

**REPUBLIC OF ZAMBIA** 

MINISTRY OF HEALTH

Human Resources for Health Strategic Plan (Draft) (2006 - 2010)

December 2005

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# List of Abbreviations

APAS BKw CBoH CDE CP CPD GDP HR HR HRH HRM/D HSSP HTCC IST M&E MoE MOH MSTVT MTEF NGO PE PHC PMEC PMP PSRP PSRP PSRP PST SIDA SWAp UNFPA USAID UTH	Annual performance appraisal system Billion Kwacha Central Board of Health Casual daily employee Cooperating Partners Continuing professional development Gross Domestic Product Human resource Human resource(s) Human resources for Health Human resources for Health Human resources and Systems Program Health Services and Systems Program Health Training Coordinating Committee In-service training Monitoring and Evaluation Ministry of Education Ministry of Education Ministry of Science, Technology and Vocational Training Medium Term Expenditure Framework Non-government organisation Personal Emoluments Primary health care Payroll Management and Establishment Control Performance management package Poverty Reduction Strategy Paper Public Sector Reform Programme Pre-service training Swedish International Development Agency Sector Wide approach United Nations Population Fund United Nations Population Fund United States Aid for International Development University Teaching Hospital (Lusaka)
UNFPA	United Nations Population Fund
-	

# Foreword

Since 1991 Zambia has been pursuing health reforms aimed at providing Zambians with equity of access to cost-effective, quality health care as close to the family as possible. Although there have been some progress towards the achievement of global and national health outcomes, the reforms have not had the intended impact of improving the overall performance of the health sector. One of the major obstacles for Zambia to improve its service delivery and the achievement of the Millennium Development Goals related to child and maternal health and combating priority diseases including HIV/AIDS and malaria is the shortage of human resources for health.

The health sector is facing a major human resource crisis and there are shortages of health workers at every service delivery level. The health sector recognises that human resources are critical in the provision of quality health care and that to address the current crisis it is essential that it **ensures an adequate and equitable distribution of appropriately skilled and motivated health workers providing quality services.** 

Human resource shortages are caused by a number of factors. These include:

- Inadequate conditions of service (pay, allowances and incentives)
- Poor working conditions (facilities, supplies and equipment
- Weak human resource management systems
- Inadequate education and training systems

In order to resolve the crisis and address the key issues the Ministry of Health has developed a **Human Resources for Health Strategic Plan**, in consultation with key stakeholders. The strategies and activities outlined in the Plan attempt to address the concerns of all the stakeholders consulted and to provide a framework to guide and direct interventions, investments and decision making in the planning, management and development of human resources for health.

The Human Resources for Health Strategic Plan demonstrates the scale of the crisis and highlights some of the key factors that have led to the current situation. It further illustrates the current and ongoing national and district initiatives aimed at reducing the severity of the situation. It outlines the broad objectives, strategies and activities required to address the crisis. The focus of this HRH Strategic Plan is on developing the most appropriate, feasible and cost effective mix of strategies for both achieving improved staffing levels and making jobs in the health sector more attractive by improving conditions of service. The Strategic Plan will be used by the Ministry of Health and its partners in the health sector to mobilise resources and support in order to strengthen human resources for health.

The successful implementation of this plan will pose many challenges, but I am confident that with the concerted efforts and sustained support from government, unions, professional associations, cooperating partners and health workers that the urgent HRH needs, the needs of the overall sector and the health needs of the population can be addressed.

Hon. Sylvia Masebo, MP

### MINISTER OF HEALTH



# Acknowledgement

I would like to acknowledge with gratitude the time, expertise and support given by the Cooperating Partners, Health Professional Associations and the Workers Unions that contributed to the development of the Human Resources for Health Plan through their submissions and open discussions.

In addition, the Ministry of Health wishes to thank all Cooperating Partners for their technical support in the development of this Plan.

Dr. S. K. Miti Permanent Secretary MINISTRY OF HEALTH

# **Executive Summary**

#### Introduction

Human resources constraints are a key factor in the lack of improvement in the overall health status of the people of Zambia.

In August 2005, His Excellency, the President of the Government of the Republic of Zambia directed the Ministry of Health to develop a plan that would address the problems affecting the health sector.

In the process of developing the plan, the Ministry of Health consulted its stakeholders who included the cooperating partners, namely, UNFPA, Embassy of Sweden (SIDA), USAID, Department for International Development (DFID), European Union (EU), Health Services and Systems Program (HSSP), World Health Organisation (WHO), the Royal Netherlands Embassy; Trade Unions and Associations representing the various categories of health workers, namely: Civil Servants and Allied Workers Union of Zambia (CSAWUZ), Zambia National Union of Health and Allied Workers (ZNUHAW), Health Workers Union of Zambia (HWUZ), Medical Council of Zambia, General Nursing Council, Medical Doctors Association, Resident Doctors Association (RDA) and Zambia Medical Association.

The Ministry of Health and the stakeholders identified as the biggest problem in the health sector the human resources crisis. The result of His Excellency's directive and the contributions from the stakeholders is the Human Resources for Health Strategic Plan for Zambia (HRH Strategic plan).

The HRH Strategic Plan sets out strategies and options for 2006 to 2010 to tackle the human resources crisis in the health sector, within the timeframes of the National Development Plan and the National Health Strategic Plan 2006 – 2010. Its overall aim is:

#### To ensure an adequate and equitable distribution of appropriately motivated, skilled and equitably distributed health workers providing quality services.

It includes both immediate actions and longer-term processes for achieving four key objectives:

#### A. A coordinated approach to planning across the sector

- Ensure human resource planning is coordinated across the health sector and is based on the best available data.
- Develop monitoring and evaluation systems to track progress of the HR Strategic Plan implementation to inform its future development.

### B. An increased number of trained and equitably distributed staff

- Increase training output through the expansion of available training places
- Increase the number of applicants for training by widening participation
- Strengthen the in service training system
- Increase the numbers of skilled health workers in post
- Improve the deployment and retention of health workers.

# C. Improved productivity and performance of health workers

- Improve the quality of pre service training
- Improve the quality and cost effectiveness of in service training
- Improve performance management capacity and tools
- Improve occupational health and work place policies.

# D. Strengthened human resource planning, management and development of systems at all levels.

• Strengthen human resource planning, management and development capacity at all levels.

The HRH Strategic Plan examines the scale of the problem and the effect it is having on the delivery of health services in Zambia. It describes the fundamental causes of the problem, suggested solutions, potential impediments to the solutions, and how to overcome the potential impediments. Importantly, the HRH Strategic Plan presents some quick wins for the 12 months that will result in immediate impact on the human resources situation.

# Scale And Fundamental Causes Of The Human Resources Problem

### Scale Of The Problem

The key issues that have been identified as affecting the health sector include the following:

- (i) the public health sector is currently operating at half the expected number of health workers
- (ii) high levels of brain drain internally, within the region and to developing countries.
- (iii) increased attrition of health workers through deaths and resignations
- (iv) imbalances in the distribution of health workers between urban and rural areas
- All available evidence clearly demonstrates that the shortage of human

resources and the increasing attrition of staff are major obstacles to improved health service delivery and the achievement of the health-related Millennium Development Goals in Zambia.

There are currently only just over 600 doctors working in the public sector and there are severe shortages of nurses and other key staff. Planned interventions are not being implemented because there is not enough staff or suitably trained staff in the health facilities to provide services. The World Health Organisation states that the current staff establishment would have to increase from 23,176 to 49,360 to achieve recommended staff population ratios.

The crisis is particularly acute in rural areas where more than 50% of rural health centres have only one qualified staff member and numerous facilities are without any professional staff at all. The poorest provinces such as the Northern, North Western, Central and Eastern have the most severe staffing shortages.

However, many Level 3 hospitals are also seriously understaffed and dozens of patients are being attended to by one nurse. New facilities remain unopened because of the lack of available suitable staff.

Recent estimates show that across the public sector there is one quarter of the total number of doctors required; just over one third of the total number of nurses required; and just over one quarter of the total number of Clinical Officers required.

Attrition rates are also startling. Recent indications show that doctors have the highest attrition rate (9.8%), followed by nurses (5.3%) and pharmacists (4.25%). Zambia is losing its potential health professionals even before the have qualified: estimates in 2004 showed attrition from doctor and nurse training programmes was 30%. A substantial number of Zambian health workers are migrating to other countries for greener pastures. In the UK alone, a total of 461 Zambian nurses were recruited between 1998 and 2003.

The problem with staffing shortages goes beyond numbers and the overall headcount. There are severe staffing imbalances in terms of numbers, skills, the skills mix and geographical distribution. These are the result of staffing shortages and absences, high population/staff ratios, unattractive pay and workplace conditions, poor training quality, weak recruitment procedures, urban/rural disparity, and socio-economic considerations. In addition, Staffing shortages have resulted in increased workloads, low motivation, poor performance and productivity levels and the deterioration in the quality of services and the overall performance of the health sector.

#### Fundamental Causes of the Human Resources Problem

There is a diverse range of factors that are influencing the current human resources situation in the Zambian health sector. It is important to bear in mind

that these causes cannot be taken in isolation.

At a demand and supply level; increased health needs, utilisation of health services and new technologies are having an impact on the requirements for human resources for health; whilst factors such as education and training, labour participation, efficiency and the migration of the health workforce is influencing the provision of adequate numbers of health workers.

In particular, human resource shortages are caused by a number of identifiable factors including:

- Inadequate conditions of service such as low pay, uneconomical • housing allowance, lack of medical scheme for health workers, unrevised and discriminatory allowances, limited access to loan facilities and lack of provision of uniforms for nurses for example Medical Doctors currently receive approximately a net pay of \$908 per month compared to an average \$2500 within the region. Medical Doctors requested for minimum composite net pay of K16, 000,000=00 consisting of the following basic Salary K13,750,000.00, Housing allowance K4,000,000.00, On Call Allowance K4,125, 000.00, Recruitment and retention allowance 20% of Basic salary, Communication Allowance K500,000.00 Transport Allowance K1,300,000.00.
- Poor working environment, that is, inadequate medical and surgical supplies and dilapidated work facilities.
- Weak human resources management systems resulting in delays in processing appointment, promotion, confirmation, transfer, payments of salaries and other conditions of service to health workers
- Inadequate education and training systems.
- absence of approved structures for health workers and support staff
- inadequate funding for the health sector.

As a result of the poor working conditions, inadequate conditions of service, absence of approved structures and inadequate funding to the health sector, health workers are attracted elsewhere by better conditions of service and career development opportunities. Although current doctors and nurses salaries compare well with other Zambian public sector workers, pay in the private and NGO sectors pay is between 23% and 46% higher whilst some countries in the region are offering three to four times higher. It, therefore, makes it very difficult to retain these essential cadres.

Staff attrition contributes significantly to staffing shortages and increased workloads. At larger institutions, the workload of remaining staff has increased as result of migration. At a health centre where an individual is the last remaining health professional, the loss of only health workers has caused more dramatic effects.



Inadequacy in the education and training systems is also affecting shortages and the skills and skills mix of staff. This is due to poor training quality, inadequate training facilities, shortage of trainers, staff absences and the mismatch between skills and health sector needs. Much of the training for doctors and nurses in Zambia is focused on clinically oriented training, which produces cadres lacking essential skills and knowledge of public health. In addition, emphasis on the provision of high-level skills training results in longer training times, which delays the production of these scarce cadres.

Staffing shortages and increased workloads have also been caused by unauthorised and authorised staff absences and the weak management of the inputs of existing staff.

#### Suggested Solutions To The Problem

The Ministry of Health and its stakeholders consulted during the development of the plan identified the following key areas to be addressed:

- Making jobs more attractive through improving **conditions of service** and **workplace environment**
- Using staff more effectively and efficiently through improved **HR** management and practices.

Under these main areas of focus, the stakeholders view was that the following areas require interventions to be incorporated within the HRH Strategic Plan:

#### **Conditions of Service**

- Improved and timely payment of salaries benchmarked against the Private Sector and other countries in the region
- Improved and timely payment of allowances for accommodation, transport and other expenses
- Expanded and greater access to the health worker retention schemes.
- Establishment of a discretionary Staff Enhancement Fund for critical health workers in underserved areas.
- Accelerated development and implementation of a health workplace policy.
- Provision of staff empowerment schemes such as home ownership, land ownership, and car ownership for health workers.
- Introduction of performance based rewards for health workers.
- Improved human resources management practices

#### Enabling And Conducive Workplace Environments

 Reduced stress caused by heavy workloads, long hours and high staff/patient ratios

- Improved supply of equipment, medical supplies and operational transport
- Improved information and communication facilities, especially in rural areas
- Improved housing, especially in rural areas.
- Improved infrastructure in the health facilities.

# HR Management, Deployment Systems And Practices, And Training Outputs.

- Development and implementation of health workplace and staff welfare policies
- Approval of proposed Ministry of Health establishment to provide for recruitment and improved career progression for health cadres.
- Reduced imbalances in the distribution of existing staff
- Increased numbers of skilled, motivated and equitably distributed health workers providing quality services at all levels.
- Improved in-service training opportunities for all cadres.
- Increased pre-service training in-puts and outputs

### Bilateral Agreements

• Signing of Memorandum of Understanding (MoU) with recipient countries of migrant health workers from Zambia in order to mitigate the impact of brain drain.

### Potential Impediments To The Solutions

The health sector is labour intensive and thus cannot achieve it goals without the required well-motivated human resources. Therefore, the following potential impediments to the solutions have been identified due to resources constraints:

- Selective application of incentives both geographically and among the various categories of health workers may lead to de-motivation of cadres that may not benefit in the initial stages.
- Reduced budget allocation of resources to the health sector will pose a major challenge to the implementation of solutions leading to failure to attain the Millennium Development Goals (MDGs).
- Delayed approval of the new Ministry of Health Structures may result in difficulties in recruiting and introducing on the payroll of health critical staff.
- Uncoordinated implementation of retention initiatives through support from well meaning cooperating partners at district level may lead fragmentation of efforts and further destabilise health worker situation.
- Government failure to improve conditions of service for health workers.
- Continued low outputs of graduated from the pre-service Training Institutions

### How To Overcome The Potential Impediments

To overcome the potential impediments there is need for Government through

the Ministry of Health and its stakeholders to do the following:

- Develop guidelines for the Discretionary Staff Enhancement Fund (HRH Basket) for the implementation levels that is the district and the hospital levels.
- Develop activity-based work-plans annually to implement the strategies in the HRH plan according to priorities.
- Put in place and implement effective monitoring and evaluation mechanism
- Improve Government budget allocation to the health sector
- Operationalise the principal of selective enhancement of salaries and other conditions of service for key professional and technical staff in the health sector to be implemented through the Discretionary Staff Enhancement Fund as part of the Public Service Reform Programme (PSRP) under the Public Service Management (PSM) component.
- Ensure that Government urgently approves the new ministry of health establishment and recruit qualified and skilled human resources for placement in the critical areas.
- Encourage Private Sector participation in pre-service training of health cadres.
- Encourage pre-service partnerships in running some of the closed Government health Training Institutions.

#### Quick Wins In The First 12 Months Of Implementing The HRH Plan

The Ministry of Health of Health and its stakeholders identified several quick wins for implementation in the first 12 months of the HRH Strategic Plan and which were felt to be key in beginning the process of tackling the HR crisis in the health sector. The quick wins identified include the following:

#### **Obtain Approval For The New Staff Establishment**

This will provide the Ministry with approved and funded posts for all health workers and thus facilitate timely recruitment and placement of health workers on the GRZ payroll.

#### Recruitment

- Recruit all graduating students from health training institutions.
- Recruitment of retiring Health Workers on contracts in order to fill the gap.
- Enter into bilateral agreements to recruit foreign health worker.

#### Retention

- Improve Health Workers remuneration and conditions of service.
- The Ministry of Health through support from the Royal Netherlands embassy is implementing a Health workers retention scheme for the rural areas for Medical Doctors. The retention scheme could be extended to other health workers serving in the rural areas.
- GRZ is currently paying 20% to HRH who are degree holders in the Public Service as recruitment and retention allowance, this could be extended to other HRH with critical skills, but are diploma and certificate holders.

- Discretionary Staff Enhancement Fund (HRH Basket) which could be funded by both GRZ and Cooperating Partners for provision of the following:
  - Incentive scheme for specialized skills.
  - Special hardship allowance to health workers in rural areas.
  - Home and land ownership schemes
  - Car loans.
  - Support children's education for staff in rural/remote areas
  - Appropriate transport to all health facilities, especially in the rural areas
  - Improve access to ICT facilities
  - Renovate staff housing and facilities in rural districts.
- Revise upwards the following:
  - Doctors' on-call allowance.
  - Nurses and clinical officers' commuted night duty allowance uniform and upkeep allowance.
- Payment of all GRZ allowances including housing allowance through the payroll in order to ensure timeliness.
- Free Health Services to all Health Workers.

### Major Accomplishments Envisaged In The Year 2006

It is expected that implementation of the above strategies will make the Public Health sector more competitive and attractive to health workers both locally and abroad. This will eventually result in significant improvements in service delivery and improvement in the health indicators.

#### Implementation Framework

#### Leadership

The Ministry of Health HQ will provide strategic guidance to translate the strategies of the 5-year plan into annual plans. At the national level, a proposed high level HR Steering Committee will oversee the monitoring of the implementation of the Plan.

Districts and training institutions will be expected to develop their own human resource action plans based on their human resource needs. These will be guided by the strategic objectives of this HRH Strategic Plan.

#### Resources

Substantial resources will be required to implement the strategies and achieve the overall objectives of the HRH Strategic Plan. Balancing the need to make jobs more attractive and the need to operate within fiscal ceilings will be challenging. To Improve salaries and other conditions of service for health workers whilst simultaneously increasing numbers will require the sustained commitment and support of the Government, Cooperating Partners, unions, professional associations, health workers and other stakeholders.

The estimated amount required to commence the implementation of the HRH Plan in 2006 is about **K641 billion** as shown in **Annex 8** which provides the cost implications for the first three-year MTEF cycle. The Ministry of Health in its 2006 budget has included human resources activities to begin the implementation of the HRH Strategic plan (2006-2011) to at an estimated budget of **K 82.6 billion** as can be seen at **Annex 9**.

### Monitoring And Evaluation

Effective monitoring and evaluation of the activities and outcomes of the Plan will help to build that evidence base to ensure that the strategy is achieving its goals. Monitoring the implementation of the HRH Strategic Plan will be done at the national, provincial and district levels. Monitoring and Evaluation Plans will be developed in line with the HRH Strategic Plan and the Annual Implementation plans, in collaboration with the M&E Unit of the MoH. High-level indicators have been developed for monitoring the implementation of the strategy and more detailed monitoring routines will be developed in Year 1 for use on a monthly, quarterly, biannual and annual basis.



# **Mission and Aim**

The overall mission of the health sector is:

To provide cost effective quality health services as close to the family as possible in order to ensure equity of access in health service delivery and contribute to the human and socio-economic development of the nation.

The overall aim of the HRH Strategic Plan is:

To ensure an adequate and equitable distribution of appropriately skilled and motivated health workers providing quality services

# 1 Introduction

Since 1991 Zambia has been pursuing health reforms aimed at providing Zambians with equity of access to cost-effective, quality health care as close to the family as possible. The health reform process has involved sustained and purposeful change to improve the efficiency, equity and effectiveness of the health sector. However, the reforms have not had the intended impact of improving the overall performance of the health sector. The recent status report on the Millennium Development Goals indicates that while there has been some progress made, particularly in under-five mortality and HIV/AIDS, maternal mortality rates and the incidence of malaria, TB and other diseases are still relatively high, especially in rural areas<sup>1</sup>. The report indicates that human resources constraints (e.g. the unavailability of trained staff, lack of supplies) are a key factor for the lack of improvement in overall health status.

It is evident that the shortage of human resources and the increasing attrition of staff are major obstacles to improved service delivery in Zambia. There are only just over 600 doctors working in the public sector and there are severe shortages of nurses and other key staff. Planned interventions are not being implemented simply because there is not enough staff or suitably trained staff in the health facilities to provide the services<sup>2</sup>.

This situation is not unique to Zambia, rather it is a global phenomenon. Actors such as the World Health Organization, the World Bank and global initiatives such as the Global Fund for HIV/AIDS, Tuberculosis and Malaria (GFATM), have prioritised support and funding to human resources for health in an attempt to redress the situation<sup>3</sup>.

In August 2005, His Excellency, the President of the Government of the Republic of Zambia, concerned about the shortage of health workers, directed the Ministry of Health (MoH) to develop a plan that would address this situation. The HRH Strategic Plan covers the next five years - 2006 - 2010 in line with the timeframes of the National Development Plan and National Health Strategic Plan 2006-2010. It provides a framework to guide and direct interventions, investments and decision making for strengthening human resource management and development (HRM/D) in the health sector. It demonstrates the scale of the crisis and highlights some of the key factors that have led to the current situation. It further illustrates the current and ongoing national and district initiatives aimed at reducing the severity of the situation. The document provides a set of costed options for evaluation that would address the major issue of staff shortages. Based on a set of guiding principles, the HRH Strategic Plan sets out the broad objectives, strategies and activities for the next six years. This provides a

<sup>&</sup>lt;sup>1</sup> 'Zambia MDG Status Report for 2005

<sup>&</sup>lt;sup>2</sup> Ministry of Health (2004). A synopsis of the current staffing crisis and outline proposals for action.

<sup>&</sup>lt;sup>3</sup> Ministry of Health (2004). <u>Human Resource Crisis In Zambia. A Paper For The High Level</u> <u>Forum Abuja, December 2004</u>. and HLF Oslo paper, 2005

framework for the development of annual implementation plans, and a costed plan for the first year is included as an Annex.

Further analysis and investigation of the situation will be required as the Plan is implemented and reviewed. The implementation of the Plan will be regularly monitored and evaluated in order to modify and adjust strategies and activities to more effectively address the situation.

In the process of developing the HRH Strategic Plan all the key stakeholders were consulted to elicit their views on what are the key issues and what would be the most appropriate strategies and activities for addressing the current crisis. Those consulted included MoH officials, unions representing private and public sector health workers, professional associations, regulatory bodies, civil society and Cooperating Partners. Submissions and feedback received from these consultations have been incorporated into the Plan and strategies developed to address the key issues raised. The stakeholders consulted identified various factors that need to be addressed in order to resolve the current crisis. These include:

#### Improved conditions of service

- Improved and timely payment of salaries benchmarked against other countries in the region
- Improved and timely payment of allowances (accommodation, transport, education, utilities, loans for housing and land)
- Separate salary scale for nurses
- Expanded and greater access to retention schemes

#### Provision of enabling and conducive workplace environments

- Reduce the stress caused by heavy workloads, long working hours and high staff/patient ratios
- Improved supply of equipment, medical and surgical supplies and operational transport (e.g. ambulances and staff transport facilities
- Improved information and communication facilities, especially in rural areas
- Improved housing especially in rural areas

#### Improved HR management and development systems and practices

- Health and staff welfare policies (access to health care and support)
- Lack of career growth opportunities, especially in rural areas
- Limited production and supply of health workers
- Imbalances in the distribution of existing staff
- High attrition through death, resignations, dismissals and migration

In developing the HRH Strategic Plan many documents have been reviewed and the most relevant are referred to in the text. One very important document, which provided essential information for the staffing projections, is the draft human resources plan developed in 2001<sup>4</sup>. For reasons unknown, this plan was never implemented.

### The policy context

There is a diverse range of factors that are influencing the human resources for health situation in Zambia. Health needs, the utilisation of health services and new technologies are influencing the demand for human resources for health (HRH), while factors such as education and training; labour participation; efficiency; and migration of health workforce influence the supply. At the same time contextual factors, national and health sector policies and plans, and factors within the institutional and organisational context are also influencing human resource management and development systems and practices.

#### National and policy frameworks

The strategies and interventions developed in this HRH Strategic Plan, which aim to strengthen human resources for health, have been designed to complement the national policy frameworks, programmes and processes. Most prominent amongst these are the Public Sector Reform Programme (PSRP), the Fifth National Development Plan (Health Chapter), the Decentralisation Policy, the Medium Term Expenditure Framework (MTEF), the Sector Wide approach (SWAp), the National Health Strategic Plan and other macro-economic and fiscal reforms.

### Public Sector Reform Programme

The Public Service Management component of the PSRP is divided into four sub-components – all related to the planning, management and development of human resources (HRM/D):

- Rightsizing
- Payroll Management and Establishment Control (PMEC)
- Pay reform
- Performance Management

The approach of this Strategic Plan is closely aligned to the proposed reforms and developments in these four sub-components. The strategies proposed for improving conditions of service were informed by rightsizing initiatives and the long term direction for pay reform. The strategies proposed for the implementation of the suggested establishment and for the provision of pay enhancements are in line with the mandate for the Ministry of Health and the personnel emoluments (PE) ceilings under the MTEF.

However, balancing the need to make jobs more attractive and the need to operate within fiscal ceilings is challenging. Addressing health worker demands

<sup>&</sup>lt;sup>4</sup> Ministry of Health (2001). National 10-year human resource plan for the public health sector.

for improved conditions of service (referred to earlier), while simultaneously increasing numbers to the level recommended in the proposed establishment will not affordable within the agreed MTEF ceilings. The focus of this HRH Strategic Plan is therefore on developing the most appropriate, feasible and cost effective mix of strategies for both achieving improved staffing levels and making jobs in the health sector more attractive by improving conditions of service. In line with PSRP principles, the strategies also attempt to ensure that any pay increases and the associated pay differentials between the different cadres reflect differences in skill, responsibility and experience.

A number of options to address increases in staffing levels and pay levels have been explored. Three of these have been developed and costed. They make a realistic attempt to address both the required increase in staffing levels and the need to attract and retain sufficient health professionals. The options are presented in Section 2 after the situation analysis on staffing, training and development and performance. These aim to utilise a range of strategies such as selective pay enhancement for critical cadres and performance improvement to address staff shortages in underserved areas and facilities.

The PSRP pay reform process focuses on the establishment of a revised pay structure, in which salaries and allowances will be consolidated. This will have implications for the continued provision of the current range of allowances for health workers and the feasibility and sustainability of providing new or increased allowances. One the options outlined addresses this issue and proposes a consolidated pay package that will not result in any reduction in pay. Under the new pay policy pay will relate more closely to the jobs people are doing and the skills they need to perform them. The strategies and activities in this Plan support the clarification and definition of functions and skills, which will be important to inform decision making on health worker staffing levels and the new MoH structures. Further studies may be required to support these interventions such as functional and workload analysis to assess the skills requirements and gaps at all levels and the development of activities to strengthen education and training systems to address the gaps.

The performance management component recognises the need to review the existing performance management package (PMP) and the annual performance appraisal system (APAS) that was introduced and made a requirement for staff confirmations and promotions. The system has not been effectively implemented for a number of reasons. It is proposed that once the review has been conducted, a revised strategy and implementation plan for performance management will be developed for the Public Service. The strategies in the HRH Strategic Plan aimed at improving performance will contribute to these proposed initiatives and will help prepare the health sector for the implementation of the revised PMP. Access to and use of the Performance Improvement Fund would also help to promote and reward health sector performance improvements.

#### **MoH Restructuring**

The Act to dissolve the Central Board of Health (CBoH) has now been passed and the health sector is undergoing a comprehensive restructuring to reorganise the management and control of all public health facilities and services. In order to ensure continued popular participation, the hospital and district management boards will be replaced by advisory councils. As part of the wider Public Service Management Component of the PSRP, the staff establishment should be approved by December 2006. The eventual restructuring in line with the national decentralisation policy and the need to keep within MTEF ceilings has informed the HRH Strategic Plan.

#### Decentralisation

The ongoing decentralisation process will devolve greater responsibility for the HR function to sub-national authorities and bodies and will impact on the current organisational and managerial arrangements for the HR function within the health sector. The implementation framework for the Decentralisation Policy will guide and inform the establishment for provinces and districts administrations and other arrangements for the HR function. Drawing on the information that was available on the implementation framework, the strategies and activities outlined in the Plan are aimed at improving HR capacity and systems for current and future arrangements.

# 2. Human Resources in the Zambian Health Sector

#### Staffing

Human resources in the health sector have been identified as particularly problematic. The severe shortage of human resources and the increasing attrition of staff are now seen as a major obstacle to improved service delivery in Zambia. The lack of staff means that many health facilities are understaffed. There are numerous rural health centres without any professional staff at all, and more than 50% of rural health centres have only one qualified staff member<sup>5</sup>. Service delivery in hospitals is also affected, with many Level 3 hospitals understaffed and dozens of patients being attended to by one nurse. New facilities constructed to improve access to health services, remain unopened due to lack of staff. And there are insufficient health workers to scale up and expand the delivery of essential health services. The actual numbers of staff by cadre are given in Table 1.

Staff Category	Current Staff Levels	Current Staff: Pop Ratios		
Doctors	646	17,589		
Nurses	6,096	1,864		
Mid Wives	2,273	4,999		
Clinical Officers	1,161	9,787		
Pharmacists	24	473,450		
Pharmacy Tech	84	135,271		
Lab. Scientists	25	454,512		
Lab. Technologists	100	113,628		
Lab. Technician	292	38,914		
EHO	53	214,393		
EH Technologist	32	355,088		
EH Technicians	718	15,826		
Dental Surgeon	14	811,629		
Dental Technologist	40	284,070		
Dental Therapist	2	5,681,402		
Physiotherapist Deg.	0	-		
Physiotherapist Dip.	86	132,126		
Radiologists	3	3,787,601		
Radiographers	139	81,747		
Paramedics	320	35,509		
Nutritionist	65	174,812		
Support Staff	11,003	1,033		
Total	23,176	490		

Table 1: Current numbers of staff by cadre in the public sector and staff to population ratios

**Sources:** Ministry of Health MoHHRIS database 2004/2005

<sup>&</sup>lt;sup>5</sup> Koot, J. and Martineau, T. (2005). Mid Term Review: Zambian Health Workers Retention Scheme (ZHWRS) 2003–2004. Final Report.

Staffing shortages have resulted in increased workloads, low motivation and morale, poor performance and low productivity levels, and deterioration in the quality of services and the overall performance of the health sector. The stakeholders consulted identified various factors that need to be addressed in order to resolve the current crisis. The key issues raised by the stakeholders relate to two main areas:

- 1. making jobs more attractive through improving conditions of service (pay, allowances, loans and incentives) and the workplace environments
- 2. Using staff more effectively and efficiently through improved HR management and practices.

#### Staff Attrition

There is no definitive data on health worker attrition in Zambia. Therefore, for the purposes of this strategic plan, figures used in the draft HR plan of 2001 are used<sup>6</sup>. The annual attrition rates for selected groups were: doctors -4.2%, registered nurses – 7.8%, enrolled nurses – 6.1%. The figure used for "allied professions (clinical officers, environmental health technicians, laboratory staff, etc) was based on the 2001 figure of 7.7% for clinical officers<sup>7</sup>. A report produced by Kombe et.al, shows that according to the Nursing and Midwifery Council in the UK, a total of 461 Zambian nurses were recruited between 1998 and 2003<sup>8</sup>. There is anecdotal evidence to suggest that there are approximately 300 Zambian doctors working abroad<sup>9</sup>. There are many reasons given for health worker attrition in Zambia. Evidence suggests that a substantial number of Zambian health workers are migrating to other countries, attracted by better conditions of service and career development opportunities<sup>10</sup>. To make up the shortfall the MoH has had to recruit from overseas and in 2005 44% of the doctors in post were non-Zambians. Other causes of attrition include death, resignations and dismissals<sup>11</sup>.

<sup>&</sup>lt;sup>6</sup> One analysis, based on the 1999-2004 attrition and graduation rates, shows doctors have the highest attrition rate (9.8%), followed by nurses (5.3%) and pharmacists (4.2%) Source: Kombe, K., Galaty, D., Mtonga, V. and Banda, P. (2005) Human Resource Crisis in the Zambian Health System: A Call for Urgent Action)

<sup>&</sup>lt;sup>7</sup> The strategic plan includes activities of improve the collection and use of HR data which will give more accurate attrition rates. These will be used as the projections are updated.

<sup>&</sup>lt;sup>8</sup> Kombe, K., et al. (2005) op.cit.

<sup>&</sup>lt;sup>9</sup> Koot, J. and Martineau, T. (2005). Mid Term Review: Zambian Health Workers Retention Scheme (ZHWRS) 2003–2004. Final Report.

<sup>&</sup>lt;sup>10</sup> Kombe, K., et al. (2005) op.cit.

<sup>&</sup>lt;sup>11</sup> Ministry of Health (2004). A synopsis of the current staffing crisis and outline proposals for action.

At larger institutions the workload of remaining staff increases when an individual leaves. At a health centre where the individual is the last remaining health professional, the loss on one person can have much more dramatic effects. Management induced losses – such as through dismissals have a significant impact significant given the investments in training and recruitment.

Better information is needed on the people who leave – not just the cadres, but the characteristics within cadres – in order to better target retention strategies. For example, in recent analysis of losses it was found that that the majority of resignations (voluntary losses) take place in the first five years of service<sup>12</sup>. Preliminary findings from a recent study of attrition within the nursing profession indicate that the highest staff losses are from tertiary hospitals and that although some staff go overseas to the private sector, others move to the district level tempted by greater access to in-service training and the associated 'sitting' allowances, and transport and housing allowances<sup>13</sup>. Furthermore, although vacancy rates may be high at district level, turnover rates are not, implying that strategies should possibly be targeted more at staff who might move from Level 2 or 3 hospitals to the districts rather than for retaining those already there. Further information is needed to better understand the nature of staff flows and to develop appropriate attraction and retention strategies.

The retention strategies outlined in this HRH Strategic Plan aim to reduce the current attrition rates and correct numerical, skills/skills mix and distribution imbalances. They have been informed by analysis and synthesis of the information available on existing retention schemes, such as the Zambian Health Workers Retention Scheme (ZHWRS) and individual district retention initiatives. The ZHWRS has been successful in attracting and retaining approximately seventy Zambian doctors in rural districts and facilities. It is also important to continue to support and promote district initiatives as district managers have a better understanding of where the critical staff shortages are and how these shortages are best managed.

There are various retention schemes being supported through basket and project based funding. Any future expansion and/or scale up of these initiatives must be well managed and coordinated, to ensure that they do not distort distribution imbalances even further. For example, some of those provinces currently receiving donor support for retention schemes are attracting health workers from other areas and facilities which is compounding staffing imbalances. The strategies and activities outlined in the HRH Strategic Plan are designed to ensure that current and future investments in retention and incentives schemes are guided and coordinated and contribute to improved staffing at all levels. They aim to ensure that retention packages are targeted and differentiated according to the particular type of health worker, the job being done and the service needs of the location and/or facility.

<sup>&</sup>lt;sup>12</sup> Koot and Martineau (2005) op. cit.

<sup>&</sup>lt;sup>13</sup> Personal communication with Naomi Toyoshi-Hamada, October 2005



Further investigation will need to be undertaken throughout the implementation period of the HRH Strategic Plan in order to track and analyse attrition rates and trends and to use this information to develop the most appropriate strategies to retain essential health worker cadres. It should also be noted that for retention schemes to be effective in addressing staffing shortages they need to be supported by other human resource management and development strategies, such as increasing supply and improving pay, performance and human resource management systems.

#### Imbalances In Human Resources For Health

The problem with staffing shortages goes beyond numbers and the overall headcount. There are severe staffing imbalances in terms of numbers, skills/skills mix and geographical distribution. Numerical imbalances are a result of staffing shortages, high population/staff ratios, and pay and workplace conditions. Skill/skill mix imbalances are caused by poor training quality, inadequate training facilities, shortages of trainers, staff absences and the mismatch between skills and health sector needs

Distributional imbalances are as a result of urban-rural disparity, weak posting procedures, personal preferences and socio-economic considerations. Imbalances may also be the result of the use of essential cadres e.g. medical specialists, senior nurses, for managerial functions. There is some evidence to suggest that the total number of doctors in-post may actually be lower than the reported figure as some are in managerial/administrative positions. The discrepancies in the classification systems are also contributing to the overestimation of the number of doctors in post. There are activities proposed in the Plan aimed at cleaning the current database and strengthening the overall HR information systems to address this issue.

Analysis by province shows a skewed staff distribution in favour of urban areas, e.g. Lusaka's doctor population ratio of 1:6247 compared to Northern Province's ratio of 1:65763. The Millennium Development Goals status report (2005) indicates that poorest provinces such as Northern, North-western, Central and Eastern, have the most severe staffing shortages. Table 4 below shows the current staff distribution by Province.

Province			Registered Midwives	Registered	Zambia Enrolled Midwives	Zambia Enrolled Nurse	Pharmacy Staff		Paramedical Staff	Environmental Health Technologists	
Central	35	132	60	84	242	388	9	37	46	93	1126
Copperbelt	202	187	126	357	505	1160	33	110	140	79	2899
Eastern	29	138	15	103	159	506	8	28	38	95	1119
Luapula	15	65	10	36	39	274	5	25	21	55	545
Lusaka	256	212	129	421	305	1014	5	103	162	58	2665
North Western	21	55	5	38	41	281	7	18	20	73	559
Northern	22	107	18	94	149	320	5	30	35	90	870
Southern	38	174	31	117	359	663	16	48	53	126	1625
Western	28	91	16	38	64	350	4	18	30	81	720
Grand Total	646	1161	410	1288	1863	4956	92	417	545	750	12128

#### Table 2: Staff distribution by province

Source: MoH data

Staffing imbalances are also due to weak and uncoordinated recruitment procedures. The recruitment of health workers has been hampered by the recruitment ban that has been in place for a number of years. The fact that this has now been lifted should improve recruitment procedures; however there may be new conditions imposed on recruitment and this will have to be considered in the development of strategies to strengthen recruitment procedure. There have also been problems in the past with health workers being recruited by districts without central authorisation – mainly to get around the recruitment ban. These staff – if paid at all – have been given allowances but have never been put on the payroll. Controls have now been introduced to prevent this reoccurring and funds have been allocated to ensure that all those appointed are put on the payroll. In addition recruitment guidelines developed in 2004 should help to improve procedures. However future appointments will only be allowed for posts included in an approved establishment. This underlines the urgency of getting the establishment approved as soon as possible.

Strategies to address recruitment challenges take cognisance of any such conditions and are aimed at improving the overall rigour and transparency of recruitment and selection procedures (e.g. selection, appointment and deployment) and at refining them to improve the quality of staff entering the health sector. The strategies also take into account the further decentralisation of the recruitment function to the provinces and districts.

Deploying staff to rural locations presents more challenges than deployment to more attractive posts in urban centres. However, it is said that there is also increasing attrition from urban facilities e.g. closure of wards in third level hospitals. There is anecdotal evidence to suggest that some staff are leaving tertiary hospitals to go overseas, while others (particularly Registered Nurses and midwives) are going to district-based facilities to access in-service training opportunities; housing and transport allowances; to work on donor funded programmes; and to avoid the heavy workloads in the hospitals as a result of staff shortages and ineffective referral systems. There is also evidence to suggest that staff absence is not being effectively managed and that this is contributing to staffing imbalances.

A broad mix of strategies and approaches is required to improve the current imbalances at all levels. The HRH Strategic Plan includes strategies and activities such as innovative employment arrangements, selected pay enhancement for essential cadres in particular areas, retention strategies, and strengthening pre-service and in-service training to improve skills and skills mix. Strategies to strengthen public-private partnerships in order to improve the involvement and participation of the private and non-government sectors in the provision of local services have also been developed.

Promoting the use of non-formal health workers and non health professionals is another area that should be explored to extend coverage and address distributional imbalances. There is evidence to suggest that the performance standards achieved by non-health professionals, particularly in the delivery of HIV/AIDS services, is as high as health professionals and that loss rates among these volunteers is substantially lower than that of paid staff<sup>14</sup>.

### The Current and Proposed Staff Establishment

It is difficult to adequately describe the staffing situation for the whole sector as data on staffing for private sector employers and NGOs are not available. Data for employees in the government sector and in mission-run institutions are available, though they have had to be drawn from several different sources as there is no single source providing all types of data needed. Hence, in some cases there are some discrepancies in the data provided. Improving the availability of data is an activity included in the strategic plan.

In order to address serious health worker shortages, the MoH in collaboration with the Management Development Division of the Cabinet Office developed a new establishment in 2005<sup>15</sup>. Based on the WHO recommendations on staff population ratios (e.g. 1: 5000 and 1:700 for doctors and nurses respectively) the current staff establishment would have to increase from 23,176 to 49,360. Recent evidence from WHO suggests that countries within Africa (e.g. Zimbabwe, Namibia, Botswana and Tanzania) that have achieved the recommended staff population ratios have shown a tremendous improvement in their national health indicators<sup>16</sup>. The recommended establishment proposes more than a two-fold increase in the total staff. Proposed increases of doctors are nearly four-fold and nearly three-fold for nurses and midwives (see Table 2).

<sup>&</sup>lt;sup>14</sup> Huddart, J., Lyons, J. and Furth, R. (2003) HIV/AIDS Workforce Study

<sup>&</sup>lt;sup>15</sup> The Public Service Management Component of the Public Sector Reform Programme 2005, GRZ

<sup>&</sup>lt;sup>16</sup> WHO 2005

There is also a dramatic shift in the percentage of support staff is from 47% to 20%.

Staff Category	Current Staff Levels	Recommended Establishment	Shortfall
Doctors	646	2,300	1,654
Nurses	6,096	16,732	10,636
Mid Wives	2,273	5,600	3,327
Clinical Officers	1,161	4,000	2,839
Pharmacists	24	42	18
Pharmacy Tech	84	120	36
Lab. Scientists	25	50	25
Lab. Technologists	100	210	110
Lab. Technician	292	1,300	1,008
EHO	53	120	67
EH Technologist	32	220	188
EH Technicians	718	1,300	582
Dental Surgeon	14	33	19
Dental Technologist	40	300	260
Dental Therapist	2	300	298
Physiotherapist Deg.	0	50	50
Physiotherapist Dip.	86	250	164
Radiologists	3	33	30
Radiographers	139	200	61
Paramedics	320	6,000	5,680
Nutritionist	65	200	135
Support Staff	11,003	10,000	-1,003
Total	23,176	49,360	26,184

 Table 3: Current Staff Levels versus Recommended Establishment

Source: Ministry of Health MoHHRIS database 2004/2005

# Cost Of New Establishment

The staffing increases proposed for the new establishment would be extremely challenging to achieve. The cost of the new establishment would increase from the current K234 Billion to K651 Billion. Any increase in staffing levels must be feasible and affordable and aligned with national policies and reforms. According to the Public Service Management Component of the Public Sector Reform Programme in order for the MoH to achieve and fully fund these increased staffing levels, even in a phased manner, staffing levels in other ministries would have to fall. However the PSRP does recognise that it is essential that ministries operating in high priority sectors receive an appropriate share of the overall budget without reducing the shares of other ministries unduly<sup>17</sup>. One way to increase the staffing levels of only the most critical and essential cadres.

<sup>&</sup>lt;sup>17</sup> The Public Service Management Component of the Public Sector Reform Programme 2005, GRZ

However, while affordability is a key criterion in increasing staffing levels, other factors must also inform decisions on staffing levels. Factors such as the availability and quality of training capacity and facilities to produce the increased numbers, and the functioning of human resource planning and management capacity and systems to recruit, deploy and retain them should also inform decision making.

### Personal Emoluments For Health Workers

The provision of attractive pay and benefits is a key consideration in attracting and retaining health workers. Table 3 below provides a sample of the current (2005) salaries and allowances for doctors, nurses and paramedics. Allowances make up a considerable portion of the composite total – in the case of doctors this is just under 40%. There is a wide range of salary levels across health professionals with the highest in this table being five times that of the lowest. These salaries compare well with those of other public sector professionals in Zambia and are attracting health professional from abroad. However, the private-for-profit health sector is paying significantly higher salaries than government or NGOs. Private doctors' salaries are more than double the salaries of government doctors, midwives' salaries are almost one third higher, and laboratory technicians' salaries are more than three times the amount paid by government. NGOs are paying between 23% and 46% more than government.<sup>18</sup> These salary differentials are making it challenging to retain these cadres.

	1	2	3	4	5	6	7		
Cadre	Gross Monthly Salary	Recruitment & retention	Commuted Overtime	Commuted Night Duty	Uniform Upkeep	Housing Allowance	On-call	Grand Total (ZKW)	Grand Total (USD)
Doctor	3,778,438	755,688				500,000	1,200,000	6,234,126	1,453
Pharmacist	3,072,188	614,438			35,000	400,000		4,121,626	960
Lab. Scientist	2,687,500	537,500			35,000	400,000		3,660,000	853
Tutor	2,429,500	485,900			35,000	450,000		3,400,400	792
Senior Nurse & Paramedic	1,683,230	336,646	40,000	30,000	35,000	450,000		2,574,876	600
Nurse	1,141,770		40,000	30,000	35,000	250,000		1,496,770	349
Mid Wife	1,141,770		40,000	30,000	35,000	250,000		1,496,770	349
Clinical Officer	1,141,770		40,000	30,000	35,000	250,000		1,496,770	349
Lab. Technologist	1,141,770		40,000	30,000	35,000	250,000		1,496,770	349
Pharmacy Tech	1,141,770				35,000	250,000		1,426,770	332
Lab. Technician	981,354		40,000	30,000	35,000	150,000		1,236,354	288

### Table 4: Composite Monthly Pay before tax of a sample of health workers

Source: MoH data

Exchange rate: UD\$1 = 4,292.00 Zambian Kwacha (October 2005)

<sup>18</sup> Huddart, J., Lyons, J. and Furth, R. (2003) HIV/AIDS Workforce Study

Note: Allowances in column 6 and 7 are Tax Free. The Tax bands on annual income are as follows: Kw 3,540,000 = Tax Free; Kw 8,640,000 = 30% Tax; Kw 48,000,000 = 35%; Above Kw 48,000,000 = 37.5%

Although adequate pay and compensation is a key factor in retaining staff, other strategies should be adopted to address staffing shortfalls. This HRH Strategic Plan explores and presents other short term strategies such as increasing the recruitment of non-Zambian health workers; and more long term strategies such as improving and upgrading the skills of informal health workers to provide essential services; utilising non-health professionals to deliver specific services e.g. HIV counselling; greater involvement of the private sector in service provision; and strengthening training systems to improve the production of appropriately skilled health workers.

#### The Current PE/GDP Ratio In The Health Sector

Macroeconomic policies, driven by multilateral partners' conditionalities, are impacting on the ability of many African and developing countries to increase their health sector spending, particularly for human resources for health. The conditionalities include ceilings on overall public sector spending, resulting in caps on health sector spending, and restrictions on the civil service budget, which has led to constraints on health worker recruitment and salaries.

In the case of Zambia, the level of funding which the Government can allocate to health is constrained by two factors. Firstly, total revenue and that available for the health sector is related to the strength of the economy. The health sector currently gets 11.9% of the total national discretionary budget, somewhat below the current Abuja target of 15% for developing countries.

Secondly, and this has an even more direct bearing on human resources, is the need to conform to the PRSP targets that the Government has agreed to for the level of spending on public servant personal emoluments (PEs), which is currently set at 8.01 % of PE to GDP ratio. The national PE/GDP ratio in 2004 was 7.49% and the MoH budget for PEs was 234 BKw, which represents a PE/GDP ratio for the health sector of 0.9163%. The expected PE/GDP ratio for 2005 is 0.7676%<sup>19</sup> (MTEF 2005).

Nevertheless, some staff increases are needed to meet the service needs and some increase in remuneration is needed to attract and retain critical staff groups. After considering the analysis of other aspects of staffing – distribution, attrition, training and performance – a set of options relating to numbers of staff and levels of remuneration are presented towards the end of this section.

<sup>&</sup>lt;sup>19</sup> MTEF plans, 2005

### Training and Development

The production and training of health workers has not kept pace with health sector needs, both quantitative and qualitative, especially to address the increasing burden of disease as a result of HIV/AIDS and to cater for evolving and expanding health worker roles and new forms of service provision. The under-funding of health training institutions, poor training and accommodation facilities, inadequate equipment and materials, and the inadequate teaching staff have resulted in high attrition rates from pre-service training, fewer graduates and deterioration in the overall quality of outputs. The health sector has attempted to increase the production of particular cadres by introducing day schooling in some health training institutions e.g. day schooling in nurse training schools<sup>20</sup>. This initiative is quite recent and it is too early to tell the extent to which it has or will support increased production of appropriately skilled health workers.

#### Attrition from training

Attrition from pre-service training programmes was identified in the 2001 HR Plan<sup>21</sup> as a concern and this continues to be the case in 2005. Based on an analysis of the 2001 training attrition data and the intake data available for 2005, it is estimated that the rate of attrition for doctor and nurse training programmes in 2004 was 30% and was between 20-25% for other health training programmes, a rate similar to that reported in 2001. These attrition trends urgently need further and more detailed analysis, especially given the current and proposed levels of investment in pre-service training. While there is some evidence to suggest that poor accommodation facilities and workplace environments may be contributing to this situation, there is a need to undertake further analysis to determine the underlying causes.

#### Curriculum content

Pre-service training must equip health workers with the necessary skills, knowledge and competencies to undertake expanding responsibilities and new forms of service provision. Much of the training for doctors and nurses in Zambia tends to be focused on clinically-oriented training, which is producing cadres that lack essential skills and knowledge in public health.

Up-to-date, comprehensive and contextually appropriate curricula are essential to ensure that health workers have the required skills and competencies. However, a number of undergraduate professional courses for health workers require updating to ensure greater relevance and applicability to local conditions. In addition curricula urgently need revision to incorporate new information and technologies for priority health services such as HIV/AIDS, IMCI, MCH, TB, etc.

<sup>&</sup>lt;sup>20</sup> Report by HR Task Group, 2004

<sup>&</sup>lt;sup>21</sup> Ministry of Health (2001). National 10-year human resource plan for the public health sector. Note: this plan was never implemented.

The growing emphasis on the provision of high-level skills training is also constraining the production of critical health cadres. The statutory and regulatory bodies and the training institutions have increasingly been promoting the upgrading of training and qualifications for particular health cadres e.g. from laboratory technician to laboratory technologist; from enrolled nurse to registered nurse. This is resulting in longer training times (e.g. enrolled or community nurse training is 2 years compared to 3 - 4 years for registered nurse training), which is delaying the production of these scarce cadres.

In addition, the appointment and deployment of these highly qualified cadres, particularly for the rural areas is becoming increasingly difficult as result of limited career opportunities and inadequate working conditions and amenities in the more remote areas. There is a great number of these high-level skill staff lost to the private sector and the international market. High-level skill staff are also more expensive to recruit and retain, and as districts undertake greater responsibility for human resource management under decentralisation, they may decide that appointing less qualified and cheaper cadres is less of a drain on scarce resources (a situation that is already occurring in Uganda).

#### Training for new roles

The production of sufficient quantities of midwives is critical to improve maternal mortality rates. Midwifery training can currently only be taken after a basic nursing qualification has been obtained. However, while the option of direct entry into midwifery training may produce greater numbers in a shorter time, it should be noted that such specialised cadres will have limited career development and advancement opportunities, which may make the recruitment and retention for this particular cadre challenging.

The response to what has been called a staffing "crisis" needs consideration of more radical options than simply increasing numbers of existing types of staff. The feasibility of producing a more multiskilled health worker could also be explored e.g. a multiskilled community health nurse, which could be produced in a shorter timeframe, would improve service delivery at the PHC level, increase staffing in rural facilities and would allow the sector to respond more effectively to changing needs. This should be informed by a consideration of burden of disease, the provision of minimum standards of care, and the availability of resources to train, employ, and retain these workers. There could be direct entry to this type of training programme or by existing staff (e.g. CDEs) could be trained to take on new roles. Health workers with this type of qualification would be able to move through a defined career structure but would not be marketable outside Zambia.

Previous attempts to do this e.g. the production of a Public Health Practitioner were stalled over disagreements on the registration and certification of this new cadre. Further consultations and agreement with the professional councils and associations and the health worker unions will be required to overcome professional boundaries and/or other differences. A first step to exploring this idea would be to undertake a review of the Medical Licentiate cadre to determine the extent to which these health workers have contributed to improved service delivery.

Providing further training to informal and non-health professionals should also be explored. In 2003, 31% of staff providing HIV/AIDS services were volunteers and lay counsellors and the performance standards achieved by these groups was as high as nurses and in some cases higher than that of other health professionals<sup>22</sup>. Access to learning opportunities and training was a key motivating factor for their involvement in HIV/AIDS services. Some volunteers had funded their own training and hoped to use their volunteer experience to advance to paid work as lay counsellors. These finding have informed strategies focusing on attracting and retaining these and other non-health professionals. These could continue to be employed by non-government sector thereby reducing the pressure on the overall health sector PE budget and reducing the need to increase numbers of health workers required for these services. However, offering further training opportunities to these groups may it more difficult to retain them in their current locations.

Increasing and diversifying training intakes can also be achieved through widening participation. This could include lowering the entry requirements for particular courses; a lower entry requirement for the above mentioned multi-skilled training programmes; developing bridging courses for those school-leavers who do not meet the entry requirements; providing upgrading training courses for non-health professionals and informal health workers (through a mix of off/on-site training approaches); and promoting health service careers in schools through the provision of information on career opportunities in health. Information could be disseminated to schools on jobs available, entry requirements for training programmes, availability of training scholarships and contact details for institutions offering training.

### Increasing and improving training output

In order to improve training output several options have been explored. These include renovating and expanding existing health training institutions, re-opening schools that were closed, and/or constructing new institutions. Much of the anecdotal evidence points to poor accommodation facilities as a key contributor to trainee attrition and renovating existing facilities would help to address this. Depending on the location of the institutions, re-opening some of the schools that have been closed over the past few years may also be a feasible one. This would also help to widen participation in health training as many are in rural areas, and are catering for nurse and laboratory training. The feasibility of using these re-opened schools as multipurpose training facilities could also be explored. On the downside it may be difficult to attract and retain highly qualified tutors to these rural locations.

<sup>&</sup>lt;sup>22</sup> Huddart, J., Lyons, J. and Furth, R. (2003) HIV/AIDS Workforce Study



Supply issues also need to be considered in increasing training intake. Issues such as the capacity of the secondary schooling system to produce sufficient candidates who meet the entry requirements should be considered. If there is sufficient supply on what basis will candidates be targeted and selected (e.g. gender, economic status, geographic, etc.) and what systems are in place to assure the quality of applicants. Other issues such as the availability of bridging courses, scholarships etc. should also be considered.

However it must be noted that there are risks to increasing overall training output, such as the additional pressures that it will place on an already weakened training and education system and the need to provide practice sites and clinical instructors for the additional numbers of trainees.

#### In-service training

In-service training (IST) and continuing professional development (CPD) is essential for updating and maintaining health worker skills and knowledge and for assuring quality service provision. IST/CPD systems and practices need to be informed by and aligned with global, regional and national strategies and programmes and by contextual factors such as population growth, changing disease patterns, health seeking behaviour and labour market dynamics.

Unfortunately, the capacity of the current IST/CPD system to address these issues is limited. In-service training interventions are not integrated and/or coordinated e.g. less than one third of the doctors and nurses trained in UTH to provide ARV services are actually applying their training and providing HIV/AIDS services<sup>23</sup>. In service training programmes are often driven by donor interests and off-site training is contributing to staff absences and increased workloads for those remaining on site. The MoH has developed a National In-service Training Coordination System and Implementation Plan for 2005-2009 aimed at addressing some of these issues. Given the changing and expanding roles of health workers it is also important to ensure that IST/CPD interventions focus on professional and personal as well as medical training and development. The further decentralisation of the training function should also be considered when developing strategies to strengthen in-service training. These could include developing provincial and district capacity to plan and manage IST and ensuring that adequate funds are allocated and/or ring-fenced to enable them undertake this function effectively.

There is substantial investment made in updating and developing in-service training materials and resources in order to accommodate new information and technologies and these could be better incorporated into the PST curricula. This would require consultations with other ministries responsible for pre-service training, technical programmes and health training institutions.

<sup>&</sup>lt;sup>23</sup> Huddart et al 2003 op.cit.

The strategies outlined in the Plan recognise the need to strengthen coordination mechanisms to ensure that IST/CPD plans and interventions are aligned to global, national and health polices and priorities and are contributing to the achievement of planned HRH and health outcomes. The proposed Health Training Coordination Committee will collaborate with other established and evolving structures and build linkages with training and development systems at all levels. It should also assist in helping to reduce the potential for role duplication, and/or conflict between the different stakeholders and improve the utilisation of training resources.

The strategies are also aimed at promoting the use of more innovative forms of IST/CPD in order to reduce the time health workers spend away from their facilities and improve health worker access to IST opportunities. On-site training managed by the district or facility will provide opportunities for trainees to practice throughout the course; will enhance the physical and psychological fidelity between the training environment and the actual work requirements and conditions; and will promote greater application of newly acquired skills and behaviours to improve performance.

Ultimately improving and strengthening training and development systems should develop systems that can:

- increase and maintain the supply and production of human resources,
- equip health workers with the necessary knowledge, skills and competencies to achieve planned health standards, targets and outcomes
- develop and revise curricula relevant to service needs
- monitor and maintain standards and quality
- provide a mix of appropriate and relevant training approaches
- support the continuing professional development of health workers
- develop and utilise monitoring and evaluation systems to ensure that training and development leads to improved performance

# Productivity and performance

Unauthorised absences are having an adverse impact on the performance and motivation of the remaining staff that are forced to undertake additional responsibilities, leading to increased workloads and stress. Preliminary data from a recent study<sup>24</sup> indicates that in some Level 1 hospital and PHC facilities a high number of staff posted may be absent on any one day. Some of these absences may be authorised, but others may not. Reasons for absence generally include:

- Illness
- Funerals
- Moonlighting
- Working as consultants for projects, NGOs, etc
- Attendance at workshops/training
- Lateness

<sup>&</sup>lt;sup>24</sup> National Health Facility Census 2005

• Caring roles and other family and social responsibilities

Absence can be reduced through strengthening and improving management systems, supervisory support, employee relations, working conditions, pay and benefits and social and cultural factors. Managers can address staff absences through simple measures such as displaying rosters, monitoring staff flows, leave registers, job plans and performance appraisals, or even by just showing that it matters if staff are not there. Getting staff onto the payroll and ensuring timely payment of salaries will also help to reduce incidences of moonlighting, which contribute to staff absence.

The performance of the overall workforce is strongly linked to the sector's ability to adequately staff health services both now and in the future and the potential for substantial productivity gains from existing staff. Productivity gains and performance improvements can be achieved through improving the quality of pre-service and in-service training, developing the capacity of managers to manage performance, improving health and workplace policies and optimising staffing levels.

The strategies outlined in the HRH Strategic Plan are aimed at improving the capacity of the overall sector and individual managers to make their districts more productive and to be more accountable for performance. Performance and productivity can be improved through the effective application and integrated use of performance appraisal, support supervision and quality assurance systems. As described above incentives and allowance are just one factor in improving performance and equal attention should be given to non-monetary incentives. These could include improving the workplace environment; ensuring that staff have the necessary supplies and equipment to perform effectively and safely; implementing occupational health, staff welfare and workplace policies; improving communication and staff participation in decision making; supervisory support; and the use of job plans.

Reforms planned for the performance management sub-component of the Public Service Management Component will involve a review and revision of the current performance management system, including the Performance Management Package (PMP). Other activities will focus on work process re-engineering, interventions to induce positive attitudes and work culture through the Peak Performance initiatives, and establishing systems to guarantee the timely disbursement and utilisation of resources on activities outlined in the ministerial and departmental annual work plans as a way of operationalising Strategic Plans. Citizens Charters and other mechanisms will also be developed and implemented as a way of monitoring and evaluating organisational performance<sup>25</sup>.

<sup>&</sup>lt;sup>25</sup> Public Service Management Component 2005

The strategies outlined in the HRH Strategic Plan are aimed at addressing urgent performance management issues and aim to develop health sector capacity for the introduction of the revised performance management system. The strategies will also address staff absence, which is a key issue in performance and productivity.



### 3. Current Initiatives to Resolve the Human Resource Crisis

Many of the problems outlined above have been recognised and the government and cooperating partners are already addressing some of them. Current initiatives include:

- 1 Action at **Government Level** to meet the Abuja targets:
  - Increase in Health sector's national budget from 9% in 2004 to 12% in 2005. restructuring of the Ministry of Health,
  - Exemption of the public social sectors from the employment freeze,
  - K32 billion allocation to the Ministry above the normal PE budget for recruitment and retention,
  - Loan scheme for public health workers managed by MoH headquarters.
- 2 Action at **District Level** (e.g. Katete, Sinazongwe) includes:
  - Provision of staff transport,
  - Group performance incentive schemes,
  - Top-up salaries for staff in remote areas,
  - Renovation of accommodation
  - Electrification using solar in remote areas.
- 3 Support from **Cooperating Partners** such as:
- The Royal Netherlands Government supported Zambia Health Workers' Retention Scheme currently being piloted amongst medical doctors in rural areas.
- The recruitment of 9 Clinical Care Specialists for the provincial offices by USAID.
- Provision of top-up allowances for members of district health management teams.
- The renovation and construction of houses for medical staff in Luapula Province by USAID.
- Institutional and scholarship support from UNFPA for the training of Zambia Enrolled Midwives in North Western Province. Trainees are deployed within North Western Province and bonded for two years.
- WHO salary supplementation for lecturers in the School of Medicine, University of Zambia
- SIDA support in terms of training of nurse tutors, curricula review and general strengthening of training institutions

### 4. Guiding Principles for the HRH Strategic Plan

#### Tackling root causes rather than symptoms

Many of the HR problems are long-standing. They may have been tackled by short-term measure e.g. adding another allowance, but the problem has quickly re-emerged. The plan will include fundamental reviews of systems and structure to ensure that change is sustained and has lasting effects.

#### Evidence based

There is some existing evidence of what works e.g. providing protecting clothing reduces occupational hazards. But for other solutions there may be little or no evidence of what will actually work in the Zambian context e.g. what motivates staff and what motivators are valued? Will multiskilled workers be better than the current professional mix. In this case the evidence needs to be gathered through piloting and systematic and careful monitoring. Learning about ways to tackle the HR challenges will be incremental, but if carefully managed will gradually develop into a sound evidence base.

#### Moderated radicalism

Implementing and monitoring innovative practices, which will contribute to a more comprehensive and valid knowledge base and help to ensure that HRH developments address the key HR problems and are aligned with national strategic frameworks.

#### Sustainability

New systems can be maintained; responsiveness to change; long-term affordability.

#### Institutional Learning

MoH learning to solve its own problems through analysis and action (developing a 'learning organisation').

#### Integrated HR approaches

Ensuring one set of strategies does not undermine another (for example a thorough but lengthy off-site training programme may be effective in developing appropriate skills, but at the same time undermine attempts to increase staff presence in health facilities); and that where possible HR strategies support each other e.g. performance appraisals may improve the quality of an individual's work but also improve their job satisfaction thereby acting as a retention factor.

### 5. Objectives and Strategies

In order to contribute to the aim of this plan, the main focus of the specific **objectives and strategies** will be on:

- A. coordinated approach to planning across the sector
- B. increased number of trained and equitably distributed staff
- C. improved productivity and performance of health workers
- D. strengthened human resource planning, management and development systems at all levels

The objectives and strategies are presented below using this structure. The order of presentation does not necessarily reflect the priorities as many will need to be undertaken simultaneously e.g. increasing training numbers at the same time as strengthening coordinating mechanisms and HRM/D systems. Different activities will also contribute to the achievement of more than one strategy. Greater prioritisation of the activities will be undertaken during the development of annual implementation plans and when the cost of the strategies has been calculated.

## A: An effective, ongoing and coordinated approach to planning across the sector by 2006

Strategy A.1: Ensure human resource planning is coordinated across the health sector and is based on the best available data

#### Rationale

A high level Steering Committee is needed to coordinate HR activities across the whole sector, and therefore its composition should reflect this function (public, NGO and provide sector employers, education and training, finance and PSM). Its major function is to ensure that there is an appropriate HR strategy (covering all the various HR-related plans – see Annex 4 for an incomplete hierarchy), that is updated in the light of the changing situation, and that this is translated into action plans. It should also advise the minister on HR issues. It should monitor implementation of the strategy using high level indicators. It may commission special studies to inform future HR strategies. Its oversight includes that of all other HR committees and sub-groups, including the HR Technical Working Group (see suggested structure in Annex 5). The HR Directorate of the MoH should act as the secretariat for this committee, providing necessary data and reports.

Before working to improve the state of the current HR data, a decision is needed on the database requirements for the future, given the forthcoming decentralisation of employment and HR functions. Basic data requirements on staffing of the NGO/private sector should also be considered. An assessment is needed which proposes options, which might include continuing with a standalone database or migration to an existing database such as PEMEC. Such an assessment was recently carried out in Malawi<sup>26</sup>. Whatever option is selected, data should be up-to-date and accurate. A data cleaning exercise will be needed. Amongst other things, for meaningful analysis to be done, it is important to ensure that all staff can be classified by job title and not just profession.

The staffing projections in the HRH Strategic Plan are based on tentative assumptions. These assumptions should be revised during Year 1 (and perhaps every 2 years thereafter) based on more detailed and accurate analysis of staffing data (e.g. distribution, attrition) using whatever HR database is currently in use by the MoH, and on the changing service needs as determined by the NHSP and associated annual workplans. This step will link to the M&E strategy.

The HRH Plan is a broad set of strategies and needs to be translated into action plans to ensure that it is implemented. These implementation plans will also be informed by progress in the current year and changing requirements. The plans need to be reviewed by the High Level Steering Committee and this committee should also recommend the broad direction for the coming year. The HR Directorate, in its role of supporting the committee, should prepare the relevant analyses and then ensure the Implementation Plan for the coming year reflects the recommendations of the High Level Steering Committee. In line with the PSRP Performance Management Package, the plans need to be cascaded down to HR staff and general managers to be incorporated into unit plans and individual job plans.

#### Activities (Detailed tasks in annex 2)

#### Immediate

- A.1.1 Create high level sector wide human resource steering committee to provide strategic oversight of Human Resource planning
- A.1.2 Ensure coordination and harmonisation of all human resource related plans
- A.1.3 Improve and maintain accurate and up-to-date staffing database
- A.1.4 Revise the staffing projections in the light of regular analysis of staffing data and changing service needs
- A.1.5 Support the development of annual implementation plans for the Human Resource for Health strategy

<sup>&</sup>lt;sup>26</sup> Schenck-Yglesias, C. (2003). Malawi Health Human Resource Information Systems: Supporting the Development and Monitoring of Health Human Resource Deployment and Training Policies and Plans, JHPIEGO/USAID.

#### Strategy A.2: Develop monitoring and evaluation systems to track progress of the implementation of the HR plan, make adjustments/modifications and inform further development of the plan

#### Rationale

Indicators developed for the HRH strategic plan and included in this document relate to the broad strategies; more detailed indicators are needed for monitoring the Annual Implementation Plans and for special initiatives (e.g. selected retention strategies) to establish the level of their effectiveness and the value of extending them.

The establishment of this team is a) to ensure the HRH M&E occurs b) to bring in a wider group of stakeholders e.g. senior service delivery managers involved in the HRH M&E. Though this team should be serviced by the HR planning unit, the responsibility for ensuring the group operates should be at a higher level as it providing an oversight of the M&E function. The Director HR might be the appropriate person to chair the group. This team should develop M&E plans in line with the HRH Strategic Plan and the Annual Implementation Plans. This work should be done in collaboration with the M&E Unit of the MoH.

One of the guiding principles of the HRH Plan is that strategies are based on available evidence. Some evidence is currently available based on international and local research. In order not to delay implementation, however, some strategies are based on available evidence where is it sufficient. For other strategies, more evidence will be required and studies should be commissioned to provide this. National and international research organisations will be used.

It is important to ensure that the findings of any research, and the monitoring and evaluation information, are shared with policy makers and managers. Whilst eventually it would be preferable to write briefing papers on the research, the first step is to let people know what research has been done. Any new research should include a requirement for a policy brief written in accessible language and relating the findings to the concerns of policy makers and managers.

#### Activities (Detailed tasks in annex 2)

#### Immediate

- A.2.1 Develop indicators for monitoring and evaluating (M&E) implementation of HRH Plan and integrate into health sector monitoring and evaluation system
- A.2.2 Establish HRH monitoring and evaluation team
- A.2.3 Develop annual M&E plans to monitor implementation
- A.2.4 Strategies and activities informed by NHSP priorities
- A.2.5 Develop operation and applied research plans to study implementation of strategies

#### B. Increased numbers of trained and equitably distributed staff by 2008

Strategy B.1: Increase training output by expanding the number of training places available

#### Rationale

As for the overall HRH strategy, there is a need to coordinate training programmes for health personnel across the sector. Some training providers are outside the sector e.g. University. The High Level HR Steering Committee will establish a committee to oversee the development and implementation of an annual training plan. This should include the MoH, Ministry of Education (MoE) and Ministry of Science, Technology and Vocational Training (MSTVT). This committee needs to oversee the development of a plan that covers all aspects of training (tutor development, facilities renovation and expansion, etc) and is integrated with the overall HRH strategic plan.

Scholarships should be used to help fill the training gap. A policy is needed to ensure that scholarships should be demand-driven (based on the training plan) and value for money should be an important criterion (which may mean having a policy of national, then regional, then global training where possible). Non-Swap CPs may align their selection and management procedures with those of the Scholarship pool.

Innovative delivery methods for providing training need to be explored. Also the structures of training institutions – especially the current segregation by cadre – need to be reviewed and new structures explored.

#### Activities (Detailed tasks in annex 2)

#### Immediate

- **B.1.1** Establish a Health Training Coordinating Committee (HTCC)
- **B.1.2** Develop Training Plan with expanded training outputs
- **B.1.3** Increase number of training facilities by upgrading, constructing, renovating and expanding public training institutions.
- **B.1.4** Re-open enrolled nursing and laboratory technician training schools and other institutions closer to locations where potential applicants live.
- **B.1.5** Increase the number of scholarships available for training.

#### Longer term

**B.1.6** Investigate new forms of training structures (polytechnics, etc.).

- **B.1.7** Increase the use of non-traditional forms of training (e.g. distance learning)
- **B.1.8** Involve private sector training providers in pre-service training
- **B.1.9** Increase the number of scholarships for specialised health training programmes e.g. Paediatric Nursing that are not available in-country.
- **B.1.9** Introduce direct-entry Midwifery

# Strategy B.2: Increase the number of applicants for training by widening participation

#### Rationale

It is necessary to ensure that as training capacity increases, there is a sufficient supply of adequately qualified school leavers wanting to become health professionals. As school standards are not improving and a wider choice of better paying jobs is becoming available, careers in the health service need to be promoted and options around entry level need to be explored.

### Activities (Detailed tasks in annex 2)

#### Longer term

- **B.2.1** Revise entry requirements and develop and provide bridging and upgrading training courses for key health cadres
- **B.2.2** Promote health service careers in schools

#### Strategy B.3: Strengthen in-service training system

#### Rationale

In-service training is necessary to ensure staff have up-to-date skills and are well prepared for career progression. However, this needs to be coordinated and alternative means of training provision explored. Given the staffing shortages, ways of reducing time staff are away from the job should be explored. In-service training can be a motivating factor if linked to career development, so appropriate systems need to be put in place to address this. The immediate priority of the HRH Strategic Plan is to get more staff in post, so this particular strategy should be implemented in the longer-term.

#### Activities

#### Longer term

- **B.3.1** Review and implement national In-service Training (IST) Coordination Plan
- **B.3.2** Increase the use of non-traditional forms of in-service training (e.g. distance learning, e-learning, mentoring, on-site training)
- **B.3.3** Improve links between In Service Training (IST), Continuing Professional Development (CPD) and career development
- **B.3.4** Monitor links between IST and registration/certification

#### Strategy B.4: Increase numbers of skilled health workers in post

#### Rationale

The uncertainty about the actual establishment has hampered HR planning, especially as this is tied in with the restructuring of the Ministry of Health. There is still some uncertainty about the recommended establishment and decision making on actual numbers required and how the increased staffing will be resourced may need further information. Implementing the new proposed establishment from about 23,000 to 49,000 – would raise the PE/GDP ratio. Without including any increase in the remuneration package, the PE/GDP ratio would rise to 2.26%, nearly three times greater than the expected level for 2005. The first step is to select one of the three options presented in this HRH Strategic Plan. Further minor adjustments may be needed to staffing numbers within the selected option. Once the establishment has been finalised, this needs be communicated to all decision makers to allow them to make or adjust staffing plans. It may be necessary to develop a change management action plan to ensure that the change required by the new establishment is effectively managed.

The numbers of staff available can be increased by improving the recruitment procedures: making is easier and more attractive for people to apply and get into the jobs and speeding up the administrative processes. The delays in getting new recruits on the payroll may incur considerable hardship to the individual and similarly significant challenges to the employers to find money e.g. using allowances to enable new recruits to survive. It is also impacting on staff motivation, morale and performance and contributing to staff absence and attrition. If more attractive job options arise, those not yet on the payroll may be tempted to leave their employment resulting in unnecessary losses and wasted investment in training. It is expected that some inefficiencies in the system can be detected, and where feasible, strategies introduced to address them. Once improvements have been made to the systems, they should be sustained.

Trained staff are apparently unemployed and therefore could quickly be available. This pool of labour should be tapped. If people have been unemployed for more than a year or so, brief reorientation courses will be needed. The reorientation courses could be stopped once the number of unemployed is sufficiently reduced.

Zambia cannot yet produce enough health staff to meet its needs. Whilst various strategies are being implemented to increase the supply of staff, the impact will take time. In the short and possibly medium term, international recruitment will be used. Some international recruitment already takes place; the numbers of selected cadres will be increased using the most satisfactory sources of staff.

Retirees are another source for recruitment. They can be better targeted to fill

skills shortage areas and brought in more quickly by reducing the time taken to get them on to contracts. It may be possible to recruit more staff on contract if they have more choice in the location of the posting; some may wish to go to their home villages, so a transfer mechanism would be needed.

In the longer term, the skills mix of staff and the use of integrated competence training need to be reviewed to ensure facilities – particularly those at PHC level – have the most appropriate mix of staff and skills.

## Activities (Detailed tasks in annex 2) *Immediate*

- **B.4.1** Finalise new establishment
- **B.4.2** Improve recruitment procedures at all levels particularly targeting new graduates, and unemployed health workers
- **B.4.3** Improve procedures for getting new employees onto payroll
- **B.4.4** Develop systems to recruit foreign health workers for strategic positions with capacity development function (also contributing to improving productivity and performance)
- **B.4.5** Develop employment/contracting procedures to retain health workers nearing retirement

#### Longer term

**B.4.6** Review function and roles of regulatory bodies and strengthen registration and certification procedures

#### Strategy B 5: Improve the deployment and retention of health workers

Effective deployment procedures will help to reduce numerical, staff/skills mix and distribution imbalances (rural/urban, tertiary/district) and improve the timely placement of the right staff where they are most needed. A deployment policy and set of procedures should be developed/revised. This should be guided by plans for the further decentralisation of responsibility for the HRM/D function. Deployment decision making will be dependent on an up-to-date database to provide accurate information on staffing levels, skills mix, underserved areas, and attrition trends.

A retention plan should be developed that provides clear criteria for the selection of target areas and cadres; it should identify the mix and type of incentives to be provided; retention packages should be costed for the mobilisation of resources; and should include indicators for monitoring progress and outcomes, included in M&E Plan.

Making substantial improvements to the terms and conditions of *all* health workers would not be feasible given the resource constraints and the need to maintain personnel emoluments (PE) ceilings under the MTEF. Across the board increases could also have an adverse impact on current retention strategies

designed to ensure that essential health workers are retained in underserved areas and facilities. Evidence suggests that doctors, nurses/midwives, tutors, pharmacists and laboratory technologists/technicians are among the most critical cadres required to improve and expand delivery of essential health services and that it is rural health facilities and hospitals that are underserved.

It may not be feasible to enhance conditions of services for all the above professional groupings and improvements may only be targeted at particular subsets e.g. the conditions of service for tutors in nursing institutions in particular areas may be improved if these are considered the most critical; registered midwives may be targeted rather than all of the nursing profession. Information and evidence must be available to inform these types of decisions so that improving conditions of service has the intended impact. It will be essential to ensure that this initiative targets only those health workers/cadres and areas that have the greatest need. Indicators developed and included in monitoring and evaluation plan will help track the impact of improved terms and conditions.

Some districts are successfully utilising strategies to retain and motivate staff in underserved rural areas. Information on these should be disseminated to inform other initiatives. Recent evidence suggests that staff attrition rates from urban facilities e.g. UTH are also a concern and targeted retention packages may be required to address this – hence the definition of "underserved areas" is broader than remote rural areas. It is important that official mechanisms are in place to finance and manage these initiatives and that guidelines are available at all levels to ensure fairness, transparency, equity and accountability. Supporting locally managed initiatives will reduce the administrative burden on the centre, ensure more sustainable practices and the retention of the most essential cadres required for improved service delivery at that level. It will be important to ensure that other HRM/D strategies and practices are strengthened to complement these initiatives e.g. performance management, training and development, occupational health and safety, employee relations, and that these are linked to infrastructural and workplace improvements.

While there are some data available on general attrition trends, more accurate baseline and consolidated data are required on current attrition trends and targeted studies undertaken on particular cadres and areas where attrition is most acute. Attrition indicators should be developed for monitoring and evaluating trends and attrition through death, resignation, dismissals and migration. Monitoring information can be utilised to develop targeted and differentiated strategies for controlling/reducing attrition of critical cadres and for improving deployment and retention decision making.

There is evidence to suggest that improving the working and living environments can help to retain staff. The type and scope of initiatives should be informed by data on retention and attrition. Developing a plan for scale up will help to ensure that initiatives are coordinated and contribute to other retention strategies. Support to these initiatives should be guided and directed by the Retention Plan and other infrastructural development plans. Indicators developed to track the impact of improved amenities and working conditions should be included in M&E Plan.

#### Activities (Detailed tasks in annex 2)

#### Immediate

- **B.5.1** Strengthen deployment procedures to ensure equitable distribution
- **B.5.2** Improve terms and conditions for health workers based on selective enhancement for those in underserved areas (urban, rural, district, tertiary) and areas of specialisation
- **B.5.3** Support underserved areas to maintain/develop retention schemes (allocation of running costs for non-salary incentives) for key cadres
- **B.5.4** Monitor attrition trends and emergence of new staff groups to retain
- **B.5.5** Improve amenities and working environments in underserved areas

#### C: Improved productivity and performance of health workers by 2006

# Strategy C.1: Improve the quality of pre-service training (will also contribute to increasing training output above)

The number of tutors needs to be increased in line with increased intakes and expansion and construction of training facilities which will be guided by the overall Training Plan. A Staffing Plan for training institutions should also be developed to support the developments in the training capacity. Resource constraints, limited supply of tutors and limited potential may make it challenging to achieve optimum staffing structures and exploring more innovative and cost effective ways of delivering training may be required.

The Staffing Plan will seek to increase the number of tutors by upgrading existing tutors and recruiting new tutors, including non-nationals. The performance of all staff recruited should be monitored through performance management systems. Monitoring and performance management information should be linked to the M&E system.

The Pre-service Training curricula need to be reviewed regularly to ensure that health workers have the appropriate knowledge skills and competencies to deliver quality services and achieve health goals. A broad representation of the stakeholders involved in training should participate in the review of the curricula, which may require the formation of a number of working groups for specialised areas. Linkages between PST and IST should be strengthened to ensure that training materials and resources developed for IST are disseminated to all health training institutions. There is substantial and ongoing investment in the development of IST materials and resources, particularly for health innovations and new technologies related to the priority health areas (HIV/AIDS, IMCI, TB, etc.) and where appropriate such materials should be incorporated into PST curricula to minimise costs and avoid duplication of efforts. Indicators should be included in the M&E Plan. Curriculum reviews should be started in the second half of Year 1, but are likely to be spread over a number of years.

In the longer term the management systems in the training institutions should be reviewed and strengthened and teaching equipment and materials upgraded.

#### Activities (Detailed tasks in annex 2)

#### Immediate

- **C.1.1** Develop optimum staffing structures.
- **C.1.2** Increase the number of tutors in line with increased training places through upgrading existing staff, recruiting new staff and using non-nationals on a temporary basis in strategic positions
- **C.1.3** Develop new and review existing pre service training curriculum to integrate new knowledge and skills and address service needs

#### Longer term

- **C.1.4** Strengthen institutional management systems including HRM/D systems to manage and develop training staff
- **C.1.5** Improve teaching equipment and materials

#### Strategy C.2: Improve the quality and cost effectiveness of in-service

In-service training systems will need to be improved using quality assurance systems, but this should be started from Year 2. Existing methods need to be reviewed and improved, but new methods – particularly those that reduce the time that staff spend away from their jobs – should be explored.

#### Activities

#### Longer term

- **C.2.1** Strengthen links between IST/CPD and performance
- **C.2.2** Strengthen quality assurance and evaluation systems for in-service training programmes
- **C.2.3** Increase the use of non-traditional forms of in service training (e.g. distance learning, mentoring, on-site training)
- **C.2.4** Improve accreditation of IST courses to strengthen links between IST, CPD and career development
- **C.2.5** Strengthen the role of regulatory bodies in monitoring quality and standards of IST for registration

#### Strategy C.3: Improving performance management capacity and tools

Improving performance management capacity and tools is of high priority for existing staff in order to address and improve health worker performance and productivity. The Public Service Management Component of the Public Sector Reform Programme indicates that the Performance Management Package (PMP) and performance appraisals are not being effectively implemented. It is recommending that the current system is reviewed and a revised performance management strategy be developed.

The basis of any performance management is to ensure that staff have clear instructions about what they should be doing. Hence, the importance of ensuring that all staff have valid job descriptions.

Performance management is only useful if people are at work. Thus the issue of staff absence – whether authorised or not – should be addressed. This should also send the signal that management is interested in performance. Developing the capacity of managers to manage staff absences can be an effective first step in creating greater awareness of the importance of managing staff performance and productivity. There are many causes and implications of staff absences and managers should be encouraged to utilise a range of measures (carrot and stick) to address the issue.

Thereafter and when the revised Public Service PMP is implemented more sophisticated approaches to performance management – including the use of incentives – can be introduced.

#### Activities (Detailed tasks in annex 2)

#### Immediate

- **C.3.1** Ensure that all staff have job descriptions, job plans and staff development plans
- **C.3.2** Develop simple systems for managing staff absence

#### Longer term

- **C.3.3** Develop capacity of heads of departments, and managers of service delivery facilities to lead and implement improved performance management systems and processes and effectively utilise information to improve performance
- **C.3.4** Integrate performance management tools (performance appraisal, support supervision, quality assurance, etc.) to improve individual staff performance and development
- **C.3.5** Improve staff motivation and job satisfaction through monetary and nonmonetary incentive schemes

#### Strategy C.4: Improve occupational health and work place policies.



Strengthening occupational health and work place policies can help to reduce staff absences and low productivity and performance due to ill health and perceptions of risk. Health workers should be able to practice in a safe and risk free environment. The development and implementation of HIV/AIDS workplace policies is currently under review and this could be a starting point for the development of other occupational health and staff welfare policies. Improving workplace conditions and safety and reducing risk will have a positive impact on health worker morale and overall performance and productivity. It will be important to monitor the implementation of workplace policies to ensure that they are equitable and do not contribute to increased stigmatisation and/or discrimination.

#### Activities ((Detailed tasks in annex 2)

#### Immediate

**C.4.1** Introduce free health services for all health workers and nuclear family

C.4.2 Monitor implementation on of HIV/AIDS workplace policies

## D. Strengthen human resource planning, management and development systems at all levels by 2006

Strategy D.1: Strengthening human resource planning, management and development capacity at all levels

The proposed restructuring of the MoH and the eventual roll-out of the Decentralisation Policy will have implications for the way the HR function is managed and coordinated. It is important that once the immediate restructuring process is complete that the HR function is appraised to ensure that effective systems and capacity are in place at all levels. The review should also include the HR-related roles and functions of the regulatory boards. The findings of the review will inform the development of an action plan which will address capacity development and systems strengthening issues. The review may recommend change to work processes and the way staff work, which may require a change management action plan. This should outline the change processes, outcomes and communication strategy.

The review of the HR function may highlight capacity constraints which should be addressed through systematic and coordinated approaches. As much as possible innovative approaches should be explored to build the capacity of HR practitioners, such as distance education courses, locally provided courses, tailored on the job training courses, mentoring, coaching, etc. These could be provided through the use of long and short term technical assistance. Off the job long term training should only be used as a last resort. Short and long-term TA should be used for problem solving and systems development, but the opportunity should always be used for the transfer of skills to build up capacity in HRM/D.

Effective HR systems will strengthen capacity at all level for the planning, management and development of human resources.

#### Activities (Detailed tasks in annex 2)

#### Immediate

- **D.1.1** Review HR function in light of restructuring and ongoing decentralisation
- **D.1.2** Develop capacity development plan for improving strategic and operational planning, management and HRM/D capacity including in employee relations
- **D.1.3** Develop and implement HR planning, management and development systems at all levels
- **D.1.4** Improve recruitment and deployment procedures for HR and management staff
- **D.1.5** Use of short and long-term TA consultants to develop capacity
- D.1.6 Review functions and roles of regulatory bodies

# 6. Options for consideration in the implementation of the HR plan

Taking the staffing situation described above (numbers, types, distribution and flows of staff, training outputs and staff performance) and the wider policy context into consideration, three options for addressing the staffing needs are proposed for evaluation. These consider both the need to increase the number of posts and to make the job more attractive in order to recruit and retain staff in existing posts. Rather than an across-the-board increase in staffing levels it was decided to focus on increasing the staffing levels of only the most critical and essential cadres. The costings of each option are summarised below in Table 5.

#### Option 1:

- Increase the overall numbers of essential cadres in line with population growth (3.1%) in order to improve the current mix of staff
- Affect the agreed 13% salary increase in 2006 for all staff
- Assume current pre-service education and service attrition rates will continue for some years
- Progressively increase pre-service intakes as proposed commencing 2007 but not open any new training facilities

This option targets specific cadres for increases in numbers, guided by population growth.

#### Option 2

- Increase the overall numbers of essential cadres in line with population growth (3.1%) in order to improve the current mix of staff
- Affect the agreed 13% salary increase in 2006 for all staff
- Assume current pre-service education and service attrition rates will continue for some years
- Increase pre-service intakes as proposed but not open any new facilities
- Include an efficiency rate of 0.1%, which should be achievable, given the focus on improving systems and structures and evidenced from 2008 onwards. (An improvement in efficiency rates will reduce the level of increases needed and therefore the need for recruitment of foreign health workers or provide an opportunity to increase staff to population ratios.) Not to be applied to Educators or Doctors.

This option is based on Option 1, but assumes that better staff management (eg improved performance and productivity, reduced absence) will improve the efficiency of existing staff, thus reducing the number of staff required. The efficiency rate used is not ambitious and it only applied from 2008 by which time is expected that activities included in the Strategic Plan will have started to have an impact. The number of Educators and doctors is too low for efficiency measures to reduce the number of staff needed.

#### Option 3

- Increase the overall numbers of essential cadres in line with population growth (3.1%) in order to improve the current mix of staff
- Affect the agreed 13% salary increase in 2006 for all staff
- Start reducing current pre-service education and service attrition rates in 2008
- Increase pre-service intakes as proposed but not open any new facilities
- Apply an efficiency rate of 0.1% commencing 2008
- A consolidated pay package (including benefits and allowances) would be developed and a one off 5% increase would be provided across the board for all staff receiving allowances in 2006

This option is in line with the PSRP and would consolidate all allowances (see Table 4) to streamline the remuneration system. The one-off 5% increase is an inducement.

#### Discretionary Staff Enhancement Fund

 This is an additional enhancement (numbers and/or salary) for essential cadres in selected areas and facilities, which would be provided based on centrally established and agreed guidelines (criteria for submissions and target cadres included in Annex 4). To be managed by the MoH – at least in the first instance.

Associated training inputs are given in Annex 3.

### Table 5: Summary costs of workforce projections and costs 2005 – 2011

		Total training cost (Kw)	%difference from previous year	Total salary cost* (Kw)	%difference from previous year	Total workforce each year	%difference from previous year	Total Allowance Compensation payment (Kw)
2005 (Base)		766,001,362		338,342,797,805		23162		
2006	Option 1	766,001,362		396,383,255,221	17.15%	23621	1.98%	
	Option 2	766,001,362		396,383,255,221		23621		
	Option 3	766,001,362		396,383,255,221		23621		14,057,843,139
2007	Option 1	920,713,128	20.20%	457,709,969,766	15.47%	24070	1.90%	
	Option 2	920,713,128		457,709,969,766		24070		
	Option 3	920,713,128		457,709,969,766		24070		
2008	Option 1	920,713,128		526,165,292,546	14.96%	24522	1.88%	
	Option 2	1,002,588,128	8.89%	526,085,042,546	14.94%	24517	1.86%	
	Option 3	1,002,588,128		526,085,042,546		24517		
2009	Option 1	1,058,838,128	15.00%	602,603,928,897	14.53%	24975	1.85%	
	Option 2	1,058,838,128		602,445,255,897	14.51%	24956	1.79%	
	Option 3	1,058,838,128		602,445,255,897		24956		
2010	Option 1	1,058,838,128		688,673,133,452	14.28%	25431	1.83%	
	Option 2	1,058,838,128		688,225,370,846	14.24%	25398	1.77%	
	Option 3	1,058,838,128		688,225,370,846		25398		
2011	Option 1	1,058,838,128		784,462,687,448	13.91%	25856	1.67%	
	Option 2	1,058,838,128		783,449,190,717	13.84%	25796	1.57%	
	Option 3	1,058,838,128		783,449,190,717		25796		

\* Includes Allowances

#### Strengthening Human Resource-related functions and capacity

It will be an extremely demanding challenge to address all of the HR issues raised in this document. The effort needs to be well coordinated and carried out by people with appropriate skills and experience. Decisions relating to HR are made in various locations and at different levels across government. In order to determine where coordination needs to be strengthened and what additional skills and experience is needed, a rapid review of the HR functions (who does what and what are the gaps) is needed. It would be logical to carry this out as part of or immediately after the restructuring of the ministry of health. Based on this review, a plan for developing HR systems and capacity should be developed. Some skills development should be provided as part of the proposed technical assistance and relevant skills transfer interventions should be built into the terms of reference of the consultants used.

#### Areas for further study and analysis

The previous section has provided a broad analysis of the human resource situation in the health sector. However, in some areas more in-depth information is needed in order to develop the most appropriate strategies to address the problems. The areas where further investigation is needed during the period of the plan are given in Table 6 below.

Problem	Area for investigation	Expected outcome
Determining appropriate numbers and skills (establishment) for service delivery needs	Functional/workload analysis to determine staffing levels and skills mix	Rational staffing levels in line with service needs
Attrition from pre-service training	Attrition trends and causes	Targeted strategies address and reduce attrition rates and lead to increased production of health workers
Attrition of health workers in underserved areas and facilities	Attrition causes and trends	Targetedretentionstrategies retain essentialhealthworkersunderserved areas
Use of non-formal health workers and non health professionals to make up staffing shortfalls	Establish numbers and performance of non- formal health workers and non health professionals involved in service delivery	Increased numbers of non-formal health workers and non health professionals involved in service delivery, reducing staffing shortages and extending coverage

#### Table 6: Areas for further investigation

Problem	Area for investigation	Expected outcome
Staff absence	Levels of absence and causes	Performance management systems reduce unauthorised staff absence and mitigate the impact of authorised absences
Production and retention of cadres for PHC service delivery	Feasibility of producing multi-skilled health worker Impact assessment of Medical Licentiate cadre on service delivery.	Production of cadre, with defined career structure that is retained within the health system and improves PHC service delivery
Pre-service and in- service training not addressing service needs	Assessment of training needs Feasibility study for multipurpose training facilities Review of proposed In- service Coordination System	Training programmes prepare health workers for service needs Viable and efficient multipurpose training institutions established reducing wastage and duplication
Making conditions of service more attractive to retain essential cadres	Development of selective pay enhancement for critical cadres within ceilings	Critical cadres retained and motivated through selective pay enhancement
Inadequate HR information systems	Assessment of current system for accuracy (inc data flows from provinces) and ability to support HR decision- making	HR decision making informed by accurate and up-to-date staffing database

### 7. Key Assumptions With The Strategies

The strategies have been developed to address current or future challenges in order to achieve the objectives set out in this document. However well-designed the strategies might be, there are factors outside the control of the Human Resources Directorate, and indeed some beyond the control of the MoH which may hinder the achievement of the stated objectives. Some of these risks may be managed within the HRH Strategic Plan to reduce the negative impact. Others should be acknowledged and monitored. In the planning process the risks are restated as assumptions, which support the link between the strategies and their respective objectives as shown in Table 8. As part of managing the HR

strategy it will be necessary to regularly check whether the assumptions remain true. If not, some redesign of the strategies may be required.

Risks for some objectives are dealt with under other objectives. For example, "all key staff have capacity, tools and training in managing human resources planning processes and systems" is a legitimate risk for the first objective related to planning, but is covered by the fourth objective of strengthening HR systems.

Objectives	Assumptions/Risks	Strategy
An effective, ongoing and coordinated approach to planning across the sector by 2006	<ul> <li>All key stakeholders are and continue to be included in the planning process</li> <li>Regular review meetings, monitoring and evaluation inform decisions and action taken</li> <li>The decentralisation process does not hinder flows of data between the centre and the districts</li> </ul>	<ul> <li>Ensure human resource planning is coordinated across the health sector and is based on the best available data.</li> <li>Develop monitoring and evaluation systems to track progress of the implementation of the HR plan, make adjustments/ modifications and inform further development of the plan</li> </ul>
Increased numbers of trained and equitably distributed staff by 2008	<ul> <li>Retention of tutors in training institutions<sup>27</sup></li> <li>Improvements in infrastructure capacity is maintained</li> <li>All stakeholders reach and abide by consensus on re-defined pre-service entry requirements</li> <li>Stakeholders adhere to in- service coordination plan</li> <li>Improved deployment systems and retention schemes implemented</li> <li>Salaries and benefits for governmentfunded staff remain competitive.</li> <li>Quality of school education does not deteriorate</li> </ul>	<ul> <li>Increase training output by expanding the number of training places available</li> <li>Increase the number of applicants for training by widening participation</li> <li>Strengthen in-service training system</li> <li>Increase numbers of skilled health workers in post</li> <li>Improve the deployment and retention of health workers</li> </ul>
Improved productivity and performance of health workers by 2006	<ul> <li>Sufficient equipment and supplies available for staff to work effectively</li> <li>Management systems result in motivated staff and improved performance</li> </ul>	<ul> <li>Improve the quality of pre-service training (will also contribute to increasing training output above)</li> <li>Improve the quality and cost effectiveness of in-service training (will also contribute to strengthening IST system above)</li> <li>Improving the quality and cost effectiveness of in-service training</li> <li>Improving performance management capacity and tools</li> <li>Improve occupational health and work place policies.</li> </ul>

#### Table 7: Key assumptions associated with the strategies

<sup>&</sup>lt;sup>27</sup> Number increased under improved productivity & performance; the assumption is that they will then stay.



Objectives	Assumptions/Risks	Strategy
Strengthen human resource planning, management and development systems at all levels by 2006	<ul> <li>Managers are empowered to use new tools and training for HR planning, management and development.</li> <li>Low turnover of senior HR staff</li> </ul>	Strengthen human resource planning, management and development systems at all levels

### 8. Risks

The main external factors that could impact on the performance of the health sector during the duration of this strategic plan include political and legal, economic, social and cultural, and technological factors, as summarized below.

#### Political and Legal Factors

The political climate in Zambia is generally peaceful, stable and conducive for smooth delivery of healthcare services throughout the country. However, the following have been identified as the major political and legal developments that could impact on the implementation of this plan.

#### National Decentralisation Policy

In 2003, the Government launched the National Decentralisation Policy, which will be implemented over a period of 10 years, starting from 2003. This development has brought in another dimension to the future organization and management of health services in Zambia, with major implications on planning, resource allocation, human resource management and accountability, as the overall decentralization policy calls for channeling and control of resources through the Local Authorities at district level.

The challenge is for MOH to carefully study the implications of the new decentralization policy and ensure that the implementation of the HRH plan is harmonized with the requirements of the new policy, while taking full advantage of the opportunities presented by it.

#### National Health Services Act of 1995

The repealing of the NHSA/1995 will facilitate the merger of the MOH-HQ and CBoH functions at the centre and dissolution of the hospital and district management boards, and introduce of a new organizational structure for the health sector in order to bring the much needed improvements to service delivery.

The proposed restructuring of the health sector presents significant challenges, which if not properly managed, could lead to a reversal in the achievements

made under the health reforms. The following have been identified as major risks associated with this process:

- Possibility of disrupting the technical support services rendered by the CBoH to service units, which could adversely affect the quality of health service delivery;
- Possibility of staff losses due to de-motivation arising from the shift to poor Civil Service Conditions of Service and uncertainties that may result from the change process. Staff attrition could lead to loss of institutional memory; and
- Possibility of a reduction in donor funding due to concerns that transparency and accountability for donor funds may slacken, with the loss of systems and capacity developed under the CBoH, such as the Health Management Information System (HMIS), Financial and Administrative Management Systems (FAMS), Planning Systems and the Sector-wide Approach (SWAp).

#### Economic Factors

Since 1992, the Government has continued to pursue stringent fiscal policy measures aimed at stabilizing the macroeconomic environment and achieving sustainable economic growth. During the period from 2000 to 2004, the Zambian economy registered positive real growth at an average rate of 4.6% per year, which is higher than the average rate of 4.4% projected for the period from 2001 to 2005 (MoFNP: TNDP/2002-05). Despite the improvement in GDP growth rate, it is still inadequate to have significant changes on the standard of living and health status of Zambians. It is estimated that the economy must consistently grow at 7-8% per annum for at least 10 years.

Due to the past poor macroeconomic performance, health services are still under-funded to effectively support interventions that would result in significant disease reductions. The implementation of the HRH plan is dependent on the performance of the economy and consist adequate funding to the Sector.

#### Social/Cultural Factors

Poverty levels in Zambia have remained high and pose a demand for health services. In 2002, the overall poverty incidence was estimated at 67%. The link between ill health and poverty has been well established. Poverty leads to ill health and ill health is more likely to lead to further impoverishment among the poor than among the wealthy. As a result of poverty, preventable and treatable diseases have taken an enormous toll on the poorest people in Zambia who do not have access to professional healthcare, health information, safe drinking water and sanitation, education, decent housing and secure employment

The challenge for the implementation of the plan is to ensure improved supply

and equitably distributed human resources for health to meet the high demand.

#### Technological Factors

Significant advances in science and technology in the world present major challenges and opportunities for the health sector in Zambia. Currently, there are a number of methodologies and technologies on the market, which could be used in resolving major healthcare problems in a more efficient, effective and economical manner. Lower costs of computers, improved connectivity, the internet and more user-friendly software packages could improve the abilities of healthcare providers to communicate and share data and information, and significantly contribute to efficiencies and cost-effectiveness in health service delivery.

The challenge is to ensure provision of basic technology and equipment at all levels of health service delivery in order to improve the working environment.

### 9. Resourcing the plan

Strong HRH leadership and substantial resources will be required to implement the strategies and achieve the overall objectives of the HRH Strategic Plan. The sustained support and commitment of the government, Cooperating Partners (CPs), unions, professional associations and health workers will be required to achieve this.

Most of the recurrent costs related to human resources (salaries, regular training courses, regular management and supervision activities) will be funded from the regular government budget.

There are a number of human resource programmes already supported by Cooperating Partners.

A strategy for communicating and marketing the plan and attracting additional funds will be needed. It is hoped that the fact that there is a comprehensive and integrated HRH Strategic Plan will make this area more attractive to other funders.

### **10.** Implementation of the strategy

The implementation of the Strategic Plan will be conducted at various levels of the health care delivery system. The high level steering committee will oversee the implementation of the broad strategies. The implementation plans will be reviewed by the High Level Steering Committee, which should recommend the broad direction for the coming year. The Ministry of Health HQ will primarily provide the strategic guidance to interpret the Strategic Plan into annual costed action plans. The District Health Management Teams, Hospital Management Teams and Training Institutions will be expected to develop their human resource action plans based on their human resource needs. However in developing their plans, they will be guided by the strategic objectives of this Strategic Plan.

### 11. Monitoring and evaluation

Monitoring the implementation of the HRH Strategic Plan will be done at three levels, the national, provincial and district levels. At the national level, the high level HR Steering Committee will oversee the monitoring of the implementation of the Plan. The Monitoring and Evaluation Team will develop M&E plans in line with the HRH Strategic Plan and the Annual Implementation plans, in collaboration with the M&E Unit of the MoH. A monitoring report will be compiled and presented to the annual Health Sector Committee and monitoring and evaluation information shared with policy makers and managers. At the provincial, the monitoring of the Implementation Plan will be integrated in the performance assessment and quarterly reports submitted to the Ministry HQ for review. A set of high level human resource performance indicators is given in Table 9 below. The targets will be completed early in year 1 once the major options outlined above have been agreed.

Objective	Strategy	Indicators	Means of verification
An effective, ongoing and coordinated approach to planning across the sector by 2006	Ensure human resource planning is coordinated across the health sector and is based on the best available data	High level HR "oversight" body monitor implementation of HR strategy through regular quarterly meetings	Annual HRD reports Minutes of HR advisory body meetings
	Develop monitoring and evaluation systems to track progress of the implementation of the HRH Plan, make adjustments/ modifications and inform further development of the plan	HR data used as a basis for modifying the HRH Strategic Plan and for developing annual plans	Annual revisions of the HRH Strategic Plan Annual plans
Increased numbers of trained and equitably distributed staff by 2008	Increasing training output by expanding the number of training places available Increase the number of applicants for training by widening participation Strengthen in-service training system Increase numbers of skilled health workers in post	Number of health centres with at least one enrolled nurse and one Clinical Officer increased from 50% to 80 % by 2010 At least 60 % of	Personnel database Training reports



Objective	Strategy	Indicators	Means of verification
	Improve the deployment and retention of health workers	health professionals working at Level 1 hospitals and PHC facilities.	
		Training output increased by at least: • 80% nurse midwives by 2010	
		<ul> <li>10% doctors by 2010</li> <li>100% lab techs by 2010</li> </ul>	
Improved productivity and performance of health workers by	Improve the quality of pre- service training Improve the quality and cost effectiveness of in-service	Instructor to student ratio reduced from 1:x 26 to 1:20 by 2009	Training division database
2006	Improve performance management capacity and tools	80% of health facilities conduct staff appraisals annually	Facility survey (for appraisal and workplace policy)
	Improve occupational health and work place policies.	Workplace policy on HIV/AIDS implemented satisfactorily in 90% of health	
Strengthen human resource planning, management and development systems at all levels by 2006	Strengthen HR planning, management and development capacity at all levels, using long and short- term TA following a review of then HR function	Appropriate organisational structures to carry out HR functions in line with restructuring exercise and eventually decentralisation HR staff	Organisation charts of HR structures Survey of HR staff at all levels
		appropriately skilled according to level and function	

In addition more detailed monitoring routines will be developed in Year 1 for use on a monthly, quarterly, biannual and annual basis. The annual review and revision cycle is presented in Table 10.

## Table 9: Annual review and revision cycle for the HR strategy 2006-2010and responsibilities

Month	Task	Responsibilities				
January 2006	Annual plan implementation starts	Director – HRA, PHD, DDH				
October 2006	Review of progress again annual plan and check planning assumptions; meeting with key stakeholders	HR taskforce				
October - November 2006	Review of strategy; modifications to the strategy, if necessary	HR taskforce				
	Development of annual plan (based on modified strategy) and budget for coming year	Director – HRA, PHD, DDH				
January 2007	Annual plan implementation starts	Director – HRA, PHD, DDH				
Repeat sequence for subsequent years						

There will be two evaluations during the period of the HRH Strategic Plan. These will consist of a mid term review assessment after the first two and half years of implementation and a comprehensive final evaluation at the end of implementing the plan.

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### Annex 1: Strategies and key activities 2006 - 2010

ID	Task Name			2007	2008 H1 H2	2009	2010	2011
1	A: An effective, ongoing and coordinated approach to planning across the sector		11   HZ					
2	Strategy 1: Ensure human resource planning is coordinated across the health sector and is based on the best available data	-		-				
3	Strengthen high level sector wide human resource steering committee to provide strategic oversight of Human Resource planning							
4	Ensure coordination and harmonisation of all human resource related plans							
5	Improve and maintain accurate and up-to-date staffing database							
6	Revise the staffing projections in the light of regular analysis of staffing data and changing service needs							
7	Support the development of annual implementation plans for the Human Resource for Health strategy			HR ta:	sk force			
8	Strategy 2: Develop monitoring and evaluation systems to track progress of the implementation of the HR plan, make adjustments/mod	-						_
9	Develop indicators for monitoring and evaluating (M&E) implementation of HR Plan and integrate into health sector monitoring and evaluation system							
10	Develop Terms of Reference (ToR) for HRH monitoring and evaluation team							
11	Develop annual M&E plans to monitor implementation							
12	Develop operational and applied research plans to study implementation of strategies				-			
13	Coordinate and monitor other HR research and utilise findings				-			-
14	Disseminate M&E reports, reviews and research findings					-		-
15	B. Increased numbers of trained and equitably distributed staff	-						-
16	Strategy 1: Increase training output by expanding the number of training places available	•						-
17	Establish a Health Training Coordinating Committee (HTCC) linked to the MoH Human Resource Development Committee (HRDC), with representation fro							
18	Develop training plan with expanded training outputs							
19	Increase number of training facilities by upgrading, constructing, renovating and expanding public training institutions.							
20	Re-open enrolled nursing and laboratory technician training schools and other institutions closer to locations where potential applicants live.							
21	Establish direct entry for midwifery training		j					
22	Investigate new forms of training structures (polytechnics, etc.).							
23	increase the use of non-traditional forms of training (e.g. distance learning)			(				
24	Involve private sector training providers in pre-service training				:	:		_
25	Increase the number of scholarships for training (locally first, then regional targetted at scarce skills)							
26	Strategy 2: Increase the number of applicants for training by widening participation			_				÷.
27	revise entry requirements							
28	develop and provide bridging training programmes							
29	skills upgrading for selected non-professional staff					:		
30	promoting health service careers in schools							
31	Strategy 3: Strengthen in-service training system			_				÷.
32	review national In-service Training (IST) Coordination Plan							
33	increase the use of innovative approaches to in-service training (e.g. distance learning, e-learning, mentoring, on-site training)							
34	Improve links between In Service Training (IST), Continuing Professional Development (CPD) and career development							
35	Monitor links between IST and registration/certification							
36	Strategy 4: Improve numbers of skilled healthworkers in post	•			Ý.			
37	Finalise new establishment							
38	Review skills mix for the different service levels, particularly PHC service delivery							
39	Improve recruitment procedures at all levels particularly targeting new graduates, and unemployed health workers							
40	Improve procedures for getting new employees onto payroll							
41	Develop systems to recruit foreign health workers for strategic positions with capacity development function (also contributing to improving productivi							
42	Develop employment/contracting procedures to retain health workers nearing retirement							
43	Strategy 5: Improve the deployment and retention of health workers	-		•				
44	Strengthen deployment procedures to ensure equitable distribution							

### Annex 2: Work plan for 2006

#### Introduction

This work plan has been derived from the 5-year HRH strategic plan. These are then priority tasks for 2006. For a better understanding of how the tasks relate to the wider HRH Strategic Plan, this plan should be read alongside the 5-year HRH Strategic Plan, in particular section 4 (key strategies).

This work plan provides guidance on the main tasks needed to support 'immediate' relevant activities. A suggested schedule by quarter is given, but this should be used flexibly and if necessary, revised on a quarterly basis.

#### Objective A: An effective, ongoing and coordinated approach to planning across the sector

Strategy A.1: Ensure human resource planning is coordinated across the health sector and is based on the best available data

Activity A.1.1: Create high level sector wide human resource steering committee to provide strategic oversight of Human Resource planning

#### Tasks

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Develop terms of reference for the high level steering	Director HR	х				This is a high level
	committee and develop appropriate name						steering committee
2.	Draw up membership profile of committee and modus		Х				that will coordinate
	operandi						HR across the whole
3.	Approval		х				sector, and therefore
4.	Recruit members		Х				its composition
5.	Orientation for members			Х			should reflect this
6.	Regular meetings commence			Х	Х	х	function (public, NGO



<b>Resource requirements</b> : Allowances for meetings; suggest 10 members x 2 half day meetings per year		and provide sector employers, education and training, finance
Estimated cost:	Kw USD	and PSM).

### Activity A.1.2: Ensure coordination and harmonization of all human resource related plans

Task	(S						
No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Catalogue all HR plans available and required	Asst. Dir HR	х				There are a number
2.	Review for compatibility with HR strategy and each other		х				of different HR-
3.	Make appropriate/acceptable revisions and reject redundant		х				related plans in
	plans						existence (e.g.
4.	Briefing meeting of persons responsible for each of the HR- related plans			х			training plan, retention plan,
5.	Establish mechanism to ensure that all HR-related plans fit with HR strategy			х			scholarship plan) and others
	<b>Resource requirements:</b> Allowances for briefing meeting and subsequent coordination meetings; suggest 10 members x 1 half day meetings per year						suggested for the implementation of the overall strategy. The outcome of this activity is a system
	Estimated cost:	Kw USD					to ensure that as plans are revised they are compatible with the Annual Action plans for the HRH strategic Plan.

#### Activity A.1.3: Improve and maintain accurate and up-to-date staffing database

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Develop TORs for consultant			х			Before working to
2.	Assessment of current system in terms of accuracy (inc data	Chief HRM			х		improve the current
	flows from provinces) and ability to support decision-making	planning					HR data, a decision
3.	Assessment of future systems and requirements				Х		is needed on the
4.	Options development: e.g. transfer to PEMEC, improve				Х		database
	current system						requirements for the
5.	Work plan for implementing selected option					Х	future, given the
	<b>Resource requirements:</b> HR database consultant (4 weeks – two trips for tasks 2 - 5); software (including Project Planner) and computing equipment may be needed, depending on the options selected						forthcoming decentralisation of employment and HR functions.
	Estimated cost:	Kw USD					

Activity A.1.4: Revise the staffing projections in the light of regular analysis of staffing data and changing service needs

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Develop key questions on staffing situation	Chief HRM		х			The staffing projections in the
		planning					
2.	Develop analysis routines				Х		HRH Strategic plan
3.	Identify changes in NHSP with HR implications (with Planning Directorate)				х		are based on very tentative
4.	Revise staffing projections				х		assumptions. As more detailed and

5.	Assess implications of changes in staffing projections for the HR plan and associated plans e.g. training plan	X	accurate analysis of staffing data
	Resource requirements: Consultant input to develop analysis routines and assist with the projections during year 1 (4 weeks); may need new HR planning tool, though a number available are free.		(e.g. distribution, attrition) becomes available, these assumptions should be revised.

# Activity A.1.5: Support the development of annual implementation plans for the Human Resource for Health strategy

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review progress against plan for current year in consultation	Asst.			Х		Progress against
	with all relevant managers	Director HR					previous year's
2.	Identify requirements for coming year				х		action plan needs
3.	Prepare briefing papers for High Level Steering Committee				Х		to be reviewed by
4.	Develop implementation plan for coming year based on					х	the High Level
	recommendations of High Level Steering Committee						Steering Committee
5.	Communicate Annual Implementation plan for coming year to					Х	and this committee
	all relevant managers						should also
6.	Managers communicate the Implementation Plan to HR staff					х	recommend the
	and general managers and incorporate relevant activities in						broad direction for
	job plans						the coming year.
	Resource requirements: No special requirements						This should be
	Estimated cost:	Kw					translated into
		USD					action plans which
							are communicated
							throughout all
							levels of the
							organization

# Activity A.1.6: Develop indicators for monitoring and evaluating (M&E) implementation of HR Plan and integrate into health sector monitoring and evaluation system

Tasl	(S						
No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review existing indicators included in HRH Strategic Plan	Chief HRM planning	х				
2.	Develop additional indicators for annual monitoring and monitoring of specific HR interventions		х				
3.	Identify data sources for indicators from data collection systems including HMIS		х				*
	Resource requirements: No special requirements						
	Estimated cost:	Kw USD					

Strategy A.2: Develop monitoring and evaluation systems to track progress of the implementation of the HR plan, make adjustments/modifications and inform further development of the plan

#### Activity A.2.1: Establish HRH monitoring and evaluation team

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Develop Terms of Reference for team and modus operandi	Director HR	х				
2.	Identify profile of team members		Х				
3.	Recruit team members			Х			
4.	Establish schedule of meetings			Х			
	<b>Resource requirements</b> : No special requirements except if team members need to travel						
	Estimated cost:	Kw					



			USD					
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#### Activity A.2.2: Develop annual M&E plans to monitor implementation

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review Annual Implementation plans	Chief HRM	\$				
		planning					
2.	Select key indicators for monitoring progress in general and		\$				
	for monitoring special initiatives being tested.						
3.	Identify data sources		\$				
4.	Establish data collection routines		\$				
5.	Collect data		х	х	х	Х	
6.	Produce quarterly reports		х	Х	Х	х	
7.	Produce annual report					Х	
	Resource requirements: No special requirements						*
	Estimated cost:	Kw					+
		USD					

\$ This work should be complete by December 2005 in readiness for the first annual implementation plan.

#### Activity A.2.3: Develop operational and applied research plans to study implementation of strategies

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Catalogue all relevant staffing studies (complete, in progress and planned) and obtain hard and electronic copies where available.	Asst. Director HR			x		
2.	Review HRH Strategic Plan for strategies requiring further evidence				Х		
3.	From 1 and 2 identify studies needed				Х		

4.	Schedule studies according to importance of evidence and time needed to support relevant strategies; develop a research plan		x	
5.	Develop TORs for studies			Х
6.	Contract studies to be included in Year 1 and early Year 2			Х
	<b>Resource requirements:</b> Lump sum for 3 studies to be started in Year 1			
	Estimated cost:	Kw USD		

#### Activity A.2.4: Disseminate M&E reports, reviews and research findings

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Disseminate list of key studies to policy makers and	Chief HRM				Х	
	managers.	planning					
2.	Distribute research documents as requested.					Х	
3.	Organize round-table discussions based on key research					Y2	
	reports						
	Resource requirements: Printing and postage costs						
	Estimated cost:	Kw					
		USD					

B. Increased numbers of trained and equitably distributed staff

Strategy B.1: Increase training output by expanding the number of training places available

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Develop Terms of Reference for committee and modus	Chief HRDO	Х				This committee
	operandi						should include the
2.	Identify profile of committee members		Х				MoH, Ministry of
3.	Recruit committee members			Х			Education (MoE)
4.	Establish schedule of meetings			Х			and Ministry of
	Resource requirements:						Science,
	Estimated cost:	Kw USD					Technology and Vocational Training (MSTVT). As part of the modus operandi, a clear communication link with the high level HR Steering Committee should be established to ensure good coordination with the overall HR strategy.

#### Activity B.1.2: Develop Training Plan with expanded training outputs

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Confirm current training intakes	Chief HRDO	Х				The Training Plan
2.	Confirm training requirements for staffing projections		х				is a sub-plan of the overall HRH
3.	Draft Training Plan for coming six years (in tandem with other training-related plans)			x			Strategic Plan. Currently there are
4.	Review with key stakeholders			Х			various plans
5.	Disseminate to all training managers and other stakeholders				Х		related to training
	Resource requirements:						including the development/
	Estimated cost:	Kw USD					renovation of training institutions that must be linked to the overall training plan

## Activity B.1.3: Increase number of training facilities by upgrading, constructing, renovating and expanding public training institutions.

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Identify priority institutions to be upgraded in Year 1 and	Director-		х			The development/
	develop short-term Training Infrastructure Plan	Policy &					upgrading of the
		Planning					training facilities
2.	Implement Training Infrastructure Plan				Х	Х	should be in line
3.	Develop a longer-term training infrastructure plan based on					Х	with the overall
	the training plan						Training Plan. It
	Resource requirements:						should aim to

Estimated cost:	Kw USD	increase the efficiency of the use of training institutions. This may mean having multipurpose training institutions instead of single professions
		institutions

## Activity B.1.4: Re-open enrolled nursing and laboratory technician training schools and other institutions closer to locations where potential applicants live.

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Survey of current state of facilities	Director-HRA	Х				The feasibility of
2.	Negotiation/discussion phase - including with districts as the clients			х			one being multipurpose - nursing and some other courses – should be
3.	Prioritise which institutions should be opened and when (as part of training infrastructure plan)			х			
4.	Renovation & re-equipment as necessary				Х	Х	
5.	Recruit tutors and support staff					Х	considered to test
6.	Obtain accreditation				By y	/r 6	the use of
7.	Recruit students					х	multipurpose
	Resource requirements:						training institutes
	Estimated cost:	Kw USD					

#### Activity B.1.5: Increase the number of scholarships for training

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Develop policy on use of scholarships	Chief HRDO		Х			The policy should
2.	Create a scholarship pool from Swap funds				Х		attempt to prioritise
3.	Identify structure to manage scholarships: applications, management, evaluation					Х	the use of local courses first, and
	Resource requirements: Scholarship funds						then regional and
	Estimated cost:	Kw USD					they should be targeted at scarce skills.

## Strategy B.4<sup>28</sup>: Increase numbers of skilled health workers in post

#### Activity B.4.1: Finalise new establishment

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Obtain approval	Director HRA	Х				In addition to the
2.	Identify major implications for new establishment/structure		Х				initiative in October
	(role changes etc)						2005, it may be
3.	Communicate new establishment to key stakeholders			х			necessary to
	(meetings, memos, copies of new establishment printed or in						develop a change
	CD-Rom) indicating time frame and targets over the period						management action
	i.e. reduce unrealistic expectations.						plan to ensure that
4.	Monitor impact of new establishment e.g. what tasks are				х		the change
	being missed out; where is there duplication, etc						required by the new
5.	Formal review to look at appropriateness of staffing levels and					Х	establishment is
	skills for jobs to be done (year 3)						effectively

<sup>&</sup>lt;sup>28</sup> Strategies B.2 and B.3 start in Year 2



<b>Resource requirements:</b> Printing & dissemination of 'establishment' document (this could be produced on CD-Rom if cheaper and quicker); meetings/workshops may be needed				managed.
if change management is required.				
Estimated cost:	Kw			
	USD			

## Activity B.4.2: Improve recruitment procedures at all levels particularly targeting new graduates, and unemployed health workers

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review current procedures to identify delays and other	Ass. Director	Х				
	problems (if possible get an estimate of recruits lost due to	HRMD					
	inefficient/unfriendly procedures)						
2.	Identify ways of reducing problems			х			
3.	Communicate with final year students about process of				х		
	recruitment and posting policy and types of jobs available						
4.	Implement improved procedures and monitor					Х	
						to	
						Y6	
5.	Identify number (estimate) of unemployed graduates by cadre		х				
6.	Develop brief re-orientation courses			Х			
7.	Recruit and provide orientation courses				Х		
8.	Monitor size of unemployed pool by cadre to identify need for					Х	
	orientation courses						
	<b>Resource requirements</b> : Tasks 1-2 – consultants (3 weeks);						
	Task 3 – development and printing of briefing materials; Task						
	4 – consultant to carry out sample survey (3 weeks); Tasks 6						
	<ul> <li>– 7 – development and implementation of courses</li> </ul>						



 Estimated cost:	Kw			
	USD			

#### Activity B.4.3: Improve procedures for getting new employees onto payroll

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Survey of new joiners to identify extent of delays in getting people on to the payroll	CHRMO		x			
2.	Map the system of getting a person on the payroll			Х			
3.	Track a sample of files by date at each stage of the system to identify major bottle-necks				x	x + Y2	
4.	Identify solutions for reducing bottlenecks					Y2	
5.	Set time standards for each step in the process and develop simple monitoring tool					Y2	*
6.	Monitor samples of new recruits against the time standards, taking remedial action where necessary					Y2	*
	<b>Resource requirements</b> : Consultant to carry out steps 1 – 5 (4 person weeks over 12 months)						
	Estimated cost:	Kw USD					



## Activity B.4.4: Develop systems to recruit foreign health workers for strategic positions with capacity development function (also contributing to improving productivity and performance)

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review current agreements (source, numbers and types of	ASS.		Х			
	staff, funding - especially GRZ contribution, and perceived	Director-					
	effectiveness of the arrangement) and recently completed	HRMD					
	agreements e.g. Dutch doctors						
2.	Identify preferred types of arrangement			Х			
3.	Identify sources that could be expanded, and potential new			Х			
	sources (check with foreign aid missions and UN)						
4.	Develop International Recruitment Plan and exit strategy				х		
5.	Implement Plan and monitor contribution to staffing of					X +	
	services, and where appropriate, capacity development					Y2-	
						5	
	Resource requirements: No special requirements						
	Estimated cost:	Kw					
		USD					

#### Activity B.4.5: Develop employment/contracting procedures to retain health workers nearing retirement

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review and revise policy on recruiting retired staff on contract	ASS. Director- HRMD		x			
2.	Identify current bottlenecks in process of recruiting retired workers on contract				х		*
3.	Modify systems to ensure smooth transition between retirement and start of new contract, so minimum of working days lost				x		

4.	Identify areas of critical skill shortage not immediately being address by increased training output		x	
5.	Orient/train employers to communicate benefits of staying on contract to health workers with the appropriate skills who are due to retire			X
6.	Monitor time gaps between retirement date and contract start dates			Y2
	<b>Resource requirements:</b> Briefing meetings cascaded via the provincial offices, for employers on recruitment of retirees on contract.			
	Estimated cost:	Kw USD		

#### Strategy 5: Improve the deployment and retention of health workers

#### Activity B.5.1: Strengthen deployment procedures to ensure equitable distribution

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review Deployment Policy and procedures	ASS.	Х				
		Director-					
		HRMD					
2.	Identify weaknesses/bottlenecks in deployment procedures		Х				
3.	Develop revised Deployment Policy and guidelines to			Х			
	address gaps						
4.	Develop Retention Plan			Х			
5.	Orient managers at all levels				Х		
6.	Monitor to ensure implementation is addressing imbalances					Y2-	
						6	



<b>Resource requirements:</b> TA for appraisal of current systems (5-10 days), allowances for review team; workshops for stakeholder consultations; orientation workshops for managers				
Estimated cost:	Kw			
	USD			

Activity B.5.2: Improve conditions of service based on selective enhancement for health workers in facilities and underserved areas (urban, rural, district, tertiary) and areas of specialization

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Identify essential health workers/cadres and skills based on	ASS.	Х				
	service needs	Director-					
		HRMD					
2.	Identify attrition trends among these cadres		Х				
3.	Develop pay and benefits for these cadres/skills			Х	Х		
	(performance related)						
4.	Monitor impact of improved terms and conditions through					Y2-	
	health workers surveys, attrition data and performance					6	
	reviews						
	Resource requirements: TA support to identify essential						
	cadres and skills mix and develop pay packages (10-20						
	days); improved pay package for selected health workers in						
	selected areas/facilities.						
	Estimated cost:	Kw					
		USD					

## Activity B.5.3: Support underserved areas to maintain/develop retention schemes (allocation of running costs for non-salary incentives) for key cadres

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Disseminate information on existing retention schemes	ASS.		х			It will be important
	through provincial workshops	Director-					to ensure that other
		HRMD					HRM/D strategies
2.	Provide technical support through the development of				Х		and practices are
	guidelines (management, selection criteria, incentive mix,						strengthened to
	M&E, etc.) for existing schemes and for scale up to other						complement
_	underserved areas						retention initiatives
3.	Ensure that district allocations/ basket funding provide for				Х		e.g. performance
	creation of Recruitment and Retention Fund (within ceilings)						management,
4.	Incentive package developed by Hospital Management					х	training and
	Teams, District Health Management Teams, with technical						development,
	support from centre and provinces						occupational health
5.	Monitor impact on staffing and attrition levels					Y2-	and safety,
						5	employee relations,
	<b>Resource requirements:</b> Workshops for information sharing						etc. and that these
	x 9 provinces. Technical Assistance (consultant) to review						are linked to
	existing retention strategies; support the development of						infrastructure and
	guidelines; recommend incentive mix, and develop M&E						workplace
	systems (5-10 days); printing and communication costs for						improvements.
	the documentation and dissemination of information;						
	development and dissemination of guidelines; increased						
	basket/project based funding for incentive packages.						
	Estimated cost:	Kw					
		USD					



#### Activity B.5.4: Monitor attrition trends and emergence of new staff groups to retain

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review attrition trends and causes	ASS.	х				
		Director-					
		HRMD					
2.	Identify cadres/health workers with highest attrition rate		х				
3.	Identify current and potential causes of attrition		Х				
4.	Establish how information and monitoring systems can be			Х			
	expanded to track attrition trends and identify emerging						
	cadres						
5.	Establish how information systems can be linked to decision				Х		
	making on deployment and retention						
	<b>Resource requirements:</b> TA involved in support to retention						
	(above) utilized to develop research plan, models and						
	projections on attrition trends, conduct targeted studies on						
	particular cadres and within particular areas and						
	recommendations for strengthening information systems (5-10						
	days).						
	Estimated cost:	Kw					
		USD					



Activity B.5.5: Improve amenities and working environments in all areas, especially underserved areas and facilities

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Conduct survey of promising practices and impact	Director- HRA & Director – Policy &		x			
		Planning					-
2.	Document and disseminate information			Х			
3.	Develop plan for scale up of successful initiatives				Х		
4.	Support scale up plan through basket and donor funding (staff housing, utilities, transport, medical care, communication, etc.)					x	
5.	Monitor impact of initiatives on target areas and facilities					Y2- 5	
	<b>Resource requirements:</b> Survey to collect information on practices; documentation and dissemination through workshop/information sharing fora; basket and project based funding for evidence based initiatives						
	Estimated cost:	Kw USD					

#### C: Improved productivity and performance of health workers

Strategy C.1: Improve the quality of pre-service training (will also contribute to increasing training output above)

Activity C.1.1: Develop optimum staffing structures to support expansion of training

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Develop a Staffing Plan for the training institutions to guide and direct recruitment, development and retention of tutors and other support/resource staff	Director-HRA	х				
2.	Determine current staffing numbers in training institutions to inform Plan		х				
3.	Determine numbers of tutors and other support staff required for expanded, re-opened and new training institutions based on optimum tutor: student ratios, resources, etc.		х				
4.	Explore innovative and cost effective ways of delivering training					х	
5.	Identify retention strategies for existing tutors (see Retention Plan)			x			
6.	Determine number and timeframe for staff recruitment			Х			
	<b>Resource requirements:</b> allowances for members of team developing Staffing Plan						
	Estimated cost:	Kw USD					



Activity C.1.2: Increase the number of tutors in line with increased training places through upgrading existing staff, recruiting new staff and using non-nationals on a temporary basis in strategic positions

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Identify numbers of tutors required for increased intakes (Staffing Plan)	Director-HRA	x				
2.	Identify potential tutors from existing staff and develop career/personal development plans			X			
3.	Determine numbers of non-nationals required to make up staffing shortfall and address skills gaps			Х			
4.	Recruit and appoint tutors in line with Staffing Plan and International Recruitment Plan				x	х	-
5.	Develop and implement performance management systems for tutors					Y2	-
6.	Monitor retention and performance of tutors					Y2- 6	-
	<b>Resource requirements:</b> allowances for team developing Staffing Plan (as above); funding for staff recruitment and appointment						
	Estimated cost:	Kw USD					

## Activity C.1.3: Develop new and review existing pre service training curricula to integrate new knowledge and skills and address service needs

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review existing curricula for relevance and quality of content	Ass. Director			Х		
	for service needs	- HRMD					
2.	Identify deficiencies in curricula				Х		

3.	Identify priority areas and update curricula based on service needs in consultation with training institutions, professional associations, service providers and other training and performance information		Y2
4.	Assess appropriateness of in-service training modules for inclusion in PST curricula		Y2
5.	Establish schedule for regular review and updating of curricula		Y2
6.	Develop indicators for monitoring relevance and quality of curricula		Y2
	<b>Resource requirements:</b> TA to support review of curricula (10 days) and development of specialised curricula (number of days required dependent on priority areas); workshops for information sharing, curricula development, etc.		
	Estimated cost:	Kw USD	

Strategy C.3<sup>29</sup>: Improving performance management capacity and tools

#### Activity C.3.1: Ensure all staff have job descriptions, job plans and staff development plans

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Assess implementation of performance management systems	Ass. Director		х			
	in health sector	- HRA					
2.	Identify weaknesses and constraints to implementation			х			
3.	Develop generic job descriptions for selected cadres and				Х		
	service delivery levels						
4.	Orient managers on job description development				х		

<sup>&</sup>lt;sup>29</sup> Strategy C.2 starts in Year 2

5.	Pilot development and implementation of job descriptions, job plans and staff development plans with selected health workers in selected areas and facilities			x	
6.	Monitor implementation and scale up on evidence base			Y2- 5	
	<b>Resource requirements:</b> TA to review performance management systems and the development of generic job descriptions; workshops for training and orientation; financing for piloting initiative.				
	Estimated cost:	Kw USD			

#### Activity C.3.2: Develop simple systems for managing staff absence

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review levels of authorized and unauthorized staff absence	Ass Director- HRA	х				
2.	Document and disseminate information on practices and initiatives addressing absences		х				
3.	Develop guidelines for the management of staff absence			Х			
4.	Provide training and orientation for heads of departments, heads of facilities and other managers				x		
5.	Support the scale up of successful practice in selected areas					Х	
6.	Monitor impact					Y2- 5	
	<b>Resource requirements:</b> allowances/transport for research/study group; documentation and dissemination of findings; training and orientation workshops; financing for scale up of practices						



Estimated cost:	Kw			
	USD			

#### Strategy 4: Improve occupational health and work place policies

#### Activity C.4.1: Improve access to free health services for all health workers and nuclear family

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review the current provision and access of health services	Director-		Х			
	for health workers	HRA/					
		Director-					
		<b>Clinical Care</b>					
2.	Identify weaknesses and constraints			Х			
3.	Determine priority health services				х		
4.	Support the provision of health services through basket funding					х	
5.	Monitor impact on performance and productivity					Y2- 5	
	<b>Resource requirements:</b> allowances/transport for study team; financing provision of health services						
	Estimated cost:	Kw USD					

#### Activity C.4.2: Monitor implementation of HIV/AIDS workplace policy

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Improve access to immediate prophylaxis treatment.	Director-	Х				
		HRA/					
		Director-					
		<b>Clinical Care</b>					
2.	Improve availability of protective supplies and equipment		х				
3.	Develop indicators for monitoring implementation and impact		Х				
4.	Resource requirements: no requirements for monitoring;						
	cost of treatment and supply of supplies and equipment to be						
	met from where????						
	Estimated cost:	Kw					Ţ
		USD					

#### D. Strengthen human resource planning, management and development systems at all levels

Strategy D.1: Strengthening human resource planning, management and development capacity at all levels

Activity D.1.1: Review HR function (including HR-related roles of regulatory bodies) in light of restructuring and ongoing decentralization

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Review HR function at all levels to analyse key HR tasks	Director-		Х			
	being undertaken	HRA					
2.	Identify responsibilities for these tasks at the different levels			Х			
3.	Identify required capacity, systems and information needs			х			

4.	Develop Action Plan to address identified gaps (capacity development, systems strengthening, etc.)			х		
5.	Develop Action Plan to manage change (e.g. change			х	х	
	processes and expected outcomes, communication strategy)					
	<b>Resource requirements:</b> TA to conduct review (10-15 days);					
	workshops for consultations, planning and change					
	management					
	Estimated cost:	Kw				ſ
		USD				

### Activity D.1.2: Develop capacity development plan for improving strategic and operational planning, management and HRM/D capacity

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Findings of review of HR function inform the development of Capacity Development Plan	Ass Director- HRMD			Х		
2.	Individual capacity development plans developed for key HR staff				х		
3.	Technical assistance provided to support capacity development through mentoring, coaching and other on-the- job approaches				x	х	
	<b>Resource requirements:</b> short and long term TA as above; financing for implementation of capacity development initiatives, including off and on the job training interventions						
	Estimated cost:	Kw USD					



## Activity D.1.3: Develop and implement HR planning, management (including employee relations) and development systems at all levels

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Findings of review of the HR function will inform the	Ass Director-			х		
	development of Systems Strengthening Plan	HRMD					
2.	Support to systems strengthening (planning, recruitment, deployment, performance management, training, information, monitoring and evaluation, etc.) through allocation of financial resources and use of long and short term TA				x	x	
2						v	-
3.	Implement systems					Х	
4.	Monitor implementation and impact on capacity					Y2- 5	
	<b>Resource requirements:</b> financing for strengthening information systems, planning models/programmes, documentation and dissemination of policies and guidelines, short term TA						
	Estimated cost:	Kw					
		USD					



#### Activity D.1.4: Use of short and long-term TA consultants to develop capacity

No.	Tasks	Responsible	Q1	Q2	Q3	Q4	Comments
1.	Identify areas for technical assistance	Director-	Х				It will be important
		HRA					to plan and
2.	Develop ToR for long term TA		Х				budget for short
3.	Develop plan for short term TA and develop ToR			Х			term TA. ToRs
4.	Recruit and appoint long term TA			Х			and performance
5.	Coordinate short term TA (contract management, QA,			Х	Х	Х	contracts should
	monitoring and evaluation)					Y2-	be developed for
						5	short term TA
	Resource requirements: long and short term TA						
	Estimated cost:	Kw					
		USD					

#### Annex 3: Training outputs

Training Programme	Under	Duration	Intakes pa*
MBChB	UNZA	5 yrs	70
M.Med. (Medicine)	UNZA	4 yrs	11
M.Med (Orthopaedics)		-	
M.Med. (Obs & Gynae)			17
M.Med. (Paediatrics)			10
M.Med (Radiology/Oncology)			
M.Med. Surgery			16
B.Sc. Nursing (PBN)	UNZA	3 yrs	26
B Biomedical Engineering	UNZA	3 yrs	15
B Physiotherapy	UNZA	3 yrs	21
B Pharmacy	UNZA	3 yrs	12
Masters in Public Health	UNZA	2 yrs	16
BSc Nutrition	UNZA	5 yrs	10
Dip.Med.Lab.Technology	MST	3 yrs	20
Diploma in Physiotherapy	MST	3 yrs	102
Diploma Nutrition	MACO	2 yrs	10
Diploma in Pharmacy	MST	3 yrs	3
Pharmacy Technician		,	
Diploma in Anaesthetics	MoH	1 yr	22
Diploma in Gen. Pathology			
Registered Nurse	MoH	3 yrs	385
Enrolled Nurse	MoH	2 yrs	299
Registered Mental Health Nursing	MoH	1.5 yrs	5
Registered MH Nursing (direct entry)	MoH	3 yrs	42
RN Anaesthetics	MoH	1 yr	22
Operating Theatre Nurse	MoH	1 yr	27
Registered Midwife	MoH	1 yr	125
Enrolled Nurse Midwife	MoH	1 yr	97
Medical Licentiate	MoH	3 yrs	21
Clinical Officer General	MoH	3 yrs	140
CO Psychiatry	MoH	2 yrs	5
CO Psychiatry (direct entry)	MoH	3yrs	43
Counseling (post basic)	MoH	1 yr	23
Dip. in Env'al Health (EHT)	MoH	3 yrs	86
Dip Biomedical Technology	MoH	3 yrs	16
Diploma Dental Therapy	MoH	3 yrs	10
Diploma Dental Technology	MoH	3 yrs	6
ludos attrition rato			1352

\* Excludes attrition rate

Notes:

- The Registered Nurses doing the B Sc Nursing are on full salary for the period of the course. Nurses doing Post Basic courses do not receive a salary and make a co-contribution to the cost of the course.
- The desire on the part of the MoH for 'direct entry' courses could be generated by them not having to contribute to the cost!!

#### Annex 4: Discretionary Staff Enhancement Fund

It is recommended that the MoH establish a Discretionary Staff Enhancement Fund (DSEF) for additional enhancement for essential cadres in selected areas and facilities. Access to the DSEF would be provided in response to submissions (urban and rural) based on centrally established and monitored guidelines.

A submission should provide evidence of any combination of the following:

- Staff shortage
- Skill shortage
- Staff turnover
- Workload
- Hardship (distance/remoteness)
- State of facilities
- State of working conditions (drugs, equipment etc)
- Availability of training opportunities
- Availability of appropriate accommodation
- Availability of education facilities for children

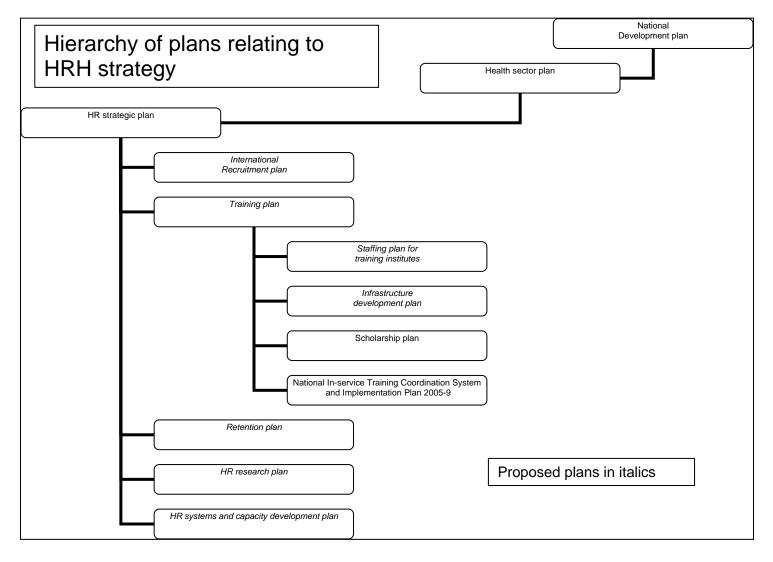
Requests should include both financial and non-financial incentives and innovative non-financial incentives are to be encouraged. The DSEF should therefore include an allocation for non-financial incentives such as capital development, equipment and training.

The targeted groups should include:

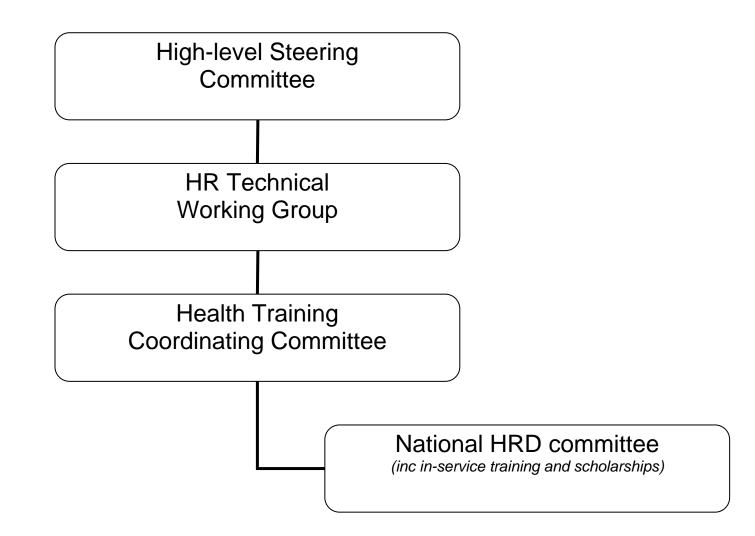
- Doctors
- Nurses
- Midwives
- Tutors
- Clinical Officers
- Laboratory Technicians
- Rehabilitation Professionals
- Counsellors

The size of the DSEF will depend on available funds. The MoH could allocate 0.5% of its current PE ceiling amount and seek matched funding from Donors.

#### Annex 5: Hierarchy of plans



#### Annex 6: Possible committee/group structure



#### Annex 7: Detailed descriptions of Assumptions and Options

Note: projection tables are at the end of this section.

#### Zambia Medical Workforce Model and notes

Doctors

#### Option 1

- Increase the overall numbers in line with population growth (3.1%)
- Apply the 3.1% across essential cadres to improve the current mix of staff
- Provide a salary increase in line with the inflation rate (13% estimated for 2006) for all staff
- Assume current pre-service education and service attrition rates will continue for some years
- Progressively increase pre-service intakes as proposed commencing 2007 but not open any new facilities

Assumptions

Population growth	3.1% applied to all Doctors
Doctor: Population	0.057:1000
Ratio	
Graduate numbers	No increase
Student intake	Maintain current level of student intakes
numbers	
Workforce attrition	4.2% attrition rate - 2000 rates in HR Strategic Plan
	(2001). Reduced by 0.1% from 2009
Pre-service attrition	39% - from 2001 HR Strategic Plan. Reduced by 9%
	from 2009
Inflation rate	13% in 2006 and every year thereafter.
Efficiency dividend	Nil
Allowance	Nil
Compensation	
Training Costs	No training cost
Salary Costs	Based on 2005 salary allocation following 25%
-	increase and including allowances. The % of the
	workforce at each level is calculated and used to
	calculate total costs = MDSO1 17%; MDSO2-4 71%;
	RR Package 12%

#### Option 3

As per Option 1 plus:

• A consolidated pay package (including benefits and allowances) would be developed and a one off 5% increase would be provided across the board for all staff receiving allowances

Assumptions

#### As per Option 1 plus:

In 2006 provide a one off 5% payment to compensate for consolidation of allowances with
the base salary

#### Outcomes at 2010

	Option 1	Option 3
Ratio	Maintained at 0.057:1000	Maintained at 0.057:1000
Increase/decrease in staffing numbers	84 (12.9%) increase	84 (12.9%) increase
Surplus/Deficit	Relative balanced workforce. Zambian Non-Zambian workforce reduced from 44% to 35%	Relative balanced workforce. Zambian Non- Zambian workforce reduced from 44% to 35%
Increase in salary cost	Kw46,459,915,686 (including allowances)	Kw46,459,915,686 (including allowances)
Total cost in 2010	Kw99,044,946,895	Kw99,044,946,895
Allowance Compensation Payment in 2006		Kw2,629,251,560

Major decision making policy options

- Increase graduate numbers <u>or</u> decrease pre-service attrition rate
- Increase graduate numbers or decrease recruitment
- Increase recruitment <u>or</u> decrease attrition rate
- Decrease recruitment <u>or</u> increase ratio

#### Zambia Nursing Workforce Model and notes

All Nurses

#### Option 1

- Increase the overall numbers in line with population growth (3.1%)
- Apply the 3.1% across essential cadres to improve the current mix of staff
- Affect the agreed 13% salary increase in 2006 for all staff
- Assume current pre-service education and service attrition rates will continue for some years
- Progressively increase pre-service intakes as proposed commencing 2007 but not open any new facilities

Population growth	3.1% applied to all Nurses
Nurse: Population	0.723:1000
Ratio	
Graduate numbers	
Registered	Increased from 2009
Nurses	
Enrolled Nurses	Increased from 2008
Registered	Increased from 2007
Midwife	
Enrolled Midwife	Increased from 2007
Student intake	
numbers	
Registered	Increased in 2007 from 385-450
Nurses	
Enrolled Nurses	Increased in 2007 from 299-330
Registered	Increased in 2007 from 125-145
Midwife	
Enrolled Midwife	Increased in 2007 from 97-130
Workforce attrition	
Registered	7.8% - 2000 rates in HR Strategic Plan (2001). To be
Nurses	used until such time as current detailed and validated
	data is collected. Reduced by 0.1% from 2008
Enrolled Nurses	6.1%
Registered	7%
Midwife	
Enrolled Midwife	7%
Pre-service attrition	
Registered	33% based on figures from 2001 HR Strategic Plan
Nurses	and confirmed by analysis of attrition rate for 2004

#### Assumptions

	graduates. Reduced by 10% from 2009
Enrolled Nurses	25% based on 2001 HR Strategy and needs to be
	verified by more recent data
Registered	22% based on 2001 HR Strategy and needs to be
Midwife	verified by more recent data
Enrolled Midwife	22% based on 2001 HR Strategy and needs to be
	verified by more recent data
Inflation rate	13% in 2006 and every year thereafter
Efficiency dividend	Nil
Allowance	Nil
Compensation	
Training Costs	Includes Donor contribution and based on proposed
	2005 Pool Fund allocation which is based on 2004
	graduate figures
Salary Costs	Based on 2005 salary allocation following 25%
-	increase and including allowances

#### Option 2

As per Option 1 <u>plus</u>:

• Include an efficiency rate of 0.1%, which should be achievable, given the focus on improving systems and structures. (*An improvement in efficiency rates will reduce the level of increases needed and therefore the need for recruitment of foreign health workers or provide an opportunity to increase staff to population ratios.*) Not to be applied to Educators or Doctors.

#### Assumptions

As per Option 1 plus:

	Efficiency dividend	Efficiency dividend of 0.1% introduced in 2008
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#### Option 3

As per Option 2 plus:

• A consolidated pay package (including benefits and allowances) would be developed and a one off 5% increase would be provided across the board for all staff receiving allowances

Assumptions

As per Option 2 plus

Allowance	In 2006 provide a one off 5% payment to
Compensation	compensate for consolidation of allowances with
	the base salary

Summary of outcomes by 2010

	Option 1	Option 2	Option 3
Ratio	Maintains the	Maintains the	Maintains the
	current ratio	current ratio	current ratio
Increase/decrease	13% increase in	12.7% increase in	12.7% increase in
in staffing	staffing numbers	staffing numbers	staffing numbers
numbers			
Surplus/Deficit	Keeps workforce in	Keeps workforce in	Keeps workforce in
	relative balance to	relative balance to	relative balance to
	2010. Beyond 2010	2010 with reduced	2010 with reduced
	will need to further	recruitment	recruitment
	reduce pre-service	requirement.	requirement.
	and workforce		
	retention or		
	increase		
	recruitment	16 404 000 700	16 404 000 700
Increase in	Kw 134,086,766	Kw 134,086,766	Kw 134,086,766
training cost by	(34.6%) due to	(34.6%) due to	(34.6%) due to
2010	increased intakes	increased intakes	increased intakes
	and reduced	and reduced	and reduced
	attrition	attrition	attrition
Increase in salary	Kw154,058,292,315	Kw153,521,775,834	Kw153,521,775,834
cost by 2010			
Total cost in 2010	Kw292,553,430,443	Kw292,016,913,962	Kw292,016,913,962
Allowance			Kw7,155,357,180
Compensation			
Payment in 2006			

Major policy decision making options

- Increase graduate numbers <u>or</u> decrease pre-service attrition rate
- Increase graduate numbers or increase recruitment
- Increase recruitment <u>or</u> decrease attrition rate
- Decrease recruitment or increase ratio

#### Zambia Allied Health Workforce Model and notes

All Allied Health

#### Option 1

- Increase the overall numbers in line with population growth (3.1%)
- Apply the 3.1% across essential cadres to improve the current mix of staff
- Provide a salary increase in line with the inflation rate (13% estimated for 2006) for all staff
- Assume current pre-service education and service attrition rates will continue for some years
- Progressively increase pre-service intakes as proposed commencing 2007 but not open any new facilities

Population growth	3.1%	
Allied Health:	0.27:1000	
Population Ratio		
Student intake	Not increased	
numbers		
Workforce attrition	7.7%	
Pre-service attrition	15%	
Inflation rate	13% in 2006 and every year thereafter	
Efficiency dividend	Nil	
Allowance	Nil	
Compensation		
Training Costs	Includes Donor contribution and based on 2004 Pool	
	Fund allocation	
Salary Costs	Based on 2005 salary allocation following 25%	
	increase and including allowances	

Assumptions

#### **Option 2**

As per Option 1 plus:

• Include an efficiency rate of 0.1%, which should be achievable, given the focus on improving systems and structures. (*An improvement in efficiency rates will reduce the level of increases needed and therefore the need for recruitment of foreign health workers or provide an opportunity to increase staff to population ratios.*) Not to be applied to Educators or Doctors.

Assumptions

As per Option 1 plus

Efficiency dividend Efficiency dividend of 0.1% introduced in 2008
--

Option 3

As per Option 2 <u>plus</u>:

• A consolidated pay package (including benefits and allowances) would be developed and a one off 5% increase would be provided across the board for all staff receiving allowances

Assumptions As per Option 2 <u>plus</u>:

Allowance	In 2006 provide a one off 5% payment to
Compensation	compensate for consolidation of allowances with
	the base salary

Outcomes by 2010

	Option 1	Option 2	Option 3
Ratio			
Increase/decrease in staffing	565	565	565
numbers			
Surplus/Deficit	230 Surplus	241 Surplus and increase due to application of efficiency dividend	241 Surplus and increase due to application of efficiency dividend
Increase in training cost by 2010	Kw158,750,000	Kw158,750,000	Kw158,750,000
Increase in salary cost by 2010	Kw71,608,265,103	Kw71,608,265,103	Kw71,608,265,103
Total cost in 2010	Kw164,177,457,943	Kw164,177,457,943	Kw164,177,457,943
Allowance Compensation Payment in 2006			Kw97,406,218,431

Major policy decision making options

- Decrease graduate recruitment or increase ratio
- Decrease intakes <u>or</u> increase ratio

#### Zambia Support Workforce Model and notes

Support Staff

#### Option 1

- Increase the overall numbers in line with population growth (3.1%)
- Apply the 3.1% across essential cadres to improve the current mix of staff
- Provide a salary increase in line with the inflation rate (13% estimated for 2006) for all staff
- Assume current pre-service education and service attrition rates will continue for some years
- Progressively increase pre-service intakes as proposed commencing 2007 but not open any new facilities

Assumptions

Population growth	No population growth applied to all Support Staff (this will have the effect of increasing the ratio of clinical to non-clinical staff)	
Support Staff:	0.968:1000	
Population Ratio		
Recruitment rate	Nil	
Workforce attrition	This is not known. A guestimate of 4% has been used.	
Inflation rate	13% in 2006 and every year thereafter	
Efficiency dividend	Nil	
Salary Costs	Based on 2005 salary allocation following 25%	
-	increase	

#### Option 2

As per Option 1 plus:

 Include an efficiency rate of 0.1%, which should be achievable, given the focus on improving systems and structures. (An improvement in efficiency rates will reduce the level of increases needed and therefore the need for recruitment of foreign health workers or provide an opportunity to increase staff to population ratios.) Not to be applied to Educators or Doctors.



#### Assumptions

As per Option 1 plus:

Efficiency dividend	fficiency dividend of 0.1% introduced in 2009
---------------------	---

Outcomes by 2010

	Option 1	Option 2
Ratio	0.968:1000	0.968:1000
Increase/decrease in	Nil	0.1% efficiency dividend
staffing numbers		
Surplus/Deficit	Nil	Surplus. Need to decide whether
		to increase ratio or decrease
		attrition replacement
Increase in salary cost	Kw54,367,524,961	Kw54,367,524,961. This would
by 2010		reduce if recruitment was reduced
		to match the gain from the
		efficiency dividend
Total cost in 2010	Kw118,955,134,961	Kw118,955,134,961 This would
		reduce if recruitment was reduced
		to match the gain from the
		efficiency dividend

Major policy decision making options

- Increase recruitment <u>or</u> decrease attrition rate
- Decrease recruitment or increase ratio

#### Zambia Education Workforce Model and notes

#### Educators

Option 1

- Increase the overall numbers in line with population growth (3.1%)
- Apply the 3.1% across essential cadres to improve the current mix of staff
- Provide a salary increase in line with the inflation rate (13% estimated for 2006) for all staff
- Assume current pre-service education and service attrition rates will continue for some years
- Progressively increase pre-service intakes as proposed commencing 2007 but not open any new facilities

#### Assumptions

Student population	5% per annum commencing 2007	
growth		
Educator: Student	7.2:100	
Population Ratio		
Workforce attrition		
Inflation rate	13% in 2006 and every year thereafter	
Efficiency dividend	Nil	
Allowance	Nil	
Compensation		
Salary Costs	Based on 2005 salary allocation following 25%	
	increase and including allowances	

Option 3

As per Option 1 plus:

• A consolidated pay package (including benefits and allowances) would be developed and a one off 5% increase would be provided across the board for all staff receiving allowances

Assumptions

As per Option 1 plus:

Allowance	In 2006 provide a one off 5% payment to compensate
Compensation	for consolidation of allowances with the base salary

Outcomes by 2010

	Option 1	Option 3
Ratio	7.2	7.2
Increase/decrease in staffing	49 (21%)	49 (21%)
numbers		
Surplus/Deficit	Nil if recruitment pattern	Nil if recruitment pattern
	can be maintained.	can be maintained.
Increase in salary cost by	Kw7,674,236,617	Kw7,674,236,617
2010		
Total cost in 2010	Kw14,089,755,213	Kw14,089,755,213
Allowance Compensation	Nil	Kw7,817,714,848
Payment in 2006		

Major decision making options

- Increase graduate numbers <u>or</u> decrease pre-service attrition rate
- Increase graduate numbers or increase recruitment
- Increase recruitment or decrease attrition rate
- Decrease recruitment <u>or</u> increase ratio

# Annex 8: Detailed Costing of Human Resources For Health Strategic Plan (2006 – 2010) SUMMARY OF COSTS (BY ACTIVITY)

	BUDGET (ZMK)			-
S/N	Description	2006	2007	2008
1.0	Training			
1.1	Pre-service training			
1.1.1	Increase number of intakes in training institutions	41,965,500,000	26,350,250,000	26,350,250,000
1.1.2	Construct and renovate training institutions	8,809,532,160	8,809,532,160	8,809,532,160
1.1.3	Re-open Closed five (5) EN & (1) Lab. Tech TIs.	15,262,892,000	3,060,000,000	3,060,000,000
1.1.4	Bilateral agreements to cover shortfalls from Tis.	800,000,000	800,000,000	800,000,000
1.1.5	Upgrading existing TIs (Library, ICTs) Establish Health Training Coordinating Committee (	840,000,000	840,000,000	840,000,000
1.1.6	HTCC)	50,000,000	50,000,000	50,000,000
1.1.7	Private sector partnerships in pre-service training.	105,000,000	105,000,000	105,000,000
1.1.8	Introduce Direct Entry Midwifery	400,000,000	400,000,000	400,000,000
	Sub-Total Pre-service training	68,232,924,160	40,414,782,160	40,414,782,160
1.2	In-service Training			
1.2.1	Implement of In-service training Coordination Plan	812,630,750		
	Sub-Total Pre-service training	812,630,750	418,095,750	409,221,750
	Total Training	69,045,554,910	40,832,877,910	40,824,003,910
2.0	Recruitment			
2.1	New MOH Staff Establishment approved.	626,660,000		
2.2	Recruitment of all graduating students Recruit retiring critical health workers on short-term	14,093,866,680	14,093,866,680	14,093,866,680
2.3	contract	14,093,866,680	14,093,866,680	14,093,866,680
2.4	Recruitment of foreign health workers.	42,044,169,290	42,044,169,290	42,044,169,290
2.5	Twining local with foreign health institutions.	253,800,000	253,800,000	253,800,000
	Sub-Total	71,112,362,650	70,485,702,650	70,485,702,650
	Total Recruitment	71,112,362,650	70,485,702,650	70,485,702,650
3.0	Retention			
5.0	Improve health workers remuneration and conditions of			
3.1	service.	446,669,757,883	271,669,757,883	271,669,757,883
3.2	ICT, Electrification and Health facility staff housing.	50,068,300,000	41,610,800,000	9,660,200,000
3.3	Introduce free health services to health workers	426,500,000		
	Sub-Total	497,164,557,883	313,280,557,883	281,329,957,883
	Total Retention	497,164,557,883		281,329,957,88
4.0	Human Resource Systems Strengthening		J	J
4.1	Strengthening performance management systems	1,175,000,000	60,600,000	60,600,000
4.2	Developing Human Resources Planning and Information Systems	1,300,825,000		
7.2	Sub-Total	2,475,825,000		
		2,473,023,000	1,730,123,000	303,400,000
	Total HR Systems Strengthening	2,475,825,000	1,736,125,000	385,400,000

5.0	<b>Statutory Boards</b> Introduce Mandatory Rural Posting for all Graduating			
5.1	Students	495,000,000	495,000,000	495,000,000
	Sub-Total	495,000,000	495,000,000	495,000,000
	Total Statutory Boards	495,000,000	495,000,000	495,000,000
6.0	Monitoring and Evaluation			
6.1	Quarterly& bi-annual meetings and reports	30,000,000		
6.2	Operational and Applied Research	1,275,000,000	1,250,000,000	1,250,000,000
	Sub-Total	1,305,000,000	1,250,000,000	1,250,000,000
	Total Monitoring and Evaluation	1,305,000,000	1,250,000,000	1,250,000,000
OVE	RALL TOTAL COST OF THE PLAN			
1.0	Training	69,045,554,910	40,832,877,910	40,824,003,910
2.0	Training Recruitment			
3.0		71,112,362,650		
				281,329,957,883
4.0	-)	2,475,825,000		
5.0	Statutory Boards	495,000,000		
6.0	Monitoring and Evaluation	1,305,000,000	1,250,000,000	1,250,000,000
	TOTAL	641,598,300,443	428,080,263,443	394,770,064,443
Excha	ange Rate 1 US\$ = ZMK4700	136,510,276.69	91,080,907.12	83,993,630.73

#### Annex 9

## **Proposed Ministry of Health 2006 Budget Estimates For Human Resources Activities**

Funding Source	EU	
ID	Activity	Amount
172	Improve the deployment and retention of health workers	30,550,000,000
	urce' = EU (1 detail record)	
Total		30,550,000,000
Funding Source	Expanded Basket	
ID	Activity	Amount
2	Increase number of applicants for training by widening participation	109,143,125
4	Increase training output by expanding the number of training places available	81,587,500
12	Establish and maintain training information monitoring system (TIMS) to capture trainers and trainee information	399,758,000
14	Identify provincial training needs	87,685,000
15	Develop a provincial training plan based on identified priorities e.g. HIV/AIDS, TB and Malaria	86,480,000
18	Review core competencies and job descriptions of staff as well as identified training needs in the health sector	20,000,000
155	FLEET MANAGEMENT	250,000,000
170	Strengthen human resource planning, management and development systems at all levels	148,260,000
173	Develop HR Plan monitoring and evaluation systems	106,822,500
174	Coordinate human resource planning across the health sector based on the best available data	82,702,500
	urce' = Expanded Basket (10 detail records)	
Total	05454	1,372,438,625
Funding Source		
ID	Activity	Amount
168		360,045,000
Summary for 'Funding Sol Total	urce' = GFATM (1 detail record)	360,045,000
Funding Source	GRZ	
ID	Activity	Amount
1	Improve the quality of pre-service training	102,510,750

3	Implement national In-Service Training coordination plan	81,268,125
4	Increase training output by expanding the number of training places available	1,600,000
5	Revive the Human Development Committee (HRDC) in the MoH	6,697,500
6	Capacity Building in in-service coordination	133,000,000
8	develop a national health sector trainng plan based on identified priorities e.g. HIV/AIDS, TB and Malaria	87,474,000
10	Develop master trainers by technical areas	498,267,250
11	Certify Training Institutions	32,144,000
13	Coordinate training events at all levels and across technical areas	49,205,000
18	Reviiew core competencies and job descriptions of staff as well as identified training needs in the health sector	13,590,000
29	MMED and PhD Capacity Building Programme	36,500,000
30	Capacity Building for Continuing Students	2,055,915,000
32	Capacity Building - Diploma Studies	426,412,500
147	MAINTENANCE OF INFRUSTRUCTURE	610,000,000
155	FLEET MANAGEMENT	405,606,250
156	Facilitate foreign and local travel for staff	396,325,000
157	PROCUREMENT OF SERVICES	1,785,800,000
158	PRODUCTION OF THE MINISTRY OF HEALTH NEWS BULLETTIN	72,500,000
162	RECORDS MANAGEMENT	430,681,250
163	GENDER AND HUMAN RIGHTS	59,000,000
164	TAKING STOCK OF MINISTRY OF HEALTH ASSETS	79,303,190
165	COORDINATION OF OFFICIAL AND PUBLIC FUNTIONS.	30,000,000
166	PARLIAMENTARY AND CABINET LIAISON	250,950,000
168	HIV/AIDS WORKPLACE PROGRAMMES	143,641,250
172	Improve the deployment and retention of health workers	7,873,282,948
174	Coordinate human resource planning across the health sector based on the best available data	28,608,750
175	Increase numbers of skilled health workers in post	15,327,438,991
Summary for 'Funding Source' <b>Total</b>	= GRZ (27 detail records)	31,017,721,754

#### Funding Source SIDA

ID	Activity	Amount
1	Improve the quality of pre-service training	908,843,625
2	Increase number of applicants for training by widening participation	70,568,125
3	Implement national In-Service Training coordination plan	160,463,125
4	Increase training output by expanding the number of training places available	510,285,625
5	Revive the Human Development Committee (HRDC) in the MoH	737,051,000
6	Capacity Building in in-service coordination	30,000,000
17	Coordinate training events at all levels and across technical areas	110,418,957
20	Disseminate training standards and guidelines to all the districts	362,512,500
21	Train Master Trainers for specific technical areas	235,459,250
23	Provide support to TI to create a conducive learning environment	79,870,000
24	Train district trainers for specific technical areas e.g. CTC, PMTCT, ART, TB, Malaria, RH, CHN	560,913,750
26	Deleop/ Adapt TIMS Database	329,195,000
33	Improve quality and cost effectiveness of In-service Training	671,441,375
162	RECORDS MANAGEMENT	481,000,000
170	Strengthen human resource planning, management and development systems at all levels	3,092,595,360
171	Improve productivity and performance of health workers	1,526,540,000
172	Improve the deployment and retention of health workers	213,233,750
173	Develop HR Plan monitoring and evaluation systems	681,062,500
174	Coordinate human resource planning across the health sector based on the best available data	651,380,000
175	Increase numbers of skilled health workers in post	1,193,472,500
Summary for 'Funding Sou <b>Total</b>	urce' = SIDA (20 detail records)	12,606,306,442
Funding Source	USAID/HSSP	

#### ID Activity Amount 6 Capacity Building in in-service coordination 30,000,000 7 Develop and Disseminate national training guidelines 691,312,000

Summary for 'Funding Sou Total Funding Source ID	sector based on the best available data arce' = WHO (1 detail record) World Bank Activity	76,000,000 Amount
Total	rce' = WHO (1 detail record)	
, ,		
Summary for 'Funding Sou		-,
	sector based on the best available data	
174	Coordinate human resource planning across the health	76,000,000
ID	Activity	Amount
Funding Source	WHO	
Total		6,005,561,500
	rrce' = USAID/HSSP (8 detail records)	4,033,120,000
172	development systems at all levels Improve the deployment and retention of health workers	4,839,120,000
170	Strengthen human resource planning, management and	84,152,500
33	Improve quality and cost effectiveness of In-service Training	15,000,000
26	Deleop/ Adapt TIMS Database	17,669,000
23	Provide support to TI to create a conducive learning environment	8,874,000
	supervision of HIV/AIDS services	
22	Conduct in service training for staff at the central level e.g	319,434,000