THE REPUBLIC OF THE GAMBIA

DEPARTMENT OF STATE FOR HEALTH & SOCIAL WELFARE

HUMAN RESOURCES FOR HEALTH

15-YEAR HUMAN RESOURCE PLANS AND TRAINING SCHEDULES FOR THE HEALTH SECTOR OF THE GAMBIA

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HEALTH HUMAN RESOURCE PLAN,
DEPARTMENT OF STATE FOR HEALTH, THE GAMBIA
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Foreword

Acknowledgements

List of Abbreviations and Acronyms

ADB	-	African Development Bank
AIDS	-	Acquired Immune Deficiency Syndrome
ARI	-	Acute Respiratory Infection
BHS	-	Basic Health Services
BSc	-	Bachelor of Science
CCS	-	Country Cooperation Strategy
CHN	-	Community Health Nurse
CMS	-	Central Medical Stores
CNA	-	Community Nurse Attendant
CNO	-	Chief Nursing Officer
CPD	-	Continuing Professional Development
DHMTs	-	Divisional Health Management Teams
DHT	-	Divisional Health Team
DoSE	-	Department of State for Education
DoSFEA	-	Department of State for Finance and Economic
DoSH&SW	-	Department of State for Health & Social
DoSLG&L	-	Department of State for Local Government and
DPHN	-	Divisional Public Health Nurse
DPI	-	Department of Planning and Information
EC	-	European Commission
EPI	-	Expanded Programme on Immunisation
ESU	-	Epidemiology and Statistics Unit
EU	-	European Union
FP	-	Family Planning
GAPHO	-	Gambia Association of Public Health Officers
HIV	-	Human Immuno-deficiency Virus
HND	-	Higher National Diploma
HRD	-	Human Resource Development
HRH	-	Human Resource for Health
HSDP	-	Health Service Development Project
HSRS	-	Health Sector Requirement Study
ICN	-	International Council of Nurses
IGCSE	-	International General School Certificate
IMCI	-	Integrated Management of Childhood Illnesses
IMR	-	Infant Mortality Rate
ISTU	-	In-Service Training Unit
KII	-	Key Informant Interview
MaHC	-	Major Health Centre
MCH	-	Maternal and Child Health
MDC	-	Medical and Dental Council
MDGs	-	Millennium Development Goals
MiHC	-	Minor Health Centre

MOs	-	Medical Officer
MTEF	-	Medium Term Expenditure Framework
MMR	-	Maternal Mortality Rate
MRC	-	Medical Research Council
NCDs	-	Non-communicabe Diseases
NEPAD	-	New Partnership for Africa Development
NGO	-	Non-Governmental Organisation
NMC	-	Nurses and Midwives' Council
OIC	-	Officer In-Charge
OPD	-	Out Patient Department
PER	-	Public Expenditure Review
PHC	-	Primary Health Care
PHOs	-	Public Health Officers
PHPNP	-	Participatory Health Population and Nutrition
PMO	-	Personnel Management Office
PN	-	Professional Nurse
PRSP	-	Poverty Reduction Strategic Plan
RVTH	-	Royal Victoria Teaching Hospital
SEN	-	State Enrolled Nurse
SMM	-	Senior Managers Meeting
SRN	-	State Registered Nurse
SRN&M	-	State Registered Nurse and Midwife
SPA	-	Strategy for Poverty Alleviation
SWAp	-	Sector Wide Approach
TA	-	Technical Assistant
TBA	-	Traditional Birth Attendant
TH	-	Teaching Hospital
TWG	-	Technical Working Group
UK	-	United Kingdom
UN	-	United Nations
UNDP	-	United Nations Development Programme
UNFPA	-	United Nations Fund for Population Activities
UNICEF	-	United Nations Children Fund
USA	-	United States of America
VDC	-	Village Development Committee
VHWs	-	Village Health Workers
WHO	-	World Health Organisation
WISN	-	Workload Indicators Staffing Needs

Executive Summary

SECTION 1

1. Introduction

Health care systems and the delivery of health services can only function with human resources for health. The developing world today – particularly Sub-Saharan Africa – is witnessing very low value for money in the face of high investments in healthcare. It is pertinent to note that the insufficiency of human resources for health worldwide has been identified as the major limiting factor for progress on initiatives such as the PHC concept of the 1978-2000, the Millennium Development Goals (WHO and CDC, 2004)[1]and 3by5 initiative. Additionally, the high costs of health care delivery, with inequalities in health status, and the inequitable access to health care are a cause for concern in all countries. This has resulted in health sector reforms calling for quality improvement and cost containment (Buchan, 2000) through proper human resources planning and management. This is more so as health care delivery is uniquely labour-intensive with expenditure on human resources taking up 60-80% of total recurrent costs (Shipp, 1998).

Secondly, the large outflows of trained health workers (especially doctors and nurses) from developing to developed countries have created serious shortages which have been a major factor hampering the rapid scaling up of human resources for health capacity all over the world. These outflows constitute about 24-36 percent of all health personnel in developed countries[2]. For The Gambia and other Sub-Saharan African countries present health worker migration is a serious threat to health systems already reeling from the HIV/AIDS epidemic; and a long-term strategy is needed to stem this negative stride. This has also become a compelling case for international organizations such as WHO, Commonwealth Development Corporation, World Bank and the International Council of Nurses (ICN) to examine the crucial issues of shortages.[3]

It is noteworthy that these shortages have affected The Gambia compelling the Health Sector to re-examine its policy on Human Resources. Despite its policy of attracting appropriately trained, skilled and motivated personnel at all levels of health care to deliver quality care, the shortages of human resources due to high attrition of doctors, nurses and other qualified staff, has serious implications on the health sector. The inadequate capacities of training institutions within the country to turn out adequate key health staff plus the inequitable distribution of qualified health staff compounds the problem. In light of the foregoing problems the country sees the need for strategic planning to be able to contain the situation.

1.1 Rationale and Objectives of the plan

1.1.1 Rationale

The rationale of this health workforce plan is to provide the framework to operationalise the HRH policy for the Health sector. The HRH policy of 2005 has as its main objective to focus on the entire HRH process including the planning, training and utilisation of HRH to the requirements of the Gambian community in particular the poor and vulnerable groups in line with the National Health Policy.[4] The plan, in order to do this, will provide staffing requirements targets for the various levels within the health sector. In addition, the plan would also propose measures for the training of health service personnel to improve on the staff strength thereby meeting the HRH requirements by the year 2020 in line with the National Health and HRH Policy objectives.

The plan will stipulate staffing targets for each of the major categories of health personnel, taking into consideration the minimum package, the workload, the population growth, the possible emergence of some diseases, present level of staffing, attrition from the workforce, and outputs from training programs and other sources. The economic situation of the country would also be considered. The plan will also state how recruitments should be managed in order to match

[1] The 3 by 5 Initiative was created because currently six million people infected with HIV in the developing world need access to antiretroviral therapy (ART). WHO is fully committed to achieving the 3 by 5 target – getting 3 million people on ART by the end of 2005: http://www.who.int/3by5/cn/

[2] Improving Health, Nutrition, and Population Outcomes in Sub-Saharan Africa: The Role of the World Bank, 2005

[3] CDC: International Organisation on Migration "Seminar on Health and Migration: 9-11 June 2004; Session III B – Migration of health care workers"

[4] Main objective of HRH Policy, 2005

staffing requirements with the number of staff actually employed. Indications of the future costs of staffing the service will also be provided.

This planning document should be viewed as a rolling plan that should be regularly and systematically reviewed and up-dated should any relevant change occur or seem probable to occur. The change may be associated with such factors as developments in government policy regarding health or health service personnel, changes in the country's economic or social situation, demographic or epidemiological variables, and changes within the health care delivery system among others.

Certainly, the plan does not predict what will happen. It simply shows what would happen if the various assumptions made prove to be correct and the proposals presented in the plan are implemented. Thus, one can foresee the consequences of actions and events, can monitor whether the various assumptions are true or not, and then take whatever action is appropriate to the situation.

1.1.2 Objectives of the plan

1.1.2.1 Main Objective

The main objective of this plan is to formulate a long-term strategic human resource development plan in line with that of the National Health and HRH policies to ensure adequate, appropriate, well-trained Human Resources at all levels of the health system in accordance with National priorities, Poverty reduction strategy and Millennium Development Goals for a period of 15 years.

1.1.2.2 Specific Objectives

Specifically the plan is to

a. Determine the Health workforce, which seeks to ensure:

- Forecasting of appropriate numbers of staff required at the service delivery points.
- Provision of requisite skills to match with the required job.
- Development of systems to monitor, supervise and support staff in the performance of their assigned duties with the view of maximising output and efficiently utilising human resources. In this respect the Service will be resourced with the right number of personnel with the requisite skills and attitudes; being at the right locations at the right time, doing the right things at an acceptable quality, quantity and at a cost the country can afford.

b. Outlining where resources are insufficient or likely to become insufficient.
c. Offering strategies within which appropriate managerial decisions may be taken
d. Outlining the career paths and future advancement of staff and potential recruits
e. Providing an estimate of the costs of staffing the service and of training which may be relevant in budget negotiations and in monitoring costs
f. Assisting the health authorities in designing proposals for external support and funding

1.1.3 Expected Results

1. Creation of scenarios and projections of HR needs bearing in mind the impact of different factors (demography, macro-economic framework assumptions for the plan period, impact of diseases e.g. HIV/AIDS, TB, malaria on health development) and health priorities of the next National Development Plan;

2. Proposals for pre-service and post-graduate training for the next 15 years;

3. Proposals for corresponding development of training institutions (basic and post-graduate);

4. Proposals for the reduction of the impact of staff losses due to migration (both internal and external) and attrition;

5. Proposals for the incentive mechanisms and motivation in the public sector;

6. Estimates of the implementation costs of the plan

1.2 The Health Systems Context of the Plan

The Gambia has a HRH policy with a short term Human Resources strategic plan for the health sector and which will expire at the end of the year 2009. Thus there is a need for a comprehensive and long term plan (15years) to be in line with the National Health Policy and HRH policy objectives. The plan would also take account of a number of national developments that have been instituted in the country. These include:

i. The demographic profile of an ever-increasing population with 2.8% growth rate.

ii. Socio-economic profile for which The Gambia has been described as one of the poorest countries in the world and was ranked 161 out of 174 countries worldwide (the CCS[5] document of 2002-2005, The Gambia (HDR, 2000), with a Human Development Index of 0.3987 and 64% of its population living below the poverty line (1998), resulting in budgetary constraints affecting the financing of the health sector.

iii. Epidemiological: The high mortality of infants (84/1000 live births), 60% of which is attributable to malaria, diarrhoeal diseases and acute respiratory infections, children attributable to malaria, pneumonia, malnutrition, anaemia, neonatal sepsis, premature births, gastro-enteritis, septicaemia and meningitis and maternal mortality ratio estimated at 10.5/1000 live births, with regional variation of 9/1000 in the urban areas and 16/1000 live births in the rural areas, majority of which are due to sepsis, haemorrhage and eclampsia.

HIV/AIDS reaching levels threatening national security with HIV prevalence rate of 2.1% (1.2% HIVI and 0.9% HIVII in the general population (2001),with several people in need of access to antiretroviral care. In response to the evolving HIV/AIDS crisis, the creation of departments dealing with several aspects of HIV/AIDS programme implementation (PMTCT, ARV, etc.) with the goal of offering preventive (ART) and home based care services within a continuum of care approach. The approaches include ambitious goals for access to ART with all of the accompanying service delivery and training needs for different staff types and community members, needs for re-distribution of tasks between service providers and different provider levels, etc.

The announcement of the '3by5' strategy by UNAIDS and WHO on the occasion of World AIDS Day in December 2003 with the target of giving 3 million people in need access to ART in 2005.

The drop in coverage for fully immunized children from about 80% to 68.6% for under 1 year and 76.0% for the under 2 years since 1998 to 2000 calls for an aggressive immunisation strategy all needing Human Resources.

iv. The declaration of the Millennium Development Goals (MDG) in 2000 by the General Assembly of the United Nations with the stated health goals of substantial reductions of maternal and infant mortality, a stronger fight against HIV/AIDS, malaria and other diseases. This undoubtedly has consequences for both the volume of services and the amount of human resources need to achieve the goals.

v. The recognition of the human resource crisis on the African continent, most notably in Sub-Saharan Africa at different international meetings (1994 World Health Assembly, High Level Forum on Health and MDG's - Geneva January 2004), each resulting in resolutions and commitments for support by various agencies and international bodies to reach the MDGs.

vi. Unplanned implementation of large scale external contributions to the health sector leading to duplication of services and inefficiencies in HR utilization.

[5] WHO Country Cooperation Strategy, Gambia 2002 -2005

vii. The high attrition of qualified health professionals (Doctors, RN Nurses, Pharmacists, Laboratory personnel and PHOs) with dependence on expatriate professionals particularly doctors with technical support by different partners from multi- and bilateral agencies calls for appropriate planning to contain the situation.

viii. The re-definition of priorities (expansion of existing facilities and construction of new ones) within the health system without a foreseen scenario for the impact on human resources.

With all he above challenges, the data on Human Resources shows gross shortages with misdistribution favouring the urban and larger tertiary facilities. There is therefore the urgent heed to plan the development of HRH.

1.3 Review of the Plan

Planning is dynamic in nature and therefore the plan factors in the economic and political events occurring during the next fifteen years and indeed the emergence of new diseases, technology and other developments that affect the health sector should be taken into consideration during the plan period. Based on these factors cited above, there is the need to review the plan on regular basis, preferably annually. Review and evaluation of the plan should be undertaken to revise and extend it forward. In this way it becomes a regularly updated *rolling plan* (Dewdney, 2000). Details of the review evaluation arrangements are provided in Section 6 below.

More details of the arrangements for review and revision are given in Section 7of this document.

1.4 The health care system - structure

The Gambia has a three-tier system comprising the Primary, Secondary and the Tertiary levels. The Primary level consists of the Village Health Services and Community clinics, the Secondary comprising the Minor and Major Health centres whilst the Tertiary made up of the hospitals and Teaching Hospital.

The Health sector is managed at two levels, the Central and Divisional levels. At the Central level, the Secretary of State and the Permanent Secretary are the Government's appointees responsible for the whole Health sector. To Support the latter in the management of the health sector, the central level is organised into five directorates of Health Services, Planning and Information, Support services, General services and Social Welfare. Public Servants head these Directorates.

The five directorates plan, direct, manage and coordinate all government sector health care activity throughout the country.

For the management at the Divisional levels, the country is further divided into six health divisions each with a divisional Health Management Team (DHT) and Officers in-charge (OICs). These OICs have overall responsibility for the Primary and secondary health care facilities and their staff within their respective divisions. The tertiary level, which comprises the hospitals and teaching hospital on the other hand, have semi autonomous boards and are headed by Chief Executive Officers and a Chief Medical Director respectively.

Other stakeholders in the recruitment and management of personnel include the Personnel Management Office, the Public Services Commission and the technical heads of some categories of health staff. These stakeholders oversee the personnel issues of the staff at all these levels. It is also worth noting that the only function of the Regulatory bodies is to register the respective health personnel.

Management of Human Resources however, is centralised and systems are weak and inefficient at both the central and divisional levels.

Activities within the private sector of the health care delivery service are regulated and monitored by the Directorate of Health Services, a function that the Regulatory bodies should be involved.

1.5 National HRH Situation and policy

Analysis of the Current Workforce – Challenges and Policy Statements

1.5 The Health sector Workforce

The current total Health workforce in The Gambia stands at 3,397(excluding TBAs and VHWs) to serve a population of 1,441,989. This comprises 234 Medical doctors (of which only thirty are Nationals), 928 being trained nurses of all categories, 10 pharmacists, 48 Public Health Officers, 96 laboratory staff, Radiology Staff 34, 80professionals at central level, 578 Nurse Attendants and the remaining figure is made up of Technicians and all other support staff. The large numbers of support staff present a peculiar human resource management challenge.

1.5.1 Challenges/Issues with Human Resources Development in the Health Sector

The Challenges related to human resources development in the health sector are multi-dimensional and are greatly influenced by the socio-political and economic systems in the country.

The current human resources development problems include:

1.5.2.1 HRH planning:

There is no current staffing norms and strategic HR Planning to guide recruitment and placement of staff. Postings are not guided by plans that indicate areas of needs/shortages. This leads to **Misdistribution** of the few skilled professionals in the system. They are distributed to the disadvantage of the rural and smaller facilities. The distribution imbalance tends to favour urban areas and the large facilities.

1.5.2.2 Misdistribution

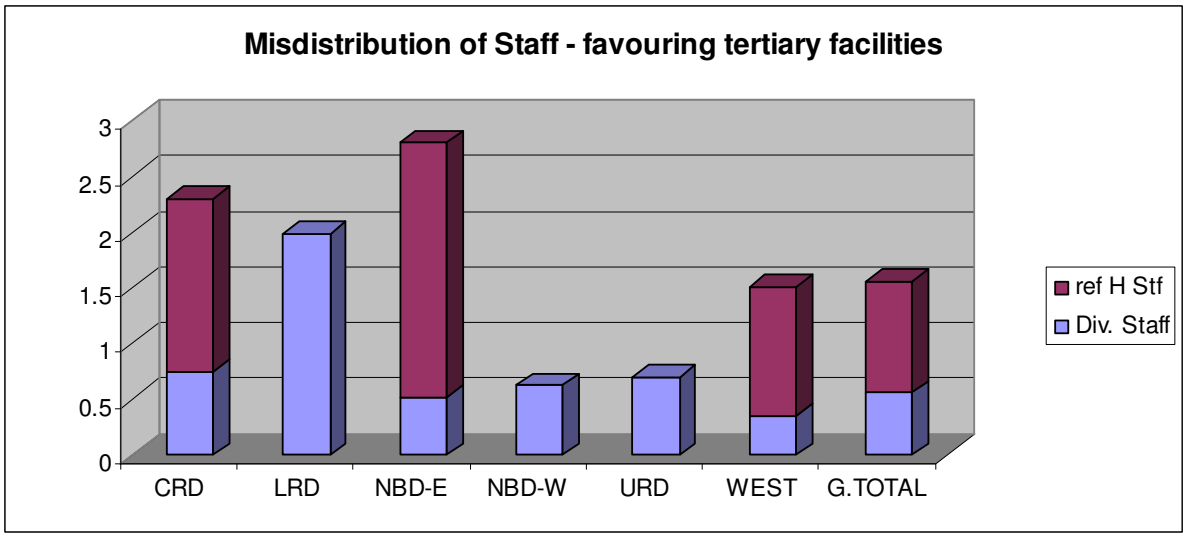
The total officially employed staff (i.e. salaried personnel), in the public and private health sector is 3,397 of which 2,538 (74.7%) are employed by the public sector and 859 (25.3%) by the private sector. Out of the 2,538 for the public sector, 1533 (45.1%) are employed in the four tertiary hospitals, 853 (25.1%) in the divisions and 152 (4.4%) are at central level (DOSH&SW). It is also worth noting that Nurse Attendants make up about 578 (22.7%) of this figure. The Public sector has 46% of professional staff and 54% support staff. Of the 46% professional staff, again 60% work in the four hospitals, 36% in other health facilities and remaining 4% at central level. It is also worth mentioning that some skilled critical staff such as midwives are employed in the private sector just to sell pharmaceutical products.

1.5.2.3 Geographical location of posts and deployment of DoSH personnel - September 2005

Graph 2.2.3 on the following page shows the geographical location of established posts and the deployment of personnel. The table shows that the distribution of staff is at variance with the established posts. There is inequitable staff distribution favouring the urban areas and large facilities such as the four hospitals.

Regarding geographic differences in personnel:population ratios, the table shows that within the four referral hospitals, there is one health personnel for every 730 people, whereas in the six divisions there is one health personnel for 1600. Further examining this figure by division the URD appears worst off with one health personnel to 1,206 people while the LRD and NBD enjoy one health personnel to 455 and 483 respectively. However Teaching Hospital is the centre to which patients are referred from throughout The Gambia and thus the medical, nursing and other hospital staff serve a population, which extends beyond the geographic boundaries of the Teaching Hospital Division. The same could also be explained for the three referral hospitals, which also serve populations beyond their boundaries of location.

Chart 1.6.3 showing misdistribution of Health Staff



1.5.2.4 The Department of Health workforce - posts and personnel - September 2005

In an attempt to ensure equitable distribution and quality service in line with the National Health and Human Resource policies, a staffing standard of all categories health facilities was developed as the initial step towards the development of the workforce plan.

In September 2005, a working group within DPI with a HRH Technical Assistant developed a draft minimum staffing norm after several consultations with experts in service delivery areas and managers at the various levels for the various levels of health care, which was finalised, with a cross section of Senior Managers in the same month. For the nine categories of Health personnel outlined below, a total of **1,926** personnel are required to deliver essential service for the health sector whereas the current establishment provides for **1,422** posts. Out of these **1,422** posts **1,123** are filled currently. This leaves the sector with a deficit of **803**, which indicates gross shortage of key health professionals. Not only is it understaffed but relies heavily on expatriate staff (nearly 90% of doctors being expatriate).

Table 1.5.2.4: DoSH - Established and unestablished posts, filled and vacant, September 2005

Category of posts	Posts		Posts filled	Posts vacant	
	Number	%		Number	%
Established posts for health personnel					
Medical Officers	151		30	121	
Dental personnel	50		24	26	
Nursing personnel	938		763	175	
Pharmacy personnel	62		43	19	
Laboratory personnel	76		30	46	
Radiology/Medical imaging personnel	24		18	6	
Physiotherapy /OT personnel	27		16	11	
Public /Environmental health personnel	55		51	4	
Medical records personnel	33		23	10	
Sub-total health personnel	*1,422*	*100%*	*1,123*	*299*	*21%*
Established posts for "Other personnel"					

Sub-total other personnel		*%*			*%*
Total established posts	*1,116*	*100.0%*	1,116	0	*23.1%*
Unestablished posts					
Total unestablished posts	968		968	0	
Grand totals DoSH *Percent*	3,506 *100.0%*		3,207 *91.4%*	299 *8.6%*	

Regarding vacant established posts, 21% (299) of the posts for health personnel were unoccupied, and 8.6 % of the posts for other personnel were unoccupied. Using the current staffing norms, of 1,926 posts of health personnel, 803 positions would have been unoccupied.

In addition to the established posts, the approved staffing complement of the Department included an additional 968 unestablished posts. Most of these posts call for relatively low-levels of skill and very limited on-the-job training. Examples include cleaners. Occupants of these posts are paid on a daily basis and do not have access to most of the benefits offered to occupants of established posts.

1.5.2.5 DoSH & SW Workforce Salaries

Salaries for the Health workforce are set out by the General Public Service based on the salary scales and grade steps for every established post throughout the public sector.

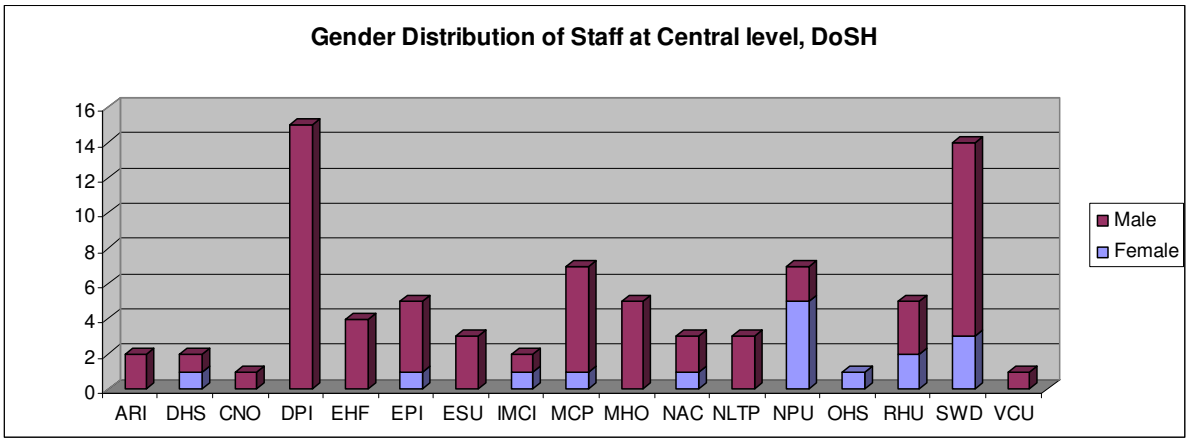
1.5.2.6 The Department of State for Health workforce - gender and age distribution - September 2005

The gender of Health personnel in the Hospitals and divisions could not be obtained, as information on personnel did not capture the gender, age and sex of personnel. Several reasons accounted for these missing items. However, at central level where information on gender was available, most management positions(over 70%) were occupied by males including the position of the Chief Nursing Officer.

Although no data on ages of the health staff could be obtained, The Gambian workforce also shows a very young working population generally. Therefore, for the period of this plan very negligible figures might retire.

Out of the total known filled posts of 147 at Management level, men were in the majority of 105 and females numbered only 42. This shows a ratio of 1:3.5.This reflects negligible numbers of females in managerial positions. In addition, there were ten positions that the gender of the occupants was not known.

Chart 1.6.6: The Gambia DoSH & Social Welfare workforce - established personnel and gender distribution at central level, September 2005



1.5.2.7 Attrition & Shortage of Health Staff

There is high attrition (about 30-50% over the years) of qualified health staff both internally and externally. For instance the annual report of the Royal Victoria Teaching Hospital depicts an exodus of over 100 nurses between 2001 and 2004. Also, specialists' doctors including Obstetrician Gynaecologists, Surgeons, Paediatricians and a Psychiatrist also left around this period. There has led to shortage of Staff with high dependence on expatriate staff particularly doctors (nearly 90%).

The contributory factors to this phenomenon are poor remuneration, unattractive/lack of incentive packages, lack of recognition and working conditions among others.

1.6 Capacities of training institutions:

Training institutions do not have adequate capacities in terms of facilities and trainers to train adequate levels of HRH for the health sector.

1.7 HR Management Systems

Ineffective and centralised Human Resource for Health management systems and thus leads to the following:

- No clear guidelines on personnel procedures with delays in promotions.
- No incentives for health workers serving in 'difficult/hardship' locations or Under-served and less attractive areas.
- Staff Performance Appraisals are conducted as a requirement of the National level for promotions and for recommendation for either further studies or another job. Managers do not understand or know how to complete the current appraisal system. As a result they often rely on Central level to complete these forms whereas these managers do not directly supervise the staff. Appraisals are not analyzed before promotions are conducted.
- Inadequate motivational and retention strategies to retain staff. Salaries and Incentive Packages are not attractive to motivate and retain staff. This often leads to demotivation among health. This has resulted in high wastage/attrition of qualified professionals.
  Attrition of qualified key staff especially doctors, nurses, Public Health Officers and laboratory staff annually to the private sector and out of country. This has resulted in shortages of these staff in service delivery areas. Between 2001 and 2004, over 100 Registered nurses and specialist doctors left the RVTH.
- Career Development:
  There are no holistic Schemes and conditions of Service and no clear career development guidelines to inform staff on how to progress in their professions.
- Continuing Education:
  It has been widely stated that there is no formal system for identifying health workers for continuing education and further training. Despite this anomaly, a study conducted in 2002 indicated that 67 (39.2%) of nurses were

reported to have received post basic training compared to only one (1) Environmental Health Officer**.** The system tends to favour certain categories of personnel. There are no guidelines to inform personnel about how to obtain fellowships.

1.8 Regulatory Bodies

There are conflicts of functions between the regulatory bodies and other directorates with inadequate financing of these bodies to adequately perform their functions.

1.9 Decentralisation:

Capacities for Management of HRH at the decentralised levels are weak.

1.10 Research and Development:

Although there is a Health systems research unit under the Directorate of Planning and Information with an officer trained on research proposal development, research methodology, data collection, analysis and report writing, indications are that only one research on attrition of HRH has been conducted

1.10 Health Human Resource Management Information System (HMIS)

A HMIS unit exists, which captures six components of Health service data including HRH. This information on HRH however, is very limited. The personnel files of health workers are kept at PMO and at DOSH & SW.
There is no HRIS within the DPI. The HR Unit tried to compile data on Human Resources using excel spreadsheet to facilitate easy and regular updates, but this has so many gaps. The total numbers, ages and gender of personnel are not captured. The source of this data is the request sent to the various Divisional Heads to submit their nominal rolls.

Another source of data is from the payroll but this also has its shortfalls as some personnel such as the Cuban doctors and other expatriate staff who are not paid from the Government payroll are not captured.
A third source of data is from the annual budget estimates but again, this is not accurate since some vacant positions are included for budgeting whereas they are actually not filled.

Other sources of HRH data are from the professional registers but these are also not reliable since people leave without notifying these bodies and some expatriate staff have not been registered over three years.

The health personnel training database, is maintained by the Schools and the HRH Office only requested for such information for this exercise. This database is about students undertaking formal professional training for work in the health service field. This training may be directed to the acquisition of formal qualifications at pre-service, post-basic or post-graduate level. Sources of data for the training database include the Department of Education, and agencies such as the World Health Organisation. Some of this data were also found to be inaccurate as the year of enrolment and graduation were at variance. The group therefore had to consult heads personally to rectify some of the issues.

1.11 Contributory factors to the Challenges:

Underlying all these developments is the poor remuneration offered to skilled professionals who work in the public health sector. The poor working conditions and environment among others are also contributing to the situation. Financial constraints make it difficult for the government to provide adequate infrastructure, equipment and incentives that would motivate and retain staff. In spite of these challenges, the health sector is determined to overcome the constraints with the view to achieving better health outcomes for the people living in the Gambia.

1.12 The private sector health workforce – September 2005

The policy for private practice for Public sector health workers is that Health personnel employed by the Government as public servants are paid D500–D600 in lieu of private practice. However, public servants can opt for private practice in forfeiture of the said amount. The private sector has 41 facilities made up of 9 hospitals and the remaining made up of clinics and Village Health services. There are also 10 category 'A' pharmacy shops, 89 and 178 categories B and C drug outlets respectively. Over 60% of these facilities are located in the Western Division. Again, 10 recognised laboratories operate in the private sector.

In The Gambia, however, most health personnel who work in the private sector have resigned their posts in the Public sector. As at September 2005, a total of 859 health practitioners were working "full-time" in the private sector of which 67 are medical doctors of which nine (9) are dentists, 66 laboratory personnel, 5 pharmacists, 1 pharmacy technician, 97 registered nurses, 68 enrolled nurses, 63 community health nurses and 2 dental technologists. The remaining 417 are made up of administrative support staff including nurse attendants and most of these personnel work in the Western Division.

1.13 Summary of National Health Policy Vision, Mission and HRH Vision and policy Statements

The HRH policy outlined the preceding strategies in line with the National Health Policy to address the HR challenges.

1.13.1 National Health Policy

The National Health Policy '*Changing for Good'* has the following vision and mission statements for Human Resources for Health.

1.13.2 Vision

The vision of the National Health policy is that the health sector will seek "the attainment of accessible quality health care for the Gambian population that would be a model for the Africa Region by the year 2020".

1.13.3 Mission

The Mission is the "provision of quality health care services within an enabling environment, delivered by appropriately and adequately trained, skilled and motivated personnel at all levels of care with the involvement of all stakeholders to ensure a healthy population".

1.13.4 Health Sector Goal for Human Resources

Ensure appropriate and adequate human resources for the health sector.

1.14 HRH policy

Following from the challenges and the formulation of the National Health policy,' Changing for Good", with the outlined vision, mission and goal, a Human Resource for Health policy and strategic plan documents were developed. The strategic plan is for five years but this plan spans longer and is more comprehensive.

1.14.1 HRH Policy Vision

The HRH policy has its vision in line with the National Health policy.

It states that 'a Gambian public/private health system that is largely self-reliant and financially sustainable in terms of its human resource, having a balanced well distributed mix of motivated and competent people with a view of;

- Cost effective health interventions leading to improved health status with emphasis on poverty reduction health indicators
- Accessibility and responsiveness of the health system to clients' expectations;
- Fairness in he sharing of the financial/economic risk of sickness and ill health

1.14.2 Main HRH Policy Objective:

The main objective of this policy is to focus on the entire HRH process including the planning, training and utilization of HRH to the requirements of the Gambian Community, in particular the poor and vulnerable groups, in line with the National Health policy.

1.14.3 Main Areas Addressed by HRH policy

The policy further highlights the following strategies among others:
That,

The Gambian Health system's performance has so far not lived up to its expectation of delivering equitable and quality services to the nation. The constraining factors include weak management capacities, insufficient human and material resources that are also inequitably distributed with high attrition rate, weak referral systems and other related issues.

To be able to overcome these challenges and meet the human resource needs of the health sector in line with the goal of the Health sector, the HRH policy outlines the following strategies.
A strategic approach to human and general resource planning including finance and service costs must be closely and clearly linked to the National Health policy and the health service infrastructure. Such an approach should also take account of and be linked to PHC goals, as well as other on-going macro and micro economic processes and frameworks such as the PER, MTEF, PRSP,(SPAII), SWAp and MDGs**.**

1.14.4 Statements from HRH policy to achieve the Goal

The following are the highlights of strategies by the HRH policy to achieve its goal

- The approach to Human Resources for Health Development in the Gambia will move toward taking a comprehensive view, as opposed to an approach based on development and interests of individual professional health cadres.

- The HRH process will be appropriately placed within the national organization structures, close to policy level while ensuring close links among planning, training, utilization and financing, taking into consideration the involvement of all relevant Government Departments and Non-Government Organizations.

- HRH structures and mechanisms will be created, strengthened and empowered to deal with all aspects of the HRH processes.

- In-service training will be fully integrated within the Human Resource Development Unit. The unit will be effectively strengthened and empowered to coordinate, plan and supervise implementation of in-service training in the context of performance management. This will be done in close consultation with programme units and DHT's, while encouraging development of capacity of DHT's to take on this responsibility.

- Establishment and operations of an HRH Advisory Committee, with appropriate interdepartmental and multisectoral composition will be fully supported with the view of developing a comprehensive approach toward the HRD process.

- Human resource development will view the health system in its totality with due attention for a public / private mix.

1.14.4.1. HRH Planning and Financing

Preamble

The planning of health services requires an integrated approach of various inputs to relate to HR indicators and other ingredients for the process.

A strategic approach to human and general resource planning, including finance and service costs, must be closely and clearly linked to the National Health Policy and the health service infrastructure. Such an approach should also take account of, and be linked to Primary Health Care goals, as well as other on-going macro and micro economic processes and frameworks such as the PER, MTEF, PRSP (SPA II), SWAp and MDGs.

HRH planning will take both a long term strategic perspective (15 – 20 years) as well as a short-term perspective to deal with immediate burning issues.

The long-term perspective will be based on creating a sustainable indigenous workforce while the short-term perspective may also rely on the deployment of non-Gambian staff to fill key gaps.

Long–term HRH planning will use appropriate computerized planning tools and specialized hired expertise.

Long-term HRH planning will be based on foreseen development of health services and facilities in line with policy priorities, future recurrent budget feasibility, health worker population ratios, workloads and remuneration differentials.

Mechanisms for cost sharing in the development of HRH, including training will be explored and established. This will involve the public sector, private sector, non-governmental organisations, trainees/students and community.

The HRH process will be strongly linked with health systems and economic research to ensure that it is evidence based

HRH planning and staffing standards will adopt a holistic approach taking into consideration private / public mix and essential health services for poverty reduction, equitable distribution, and appropriate skills mix and pre-determined workloads.

The HRH process will strongly take into account economic implications and affordability of training and deployment options.

HRD will be monitored as an important aspect of the Poverty Reduction Strategy and other related financial management processes.

1.14.4.2. Education, Training and Skills Mix of Health Cadres

Preamble

The effectiveness of health workers depends largely on their knowledge, skills and attitudes acquired through pre-service, in-service and continuing education, the type of curricula and training programmes (that should be based on local situation), the health worker-population ratio and the appropriate skill mix within the health team. For effective service delivery there is need for innovative strategies, which would include rationalizing health cadres i.e. creation of new health cadres, re-orientation and upgrading the current ones to meet the needs of the country, especially for poverty reduction and millennium development goals. Such cadres need to have well defined schemes of service.

In order to achieve the long-term vision and main policy objective, the Gambia will be open to innovative, non-conventional HR development options that may transgress conventional borders of responsibility of health professions.

HRH Development in the Gambia will in the first instance be determined by the health requirements of individuals and communities in The Gambia, in particular the poor, underprivileged and vulnerable groups, taking into consideration the PHC principle of appropriate technology. This will take priority over requirements for international recognition and regional standardization.

The composition of the complement of health cadres will be initially and periodically reviewed on the basis of community health needs and HR requirements for the delivery of rationally determined health service packages.

A health administration cadre will be introduced to take up administrative functions that are currently being occupied by various health professionals.

Midwifery skills, including life-saving skills in case of obstetric / gynaecological emergencies as well as IMCI and HIV/AIDS skills will be developed amongst personnel/cadres that are likely to work where these skills are required.

Determination of further skills requirements and training needs will be performed initially and periodically at regular intervals or as required by circumstances.

Curricula, schemes of service and training provisions will be created, identified or adjusted accordingly.

Mechanisms will be put in place for closer collaboration between DOSH&SW and DOSE to allow cross transfer of teaching staff between training institutes run under the two departments and to reduce tutor shortage.

Availability of indigenous academic staff for local health professional training institutes will be supported to minimise dependency on expatriates and to enhance sustainability.

1.14.4.3. HR Management

- ***HRH deployment and Utilization***

Preamble

The shortage of staff in the health system is compounded by various forms of mal-distribution including a focus on tertiary level hospitals versus lower PHC facilities, urban versus rural, unskilled staff versus skilled and male dominance versus female health workers. Imbalances in staff – population ratios and workloads also prevail. Skills needed to function effectively in a position are often lacking resulting to job and qualification mismatch. These factors have contributed to ineffectiveness and failure of the health care system to deliver quality services and meet clients' expectations. This calls for clear guidelines and supportive mechanisms for equitable distribution and rational utilisation of available human resources for health.

The distribution of health workers over divisions and health facilities will, in the first instance, be determined by objectively established institutional needs and workloads.

Expatriate staff will be deployed in the regular health services, while positions are created to allow for their replacement by national staff when possible.

Staff in public and private sector will be deployed in positions that match their training background with prescribed job descriptions in accordance with governing professional acts.

Staffing standards will take into account the requirements of poverty reduction strategies, essential health packages and workloads

Posting and transfer guidelines and practice will be regularly reviewed and disseminated to ensure equal distribution of HRH, while also maintaining fairness and transparency toward health staff in the process

The need to improve gender balance will be supported, and recruitment or appointment to vacant technical and managerial posts will focus on this principle, at all levels of the health system.

A mechanism for ensuring equitable distribution of HRH will be created and supported by DoSH&SW, DoSE, DoSLGL, and DoSFEA.

Special incentive packages will be introduced to attract skilled staff to underserved areas as a means to promote equity in access to health services especially for the poor and underprivileged.

Divisional health authorities will be fully involved and consulted on issues of staff allocation and transfers.

Posting guidelines will be reviewed/developed as a measure of ensuring continuous availability of skilled HRH at lower levels of the Health System where health workers including professionals will be posted to work within the first two years of graduation.

Up-grading and continuing education opportunities will be based on national and community health needs, which will also take in consideration equal opportunities and balanced development of all health workers.

Integrated in-service training, continuing education, fellowships and up grading will be supported by appropriate guidelines.

- ***Staff Motivation and Retention***

Preamble

One of the major components of human resource management is motivation. It has been realised that this aspect has not been given the attention it deserves. De-motivating factors have been acknowledged in the earlier section i.e. under

policy issues. The result is a large majority of human resources who are de-motivated and not performing their work at the required standard. Up to 50% of the skilled human resources abandoned the public health services in The Gambia health sector due to demotivation. This has a direct negative impact on quality of services and the health status and socio-economic development of the nation**.** It is therefore necessary to institute and support short and long-term corrective measures to alleviate the situation.

Salaries and remuneration schemes will be initially and regularly reviewed with reference to other sectors, remuneration of similar work in the private sector, minimum living wage and total recurrent health budget. A health service commission will be established to deal with salary and incentive schemes.

Performance appraisal system will be adapted at all levels of health system to promote quality assurance and merit-based staff promotion.

- ***Decentralization Requirements***

Preamble
Decentralization in relation to HRH aims at bringing the services and resources closer to the health worker and the communities in order to ensure equity and accessibility in line with our National Health Policy and Poverty Reduction Strategy. Therefore it is imperative to have in place strengthened and supported institutional capacities for effective HRH decentralisation.

Management capacity building at divisional levels will be supported to enhance implementation of decentralized health services in accordance with national health and decentralization policies.

Coordination mechanisms will be supported to ensure sustained linkages between DOSH&SW, PMO and Local Government in relation to HRH matters.

1.14.4.4 Health Workforce Management and Information System (HMIS)
HMIS/HRIS would be created, maintained and updated regularly to support HRH planning, Training and Management.

1.14.5 Regulatory Bodies
Preamble
The services provided by health professionals are usually aimed at improving the quality of life of the people they serve. The service orientation of the health care profession must be able to meet appropriately the ever-changing value system of the community or its consumers. As such they require constant evaluation using Quality Assurance techniques and procedures. The regulatory bodies exist to protect the public and the registration of health professionals is the hallmark of the trust and confidence that society has in the professions. It is also a necessary recognition of the vulnerability of clients/patients and the need for protection from unqualified practitioners. Therefore, support to these components of HRH is crucial for the maintenance of professional standards and delivery of optimal quality health services.

Quality assurance mechanisms including setting of standards, development of work protocols, supervision guidelines and job descriptions, professional audit and others will be put in place to monitor and rectify performance in public, private and traditional practice.

Registration practices will encourage maintenance of skills and performance putting the responsibility of continuing education with the health workers themselves

Supply of continuing education / in-service training opportunities will be well coordinated and regulated to avoid gaps, redundancies and undue interference with work.

Regulatory bodies will be supported or expanded as required to deal effectively with maintenance of professional integrity, ethical conduct and appropriate discipline in case of professional misconducts or malpractice. This will include regular revision of professional acts and regulations.

SECTION 2

2.0 PLANNED CHANGE - Workforce Plan

2.1 Introduction

As part of the first strategy of the HRH policy, this section of the workforce plan focuses on how to plan to address some of the challenges. The plan is concerned with determining the numbers of staff positions required to provide an adequate level of service (the "Required posts"), for the various levels within the health sector taking into consideration the workloads and services provided in line with the staffing schedules/norms, the numbers of personnel actually to be employed, the numbers of staff entering and leaving the health service, and the numbers of entrants into and graduates from training programmes.
In addition, the plan would also propose measures for the training of health service personnel to improve on the staff strength thereby meeting the HRH requirements by the year 2020 in line with the National Health and HRH Policy objectives.

2.1.1 Scope of the plan

The scope of this plan is to stipulate staffing targets for each of the six major categories of health personnel, (doctors, nurses, pharmacy, laboratory, Radiology and Public Health Officers) including the training costs and proposals for post graduate training and professionals' development taking into consideration the following:

- Minimum package of essential services
- The workload including range of services (expanded existing and newly constructed facilities e.g Serrekunda hospital)
- The population growth
- The possible emergence of some diseases,
- Present level of staffing,
- Attrition from the workforce, and
- Outputs from training programs and other sources and
- The economic situation of the country

The plan will also state how recruitments should be managed in order to match staffing requirements with the number of staff actually employed. Indications of the future costs of staffing the service will also be provided.

2.2 HRH Policy and Planning Strategies and Targets

In developing this plan, several factors including the HR policy strategies have been taken into consideration. For example, the training of some cadres to address skills mix and bringing health service to the community in line with the PHC concept. The long-term perspective of creating a sustainable indigenous workforce with the short-term perspective to rely on the deployment of non-Gambian staff to fill key gaps is based on the HR policy strategies. Other areas linking the plan to the HR policy strategy are as follows:

Long-term HRH planning will be based on foreseen development of health services and facilities in line with policy priorities, future recurrent budget feasibility, health worker population ratios, workloads and remuneration differentials.

HRH planning and staffing standards will adopt a holistic approach taking into consideration private / public mix and essential health services for poverty reduction, equitable distribution, and appropriate skills mix and pre-determined workloads.

The HRH process will strongly take into account economic implications and affordability of training and deployment options.

HRD will be monitored as an important aspect of the Poverty Reduction Strategy and other related financial management processes.

2.1.2 Organisational arrangements for workforce planning

The Directorate of Planning and Information (DPI) with the HRH Unit is responsible for the coordination of all activities related to health workforce planning. However, the Directorate is not involved in some HRH issues. For instance, they are not members of the fellowships committee and some technical heads manage and handle some personnel issues. Nevertheless, the Director, DPI and HR Unit were responsible for the preparation of this draft national health workforce plan, and acted as the secretariat for the Workforce Planning Group. The Directorate will also persevere to be involved with all planning issues related to HRH.

Composition of The Workforce Planning Group is as follows:

- Permanent Secretary, DoSH - Chairman
- Permanent Secretary, PMO, - Co-chairman
- Acting Director of Health Services,
- Director of Planning and Information,
- Chief Nursing Officer,
- Chief Medical Director of the Royal Victoria Teaching Hospital,
- Divisional Directors,
- Registrar, Nurses and Midwives' Council,
- Registrar, Medical and Dental Council
- Heads of Training Institutions,
- Director, Social Welfare,
- Representatives of Education and Finance.

2.2 PROCESS:

2.2 Process used to set Human Resources Requirements Targets:

To address the challenges of Human Resource for Health the strategic intervention as outlined by the HRH policy is to develop a strategic plan as a first step to address the situation. This plan made use of the staffing standards, which was developed ensuring skills mix, based on the minimum package of essential health services for the various levels. This formed the basis of the third intervention of evidence based long term HRH planning and projections.

The development of the draft workforce plan went through a series of consultations. First, the planning group liaised closely with the OICs of all divisions, units within the Department of State for Health, Heads of facilities, training institutions, professional classes and officers of other agencies including the Personnel Management Office, the Department of Education, representatives of the health professional associations and the Private sector.

Secondly, a minimum package of essential services was developed through a consultative process, including field visits, documents reviews and eventually a consensus building workshop. (Refer to process in staffing norms document). Thirdly, during the month of September 2005, a draft staffing norm document was developed based on the minimum package of essential health services using an adapted version from WISN method (Shipp, 1995). Again consensus was built on it with Senior Health Managers. It was also agreed during this meeting that the future (2020) staffing pattern of The Gambia should be as similar as is practically possible, to that of the developed world by the year 2020. The TWG also examined the current workload in addition to upcoming new facilities and tried to match it with the future staffing patterns. From the above, a process similar to the Effective Demand model, which combines WHO scenario requirements model with some aspects of target setting, demands and needs based methods of forecasting workforce was used.

Having determined the baseline establishment required for the current population, projection of future staffing requirements were made, taking into account such factors as the expected population growth rate, epidemiological changes, changes in the productivity of health personnel and planned changes in the number (construction of new facilities), range and level of services to be provided.

Each of the following sub-sections 2.2 to 2.6 provides information regarding the requirements, supply and training arrangements for each category of health personnel in the health workforce. For each of these categories there is a projection sheet linking year by year the required number of posts, the actual staff to be employed and the training

intakes required. Also on the sheets are projections of estimated staffing and training costs that will be used in Section 4 of the plan. The projection sheets are to be found following the particular personnel category to which they relate.

It must be emphasised that the projections presented in this plan are based on information currently available. As mentioned earlier in this document the plan must be regularly and systematically reviewed in order to accommodate changing policies, changing needs, and to incorporate all available relevant information regarding the workforce situation.

2.3 Model used to determine requirements/set targets

The model used for projecting the workforce requirements is similar to the effective demand model. This model as described, measures service utilization rates then projects population for each utilization category, convert projected service demands to personnel requirements using productivity norms. It considers economic factors to complement the epidemiological principles of the needs based approach. While most forecasting exercises make the assumption that the resources will be found, this approach factors in the fiscal implications while remaining interested in ensuring that HR are deployed efficiently in ways that have greater impact on health needs. The approach focuses on relative levels of needs within the entire population with needs[6].

2.4 Assumptions relating to health workforce planning

The underlisted are the general assumptions guiding the workforce plan. However, there would be slight variations with the individual categories of health cadres.

2.5 Population and population growth

The estimated population of The Gambia by the Population and Housing Census in 2003 was 1,364,507, almost twice the country's population of 700,000 twenty years earlier.[7] If the population growth rate of 2.8% is maintained from the 2003 census, then the population for The Gambia in 2005 would stand at 1,441,989. It is assumed that the population to be served will continue to increase at an annual rate of 2.8 per cent throughout the planning period. Thus by the end of the year 2020 the projected population would stand at 2,182,020 persons, an increase of 740,031 (33.9 per cent) on the number at the beginning of the year 2005.

2.6 Economic growth

The draft country profile in 2005 positions the Gambian economy's growth rate for the year 2005 at 4.6% per annum. If the interest, inflation and other indicators of the economy remain the same, this rate of growth is assumed to continue.

2.7 Proportion of government budgets allocated to health

According to the Estimates and expenditure of the DoSH & SW of 2003, 2004 and 2005, there have been fluctuations in government spending within the health sector. Between 2003 and 2005, the total Government budget for the health sector ranged between 11 and 13 percent with 11percent in 2005. The Department of State for Finance and Economic Affairs (DoSEFEA) and the Personnel Management Office (PMO) have, however, through their "call circular of 2006" noted a zero growth on the recruitment of personnel for the public sector in 2006. This is however seen as a general routine circular for the whole public sector and may not have any effect on the recruitment of health personnel viewing the gross shortages that the sector is experiencing. The current health expenditure per capita per annum is 10 USD. It is expected to increase by 4.6%, taking into consideration the economic growth rate.

2.7.1. Proportion of government health budget allocated to personnel emoluments

Staff salaries and other emoluments accounted for 35% of total health budget in 2004 and declined to 33% in 2005. The Department of Finance is determined to maintain this zero growth in future regarding the proportion of DoSH budgets allocated to personnel costs in any one year.

2.8 Attrition of Health Workforce

There is high attrition within the health sector especially skilled staff such as Nurses, Doctors, Public Health Officers and Midwives both internally and externally and is estimated to be between 30 and 50%. A study conducted in November 2002 on the attrition of health personnel by DPI, reported that as many as 573 health workers left the Public

[6] Draft Guidelines for Human Resources for Health Policy and Plan Development at Country Level, WHO, AFRO, 2004
[7] G.M. Meier Leading Issues in Economic Development (1995), p.53, EXHIBIT 1.8; Basic Indicators: Sub-Saharan Africa.

Health sector. Majority were said to be nurses with Public Health Officers ranking second. A Public Health officer stated that at least 50% of the Public Health cadre who graduated within the last 10 years left the service. About 100 nurses, mostly SRN and Senior SEN in grades 6, 7 and 8, left Royal Victoria Teaching Hospital between 2001 and 2004. It is assumed that countrywide, the attrition of health workforce (for some professions such as nurses and doctors) is about 4% annually either through emigration or resignations.

2.5.6 Failure to complete course

Statistics from training institutions indicate varying failure rates of students to complete the courses of study. Therefore the assumption of a percentage of some students not completing their studies would also be considered for the individual categories of cadres.

2.3.7 Retirements

A certain percentage of retirements for the various professionals would also be assumed during the projections since ages of most cadres are not known.

2.3.8. Death and Invalidity Rate

It is difficult to establish the death rate for only health professionals in the Gambia and so, the general death rate for the people of the Gambia estimated to be 11.27%[8] would be used to assume the death rate for the various categories of health cadres to be projected.

2.3.9 Expenditure on health workforce for the Private Health Sector

The expenditure in the Private sector for the health workforce is not fully known according to the Draft Country Profile, as the accounts in these institutions are not audited fully by the Auditor General's Office. This sector however, employs about 26% of total health workforce. It is assumed that non-government provision of medical, dental, pharmaceutical, and other health services including Traditional medicine currently offered in The Gambia will grow rapidly. Areas of growth will include establishment of private hospitals/clinics, sale of pharmaceuticals through the retail market, clinical support services such as laboratory and medical imaging services. It is also assumed that the majority of the population in the rural areas will make full use of Traditional medicine.

The impact of such developments on staffing and training requirements will be assessed in the rollover reviews of this plan and adjustments made where appropriate.

2.3.10 Targets

The key health professionals' requirement targets for the health sector determined in this plan to be achieved by 2020 is based on the agreement arrived at during the consensus-building workshop for the minimum package and staffing norms. During this workshop with Senior Managers and some Heads of facilities and training institutions, it was agreed that the staffing pattern for the health sector of The Gambia should be close to that of the developed world by 2020. In addition, the model used also aided the target setting taking into consideration the services provided and their utilisation, epidemiological, economical factors as well as the size of the population**.** Although the commission on macroeconomics and health[9] recommends rates for some professionals such as doctors and nurses (a doctor population ratio of 1:2,500 and nurses 1: 2222), this target would be quite difficult for the Gambia to achieve and thus a target of 1:4,500 for doctors and 1: 1091 for professional nurses, and 1: 3500 for sub-professional nurses) by the year 2020 is the target of this plan.

2.4 Medical Officers, Requirements, Staffing and Training

The total number of doctors including dentists in the health sector is 234, of which 67 are in the private sector. Again only 30 are Gambian Nationals. With the current estimated population of 1,441,989, the current doctor population ratio in the Gambia is 1:6,162. However, taking only the Gambian Nationals, the ratio is 1: 48,066. The staffing norms, which were developed using the current workloads in health facilities, stipulate a total requirement of 305 doctors for the health sector. With this figure, the doctor population ratios will improve from 1: 48,066 to 1:4,727. The target doctor population required for the country by the year 2020 with an estimated population of 2,182, 020 would be 485. With

[8] Rep. of The Gambia (1993) Population and Housing Census 1993 (volume III), Mortality Analysis Evaluation,
[9] Improving Health, Nutrition and population outcomes in Sub-Saharan Africa – The role of the World Bank, 2005

these target figures, there is a current deficit of 71 doctors if the expatriate doctors are included. With the exclusion of the expatriate doctors, the current deficit would be 275 currently and 455 to reach the target of 485 in 2020.
The following table presents the DoSH medical officer staffing situation as in September 2005.

Table 2.4: The Gambia DosH - Medical Officers, September 2005

Designation of position	Number of posts	Number of posts occupied	Current Requirements/Norm
Director of Medical Services	1	1	1
Deputy Director of Medical Services	1	1	1
Snr. Consultant Specialist	6	6	12
Consultants	37	14	20
Senior Registrars	9	21	25
Registrars	4	3	5
Principal Medical Officers	7	5	20
Senior Medical Officers	23	32	57
Medical Officers	61	75	92
House Officers	2	-	15
Private sector	-	67	67
Total	151	234	305

Of the medical staff shown in the above table, only thirty (30) are Gambian Nationals and the remaining One Hundred and Thirty-seven (137) are expatriates mostly employed on a two-year contractual basis.

The private sector also has 67 medical doctors and thus bringing the total figure to 234

2.4 .1 DoSH medical cadre development plan, 2005-2020

In consultation with DoSH medical staff and Senior Managers, the following staffing standards were agreed.
-VillageClinic 1 medical officer in each.
- Minor Health Centres in category B – 1 medical officer in each facility
- Major Health Centres in Category A – 2 medical officers in each facility
- Major Health Centres in category B – 3 medical officers in each facility

-Hospitals in category A – Medical service team – 3 medical officers per team
Paediatrics - 3 medical officers per team
obstetrics/gynaecology service team – 3 medical officers per team
surgical service team – 3 medical officers per team

- Hospitals in category B
- Medical service team – 5 medical officers per team
- Obstetrics/gynaecology – 5 medical officers per team
- Surgical service team – 5 medical officers per team
- Paediatrics service team – 5 medical officers per team
- ENT, ophthalmology, psychiatric service teams 2 - 5 medical officers per team depending on the service area and population served.

- Teaching Hospital 99 doctors are required for the current workload of which 25% would be specialists.

For the total doctor population in the norms for hospitals in category B, about 25 doctors are required for each hospital with the observed current services and service utilisation by the current population.
The figures below were arrived at using the following methods:

- Norms developed based on current service utilisation /workload
- Recommendation from the World Bank (ibid 2005) which outlines the developing world doctor: population ratios of between 40 to 60 physicians per 100,000 population i.e 1:1,666 and 1: 2,500 plus studies by

Nmadu (1998) and the recommendation from the World Development Report of (ibid, 1993), also gives the minimum specialists percentage of total physicians to be 25%.

Using these standards, the staffing targets shown in the table below were agreed upon with the Senior Managers and Heads of facilities and raining Institutions as providing an appropriate cadre of medical personnel (about 238 doctors plus 67 in the Private sector) to staff a comprehensive Public and private sector medical service covering a population numbering 1,441,989 people

Based on these factors and the assumptions outlined above, the doctor requirements for The Gambia by the year 2020 (population: 2,182020), would stand at 485 which would translate into a ratio of 1:4,500 and which would be a drastic improvement on the current National Doctor population ratio of 1:48,066 and total doctor population (including expatriate) of 1:6,162.

Table:2.4.1 The Gambia - Target establishment for Medical Officers, 2020

Doctors	2005	2010	2015	2020
Population	1,441,989	1,655,495	1,900,610	2,182,020
Total number of doctors required for total health sector	305	367	422	485
Total Doctors at hand both public and private	234	85	247	496
Expatriate Doctors at hand	204	169	94	19
Nationals (status quo)	30	85	102	132
Current Ratio (Nationals only)	1:48,066	1: 19,476	1:18,633	1: 16,530

The following sub-sections 2.2 to 2.6 provide information regarding the requirements, supply and training arrangements for each category of health personnel in the health workforce. For each of these categories there is a projection sheet linking year by year the required number of posts, the actual staff to be employed and the training intakes required. Also on the sheets are projections of estimated staffing and training costs that will be used in Section 4 of the plan. The projection sheets are to be found following the particular personnel category to which they relate.

2.4.3 Medical Officers - requirements, staffing and training

Table 2.4.3: The Gambia - DoSH - Target establishment for medical cadre, 2020

Department or Service	Required posts, 2020
Medicine	12
Surgery	12
Obstetrics and Gynaecology	12
Paediatrics	12
Anaesthetics/Intensive Care	4
Neurosurgeon	2
Otolaryngeal (ENT)	2
Ophthalmology	6
Dermatologist	2

Pathologist	2
Oncology	2
Orthopaedic Surgeons	3
Psychiatry	2
- Maxillofacial/Dental Surgeons	6
Burns/Plastic Surgeon	2
Urologists	2
others	4
Medical Officers & Dental Surgeons	388
Total	**485**

The basic clinical team in a major specialty according to expert opinion in The Gambia and recommendation from World Bank[10] states that at most 25% of all physicians may comprise specialists in developed economies and much lower in developing world. Based on the two opinions, and using 20% as the average value, the above targets were arrived at.

In the smaller clinical specialties and sub-specialties, the team would consist of one or two specialists with support from the general medical officer, resident medical officer and intern pool.

Assuming the population growth rate continues at around 2.8 per cent per year, a Health sector medical cadre totalling 485 (384 for DoSH and 101 for the Private sector) would be in practice by the year 2020 and there would be one doctor for every 4,499 people in The Gambia.

2.4.4 Losses from the medical cadre

DoSH relies heavily on expatriate staff on a 2-year contractual basis while it concentrates its efforts to train doctors.

- **Retirements:** The doctor cadre therefore is quite young except for the Nationals already in the system and whose ages are not known. It is assumed that the number of retirements would be minimal during the planning period.
- **Attrition:** Some may opt for private practice after some years – 5 years after graduation. That will then be after serving the mandatory period of three years after training.
- **Phasing out of Expatriates:** The expatriate doctors would also be phased out with an average annual figure of fifteen from the year 2010 with the intention of staffing the health sector with indigenous medical cadres.

Proposals to minimise future attrition from this cadre would include improvements in the training systems – provision of adequate logistics and trainers, introduction of a 2-year structured internship programme at the RVTHospital, changes in the medical officer salary and career structures, the provision of opportunity for government medical officers to undertake limited private practice and the development of a well-organised and properly implemented programme to enable medical graduates gain formal specialist qualifications. A structured programme of continuing professional education directed to the up-dating and extension of medical officers' skills, covering doctors in both DoSH and the private sector, will also play a role in maintaining a high level of commitment to work within the health care delivery system of the Gambia.

During training in the Medical school, current observations are that over 50% of students are lost. For instance out of a number of 25 students enrolled in the first batch only twelve are expected to complete the course. Again the whole of the third batch has been lost. The TWG therefore assumes a 40% loss for medical students. Factors contributing to this state should be investigated and streamlined.

2.4.5 Medical undergraduate training

Before 1999, students for medical training were trained out of country. There was the possibility of some students failing to return to the country. Some of those who returned opted for employment after serving DoSH for a few years. With the establishment of the university in 1999, however, these cadres are now being trained locally and a bonding system is to be reviewed and reinforced. This means that medical graduates from the university may be effectively bonded to serve in The Gambia for a defined period, or face penalties for breach of the conditions of the bond.

[10] World Bank Report 1993 'Investing in Health: World Development Indicators'

At the beginning of the year 2005, eighty-Two (82) Gambian Nationals were pursuing the MB.Ch.B course in The University of The Gambia Faculty of Medicine and Allied Health Sciences at various stages. The first batch of twelve is due to graduate in January 2006. In addition to this, one is also due to graduate from Ghana.

Table 4.2.3 The Gambia - number of MB Ch. B graduates expected to Graduate and enter DoSH employment, 2006-2010

Year of Graduation	Expected number of MB ChB graduates
2005	0
2006	12
2007	16
2008	- whole batch lost
2009	18
2010	33

The DoSH Medical Officers Worksheet 2.2.1 at the end of this subsection shows the impact of the under-graduate medical training programme on the numbers of medical officers likely to be in the DoSH medical cadre from year to year.

2.4.6 Medical postgraduate training

The loss of most senior Gambian national specialist medical officers – obstetrics and gynaecology, paediatrics, surgery and psychiatry from DoSH presents problems not only in terms of providing services to patients but also as regards the basic and post-graduate training of medical officers.

To ensure that there will be an adequate number and range of specialists on the staff of DoSH to provide specialised supervision and training of medical students and future post graduate training is and likely to be the greatest challenge confronting the Gambia medical training programme over the next 15 years. This plan does not include the medical postgraduate training due to time limitation to enable further consultation. Nevertheless, it is proposed that postgraduate should be considered and included during the review periods. Based on the consensus built, three specialists were agreed to be in each department of the university to strengthen medical students' training and also strengthen the Teaching Hospital.

However, depending on the economic performance of the country, the country can either increase or decrease the number of specialists to be trained during the planning period

The TWG proposes that the future review of this workforce plan should include a post-graduate training schedule showing year by year the proposed entrance and progression of DoSH medical officers into and through post-graduate training courses.

2.4.7 Projection of future DoSH medical officer staffing and staffing cost

The projection of staffing numbers, student intake, output, salary and training costs **shown in Worksheet 4.2.1 DoSH Medical Officers at the end of this sub-section is based on the following assumptions:**

Actual number of Doctors Available	-	234 of which 30 are Nationals
Required Doctors as at 2005	-	305
Current Population estimate	-	1,441,989
Population growth rate	-	2.8%
Number of Doctors/population	-	1:48,066 /1:6,162
Current Desirable ratio	-	1:4,728
Desirable ratio by 2020	-	1:4,500
Exit due to resignation	-	1 every five years
Exit due to death	-	1 every eight years
Exit due to retirement	-	1every five years

40% of medical students fail to complete the MB. Ch.B course
Expatriate staff to be reduced by 5-10 from 2006 to 2009 and by 15per year from 2010

How to arrive at the target Doctors by 2020

Target for 2020 485
Currently available 30/234
Output from medical school up to 2010 55 estimated
Deficit 400 divide by 9 intakes = 44.4
Six years to train medical doctors
To make provision for 40% failure to complete medical school, as is the observation in the Gambia medical school, which has a failure to complete rate of 50% then the intake, would be 62
Intake form 2006 to 2014 would be 62 annually

The table shows year by year the required numbers of entrants to the undergraduate medical course. Retirements affect this plan minimally but with the phasing out of expatriate contract medical officers and resignations from DoSH, a "target establishment" of 485 medical officers will be reached by the end of the year 2020.

The table does not indicate the pattern of entry to post graduate training programmes. This would be determined during the review within the next 5-10 years when the University overcomes its numerous challenges confronting it currently.

Table 2.4.8: Projection of future DoSH medical officer staffing

YEAR	STUDENT INTAKE
2005	33
2006	62
2007	62
2008	62
2009	62
2010	62
2011	62
2012	62
2013	62
2014	62
TOTAL	**591**

2.5 Nursing Service personnel - requirements, staffing and training

2.5.1 The DoSH nursing cadre, September 2005

The DoSH nursing cadre comprises four major groups of personnel, State Registered nurses (SRNs) Registered Midwives, State Enrolled Nurses (SENs) and Community Health Nurses (CHNs). Under the Chief Nursing Officer, these groups of posts are recognised although some may be in the hospital, community or the school. The following table shows the DoSH nursing cadre establishment and staffing in September 2005. For this plan, the planning group regarded SRNs and Midwives as professional nurses and the State Enrolled Nurse and Enrolled community Health nurses as Second level nurses.
The total number of nurses including all the categories in the health sector was 928, of which 165 were in the private sector. A few (7) of the nurses were expatriates. With the current estimated population of 1,441,989, the current Nurse Population ratio in the Gambia is 1:1,554. However, taking only the professionals (445) the ratio is 1: 3,240 whereas the second level nurses (318) are 1:4,535. The staffing norms, which were developed using the current workloads in health facilities, stipulate a total requirement of 1,225 nurses for the health sector. With this figure, the nurse population ratio will improve from 1: 2,670 to 1:1,177 but with a current deficit of 297. The target nurse population ratio required for the country by the year 2020 with an estimated population of 2,182, 020 would be 1:1000. If the ratio 1:1000 is the target, this translates into the total requirement of 2,182 nurses and therefore a deficit of 1,254 to reach this target in 2020.

Table 2.5.1: The Gambia DoSH - Nursing cadre - posts and staffing, September 2005

Designation of posts	Established Posts	Staff	Vacancies	Norm

Professional Nurse Posts				
Chief Nursing Officer	1	1	0	1
Principal Nursing Officer, RVT Hospital	1	1	0	1
Deputy Principal Nurse, RVTH	3	3	0	5
Principal Nursing Officer, Hospitals	3	2	1	
Senior Nursing Officer	13	8	5	
Divisional Public Health Nurse	11	9	2	
Professional Nurse, Hospital	145	407	24	566
Principal Nurse, Education	2	2	0	2
Nurse Educators, Schools of Nursing	14	10	4	20
Sub-total Professional Nurse posts		***445***	*28*	***595***
Enrolled nurse posts				
Enrolled Nurse, Hospital	-	180		330
Enrolled Nurse, Community Health	-	138		300
Sub-total SLN posts		***318***		
Private Sector		165		638
Total nursing cadre		**928**	**64**	**1,225**

2.5.2 Nursing Service development and staffing targets

The Chief Nursing Officer indicated there have never been any norms for nurses and thinks that staffing norms should be accompanied by the institutionalisation of Quality Assurance (QA) programme.

It was agreed with the Senior Managers at National, Divisional and facility with Heads of training Institutions that the proposed ratios represent desirable targets and have been adopted as the base staffing targets to be used for the 15 years projections as shown in the table below. Again, using the developing world averages for staffing, the following would be the nurse staffing requirements by the year 2020 – an average of 45 nurses per 100,000 populations – 1:2,222 that is better than some countries including Malawi, which has four nurses per 100,000. (ibid). It has also been agreed that the professional second level nurse ratio should be 3:2

At the workshop to build consensus on the norms, the following staffing was agreed for the various levels.

1.Professional nurses

Village clinics : 37
MiHC A - 2 midwives in each
MiHC B - 3
MaHC A – 7
MaHC B – 14

Hospital A - 21
Hospital B - 70
Teaching Hospital - 179

2. Second Level Nurses

Village Health Services - 138
Village clinic: - 37
MiHC A - 81
MiHC B - 12
MaHC A – 20
MaHC B – 75

Hospital A - 56
Hospital B - 100
Teaching Hospital - 119

Table 2.5.2 The Gambia DoSH – Nursing service staffing targets, 2020

Nurses		**Staffing Requirements**			
Population		1,441989	1,655,494	1,900,610	2,182,020
	Actual staffing,				

	2005	2005	2010	2015	2020
Professional Nurses (PN)	445	595	828	950	1,091
PN:Population Ratio	1:2,670	1:2,424	1:1999	1:2001	1:2000
Second Level Nurses(EN)	180	330	470	610	750
EN :Pop. Ratio	1:8,011	1:4,370	1:3,522	1:3,116	1:2,999
Second Level Nurse (CHN)	138	300	440	580	720
CHN Pop. Ratio	1: 10,449	1:4,807	1:3,762	1:3,277	1,3,031
PN: SLN ratio	3.2				
Private sector	165				
Total	**928**	**1,225**	**1,738**	**2,140**	**2,561**

The total nurse: population ratio as at the start of the planning year – 2005 stands at 1:1,788. During the consensus building meeting to develop the staffing norms, it was agreed that the professional nurse and Second level nurse ratio be 3:2. Professionals here referring to SRNS and Midwives and Second level nurses referring to SENs and CHNs

2.5.3 DoSH nurse cadre recruitment and attrition

Recruitment: There are many school leavers seeking to train as nurses in The Gambia. However, there are difficulties in recruiting more than forty entrants to the three-year general nurses training programme due to shortage of training staff, lack of space and inadequate logistics.

The planning group assumes an annual intake of fifty four (54). The TWG also proposes the expansion of the school, training of more trainers and provision of logistics to facilitate increase in training of nurses.

Attrition: Upon completion, the attrition is quite high – about 4% in a year. The attrition even starts in the advanced stages of the programme. The reasons attributed to attrition include low remuneration, poor working conditions among others. However the most common reason for resignation is emigration to take up a nursing post in a more affluent country where nursing salaries and career prospects are much better to those in The Gambia. The majority of the emigration related resignations are among SRNs.

The TWG proposes the review of salaries and allowances, conditions of service in general and put in place incentive packages to retain trained staff.

Retirements: The ages of the Nursing staff were not readily available and so the TWG assumes that the workforce of the Gambia is relatively young because of the attrition. The planing group assumes that a nurse will retire every year during the planning period.

The proposal is to strengthen the Health information management system with a component on Human Resource Information System (HRIS) that will capture accurate and relevant data on HRH.

2.5.4 DoSH nurse training programmes

(a) *2.5.4 Training of State Registered Nurses*

The School of Nursing and Midwifery programme has stated that although its facilities and equipment were designed to accommodate a maximum annual intake of thirty new students, it will accept up to 45 new trainees per year from 2005 but would only continue this double intake if the constraints of logistics and adequate teaching staff improves.

As noted earlier on, there have been difficulties in recruiting more entrants to this course due to space, inadequate teaching staff and funding. It is proposed that DoSE and DoSH should expand the capacity of the school and train more tutors and lecturers.

The post-basic training programme at the School of Nursing and Midwifery offers an eighteen-month course for SRNs leading to an Advanced Diploma in Midwifery. The programme has been designed to take up to ten State Registered Nurses each year.

In order to maintain a high standard of up-to-date knowledge and skills within the nursing cadre it will be imperative to train more nurses at the University in specialist post basic courses who, on their completion from training will act both as practitioners in their specialty and as trainers of other nursing personnel. It is proposed that in any one year 2 or 3 SRNs will enrol at the University or out-of-country courses to up-grade their qualifications from diploma to Bachelor of Nursing degree level, and 1or 2 will be pursuing post-graduate studies at masters or other higher degree level. Some of these specialities include community Oral health Nurses.

In line with the HR policy strategies to have a health workforce with appropriate skills mix coupled with efforts to prevent oral health disease burden of dental caries/periodontal diseases of the Gambia, some of the specialities for nurses that are being recommended for consideration in the near future include Community Oral Health Nursing. This would augment the work of the few dentists in the country.

b. Training of Second Level Nurses (SLN)

The SLN training course, which is for State Enrolled Nurse and Enrolled Community Health Nurse, is for duration of 2 years. A third of this time is spent on formal study with practical work occupying the other two thirds. There has been no difficulty in recruiting suitable entrants to this training program, and none is anticipated. Some of the Nurse Attendants who do very well are also given consideration to undertake this course.

2.5.5 Nursing personnel in the private sector

About one fifth (165) of Nursing personnel work in the private sector of the health care delivery system. As this sector expands, there is likelihood that experienced nurses would move the government service. For example, the opening of hospitals with more specialist services. This would call for the employment of a number of nurses, particularly those with specialised knowledge and skills.

Thus, the expected attrition arising from migration overseas and other causes mentioned above, must be added to the possible exodus of some registered and enrolled nurses to the local private sector.

2.5.6 Projection of nursing service requirements, staffing and training - Professional Nurses

The projection of staffing numbers, student intake and output and salary and training costs shown in Worksheet 3.2.1 Registered Nurses at the end of this sub-section is based on the following assumptions:

- Retirement of Professional Nurses on reaching 60th birthday – 1every year
- Attrition Exits due to migration, resignations– 4% per year
- Exits due to death, invalidity - 1 every 3 years
- Maximum number of new student intake - 40 per year
- All nursing school graduates enter DoSH upon graduation
- Percentage of new student intake not completing the training course - 15%
- Other intakes e.g nurses returning from abroad expatriate staff – None during the period
- Nurses likely to return on contract for five years – None during the period

The worksheet shows that, with the actual staff of 445, an annual intake of 54 new students with no trained nurses returning from seeking greener pastures and others from the subregion being employed over the planning period, the Professional nurse: population ratio target (1:2000) will be reached by the end of the year 2020. – 1,091 nurses

2.5.7 Further Projection of nursing service requirements, staffing and training – Second level Nurses

The projection of staffing numbers, student intake and output and salary and training costs shown in Worksheet 3.3.7 Enrolled Nurses at the end of this sub-section is based on the following assumptions:

Exit- resignation loss rate - 1.5 per cent per year
Retirement at age 60 years - 1 per year
Losses due to death, invalidity, dismissal etc - 1 every 3 years
Trainee failing to complete course - 1% per intake
Nurses likely to return on contract for five years - None

The worksheet shows that, with the current annual student intakes as indicated year by year, the target EN:population ratio target (1:3,000) will be reached by the end of the year 2010 and maintained for the remainder of the planning period.

Table 2.5.7 Training Schedule for Nursing Requirements for 2020

YEAR	PROFESSIONAL NURSES	ENROLLED NURSES	COMMUNITY HEALTH NURSES
2006	54	34	28
2007	54	34	28
2008	54	34	28
2009	54	34	28
2010	54	34	28
2011	54	34	28
2012	54	34	28
2013	54	34	28
2014	54	34	28
2015	54	34	28
2016	54	34	28
2017	54	34	28
TOTAL	**648**	**408**	**336**

A total of 1,392 nurses will be trained by the year 2020 and the cost of training one professional nurse currently is USD500 and USD450 for EN and CHN

2.6 Pharmaceutical Service personnel - requirements, staffing and training

2.6.1 DoSH Pharmaceutical Services - current situation

The pharmacy cadre is made up of the pharmacists, Pharmacy Technician and Dispensary Assistants. Apart from the Dispensary Assistants, who are trained on the job, the other two are trained out of country.

There are a total number of 48. From this figure 10 are pharmacists, 8 Pharmacy technicians and 30 Dispensary Assistants. From this number, five pharmacists with one pharmacy technician work in the private sector and the remaining five pharmacists, 7 PT and Dispensary Assistants work for the Public sector. Again three out of the five work at the Central Medical Stores (CMS) and two at the RVTH.

The current (September 2005) health personnel establishment and staffing of the DoSH pharmaceutical service are shown in the following table.

Table 2.6.1 DoSH - Pharmaceutical services - posts and personnel, September 2005

Designation of post	Number of posts	Number of staff	Vacant posts	Norm
Chief Pharmacist	1	1	0	
	4		3	
Principal Pharmacist		1		

Senior Pharmacist	2	2	1	
Pharmacist	5	1	1	19
Assistant Pharmacist				
Private sector	-	5		
Total	**12**	**10**	**7**	
Others				
Dispensary technicians	-	7	-	31
Dispensary Assistants	-	30	-	54
Private Sector	-	1		
Grand Total		**48**		**104**

None of the Assistant Pharmacist group will reach retiring age before the end of the year 2020. One is expected to return to DoSH employment in 2004 after study for a Master's degree in pharmacy but has failed to return.

2.6.2 Pharmaceutical services - future development

The number of pharmacist required by establishment (12) to manage the various service areas of DoSH has a deficit of 7. With the staffing norm requirement of (19) to manage the various service areas currently, there is a shortfall of 14 as the actual number currently with DoSH is only 5. It is anticipated that action would be expedited on the training of Pharmacists to bridge the gap by the end of planning period – 2020. The target is to bridge the current pharmacist population ratio of 1: 144,199 to 1:50,000 in the health sector by the year 2020. The target for pharmacy technician is 1: 40,000 by 2020 compared to the current ratio of 1: 205,998. Dispensary Assistant to 1: 35,000.

2.6.3 Projection of pharmaceutical service requirements, staffing and training

	Actual	**Required staffing**			
Pharmacist	**2005**	**2005**	**2010**	**2015**	**2020**
Population		1441989	1655494	1900610	2182020
	5	19	27	42	45
Pharmacy Technician	? 7	7	14	33	54
Dispensary Assistants	30	54	57	61	64

2.6.4 Training of pharmaceutical personnel

There are no training facilities for the Pharmacists and Pharmacy technicians. Currently, local on-the job training of dispensary assistants is provided by way of an 18-month structured programme of instruction undertaken at the RVTH leading to a DoSH Dispensary Assistant certificate. Some of these personnel trained on the job also leave the system after a few years.

All other professional training of pharmacy personnel has to be undertaken out of country.
The following schedule indicates starting times and numbers of trainees to commence training out of country over the planning period. The numbers must of course be regularly reviewed and updated in the light of changing circumstances.

Table 2.6.4 Training schedule – Pharmacy personnel – Bachelor of Pharmacy and Diploma

Year	Bachelor of Pharmacy degree course (out-of-country - 4 yrs	Pharmacist Technician Diploma Out of country – 3 yrs	Dispensary Assistant DoSH Certificate
2006	3	2	-
2007	3	2	-

2008	3	4	10
2009	3	4	-
2010	3	4	10
2011	3	4	-
2012	3	4	10
2013	3	4	-
2014	3	4	10
2015	3	4	10
2016	3	4	-
2017	3	-	12
2018	-	-	-
2019	-	-	-
2020	-	-	-
			-
Total	**33**	**40**	**62**

A total of 135 pharmaceutical personnel would be trained by 2020. The cost of training a pharmacist is USD29, 000 per year, USD11, 800 for pharmacy Technician per year and USD 520 for Dispensary Assistant per year.

2.5 Laboratory Service personnel - requirements, staffing and training

2.5.1 DoSH Laboratory Service - current situation, September 2005

The DoSH Laboratory Service is headed by the Director Laboratory Services, a medical officer holding the Post-Graduate Diploma in Clinical Pathology but has left and a retired expatriate haematologist is now heading the laboratory. The current (September 2005) health personnel establishment and staffing of the DoSH laboratory service are shown in the following table.

Table 2.5.1 DoSH Laboratory Service - posts and personnel, September 2005

Designation of post	Number of posts	Number of staff	Vacant posts	Norm
Director Laboratory Services				1
	1	1	0	
Chief Laboratory Technologist				
	1	1	0	1
Supervisor Laboratory Technologist				
	6	5	1	6
Laboratory Technologist	1	3	0	12
Senior Lab Technician	6	3	1	
Lab Technician	7	2	5	26
Lab Assistant	15	14	1	68
Private sector				**66**
Total	**37**	**30**	**7**	**179**

The Acting Director, Laboratory Services and the Senior Laboratory Technician are already more than 60 years of age. Three other qualified personnel would reach their 60th birthday before the end of the year 2020.

2.5.2 Laboratory Service - future development

There are in total Ninety-six laboratory personnel in the country. Sixty-six of this number works in the private sector while the remaining thirty work in the public sector. There is therefore an acute shortage of this cadre such that on-the job training with the RVTH and the Medical Research Council has been introduced to train laboratory Assistants as a

stopgap measure. The MRC also offered Distance learning for the training of Laboratory technician a few years back but has since ceased to offer it any longer.

As the health sector grows alongside population increase, there increasing demand for laboratory services are anticipated. With the current 37 established posts for laboratory cadre, only 30 have been filled. In addition to the 66 in the private sector, the ratio of laboratory per population ratio stood at 1:15,021.However, the indication was that there are gross shortages and the current established posts do not seem to match the need. The staffing norm however indicates the need for 113 laboratory personnel for the Public sector and 66 in the private sector. This translates into one laboratory staff to 12,761 people. By the norm, the indication is that there is a shortage of 83 laboratory personnel. The target for 2020 which desires to have one laboratory staff to 11,200 people implies that the health sector would need about 195 laboratory personnel by the end of year 2020 of which about one hundred needs to be trained. Due to losses from attrition, failure to complete course, retirements and deaths, a higher number would be trained to ensure that the target would be reached by the year 2020.

2.5.3 Projection of laboratory service requirements, staffing and training

Table 2.5.4 shows that with the return to The Gambia of few trainees on completion of their four-year Bachelor of Laboratory Science course out of country, re-employment of staff beyond retiring age and a spaced out intake of trainees in future years, the staffing target for the laboratory technologist cadre can be achieved. Since 2001 to date only nine persons have been sent out to train as technicians and BSc degrees in laboratory science. Out of this number, two have failed to return.

Table 3.5.2 indicates the need to secure funding for scholarships almost every year in order to send students out of country to undertake the Laboratory Technologist/Technician courses including that for on-the job training for laboratory Assistant in alternate years.

2.5.4 Training of laboratory personnel

At present local training of laboratory assistants is provided by way of a one-year structured program of instruction undertaken by employees within the service and leading to a DoSH Laboratory Assistant's Certificate.

Although there are many qualified school leavers who could be trained as laboratory personnel, it is extremely difficult to secure funding for training of laboratory technician out of Country. Since 2001 to date only nine persons have been sent out to train as technicians and BSc degrees in laboratory science. Out of this number, two have failed to return. Two of such students still in Kenya are being sponsored by WHO. It is the hope of the planning group that some funds would be committed or solicited to train laboratory personnel to meet the dire need for this cadre which is highly in short supply. There is high attrition (about 68%) of this cadre either to the private sector, NGO or outside the country

Owing to the costs involved in overseas training, the proposal is for the Bachelor's degree/Diploma programme to be introduced in the university within the school of Medicine and Allied Health Sciences whilst the training of a few personnel in the postgraduate programme is given consideration in the near future to boost the academic staff of the university. This proposal if considered, would encourage more qualified school leavers to be trained and more retained after training and thus help ease the shortages. This therefore calls for expansion of facilities in the university and the development of more qualified trainers.
The following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2020. The schedule has anticipated that by the 2011, the university would begin to train laboratory personnel. The numbers, however, must be regularly reviewed and updated in the light of changing circumstances.

Table 2.5.4 Training schedule – Medical laboratory personnel

Year of entry to training	Number of entrants		
	DoSH Certificate	DipLabSc	BLabSc
2005		5	2
2006	-	-	1
2007	-	2	2 (1MSc & 1 PhD)

2008	14	-	2
2009	-	2	1
2010	14	-	2
2011	-	5	2 MSc
2012	14	5	2
2013	-	5	2
2014	14	5	1
2015	-	5	1
2016	14	5	2
2017	-	5	0
2018	16	-	0
2019	-	-	0
2020		-	0
TOTAL	**86**	**44**	**20**

In all, about 195 laboratory personnel comprising 111 laboratory Assistants, 64 technicians and 20 technologists would be trained by the end of the planning period to meet the needs of the health sector.

2.5.5 Private sector laboratory services

There are at present (September 2005) sixty-six laboratory personnel working for private sector laboratories in The Gambia. There are ten recognised laboratories and which are in the process of being regulated by the Pharmacy Council including four under the MRC. The planning group assumes that some of these personnel will migrate to the private health sector.

2.6 Medical Imaging Service personnel - requirements, staffing and training

2.6.1 DOSH Medical Imaging Service - current situation, September 2005

The DoSH Radiological Service is headed by an expatriate medical officer who holds the post-graduate Diploma in Diagnostic Radiology and works with the RVTH. The current (September 2005) health personnel establishment and staffing of the service are shown in the following table.

Table 2.6.1 DoSH Medical Imaging/Radiology Service - posts and personnel, September 2005

Designation of post	Number of posts	Number of staff	Vacant posts	Norm
Radiologist	3	1	2	4
Radiographers	6	4	2	10
Radiography Assistant	12	12	0	20
Total	**21**	**17**	**4**	**34**

Radiologists and Radiographers are usually trained out of country undertaking a three-year structured training course leading to the award of Degree/Diploma in Medical Imaging. On completing the training course, graduates are normally promoted to fill Radiographer posts.

Radiography Assistants are usually recruited from among WASSC school leavers and trained on the job to fulfil the needs of the radiography personnel who are in short supply. They receive on-the-job training for 18 months and are awarded a DoSH certificate.

2.6.2 Medical Imaging /Radiology Service - future development

The plan to equip hospitals with the appropriate Radiology equipment would lead to a considerable increase in the workload of the Radiology personnel. Also proposed increases in the numbers of doctors in both the government and non-government health services will further increase the demand for medical imaging services.

The TWG has proposed that over the planning period to the end of the year 2020 the number of posts for qualified radiographers should be increased by 1 every 3 years for Radiographers and for Radiography Assistants 2-3 every three years. The intake of Trainee Radiographers will be adjusted to ensure that the posts for trained radiographers will be filled.

2.7.3 Projection of Medical Imaging Radiology Service requirements, staffing and training

Table 2.7.1 shows the spaced intake of trainee radiographers required in future years in order to reach the staffing targets for this service.

2.7.4 Training of medical imaging/Radiology service personnel

At present local training of radiography Assistants is provided by way of a three-year structured program of instruction undertaken by employees within the service and leading to a DoSH certificate in Radiography.

The following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2020. The numbers must of course be regularly reviewed and updated in the light of changing circumstances.

Table 2.7.4 Training schedule – Medical imaging/Radiology personnel

Training course	**Year**	**Number of trainees to commence training**
DoSH certificate in Radiography (18 months on-the-job.training)	2006 2009 2012 2014 2017	2 2 3 3 3
Bachelor/Diploma of Medical Imaging (3-year course, out-of-country)	2006 2009 2012 2015	1 1 1 1
Total		**17**

A total of 17 Radiology personnel would be trained at the end of the planning period

2.7.5 Private sector medical imaging services

Some facilities in the private sector provide this service and it is likely some of these personnel will opt for the private sector after the mandatory service period.

2.8 Public Health Officers - requirements, staffing and training

2.8.1 DoSH Public Health Officers - current situation, September 2005

The Chief Public Health Officer heads the DoSH Public Health Service (PHS) with seven others based at the central level. The current (September 2005) health personnel establishment and staffing of the service are shown in the following table.

Table 2.8.1DoSH Public Health Service - posts and personnel, September 2005

Designation of post	Number of posts	Number of staff	Vacant posts	Norm
Chief Public Health Officer	1	0	1	1
Principal Public Health Officer	2	2	0	7
Public Health Officers	59	54	5	62
Total	**62**	**56**	**6**	**70**

From available data, only two officers from this cadre would reach the retirement age before the end of the planning period.

Public health laboratory services are provided at the National Health Laboratory Service.

2.8.2 Public Health Officers - future development

2.8.3 Projection of Public Health Officer Requirements, staffing and training

The current Public Health Officer per population (56 per 1,441,989) ratio is 1:25,750 whilst the norm is (70 per 1,441,989) 1:20,600. There is therefore a deficit of fourteen (14) PHOs already. The desired ratio of 1:15,000 by the year 2020 therefore implies that there should be about 146 PHOs in the health sector to achieve this target. In addition if the under listed factors are considered, there would be the need to train about 25 per year up to the year 2017.

- Retirement of Public Health officers on reaching 60th birthday – 2 every eight years
- Attrition/Exits due to migration, resignations– 5 every 3 years
- Assignments into managerial positions
- Exits due to death, invalidity – 1 every eight years
- Maximum number of new student intake - 25 per year
- Percentage of new student intake not completing the training course - 35%

Table 2.8.1 shows the timing of staff intakes in order to meet the required staffing of PHO posts.

2.8.4 Training of Public health Officers

The current training of Public Health Officers has been tailored more toward middle level managerial training than the core purpose of environmental health. As a result, more of the graduates are deployed into managerial positions to the detriment of the core duties of environmental issues. Coupled with this is the high attrition rate both internal and external.

The TWG therefore recommends the training of a lower calibre of Environmental Health Officers to take up this core responsibility with community involvement in line with the HRH policy objectives in the future. The training of Health professionals in management could then be considered at the Master's level in the University. Courses such as Master's in Public Health (MPH) or Master's in Business Administration with either Health services' Administration or Human Resources option could be considered for the management of the health sector and addressing of more complex environmental/Public Health issues.

For the time being, the following schedule indicates starting times and numbers of trainees to commence training over the planning period to the end of 2020. The numbers must be regularly reviewed and updated in the light of changing circumstances. For the purpose of this HRH plan, the planning group recommends the training of PHOs at an annual intake of twenty-five (25) until a decision is reached for the training of environmental health officers.

It is therefore proposed that the review of the course content, duration and certification of the current Public Health Officer course should be done to tailor to the needs of the community on the environmental issues whilst efforts are also made to introduce the training of managers for the health sector at the postgraduate level.

Table 2.8.4 Training schedule – Public Health Officers

Training course	Year	Number of trainees to commence training
Higher National Diploma 3-year course	2006	25
	2007	25
	2008	25
	2009	25
	2010	25
	2011	25
	2012	25
	2013	25
	2014	25
	2015	25
	2016	25
	2017	25

2.8.5 Private sector Public Health services

The Government of The Gambia is responsible for the regulation and provision of environmental health services throughout the country. There are no private sector agencies operating in this field.

2.9 Medical practitioners in the private sector

In September 2005, Sixty-Seven medical practitioners are working in the private sector – with two dental surgeons holding public service posts.

With the statistics outlined in section **2.3,** it is assumed that the number of doctors in private practice will probably increase by 1.5 of this number or double (ie reach 130) by the year 2020.

Table 2.2.2a at the end of this sub-section shows that this number of private medical practitioners can be reached in the year 2020 with one DoSH doctor resigning to enter private practice every five years and at least five doctors coming into The Gambia to practise (possibly Gambians currently practising in other countries and other foreign nationals) during the planning period 2005-2020.

2.9. The total Gambian medical workforce 2005-2020

Table 2.2.2b shows year by year the number of medical practitioners expected to be practising in The Gambia either within the DoSH services or in the private sector.

The total number of practitioners increased from **234** at the start of the year 2005 to **485** at the end of the year 2020. The doctor: population ratio improves from **1:6,162 to 1:4,499** over this period.

2.10 Summary of staffing requirements and staff availability

Table 2.10 presents in summary form the changes in the numbers of required staff (ie posts) and staff in post over the years from the beginning of year 2005 to the end of 2020. The worksheet WS …. shows year-by-year the changes in numbers of staff and posts for the different categories of staff.

2.10 Summary of training intakes

CATEGORIES	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ENTRANTS TO TRAINING PROGRAMMES IN COUNRY														
Medical Officers	33	62	62	62	62	62	62	62	62	62	-	-	-	-
State Registered Nurses	40	54	54	54	54	54	54	54	54	54	54	54	54	
Enrolled Nurses	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Comm. Health Nurses	25	28	28	28	28	28	28	28	28	28	28	28	28	28
Public Health Officers	40	25	25	25	25	25	25	25	25	25	25	25	25	-
Dispensary Assistants	0	10	0	10	0	10	0	10	0	10	0	0	0	12
Laboratory Assistants	0	15	0	16	0	16	0	16	0	16	0	16	0	16
Radiology Assistants	2	0	0	2	0	0	3	0	0	3	0	0	3	
ENTRANTS TO TRAINING PROGRAMMES OUT OF COUNTRY														
Pharmacists	3	3	3	3	3	3	3	3	3	3	3	3		
Pharmacy Technician	0	2	2	4	4	4	4	4	4	4	4	4		
Laboratory Technologists	2	1	2	2	1	2	2	2	2	1	1	2	0	
Laboratory Technicians	5	-	2	-	2	-	5	5	5	5	5	5	5	
Radiographers		1			1			1			1			

Table 2.10 above shows year by year the number of trainees to enter training programmes in order to fill existing vacant posts and meet future requirements. This training schedule is concerned with basic and pre-service training. Trainees in the University of the Gambia and the Gambian College are largely funded by the Department of Education whilst those trained on the job and the two Nursing schools (Community Health Nurses and Enrolled Nursing schools) are paid from DoSH funds. The entrants to training programs out of country are holders of scholarships or fellowships awarded and funded by the Department of Education.

SECTION 3

HUMAN RESOURCE AND TRAINING COSTS

3.0 Costing the Health Workforce Plan

The analysis of Government expenditure on health at the beginning of the document highlights 35% of the total health budget allocated for staff salaries and wages. However, not all the training programmes are from the DoSH budget. Both the college and the University are funded from the Education budget. The financing of this plan would therefore need collaboration between the two sector Ministries. The training cost for the trainees in the two Nursing schools in addition to the salaries and wages for HRH should also be evaluated to ascertain the full staffing costs to be met from the Department of State for Health's budget.

3.1.0 Cost of Training

The cost of training covers the tuition, allowances and logistics provided for training for the in-country programmes. The cost for training out of country includes tuition, cost of living allowance and airfare.

Cost of training a doctor is $800 per year for 6 years = $4,800

3.1.1 Doctors: The cost of training doctors to meet requirements in the university of the Gambia (USD)

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	33	$800	$158,400
2006	62	$800	$297,600
2007	62	$800	$297,600
2008	62	$800	$297,600
2009	62	$800	$297,600
2010	62	$800	$297,600
2011	62	$800	$297,600
2012	62	$800	$297,600
2013	62	$800	$297,600
2014	62	$800	$297,600
TOTALCOST			**$2,836,800**

3.1.2. Cost of training a registered nurse is $500 per year for 3 years = $1,500

3.1.2.1 Nurses: The cost of training Registered nurses to meet requirements in the Gambia College is $500

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	40	500	$60,000
2006	54	500	$81,000
2007	54	500	$81,000
2008	54	500	$81,000
2009	54	500	$81,000
2010	54	500	$81,000
2011	54	500	$81,000
2012	54	500	$81,000
2013	54	500	$81,000
2014	54	500	$81,000
2015	54	500	$81,000
2016	54	500	$81,000
2017	54	500	$81,000
TOTAL COST			**$1,032,000**

3.1.2.2 Cost of training an Enrolled Nurse is $450 per year for 2 years = 900

3.1.2.2 Nurses: The cost of training Enrolled Nurses to meet requirements in the Gambia is $450

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	34	450	$30,600
2006	34	450	$30,600
2007	34	450	$30,600
2008	34	450	$30,600
2009	34	450	$30,600
2010	34	450	$30,600
2011	34	450	$30,600
2012	34	450	$30,600
2013	34	450	$30,600
2014	34	450	$30,600
2015	34	450	$30,600
2016	34	450	$30,600
2017	34	450	$30,600
2018	34	450	$30,600
TOTAL COST			**$428,400**

3.1.2.3 Cost of training a Community Health Nurse is $450 per year for 2 years = 900

3.1.2.3 Nurses: The cost of training Community Health Nurses to meet requirements in the Gambia is $450

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	28	450	$25,200
2006	28	450	$25,200
2007	28	450	$25,200
2008	28	450	$25,200
2009	28	450	$25,200
2010	28	450	$25,200
2011	28	450	$25,200
2012	28	450	$25,200
2013	28	450	$25,200
2014	28	450	$25,200
2015	28	450	$25,200
2016	28	450	$25,200
2017	28	450	$25,200
2018	28	450	$25,200
TOTAL COST			**$352,800**

3.1.3.1 Cost of training a Pharmacist out of country is $29,000 per year for 4 years = 116,000
3.1.3.1 Pharmacists: The cost of training Pharmacists to meet requirements in the Gambia is $29,000

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	3	29,000	$348,000
2006	3	29,000	$348,000
2007	3	29,000	$348,000
2008	3	29,000	$348,000
2009	3	29,000	$348,000
2010	3	29,000	$348,000
2011	3	29,000	$348,000
2012	3	29,000	$348,000
2013	3	29,000	$348,000
2014	3	29,000	$348,000
2015	3	29,000	$348,000
2016	3	29,000	$348,000
TOTAL COST			**$4,176,000**

3.1.3.2 Cost of training a Pharmacy Technician out of country is $11,800 per year for 3 years = 35,400
3.1.3.2 Pharmacy Technicians: The cost of training Pharmacy Technicians to meet requirements in the Gambia is $35,400

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2006	2	11,800	$70,800
2007	2	11,800	$70,800
2008	4	11,800	$141,600
2009	4	11,800	$141,600
2010	4	11,800	$141,600
2011	4	11,800	$141,600
2012	4	11,800	$141,600
2013	4	11,800	$141,600
2014	4	11,800	$141,600
2015	4	11,800	$141,600
2016	4	11,800	$141,600
TOTAL COST			**$1,416,000**

3.1.3.3 Cost of training a Dispensary Assistant in-country is $520 per year for 1 year = $520
3.1.3.3 Dispensary Assistants: The cost of training Dispensary Assistants to meet requirements in the Gambia is $520

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2007	10	$520	$5,200
2009	10	$520	$5,200
2011	10	$520	$5,200
2013	10	$520	$5,200
2015	10	$520	$5,200
2017	12	$520	$6,240
TOTAL COST			**$32,200**

3.1.4.1 Cost of training a Laboratory Technologist (BSc) out -of-country is $12,000 per year for 4 years = $48,000. Cost of training one MSc is $30,000 for one year and for PhD is$22,000 per year for 3 years = $66,000
3.1.4.1 Laboratory Technologists: The cost of training Laboratory Technologists (BSc) to meet requirements in the Gambia is $48,000.

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	2	$12,000	$96,000
2006	1	$12,000	$48,000
2007	2(1MSc &1 PhD)	$52,000	$96,000
2008	2	$12,000	$96,000
2009	1	$12,000	$48,000
2010	2	$12,000	$96,000
2011	2	$12,000	$96,000
2012	2	$12,000	$96,000
2013	2	$12,000	$96,000
2014	1	$12,000	$48,000
2015	1	$12,000	$48,000
2016	2	$12,000	$96,000
TOTAL COST			**$864,000**

3.1.4.2 Cost of training a Laboratory Technician (distance learning) is $1,125 per year for 2 years = $2,250.
3.1.4.2 Laboratory Technicians: The cost of training Laboratory Technicians to meet requirements in the Gambia is $2,250.

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	5	$1,125	$11,250
2007	2	$1,125	$2,250
2009	2	$1,125	$2,250
2011	5	$1,125	$11,250
2012	5	$1,125	$11,250
2013	5	$1,125	$11,250
2014	5	$1,125	$11,250
2015	5	$1,125	$11,250
2016	5	$1,125	$11,250
2017	5	$1,125	$11,250
TOTAL COST			**$94,500**

3.1.4.3 Cost of training a Laboratory Assistant on the job for one year is $780.
3.1.4.3 Laboratory Assistants: The cost of training Laboratory Assistants to meet requirements in the Gambia is $780.

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2006	16	$780	$12,480
2008	16	$780	$12,480
2010	16	$780	$12,480
2012	16	$780	$12,480
2014	16	$780	$12,480
2016	16	$780	$12,480
2018	16	$780	$12,480
TOTAL COST			**$87,360**

3.1.5 Cost of training a Radiographer out of country is $11,800 per year for 3 years = $35,400.
3.1.5 Radiographers: The cost of training Radiographers to meet requirements in the Gambia is $35,400.

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2006	1	$11,800	$35,400
2009	1	$11,800	$35,400
2012	1	$11,800	$35,400
2015	1	$11,800	$35,400
TOTAL COST			

3.1.5 Cost of training a Radiography Assistant on the job is $750 per year for 1 year = $750.
3.1.5 Radiography Assistants: The cost of training Radiography Assistants to meet requirements in the Gambia is $750.

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	2	$750	$1,500
2008	2	$750	$1,500
2011	2	$750	$1,500
2014	3	$750	$2,250
2017	3	$750	$2,250
TOTAL COST			

3.1.6 Cost of training a Public Health Officer is $500 per year for 3 years = $1,500.
3.1.6 Public Health Officers: The cost of training Public Health Officers to meet requirements in the Gambia is $1,500.

YEAR	STUDENT INTAKE	COST PER YEAR/STUDENT	TOTAL TRAINING COST
2005	40	$500	$60,000
2006	25	$500	$37,500
2007	25	$500	$37,500
2008	25	$500	$37,500
2009	25	$500	$37,500
2010	25	$500	$37,500
2011	25	$500	$37,500
2012	25	$500	$37,500
2013	25	$500	$37,500
2014	25	$500	$37,500
2015	25	$500	$37,500
2016	25	$500	$37,500
2017	25	$500	$37,500
TOTAL COST			**$509,000**

3.2 Staff training costs

Table 3.2 shows the estimated total trainee costs (at year 2005 prices) for the years 2005, 2010, 2015 and 2020. A detailed year-by-year projection by category of trainee is presented on tables 3.1.1 to 3.1.6 A total of Eleven Million, Eight Hundred and Forty-two thousand, two hundred and ten ($11,842,210) United States dollars is the estimated expenditure for the training to meet the staffing requirements by the year 2020.

The expenditure estimates from year to year do not vary greatly. However, when the plan period is divided into four quarters, the major expenditure is observed between the second and third quarters (ranging from as low as $3,000 to as high as $1,488,000) for each category and tapers towards the fourth quarter to zero for some categories of trainees. This is directly proportional to the numbers of trainees. The two quarters may be seen as the peak of training for the various categories as when trainees' numbers increased drastically to meet the desired health staff population ratio. Towards the last quarter, however, most trainees' numbers begin to decline and that accounts for the decreasing expenditure estimates.

Summary of overall of trainee costs in USD

CATEGORIES	2005	2010	2015	2018	total
Medical Officers	$158,400	$1,488,000	$1,190,400	$ 0	**$2,836,800**
State Reg. Nurses	$60,000	$405,000	$405,000	$162,000	**$1,032,000**
Enrolled Nurses	$30,600	$153,000	$153,000	$91,800	**$428,400**
Comm. Health Nurses	$25,200	$126,000	$126,000	$75,600	**$352,800**
Pharmacists	$348,000	$1,740,000	$1,740,000	$348,000	**$4,176,000**
Pharmacy Technicians	-	$566,400	$708,000	$141,600	**$1,416,000**
Dispensary Assistants	-	$10,400	$15,600	$6,200	**$32,200**
Lab. Technologists	$96,000	$288,000	$384,000	$96,000	**$864,000**
Laboratory Technicians	$11,250	$5,500	$56,250	$22,500	**$95,500**
Laboratory Assistants	-	$37,440	$24,960	$24,960	**$87,360**
Radiographers	-	$70,800	$70,800	$ 0	**$141,600**
Radiology Assistants	$1,500	$3,000	$3,750	$2,250	**$10,500**

Public Health Officers	$60,000	$187,000	$187,500	$75,000	**$509,000**
Total	**$790,900**	**$4,892,540**	**$5,064,860**	**$1,093,910**	**11, 842,210**

SECTION 4

Implementation, Monitoring, Review and Evaluation of the Health Workforce Plan

4.1 Arrangements for finalisation and adoption of the Health Workforce Plan.

This draft of the first National Health Workforce Plan will be reviewed as soon as copies have been circulated. Participants in this review will include the Secretary of State for Health, the Permanent Secretary, all divisional heads and representatives of their staff most closely concerned in matters relating to personnel, staffing, training and the costs associated with them. Consultation with relevant officials in other Departments such as Finance, Education, and the Personnel Management Office will be sought as considered appropriate.

Following the incorporation into the plan of any amendments arising from this review; the plan will be submitted to the Secretary of State for approval as an official Departmental document

4.2 Monitoring the implementation of the Health Workforce Plan4

Responsibility for monitoring the implementation of the approved national health workforce plan foremost will be the core responsibility of DPI/top level management personnel of DoSH. This responsibility can then be shared with the sector ministries such as Education, Local Government, heads of training institutions, the Chief Executives of hospitals OICs of divisions and Regulatory bodies.

Information to facilitate monitoring will be supplied by way of regular reports to divisional heads on the staffing situation from DPI and Human Resources Unit. Reports will be prepared from the workforce and training databases to be maintained by the HR Unit.

4.3 Review of the Human Resources for Health Plan

In line with changing circumstances in the health field such as changing epidemiological changes, coupled with political and economic situation it is necessary to review the plan at regular intervals to incorporate such changes. The Technical Working Group/DPI is responsible to the Permanent Secretary for the conduct of the review and the process of implementation..

It is suggested that the review should be annual in line with the annual bugetting process so that the budget process could incorporate some of the activities on the plan.

The DPI/Human Resources Unit will be responsible for the preparation of an annual overview report of staffing statistics, training statistics and other matters relevant to the review of the plan. Much of the data required for the preparation of this overview should be readily accessible through the DoSH information system network.

4.4 Evaluation of the Health Workforce Plan

At appropriate intervals, probably every five years, there will be a thorough and detailed review of all matters relating to staffing and human resource development. The Permanent Secretary will be responsible for the timely conduct of these reviews. These evaluative activities may lead to very considerable reformulation of the health workforce plan in the light of any major changes in government policy, in the country's health situation, or in other areas having significant impact upon the country's health care delivery system.

Section 5
Strengths, Weakness, Opportunities and Threats Analysis (SWOTs) of the Plan

Strengths
The strengths are that the top management of DoSH, (the Permanent Secretary, Deputy Permanent Secretary Director, DPI with the staff of DPI) and WHO as well as the heads of facilities, Training institutions Regulatory bodies and policy makers from Education and Personnel Management Office are very involved in the process and enthusiastic about the finalisation and take off of the plan. This is viewed as a good sign for the process to continue after the consultant's departure. Also, the current HRH focal person is very willing to support the implementation of HRH activities and thus would press on for the next steps to be carried out.

Weaknesses
First, is the fact that the capacity for implementing the plan may be lacking as the HR focal person has not been trained in HR issues to lead/guide the process. There may be some difficulties in interpreting the plan and drawing action plans.

Opportunities:
The opportunities are that there is commitment and involvement of both the top management of DoSH and WHO which means that DoSH with the support of WHO could solicit for funding to support the cost of the plan. Also, when the plan is costed and finalized it could be used to solicit funding from partners and relevant others. Some of these funds could be used for the training of trainers and some specialists in the University or elsewhere to provide adequate capacities for the various training institutions. It is also possible to develop capacities of HR managers for the various levels of the health sector to begin to deal with the numerous HR challenges.
It is also possible for management to improve upon HRH management systems and develop incentive packages to motivate and retain staff in the country.
A draft data collection format has been developed to aid collection of data on HRH. It is hopeful that the format would be reviewed and HRH data collected early next year to create a Human Resources Information System.

Threats:
The immediate threat includes the ability to obtain funding to implement, and monitor the plan. However, after the document has been reviewed, finalized and endorsed by the Health authorities, the plan could be used to solicit funding from partners – both bilateral, multilateral, NGOs and benevolent individuals. The second threat is that even when the cadres are trained, there is the danger of attrition due to poor conditions of service and low salaries. The lack of incentives to attract health staff to rural/deprived areas is another threat that might lead to inequitable distribution. Third is the ineffective management systems that would ensure staff in deprived areas are promoted out of turn or offered further training out of turn. Again is the lack of clear career paths for progression of staff and this might demotivate staff and thus lead to attrition.

6.0 Conclusion:
The assumptions are that the Health Sector of the Gambia would endeavour to train adequate indigenous key health staffs that are well motivated to deliver quality health service to its people by the year 2020. Also, it is assumed that funding would be found to implement the plan. The staff would also be retained and distributed equitably with good incentive packages and salaries. The costed fifteen year Strategic plan would be published and distributed to all stakeholders for urgent steps to be taken to address the issue of shortage of skilled human Resources

The analysis above indicates a number of challenges especially as they pertain to the following;
HR Budget: There are budgetary constraints for HR and budgetary allocation for HR is sometimes cut. This makes it impossible for the Directorate to implement HR activities and provide incentives for personnel

Capacities of Training Institutions: The institutions lack adequate numbers of trainers as well as logistics and infrastructure.

Postings/placement policies and procedures
There are no policies on postings and placements. There is however, a policy on posting allowance of 12-15% of salary for those posted to provinces. In practice, there are complaints that some have not yet been paid for many years, even after several claims.

Centralized and Inefficient Personnel Management Functions
Centralised, weak and inefficient staff management systems resulting in demotivation of personnel Inadequate motivation of staff and delays in promotion has led to increasing frustration among health workers, low productivity and low morale. This often leads to high level of attrition among qualified health personnel leading to shortage of professionally trained staff including Doctors, Pharmacists, Nurses, Health Administrators, and Laboratory/Diagnostic Technicians. This is further compounded by the high level of attrition from the public health service in The Gambia.

Staff Performance Appraisals are conducted as a requirement of the National level for promotions and for recommendation for either further studies or another job. Managers do not understand or know how to complete the current appraisal system. As a result they often rely on Central level to complete these forms whereas these managers do not directly supervise the staff.

Promotions: The manner in which promotions are carried out has brought about discontent among the rank and file of personnel in DoSH. The process of promotion is viewed as too slow and de-motivating to many staff. Some report to have been working under same position for ten years and although their immediate supervisors had recommended them for promotion did not happen in due time.

Scheme of Service: Some groupings/categories have written scheme of service while others do not have any at all.
Also, there appears to be no single document on the scheme of service for the personnel of DoSH. There is the need to develop a holistic scheme of service to apply to all categories of cadres.

Continuing Education/In-service training: There have been complaints of lack of transparency and favouritism in selecting personnel especially for fellowship training out of country. The composition of the fellowships committee does not include the DPI/HR unit.

Regulatory Bodies: There are conflicts of functions between the regulatory bodies and other directorates with inadequate financing of these bodies to adequately perform their functions**.**

Research and Development: There has been very minimal research on HRH and issues affecting them.

Lastly, capacities for management of HRH at the decentralised levels are weak.

In spite of the challenges enumerated, the opportunities are however that in order to realize the impact of the plan, the following should be vigorously pursued.

Systems would be set up for regular joint HR planning and review meetings between DPI/HR unit, heads of professional classes and other agencies regarding recruitment and monitoring to help minimize the issue of HRH misdistribution. In addition, a comprehensive approach in HRH planning process would be instituted.
Planning skills of managers at central, divisional and health facility levels would be improved.

The distribution of health workers over divisions and health facilities will, in the first instance, be determined by objectively established institutional needs and workloads using the posting and transfer guidelines which would be regularly reviewed and disseminated to ensure equal distribution of HRH, while also maintaining fairness and transparency toward health staff in the process
A mechanism for ensuring equitable distribution of HRH will be created and supported by DoSH&SW, DoSE, DoSLGL, and DoSFEA.
Divisional health authorities will be fully involved and consulted on issues of staff allocation and transfers

Expatriate staff will be deployed in the regular health services, while positions are created to allow for their replacement by national staff when possible.

Capacities of training institutions would be strengthened by increasing the number of trainers through accelerated training and expansion of training facilities and provision of logistics and budgets proportionally to produce required and adequate HRH.

Integrated in-service training, continuing education, fellowships and up grading will be supported by appropriate guidelines.

To strengthen HR Management, mechanisms and strategies including review of incentive package for the retention of skilled Human Resource for Health would be developed. The capacity of staff of the DPI/HR unit t would be strengthened to perform its central coordinating role and its core functions of policy formulation and monitoring of HR management and development within the health sector. There is an urgent need to train one or two officers in HR to take charge of the HR unit.

Posting guidelines will be reviewed/developed as a measure of ensuring continuous availability of skilled HRH at lower levels of the Health System where health workers including professionals will be posted to work within the first two years of graduation.

Salaries and remuneration schemes will be initially and regularly reviewed with reference to other sectors, remuneration of similar work in the private sector, minimum living wage and total recurrent health budget. A health service commission will be established to deal with salary and incentive schemes.

Special incentive packages will be introduced to attract skilled staff to underserved areas as a means to promote equity in access to health services especially for the poor and underprivileged.

Up-grading and continuing education opportunities will be based on national and community health needs, which will also take in consideration equal opportunities and balanced development of all health workers.

Staff Performance Management systems would be reviewed, updated and institutionalised and make it more regular and rewarding to both the manager and employee. Performance appraisal system will be adapted at all levels of health system to promote quality assurance and merit-based staff promotion.

On Human Resource Information System, DoSH & SW should evaluate the HMIS system and strengthen the Unit to be able to capture accurate data, maintain and update data on HRH.

Capacities of managers at decentralised levels would be strengthened though training to make them more effective

Support HRH studies and related health systems research to obtain relevant data for evidence-based planning

Create and support mechanisms for the coordination and harmonisation of HRH initiatives between DOSH&SW and Development Partners, NGOs, Private Sector, other relevant Government departments e.g. DOSE, PMO, Finance and Local Government.

Partners would consider supporting staff retention - especially in the rural areas by looking at innovative ways of motivation e.g. housing, transport and possibly utilities. National authorities especially DPI could consider developing advocacy mechanisms that would assist them advocate for increases in budgetary allocation for HRH activities. Efforts would be made to foster partnerships with other sectors such as the Education sector to improve the capacities of training institutions and trainers, open good schools in rural settings: the Works and housing to improve on roads and the Energy sector to ensure regular supply of electricity. This would encourage Health staff to accept postings to such areas. DoSH & SW would evaluate the HMIS system and strengthen the Unit to be able to capture accurate data, maintain and update data on HRH. The donor community would provide assistance for updating the human resources and training information.

Despite the analysis above, it is the hope of the consultant that the plan would be reviewed/finalized and endorsed by March 2006. Also, once there is commitment from both top management of DoSH and Senior managers, the plan would be implemented. DPI/DoSH would draw action plans for implementation of the plan with dates and budgets. DPI/DoSH would organize a dissemination meeting to build consensus among partners to facilitate the signing of the HRH costed fifteen-year Strategic Plan for the Gambia. The issue of financing the plan would then be overcome. Also, since there is high commitment from both DoSH and WHO, it should be possible to carry out the implementation and monitoring of the plan.

Finally, it is hoped that HRH management systems would be strengthened by developing holistic Schemes and conditions of service, job descriptions, performance monitoring systems, clear and well defined paths for career progression, improved salaries with incentive packages that would attract staff to rural and deprived areas. There is the need to also develop and disseminate procedures for promotion and further training. This, it is anticipated would help with the implementation of the plan and to achieve adequate indigenous HRH by the year 2020.

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