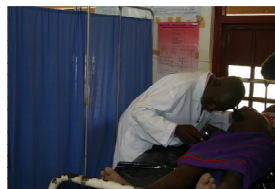




The Republic of Uganda



Roadmap for Accelerating the Reduction of Maternal and Neonatal Mortality and Morbidity in Uganda

2007-2015

FOREWORD

Uganda's Maternal Mortality Ratio (MMR) is currently estimated at 435/100,000 live births (Uganda Demographic and Health Survey [UDHS] 2005/6). This has declined from 527/100,000 live births estimated in 1990. The current maternal mortality ratio of 435 deaths per 100,000 live births translates to about 6000 women dying every year due to pregnancy related causes. In addition, for every woman who dies, six survive with chronic and debilitating ill health such as fistulae (leakage of urine or faeces from the birth canal). Similarly, infant mortality (IMR) has declined from 88 deaths per 1,000 live births to the current estimate of 76/1000 live births.

Although Uganda has made these achievements, maternal and infant mortality rates are still high. Maternal and infant health depends on the functioning of the entire health system hence the persistent high mortality rates are partly due to poor accessibility to health services, high costs, poor quality of care, poorly remunerated staff, lack of effective referral services, inadequate drugs and essential equipment. Nevertheless, all pregnant women should deliver their babies at health facilities where they can get skilled assistance in case of complications. It is important to understand that about 15% of all pregnancies end up with life threatening complications; some of which cannot be detected or predicted during antenatal care and may end fatally if not managed appropriately.

Improvement in maternal and newborn health cuts across several sectors such as Education (universal primary and secondary education); Agriculture (nutrition and food security); Finance (bona bagagawale); Transport and communication (referral of obstetric emergencies); Water (provision of safe water) and Gender (to address cultural, traditions, vulnerability and equity issues). The Road Map for accelerating the reduction of Maternal and Neonatal Mortality and Morbidity provides key strategies and interventions for implementation by the relevant sectors. In order to realise the goals of this roadmap, there is need for commitment at all levels and by various sectors.

I therefore wish to call upon all the stakeholders from Government, Civil Society, Private Sector and Development Partners to utilize this Roadmap as a guide to policy formulation, planning, development and implementation of programmes to reduce Maternal and Neonatal deaths in Uganda.

Yoweri Kaguta Museveni,
PRESIDENT OF REPUBLIC OF UGANDA

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**Dr Steven Malinga,
MINISTER OF HEALTH**

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LIST OF ABBREVIATIONS AND ACRONYMS

ANC	Ante Natal Care
ART	Antiretroviral Therapy
ARV	Antiretroviral
BCC	Behaviour Change Communication
BEmOC	Basic Emergency Obstetric Care
CAOs	Chief Administrative Officers
CBD	Community Based Distribution
CEmOC	Comprehensive Emergency Obstetric Care
CFR	Case Fatality Rate
CORPs	Community Resource Persons
CSOs	Civil Society Organizations
DDHS	District Director of Health Services
DHT	District Health Team
DPs	Development Partners
ECN	Enrolled Comprehensive Nurse
EmOC	Emergency Obstetric Care
FP	Family Planning
FWCW	Fourth World Conference on Women
GoU	Government of Uganda
HB	Haemoglobin
HC	Health Centre
HE	His Excellency
HIV	Human Immuno-Deficiency Virus
HMIS	Health Management Information System
HRDR	Human Resource Deployment Regulations
HRHP	Human Resources for Health Policy
HSD	Health Sub District
HSSP	Health Sector Strategic Plan
ICPD	International Conference for Population and Development
IEC	Information Education and Communication
IGA	Income Generating Activities
IMR	Infant Mortality Rate
IPT	Intermittent Presumptive Treatment
ITNs	Insecticide Treated Nets
IV	Intravenous
JRM	Joint Review Mission
LAM	Lactation amenorrhoea
LAPMFP	Long Acting and Permanent Methods of Family Planning
LC	Local Council
LGA	Local Government Act
LMIS	Logistics Management Information System
LOGICS	Local Governments Information Communication System
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MES	Ministry of Education and Sports
MGLSA	Ministry of Gender, Labour and Social Affairs
MIP	Malaria in Pregnancy

MMR	Maternal Mortality Ratio
MNH	Maternal and Newborn Health
MoEM	Ministry of Energy and Minerals
MOFPED	Ministry of Finance Planning and Economic Development
MOH	Ministry of Health
MOLG	Ministry of Local Government
MOU	Memorandum of Understanding
MoWE	Ministry of Water and Environment
MW	Ministry of Works
OPD	Out Patient Department
PEAP	Poverty Eradication Action Plan
PMNCH	Partnership for Maternal Newborn and Child Health
PMTCT	Prevention of Mother To Child Transmission
PNC	Post Natal Care
PNFP	Private Not For Profit
POPSEC	Population Secretariat
RESCUER	Rural Extended Services for Care and Ultimate Relief
SMNC	Standards for Maternal and Neonatal Care
SRH	Sexual Reproductive Health
SWAp	Sector Wide Approach
TBAs	Traditional Birth Attendants
TFR	Total Fertility Rate
TWG	Technical Working Group
UBOS	Uganda Bureau of Statistics
UDHS	Uganda Demographic and Health Survey
UNMHCP	Uganda National Minimum Health Care Package
UPMA	Uganda Private Midwives Association
VCT	Voluntary Counselling and Testing
VHC	Village Health Committee
VHT	Village Health Team

EXECUTIVE SUMMARY

Uganda's Maternal Mortality Ratio (MMR) had remained high for 15 years, with no significant decline between 1990 and 2000 (527 to 505 deaths per 100,000 live births). The Uganda Demographic and Health Survey of 2005/6 registered a modest decline to 435 deaths per 100,000 live births. This Maternal Mortality Ratio translates to about 6,000 women dying every year due to pregnancy related causes. In addition, for every woman who dies, six survive with chronic and debilitating ill health.

Between 1995 and 2000, infant mortality increased from 81 to 88 deaths per 1,000 live births, and later declined to 83 and 76 in 2003 and 2006 respectively. About 29% of all infant deaths occur in the neonatal period i.e. in the first 28 days of life. Three quarters of neonatal deaths happen in the first week while the highest risk of death is within the first 24 hours.

This Road Map for Accelerating the Reduction of Maternal and Neonatal Mortality and Morbidity analyses trends of selected maternal and newborn health indicators in Uganda, the organization of health services, the human resource issues, infrastructure, the referral system, equipment and supplies, the decentralization policy, community involvement/participation, health care financing and Monitoring and Evaluation. It further discusses the situation of maternal and newborn health services, with highlights on the burden of maternal and neonatal morbidity and mortality, ante natal care, skilled attendance at birth, emergency obstetric care, newborn care, post partum care, post abortion care, family planning, adolescent sexual and reproductive health and HIV/AIDS as well as the causes of maternal and neonatal mortality

The Road Map defines the path that the Government of Uganda with key stakeholders will take in order to accelerate the reduction of maternal and neonatal mortality and morbidity. It states the vision, which is "To have women in Uganda go through pregnancy, childbirth and postpartum period safely, and their babies born alive and healthy". The overall goal is to accelerate the reduction of maternal and neonatal morbidity and mortality in Uganda and help the country achieve the MDGs. The Road Map has three objectives, namely:

1. To increase the availability, accessibility and utilization of quality skilled care during pregnancy, childbirth and postnatal period at all levels of the health care delivery system.
2. To promote and support appropriate health seeking behaviour among pregnant women, their families and the community.
3. To strengthen family planning information and service provision for women/men/couples who want to space or limit their childbearing thus preventing unwanted and/or untimely pregnancies that increase the risk of maternal death.

Strategies focus on legal framework and policy environment; availability, accessibility and utilization of services; human resources, allocation and distribution of resources, coordination and management, community involvement and participation; and monitoring and evaluation. These are discussed in detail with specific interventions and key activities that will be implemented in order to achieve the above objectives. Interventions for each of the seven strategies are listed below:

Strategy 1: Improve legal and policy environment for effective formulation and implementation of maternal and newborn health programmes

- (i) *Develop, reviewing and updating policies, guidelines and protocols that enable health professionals use their skills*
- (ii) *Ensure adequate staffing at the health facility to provide the Maternal and Newborn Health Essential health care package*

- Strategy 2: Improving the availability of, access to, and utilization of quality Maternal and Newborn Care Services, particularly at sub-counties
- (i) *Provide Skilled Attendance at Births*
 - (ii) *Scale up Emergency Obstetric Care, Goal oriented ANC, Neonatal and Postnatal care and PMTCT services, particularly at sub county levels*
 - (iii) *Increase access to accurate and quality Family Planning information and services*
 - (iv) *Establish an appropriate and effective referral system*
 - (v) *Strengthen youth friendly sexual and reproductive health services*
- Strategy 3: Strengthen human resources and building capacity to provide quality maternal and newborn skilled health care
- (i) *Build the capacity of training institutions and service providers for key maternal and newborn health issues*
- Strategy 4: Advocate for increased resource allocation for maternal and newborn health care
- (i) *Review resource allocation and utilisation mechanisms to improve accountability at all levels*
 - (ii) *Strengthen the capacity of districts to ensure prioritisation of maternal and newborn health in their Development and Annual Implementation Plans*
- Strategy 5: Strengthen Coordination and Management of MNH Care Services
- (i) *Improve multi sectoral partnership, collaboration and coordination between and among all stakeholders*
 - (ii) *Promote effective public/private partnership*
- Strategy 6: Empower communities to ensure a continuum of care between the household and the health care facility
- (i) *Empower communities to demand for maternal and newborn health services*
 - (ii) *Strengthen the capacity of health planning teams and health facilities to manage Maternal and Newborn Health Services*
- Strategy 7: Strengthen monitoring and evaluation mechanisms for better decision-making and service delivery of MNH Services
- (i) *Improve accessibility and utilization of quality data and information for planning and management of maternal and newborn health programmes*
 - (ii) *Review the Health Management Information System (HMIS) to capture all essential information on Maternal and Newborn Health*
 - (iii) *Strengthen MOH and Local Government capacity for monitoring and evaluation*
 - (iv) *Provide technical support supervision to enhance quality of care*
 - (v) *Conduct maternal and newborn death audits and reviews*
 - (vi) *Establish a Monitoring and Evaluation System for the Road Map*

Annexed to Road Map is the Monitoring and Evaluation Matrix (Annex I), which spells out the Objectively Verifiable Indicators (OVIs) for the Road Map at the various levels of results, with benchmarks and targets in two milestones: 2010 and 2015. The M&E Framework should enable stakeholders to assess performance by conducting a mid term review and end of Road Map evaluation. The key roles and responsibilities by partners and stakeholders for maternal and newborn health are also presented in annex 11.

1. INTRODUCTION

1.1 BACKGROUND

Over the last 15 years, Uganda has made great progress in terms of development. Peace and security have been restored to most parts of the country. With a stable macro-economic stability, the economy has grown at a rate of 6.5% per annum for the last 10 years. The Government of Uganda (GoU) has put in place key priority programmes and as a result, the country is experiencing considerable transformation. Programmes like the Universal Primary Education (UPE), Plan for Modernization of Agriculture (PMA), and Poverty Eradication Action Plan (PEAP), plus reforms such as liberalization, deregulation, privatisation, democratisation based on good governance and decentralization are some of the core and critical elements of this process.

As a result, poverty levels in Uganda have reduced from a high 56% in 1992 to 38% in 2005. Programmes like UPE have increased primary school enrolment dramatically from a low figure of 2.5 million children in 1997 to over 7.5 million in 2005. Literacy rate has also risen from 54% in 1991 to 68% in 2000. The multisectoral approach to the HIV/AIDS epidemic has enabled Uganda to reduce the HIV prevalence rate from a high 18.5% in 1992 to 6.4% in 2005.

Maternal and infant mortality and morbidity although declining, remain unacceptably high. Uganda's Maternal Mortality Ratio (MMR) remained high, with no significant decline between 1990 and 2000 (527 to 505 deaths per 100,000 live births). The 2005/6 UDHS registered a modest decline to 435 deaths per 100,000 live births. This MMR translates to about 6,000 women dying every year due to pregnancy related causes. In addition, for every woman who dies, six survive with chronic and debilitating ill health.

Between 1995 and 2000, infant mortality increased from 81 to 88 deaths per 1,000 live births, and later declined to 83 and 76 in 2003 and 2006 respectively. About 29% of all infant deaths occur in the neonatal period (within the first month). Three quarters of neonatal deaths happen in the first week and the highest risk of death is within the first 24 hours. Perinatal mortality rate is 70 per 1,000 live births and under five mortality is 137 per 1,000 live births (UDHS 1995, UDHS 2006).

Trends of selected maternal and newborn health indicators

INDICATOR	PERIOD			
	1990	1995	2000	2006
MMR	527	506	505	435
IMR	122	81	88	76
Neonatal Mortality	n/a	27	33.2	29
Perinatal Mortality	n/a	n/a	n/a	70
U-5-M	167	147	152	137
Stunting (Chronic Malnutrition)	38	38	39	32.2
Children under 2 years fully immunised	31	47.4	37	46
Deliveries under skilled personnel	38.0	37.8	39	42
Deliveries at Health Facilities – GoU and PNFP	n/a	n/a	22.6	29
HIV/AIDS prevalence	18.5	14	6.1	6.4
Total Fertility Rate	7.3	6.9	6.9	6.5
Unmet need for family planning (%)	n/a	29	35	41
Contraceptive Prevalence Rate		14.8	22.8	24

Source: UDHS, EPI Coverage Survey 2005

Uganda's population grew from 5 million in 1949 to 24.4 million in 2002, and is currently projected at 28.2 million (mid 2006). At the current growth rate of 3.2% per annum, which is

among the highest in the world, the population is projected to almost double to 55 million by 2025 and more than double yet again to 130 million by 2050 (UN projections 2006). The rapid population growth is attributed to the high total fertility rate of 6.5, which has remained high for the last 40 years and a high unmet need for family planning at 35%. Uganda's population is mainly rural (88%) and youthful; with 52% below 15 years and 20% aged 15-24 years.

In the 2004 PEAP, the Government of Uganda reaffirmed its commitment to achieving the Millennium Development Goals (MDGs). The MDGs overlap with the PEAP, and are therefore fully consistent with Uganda's national priorities. The HSSP II, emphasizes that the presence of good health is necessary not just to improve the quality of life of an individual in terms of his/her general well-being, but is an essential input for raising the ability of people to increase their incomes at micro level, thereby contributing to poverty alleviation and a productive and growing economy at the macro level.

It is against this background that Uganda faces a daunting task of achieving its PEAP targets and Millennium Development Goals by the year 2015 especially on poverty, maternal and infant death reduction.

1.2 SITUATION ANALYSIS OF HEALTH SYSTEM

1.2.1 ORGANIZATION OF HEALTH SERVICES

Table 2: The Structure of Ugandan Health Sector

LEVEL		HEALTH CENTRE	POPULATION APPROXIMATE	SERVICES PROVIDED
District	Health Sub-District	I	Village – 1,000	Community based preventive and promotive health services. Village Health Committee or similar status.
		II	Parish - 5,000	Preventive, promotive and outpatient curative health services, and outreach care.
		III	Sub-County - 30,000	Preventive, promotive, out-patient curative, maternity and in-patient health services and laboratory services
		IV	County – 100,000	Preventive, promotive, out-patient curative, maternity, in-patient health services, emergency surgery, blood transfusion and laboratory services
		V	General Hospital – 500,000	In addition to services offered at Health Centre IV level, other general services are provided including in-service training, consultation and research for community based health care programmes.
Regional		VI	Regional Referral Hospital – 2,000,000	In addition to services offered at the general hospital, specialist services are offered, such as psychiatry, Ear, Nose and Throat (ENT), ophthalmology, dentistry, intensive care, radiology, pathology, higher-level surgical and medical services.
National		VII	National Referral Hospital – 28,200,000	These provide comprehensive specialist services and are also involved in teaching and research

Source: *Health Systems Reforms in Uganda: Processes and Outputs, 2006*

The programmes that make up the Ugandan Minimum Health Care Package (UNMHCP) consist of promotive, preventive and curative services, which are provided in a seven-tier structure from the Village to the National Referral Hospital as described in Table 2. Health Centre IIIs serve the

sub-counties and are the first level where maternity, in-patient and laboratory services are provided. The HC IVs provide emergency surgery and blood transfusion in addition to services offered at HC III. Most HC IIIs have no water and lighting for the maternity units while most HC IVs lack functional operating theatres and have inadequately skilled medical officers, unable to perform EmOC and newborn care tasks yet a primary objective of establishing HCIVs was to provide facilities for comprehensive EmOC services such as caesarean sections and blood transfusion.

1.2.2 Human Resources

The proportion of established posts filled by qualified health workers increased from 34% in 1999 to 53% in 2003 (MOH 2003) and 68% in 2004/5. Although the numbers of health workers has improved, it is still inadequate for delivery of the minimum health care package and the workforce is constrained by the unequal distribution and inappropriate skill mix. The capacity to recruit and retain qualified health workers varies from district to district.

The capacity of training is insufficient to meet the human resource needs for maternal and newborn health. The medical students might be exposed to obstetrics and paediatrics in their fourth year, with no clinical exposure in the fifth and internship year. Under these circumstances, some of the medical officers at the district hospital or health centres have no skills for maternal and newborn care, despite the critical role they are expected to play at this level.

According to the current staffing norms, HC IIIs and IVs are provided with 2 and 4 midwives respectively but these are inadequate, besides the fact that many positions are not filled. There is inequitable distribution of personnel between districts and between urban and rural settings, with over 80% of doctors and 60% of midwives and nurses located in hospitals, which mostly serve urban populations. The discrepancies have been difficult to overcome given that the poor rural districts have the least capacity to provide additional incentives to attract personnel.

There are currently professional councils that handle professional issues of the different cadres of health workers but these are hardly facilitated to monitor and supervise quality of service delivery.

1.2.3 Infrastructure

Geographical accessibility of households to health facilities increased from 49% pre HSSP to 72% in 2004 as a result of construction of new HC IIs. There has however been a mismatch between construction of new health facilities and the capacity to make them functional in terms of human resources, medical equipment and operational budgets. Many Health Centres are in an appalling state, with maternities lacking water and lighting, hence inappropriate for maternal and newborn health care. In most HC IVs, the theatres are either non-existent or non-functional due to lack of equipment, staff and/or staff housing, hence intended basic surgery e.g. caesarean section are not carried out to those in need. Women have to trek long distances looking for these services.

1.2.4 Referral System and Behaviour

The ideal referral system should be step-wise from the community to health centre and then to hospital with adequate support for appropriate care at each level and vice versa. The innovative Rural Extended Services for Care and Ultimate Emergency Relief (RESCUER) programme,

which provides an effective and efficient referral system, in which women with obstetric complications are quickly transferred from a lower to a higher health facility greatly contributed to reduction of maternal deaths in Iganga and other districts. Similarly, the Making Pregnancy Safer initiative reduced maternal deaths in Soroti District. However, for both innovations, the capacity of districts to sustain such a system remains inadequate.

There are poor ambulance systems in communities to respond to needs of women who need to deliver in hospital. The referral system is challenged with poor transport and communication networks. Most of the roads in the rural areas are poor while the communication system that has been established for referrals does not function efficiently. In cases where radio communication equipment have been installed and ambulances provided such as the Ministry of Health multipurpose ambulances, their operation and maintenance has been a great challenge to the districts. As a result, relatives of the sick women are often asked to fuel the ambulances, yet most of them are too poor to afford the cost.

1.2.5 Equipment & Supplies

Uganda experiences shortages of essential equipment and supplies. According to the 2004 Status of EmOC in Uganda report, 77.5% of districts lacked specific signal functions for EmOC (see table below). In addition, only 31.5% of HC IVs and 42% of district hospitals had oxytocics in stock, while most health units including referral hospitals had stock-outs of key antibiotics. According to the study on the functionality of HCIVs in 2005/06, 17% of the HCIVs provided blood transfusion services. In the same study, 81% of HCIVs had completed theatres. Of those with completed theatres 75% were equipped and of those equipped 34% were functional. Reasons for non functionality of theatres included uninstalled equipment, lack of reliable source of power, lack water and facilities for blood transfusion.

Signal Functions used to identify Basic and Comprehensive EmOC

Basic EmOC services	Comprehensive EmOC
<ol style="list-style-type: none"> 1. Administer parenteral *antibiotics 2. Administer Parenteral oxytocic drugs 3. Administer parenteral anticonvulsants for pre-eclampsia and eclampsia 4. Perform manual removal of placenta 5. Perform removal of retained products (e.g. manual vacuum aspiration) 6. Perform assisted vaginal delivery 	<ol style="list-style-type: none"> (1-6) All of those in basic EmOC 7. Perform surgery (Caesarean section) 8. Perform blood transfusion
<p>*Parenteral administration of drugs means by injection or intravenous infusion (drip)</p>	

Drug tracking studies have shown that availability of drugs directly influences utilization of OPD services, with peaks when new supplies have arrived at health facilities. The unavailability of essential drugs can be associated with poor logistics management and leakage of drugs from the health facilities, underplaying the importance of the drugs by the people organizing purchases, inadequate funding, and delays in release of funds. Provision of MNH record forms and books is characterized by poor supply, frequent stock out and sometimes, poor quality.

1.2.6 Decentralization Policy (Local Government Act 1997)

The Constitution of Uganda 1995 and the Local Government Act 1997 (LGA) provide for devolution of powers, functions and resources from the central government to the districts / local authorities. The district health system comprises of a well-defined population living within a clearly delineated administrative and geographic boundary and includes all actors in the recognized spheres of health within the district. It is expected that the activities of the diverse partners are reflected in the District Health Sector Strategic Plan, which in turn is an integral part of the rolling district development plan. LGA provides for the central roles to be restricted to policy formulation, standard setting, resource mobilization, technical support and capacity development, and monitoring. The districts/local authorities are charged with service provision and implementation of national policies and standards.

The local authorities therefore, make operational plans and byelaws to implement policies and to address local problems. In theory and of relevance to maternal mortality, the districts should provide health services, including promotion of family planning and reproductive health services among others. In practice however, some of the services are not provided and others have become worse over time. Thus, while the principle of decentralization is good, lack of capacity and resources, and lack of genuine community mobilization and participation have undermined its virtues in Uganda. There is also evidence to suggest that health core finances from both MOH and MOLG do not reach HC III and community levels in sufficient amounts and sometimes these funds reach late.

1.2.7 Community Involvement/Participation

The role of communities in maternal and newborn health cannot be overemphasized. The decision making power of women to utilize health services during pregnancy, childbirth, and the postpartum period is limited in many ways. Decisions are mostly taken, or dictated, by their husbands and relatives. The woman who is directly facing potential pregnancy complications is hardly involved in the decision making. In addition, the community has inadequate information on birth preparedness and emergency readiness, danger signs in pregnancy, delivery and after child birth as well as risks and dangers signs in newborns. Societal and familial expectations often influence women's choices to seek care, and may lead to delays in seeking essential professional care. Furthermore, pregnancy and childbirth are perceived as a normal process in many Ugandan communities and therefore women who deliver in the community with little biomedical assistance are often held in high regard.

Social responsibilities such as the need for women to provide for their families and care for the young children sometimes stand in their way of using needed services including refusing hospital admission when complications requiring admission are detected during antenatal visits. Transporting mothers to referral sites is also a common problem in Uganda, with lack of motorised ambulances in the communities. The cost of transport in emergency situations is usually high and remains a major factor in the delay to seek life-saving care.

The establishment of the Village Health Teams (VHTs) has been slow and poorly funded. The supervision of community agents by skilled health workers is often a missing link because of the insufficient numbers of health workers at the health facility level. This sometimes leads to these agents taking on tasks way beyond their skills.

Some communities in Uganda still observe cultural practices that are harmful to women during pregnancy, delivery and the immediate post-partum period. Some of these include: ingestion of

herbs to quicken labour; refusing caesarean section on pretext that women are supposed to deliver normally to prove womanhood; and the culture of silence/non-expression of pain during labour and childbirth (Kyomuhendo GB 2003, Ndyomugenyi 1998). These sometimes result into maternal complications that lead to neonatal and maternal morbidity and deaths.

It should be noted however that a community based initiative would not be sufficient to reduce maternal and newborn deaths if there are no facilities with the equipment, trained staff, and supplies to deal with emergencies, or if such facilities exist but are dilapidated and badly managed. If functioning health facilities are not within the reach of women facing obstetric complications, there is nothing a family or community can do to save these women's lives, no matter how much time is spent on information and mobilization campaigns.

1.2.8 Health Care Financing

At the time of developing the National Health Policy (NHP) and Health Sector Strategic Plan (HSSP) I, most stakeholders in the health sector agreed to a Sectorwide Approach (SWAp) whereby all stakeholders in the sector agreed to one programme of work (HSSP) and the point of involvement of the various players. The Government of Uganda and Development Partners have updated a Memorandum of Understanding highlighting the different roles and responsibilities of the different players under HSSP II. The stakeholders in the sector include: government, development partners, the private sector, and the consumers, i.e. the members of the population.

Over the HSSP I period, GoU budget performance improved from low levels – 83% in FY 2000/01 to about 95% for the rest of HSSP I. However, the FY 2004/05 registered a relative decline (92.8%) which has been attributed to poor wage budget performance. The health sector budget as a percentage of the national budget has been increased continuously from 7.5% in 2001 to 9.7% in 2005. This increase in the budget demonstrates the government's desire to reaching the Abuja target of 15% by 2010. The proportion of the health budget devoted to prevention and community mobilisation for health, however, remains very small. Direct government expenditure at community level was 0% in 2001/02, 0.19% in 2002/03, and 0.8% in 2003/04 but was predicted to reach 2.4% in 2006/07 (MOH/ Budget Framework Paper 2004/05 to 2006/07). The amount of resources committed to maternal and newborn health at health sub districts and sub-county levels is also very small and very difficult to track.

1.2.9 Monitoring and Evaluation

The Health Management Information System (HMIS) and the Local Government Information Communication System (LOGICS) do not capture many events related to maternal and newborn care, yet, monitoring and evaluation largely depends on the information system. Utilization of health services is low, hence the majority of complications and deaths that occur in the community are not captured in HMIS and LOGICS. The Reproductive Health Division is currently understaffed, and therefore cannot provide adequate technical backstopping to the districts.

The lack of systematic review of maternal and newborn morbidity and mortality is also a major gap in ensuring equity, access and quality of care. The vital registration process is constrained by lack of resources to print registers, limited involvement of apolitical civil servants at parish and sub county levels as well as inadequate coordination between the Ministry of Local Government, Ministry of Justice and Constitutional Affairs and the Ministry of Health. In addition, there is lack of routine collection of data about the newborn during the first week of life.

The procurement of stationery used for documentation in pregnancy, labour and after child birth remains a challenge, with frequent stock outs of antenatal care cards, partographs, registers and postpartum care records in many public facilities. Record forms for routine care of a newborn in the first week of life are usually not available. Newborns are just registered in maternity registers without monitoring and recording the condition of the baby in the critical 24 hours after birth. The development of the Woman's Health Passport currently being piloted by the Ministry of Health is likely to overcome this gap but the greater challenge is in ensuring adequate supply for the 1.5 million women that get pregnant each year.

1.3 SITUATION ANALYSIS OF MATERNAL AND NEWBORN HEALTH SERVICES

1.3.1 The Burden of Maternal and Neonatal Morbidity and Mortality

Maternal and child morbidity account for the highest disease burden in Uganda. The burden of disease pattern shows that over 75% of life years lost due to premature deaths are due to ten preventable diseases (UDHS 2000/01). Peri-natal and maternal conditions account for 20.4%, malaria for 15.4%, acute lower respiratory tract infections for 10.5% and HIV/AIDS for 9.1%.

1.3.2 Adolescent Sexual and Reproductive Health (ASRH)

The population of Uganda is mainly youthful; with 52% below 15 years and 20% aged 15-24 years. The National Adolescent Health Policy (2000) was enacted in the year 2000 as a result of the realization that adolescents have special needs that were not being tackled adequately by the existing reproductive health services, which focused on adults. The National Policy provides for establishment of youth friendly services as a component of the health care system. However very few health facilities currently provide adolescent friendly services.

Young women in Uganda are particularly vulnerable to consequences of early pregnancy, unsafe abortion and unsafe sex. By the age of 17, half (51.1%) of young women are sexually active and 62.7% have already begun childbearing by the age of 19. (POPSEC, MOH and ED, Nov 2001). There is high teenage pregnancy rate of 31% (UDHS) and limited access to adolescent friendly sexual and reproductive health information and services, which contributes to maternal and neonatal mortality and morbidity. Economic and cultural factors still play a significant role in influencing the behaviour and practices of young people. There is high primary school drop out due to pregnancy related issues this tends to propagate the cycle of ill health and poverty as there is documented poor health seeking behaviour amongst the less educated and poor.

1.3.3 Ante Natal Care (ANC)

Effective antenatal care can improve outcomes for the mother and newborns. At least four ANC visits are recommended for a normal pregnancy, aimed at identifying and treating problems such as anaemia, infections and for preventive services. About 94% of pregnant women make one visit to antenatal clinics while only 42% make the recommended four visits. The very high drop out rate (from two to four visits), especially in the rural areas is attributed to the poor quality of antenatal care services in relation to lack of laboratory services for ANC clients, stock out of drugs, understaffing and lack of privacy in most clinics. Besides, the poor health seeking

behaviour of women due to negative cultures, reliance on traditional medicines and heavy workload at the ANC clinics remain a challenge.

1.3.4 Skilled Attendance at Birth

The availability of skilled attendance at birth is essential for reducing maternal mortality. Even with good ANC, up to 15% of all births are complicated by a potentially fatal condition, yet skilled attendance at childbirth is available for only 38% of women. The single most critical input for safe motherhood is to ensure the presence of a health worker with midwifery skills at every birth. Other important inputs are appropriate equipment and supplies, and quick transport that can facilitate the transfer of women with complications to higher levels of care.

Socio cultural values are critical in effectiveness and acceptability of skilled attendants. Inappropriate birthing positions such as delivery in dorsal position might turn off many mothers from delivering in health facilities, given their preference for other positions such as squatting (Kyomuhendo 2003, Lalonde 2002 & Ndyomugenyi 1998). Although birthing while squatting is feasible, the training of midwives and doctors has not yet adjusted to produce versatile skilled attendants. Domiciliary midwifery is part of training of midwives in Uganda but there has been very limited effort to implement it in the public sector. There is limited experience among Uganda private midwives. Although private midwives have great potential to improve care of the mother and newborn in the first week of birth when most deaths occur, their experience is limited.

1.3.5 Emergency Obstetric Care (EmOC)

About 15% of all pregnancies develop life-threatening complications and require emergency obstetric care. According to the 2004 EmOC Needs Assessment, the national met need for EmOC was 23.9% whereas it should be 100%, if all women with complications were to be treated. Approximately 11.7% of women give birth in fully functional comprehensive EmOC facilities as opposed to 15%, which is the minimum required. The nearest health facility to the community at which Basic EmOC is provided is HC III and yet, only 14.4% could provide this service. Comprehensive EmOC is available in 8.1% of the facilities, while signal functions such as use of parenteral sedatives (63.6%), manual removal of the placenta (62.8%), removal of retained products (79.8%) and assisted vaginal delivery (94.6%) are predominantly missing. These are life saving procedures, which should be available at any first referral health facility if mothers are to be saved.

The national average caesarean section rate is 2.7%, as opposed to the minimum of 5%, indicating that many of the women who would benefit from this operation are missing out. Apart from implications for maternal health, this low unmet need for caesarean section also implies increased neonatal morbidity and mortality since some of the indications for this operation are due to fatal needs. The situation is compounded by inadequate staff housing facilities, with most of the essential EmOC staff in HC III, HC IV and district hospitals residing outside the health facilities' compound.

1.3.6 Newborn Care

In Uganda, Newborns are left under the care of the midwife, who is the main skilled attendant at birth. Given the limited number of midwives at HC IIIs and HC IVs, the midwife is often overwhelmed by the simultaneous needs of the newborn and the mother at the time of delivery. There is need to empower other cadres/attendants at these levels to assist the midwife to

provide some of the skills at birth. In tertiary hospitals and/or hospitals with specialists, the midwife or midwifery and obstetric trainees or the obstetricians manage a newborn requiring specialist care before being transferred to special care baby unit for specialized nurses and paediatrician to take over.

1.3.7 Post Partum Care

Postpartum care for women and newborns is still poor with only one out of ten receiving care (UDHS 2000/02), and yet, the majority of deaths occur in the postpartum period particularly in the first 24 hours. For women who deliver in health facilities, postpartum care is limited only to the first period of confinement (usually less than 24 hours of most normal births) but is characterised by lack of records and staff inefficiencies. This has significantly impacted on health of mothers and newborns who develop complications during this period. This poor coverage for postpartum care also has a negative impact on services such as follow up of mothers and newborns in the Prevention of Mother-To-Child Transmission (PMTCT) of HIV and uptake of family planning services.

The importance of postnatal care cannot be over emphasized. The Mother-Baby follow up is very low within the PMTCT service and this is mainly attributed to inadequate PNC services.

1.3.8 Abortion Care Services

Unsafe abortion is estimated to contribute to about 26% of maternal deaths and a much higher proportion of reproductive ill health. An estimated 297,000 unsafe abortions occur every year with over half of them (55%) occurring among young women aged 15 to 20 years (National abortion survey report-2005). In an environment of restrictive laws on abortion and lack of other supportive services there is a high risk of unsafe abortion with consequences of ill health and death. Approximately 15-23% of female youths (15-24 years of age) who had ever been pregnant have had an abortion and as many as 1,200 unsafe abortions result in death each year. Nearly a quarter (23%) abortions result in serious complications. While Post Abortion Care (PAC) services are supposed to be provided in HC III and HC IV, most of the health facilities require to be fully equipped to provide PAC services.

The question faced by Uganda is how to reduce the unacceptably high numbers of maternal deaths due to unsafe abortion. This problem is common in subsaharan africa and specifically Uganda. Uganda has yet to focus on comprehensive abortion care to address more specifically issues of prevention, abortion care, post abortion care services including counselling and family planning services. In particular the communities, men and women, girls and boys need to deal with issues that bring about unwanted pregnancy and subsequently unsafe abortions and loss of lives. Such circumstances include; rape and defilement, incest, , men not taking responsibility for pregnancies and many men refusing their partners to use contraceptives but sometimes contraceptive failure. Post abortion care is not yet available for many women suffering from complications of spontaneous and induced abortions. PAC services when available should be offered in a compassionate and non-judgemental manner. Service providers require to be trained in safer ways of managing abortion complications.

1.3.9 Family Planning (FP)

Family planning is a cost effective means to lower maternal mortality rates because it reduces the risk of exposure to pregnancy and death; reducing the incidence of abortion by averting unwanted and unplanned pregnancies; and by averting pregnancies that occur too early, too late

or too frequently during the woman's reproductive cycle, and those that are inadequately spaced. It is only pregnant women who face the risk of maternal death.

Although promotion of family planning is an official government policy and is supported with both government and donor resources, there is a lack of a national consensus to practice family planning. As a consequence, many contradictory arguments emerge from political and religious leaders about the role of family planning in socio-economic development and improved maternal and child health. Other challenges to increasing the use of family planning include: lack of accurate information; lack of access to quality services; contraceptive stock outs at health facility level; low resource allocation for family planning; conflicting social, cultural and religious values as well as myths and misconceptions.

Despite the knowledge on contraception being very high at 96%, the contraceptive prevalence rate only increased from 5% in 1989 to 23% in 2001. Only 48% of the married women have spousal approval to use family planning. Knowledge on contraception among adolescents aged 15-19 years is 92% for girls and 96% for boys. Despite this, the contraceptive prevalence among girls in this age group is only 9%. By age 15, 14.2 percent of women 15-19 years were already sexually active. Overall, the most commonly cited reasons for not using contraception are side effects (18 percent) and desire to have children (11 percent) (UDHS 1995 & UDHS 2000-01).

1.3.10 HIV/AIDS

HIV has become a significant indirect cause of maternal and newborn morbidity and mortality in the last fifteen years; threatening to reverse the gains made in maternal and child survival interventions in Uganda. The national serosurvey carried out in 2004/5 reported national adult prevalence of 7.1. Among adolescents and young people, girls are disproportionately more affected than boys/men (4:1) due to gender, cultural and socio-economic factors. The HIV/AIDS Seroprevalence in pregnant women stabilized at around 6.2% over the last four years, against the 2005 national target of 5%. Although VCT, PMTCT and ART were successfully introduced in the 1980s, 2001 and 2004 respectively, there is still limited utilisation of these services. The challenges include: limited coverage of VCT and PMTCT services, limited access to safe blood, inadequate access to IEC messages and condoms in rural areas as well as stigma especially in the rural areas. Overall, reduction of HIV prevalence is important for attainment of the MDGs on maternal and child health. Gender-based violence is still rampant in Uganda as a cause of HIV transmission or effect of domestic violence. Anecdotal data shows that pregnant women are suffering a great deal much than those who are not affected.

1.4 CAUSES OF HIGH MATERNAL AND NEONATAL MORTALITY

A maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy. A neonatal death is defined as death during the first 28 days of life (0-27 days).

1.4.1 Causes of Maternal Mortality

Maternal death is caused by either complications that develop directly as a result of pregnancy, delivery or the postpartum period (a "direct obstetric death"), or due to an existing medical condition (an "indirect obstetric cause"). The major direct obstetric complications responsible for maternal deaths in Uganda include bleeding, infection, obstructed labour, unsafe abortion and hypertensive diseases.

Causes of Maternal Deaths in Uganda

Haemorrhage (Bleeding)	26%
Sepsis (Infections)	22%
Obstructed Labour	13%
Unsafe Abortion	8%
High Blood Pressure (Pre-eclampsia & Eclampsia)	6%
Other Causes (e.g. Malaria, HIV etc)	25%

Source: REDUCE 2004

It is now widely recognized that maternal deaths occur as a result of factors described in the “three delays” model (Figure 1).

The first delay occurs within the household/family level and is related to the limited ability of the woman and her close relatives to make a decision to seek care. This is closely linked to the inability to appreciate danger signs of pregnancy, delivery and postpartum due to inadequate knowledge. In addition, some cultural practices restrict women from seeking health care, while poverty at the household level also limits decision making to seek health care.

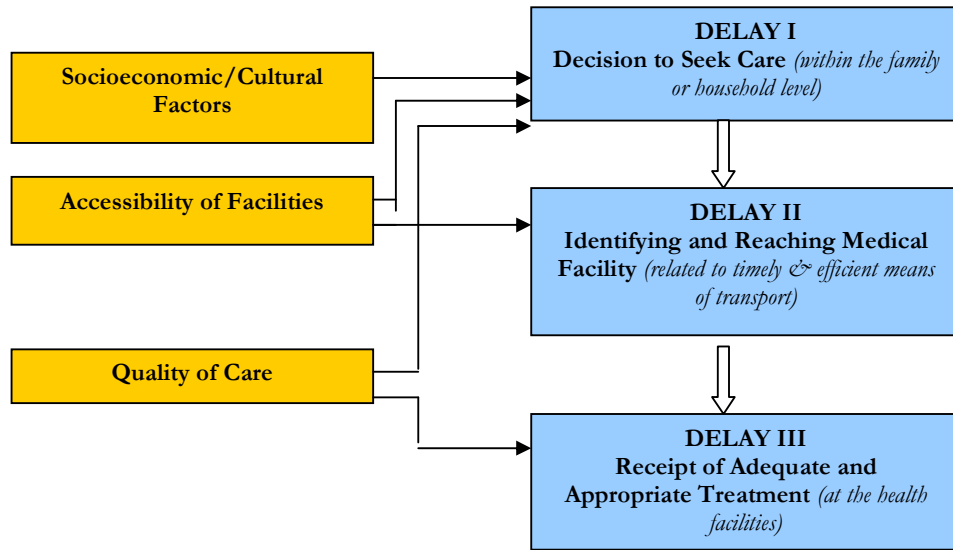
The second delay is related to inability of pregnant women with labour complications to access available health facilities when need arises. This is due to lack of inadequate community support, timely means of transport or resources to pay for it, long distances, poor roads and communication. More than 38% of the population lives below the absolute poverty line, underpinning the role of poverty in birth preparedness.

The third delay is delay in receiving care at the health facilities. At the facility level, preparedness to respond to obstetric and newborn emergencies is critical to the survival of women and the newborn. Many health facilities, particularly HC IIIs and IIs lack adequate skilled attendants, equipment, drugs and supplies for appropriate care during pregnancy and after child birth.

The functioning health centre or hospital is a critical factor in reducing the life-threatening delays and the subsequent prevention of maternal death and disability. For example, whereas postpartum haemorrhage can kill a woman in less than two hours for most complications, a woman has about 12 hours or more to get life-saving emergency care.

There are many factors contributing to high maternal mortality rates in Uganda. These include: high and unregulated fertility; short birth intervals; high rates of teenage pregnancy and abortion; and large number of women delivering without skilled attendance. Others are: low perception of risk; low level of male involvement in reproductive health and rights, harmful and negative culture on reproduction, food/nutrition, gender relations, health seeking behaviour and hygiene as well as poor infrastructure i.e. power, light, sanitation facilities and safe water. Underlying factors include: high disease burden (e.g. malaria, HIV/AIDS), high prevalence of protein/calorie malnutrition and micronutrient deficiencies; Low education levels; gender inequalities and low status of women. The poor quality, inaccessible and unusable health services compound the problem.

The Three Delays Model



Source: Thaddeus and Maine, 1994

The net results of factors in the first, second and third delays are often poor health seeking behaviour and low utilization of maternal and newborn health services including delivery without skilled attendant.

1.4.2 Causes of Neonatal Deaths

A neonatal death is defined as a death during the first 28 days of life (0-27 days).

The causes of neonatal deaths are largely related to pregnancy and birth complications. It is for this reason that newborn health is closely linked to maternal health and care. The newborn deaths are due to prematurity, infection, birth trauma and asphyxia. In a study conducted at Mulago National Hospital Special Care Unit, the causes of neonatal deaths were ranked as follows: Birth asphyxia (27%); Extreme prematurity – less than 1000gms (25%), Respiratory distress (17%); Prematurity (14%); and Congenital abnormalities (4.3%) among others.

There is scarcity of information about newborn morbidity in Uganda somehow got lost between maternal care and child survival strategies in the previous programmes, including HSSP I. The introduction of simple interventions such as training on resuscitation of the newborn and making oxygen available have been shown to drastically reduce the prevalence of birth asphyxia, the leading cause of newborn deaths, from 58% to 13% in a year at the neonatal unit in Mulago Teaching Hospital.

1.5 PRIORITY AREAS

It is widely understood and has been demonstrated that maternal and newborn health services are dependent on the functioning of the entire health system. The persistent high mortality rates are indicative of inaccessible, costly, poor quality services, Staff inefficiency, lack of effective referral services, inadequacy of essential drugs, supplies and equipment, weak supervision and monitoring and evaluation system and poor coordination and management.

The issues emerging from the situation analysis can be summarized into 7 priority areas, namely:

1. *Legal Framework and Policy Environment*

The legal and policy environment for maternal and newborn health service provision, accessibility and utilization requires to be addressed as a matter of priority through: developing, reviewing and updating policies, guidelines and protocols that enable health professionals to use their skills. Review of policies and guidelines that restrict adequate staffing at the health facilities.

2. *Availability, accessibility and utilization of Maternal and Newborn Health Services*

To ensure the availability, accessibility and utilization of Maternal and Newborn Health Services calls for the following immediate actions: providing skilled attendance at births; scaling up of EmOC, ANC, Neonatal and Postnatal care and PMTCT; increasing access to accurate and quality family planning information and services; empowering communities; establishing an appropriate and effective referral system and strengthening youth friendly sexual and reproductive health services.

3. *Human Resources*

To address the gaps highlighted under human resources, there is need to build the capacity of training institutions and service providers for maternal and newborn health issues. Providers need to be equipped with advanced/newer knowledge and skills. Hard to reach areas need to be assisted to attract and retain health workers.

4. *Allocation and distribution of resources*

With regard to allocation of resources, it is necessary to review resource allocations to improve accountability at all levels as well as strengthen the capacity of districts to ensure prioritisation of maternal and newborn health in their development and annual implementation plans. The need to ensure that resources are earmarked for maternal and newborn health particularly at the lower health facilities level, in sub-counties cannot be over-emphasized.

5. *Coordination and Management*

To improve on coordination and management, the need to implement the following key interventions is paramount: Improve multi sectoral partnership, collaboration and coordination between and among all stakeholders; and Promote effective public/private partnership

6. *Community Involvement and Participation*

Inadequate knowledge in communities is often influenced by socio-cultural factors or lack of correct and appropriate information. This should be addressed through: involving communities in the planning and management, empowering communities to create demand for maternal and newborn health services; and the capacity of health planning teams and health facilities to manage maternal and newborn health services.

7. *Monitoring and Evaluation*

Based on the gaps identified under Monitoring and Evaluation, there is need to undertake the following key interventions under this priority area: Increase accessibility and utilization of quality data and information for planning and management of maternal and newborn health programmes; review the Health Management Information System (HMIS) to capture all essential information on Maternal and Newborn Health; Strengthen MOH and Local Government capacity for monitoring and evaluation; providing technical support supervision to enhance quality of care; conduct maternal and newborn death audits and reviews; and establishing a Monitoring and Evaluation System for the Road Map.

The next chapter presents the details of the strategies, interventions and key activities that have been developed in order to address these priority areas, which will require to be implemented as a matter of urgency.

2. THE STRATEGIC PLAN

2.1 RATIONALE

The last three decades have witnessed significant renewed concern over women's health, particularly because of persistently poor reproductive health outcomes such as maternal and neonatal mortality and morbidity among other issues. The Global Safe Motherhood Initiative (SMI), launched in Nairobi (1987), brought to the world's attention the widespread problem of pregnancy related deaths and disability. The Conference called for reduction of global, regional and national maternal mortality ratios (MMR) by 50% between 1990 and 2000.

The International Conference on Population and Development (ICPD) held in Cairo, 1994, introduced the reproductive health concept. This was re-affirmed by the Fourth World Conference on Women (FWCW, Beijing, 1995). The ICPD programme of action called for reduction of MMR by 50% between 1990 and 2000, and a further 50% between 2000 and 2015. The issue of women's rights in matters relating to their sexuality and reproductive processes were considered critical for the attainment of reproductive health and well-being as well as socio-economic development. It was hoped that with the broad based life-span approach advocated in the concept of reproductive health with safe motherhood at its heart, pregnancy and childbirth would no longer carry with them the risk of death and disability as had been the case hitherto.

Deeply concerned by the persistently high maternal and newborn morbidity and mortality, the Millennium Summit in 2000 developed the Millennium Development Goals (MDGs) and agreed to increase efforts to improve maternal health and reduce child mortality. The Regional Reproductive Health Task Force during its second meeting in October 2003 in Dakar together with other stakeholders developed a generic Road Map to accelerate the attainment of MDGs related to maternal and neonatal health, to guide member states in developing theirs. The African Union (2004) urged each Member State to develop a country specific Road Map to accelerate attainment of MDGs related to maternal and neonatal health.

Following his return from a heads of state meeting in New York in 2005, His Excellency the President of Uganda convened a meeting on the state of maternal and newborn health. The President tasked the Ministry of Health to develop a master plan to address the issue of high maternal mortality. Consequently, the Ministry of Health with other sectors and partners have renewed their commitment to address maternal health issues and has developed a Road Map for Reduction of maternal and newborn morbidity and mortality in Uganda.

This Road Map addresses among others; the sentiments expressed by H.E. the President of the Republic of Uganda; the National Health Sector Strategic Plan II; Strategy to Improve Reproductive Health in Uganda; A Communication Strategy to Accelerate implementation of Reproductive Health in Uganda; the National Family Planning Advocacy Strategy, the Causes; Interventions and Strategy on Infant and Maternal Mortality in Uganda; and the Status of Emergency Obstetric Care in Uganda. The guiding principles for the Road Map are in Annex III.

2.2 VISION

Women in Uganda go through pregnancy, childbirth and postpartum period safely, and their babies are born alive and healthy.

2.3 GOAL

To accelerate the reduction of maternal and neonatal morbidity and mortality in Uganda.

2.4 OBJECTIVES

1. To increase the availability, accessibility, utilization and quality of skilled care during pregnancy, childbirth and postnatal period at all levels of the health care delivery system.
2. To promote and support appropriate health seeking behaviour among pregnant women, their families and the community.
3. To strengthen family planning information and service provision for women/men/couples who want to space or limit their childbearing thus preventing unwanted and/or untimely pregnancies that increase the risk of a maternal death

2.5 STRATEGIES AND INTERVENTIONS

PRIORITY AREA 1: LEGAL AND POLICY FRAMEWORK

Strategy 1: Improved legal and policy environment for effective formulation and implementation of maternal and newborn health programmes

Interventions and Key Activities

(i) *Developing, reviewing and updating policies, guidelines and protocols that enable health professionals use their skills*

- Review undergraduate training and internship programmes to allow adequate exposure to obstetrics and newborn care
- Develop a policy to guide professional development after graduation from medical institutions
- Develop and disseminate National Standards and clinical protocols for Maternal and Newborn Care (SMNC) and update them on a regular basis (
- Review policy to empower midwives implement skills for newborn care (e.g. Resuscitation and antibiotics prescription); EmOC skills and FP

(ii) *Ensuring adequate staffing at the health facility to provide the Maternal and Newborn Health Essential health care package*

- Review the Human Resource Deployment Regulations to suit the needs of various levels of health care
- Review the Human Resources for Health Policy to update the standing orders for civil servants in line with maternal and newborn health care needs

PRIORITY 2: AVAILABILITY, ACCESSIBILITY AND UTILIZATION OF MATERNAL AND NEWBORN HEALTH SERVICES

Strategy 2: Improve the availability of, access to, and utilization of quality Maternal and Newborn Care Services, particularly at sub-counties

Interventions and Key Activities

(i) *Provide Skilled Attendance at Births*

- Train, recruit and deploy skilled service providers at Health Centres and District Hospitals, with priority to deployment of midwives at Health Centres II and III
 - Implement an incentive scheme for health workers in hard to reach areas
 - Facilitate midwives; particularly at sub county level to enable them attend to women at birth
 - Mobilize pregnant women to attend Goal Oriented Ante Natal Care and Post Natal Care and provide each of them with the appropriate record documents
 - Train skilled attendants to provide newborn care
- (ii) *Scaling up Emergency Obstetric Care, Goal oriented ANC, Neonatal and Postnatal care and PMTCT services, particularly at sub county levels***
- Rehabilitate all Health Centres II and III and other level health facilities to be able to provide the required service package
 - Procure and distribute standard equipment, drugs and supplies for maternal and newborn health to all Health Centres and District Hospitals, with priority to Health Centres III
 - Provide water and light, particularly, and to Health Centres and District Hospitals, and particularly to Health Centres II and III
 - Establish blood banks at Health Centres IV and District Hospitals
- (iii) *Increase access to accurate and quality Family Planning information and services***
- Support logistics management for the right family planning commodities and supplies in the right times and right places
 - Support Community Based Programmes for family planning information, service delivery and commodity distribution
 - Provide full method mix for family planning
 - Promote support for family planning by parliament, local, cultural and religious leaders
- (iv) *Establish an appropriate and effective referral system***
- Procure and install communication equipment in the communities, at Health Centres III and other levels as appropriate
 - Procure motorised ambulances for emergency transport Health Centres III, IV and District Hospitals
 - Review/develop relevant guidelines on referral system and disseminate them to the community, civic leaders and health service providers
- (v) *Strengthen youth friendly sexual and reproductive health services***
- Review the training manual(s) for delivery of adolescent friendly sexual and reproductive health services
 - Provide adolescent/youth friendly information and services in all health facilities and institutions
 - Review and revise the pre-service curricula to incorporate adolescent health friendly health services
 - Train peer providers for friendly adolescent sexual and reproductive health issues
 - Support parent peer programmes for adolescent sexual and reproductive health

PRIORITY 3: HUMAN RESOURCES

Strategy 3: Strengthening human resources and building capacity to provide quality maternal and newborn skilled health care

Interventions and Key Activities

(i) *Build the capacity of training institutions and service providers for key maternal and newborn health issues*

- Review and revise a competency based professional training curriculum to ensure BEmOC is compulsory in the pre-service training for nurses/midwives and clinical officers
- Implement an in-service programme on quality essential obstetric and neonatal care with focus on BEmOC and resuscitation of the newborn
- Equip institutions with teaching and learning materials to provide competency based training, in BEmOC and emergency newborn care
- Implement an in-service programme on Family Planning technology updates
- Train health service providers on newborn resuscitation skills, Life Saving Skills and Post Abortion Care

PRIORITY 4: ALLOCATION AND DISTRIBUTION OF RESOURCES

Strategy 4: Advocate for increased resource allocation for maternal and newborn health care

Interventions and Key Activities

(i) *Review resource allocations and mechanism to improve accountability at all levels*

- Increase health sector budget allocations with earmarked funds to Health Centres III and IV, with emphasis to sub county levels
- Provide adequate resources to implement the incentive scheme for health workers in hard to reach areas
- Prepare technical briefs to advocate for maternal and newborn health in Budget Framework Papers
- Update and disseminate the REDUCE advocacy tool
- Support relevant parliamentary committees to advocate for maternal and neonatal health issues
- According Maternal and Newborn Health high priority in National and District Work Plans
- Sensitise relevant Parliamentary For a and Committees on maternal and newborn health needs

(ii) *Strengthening the capacity of districts to ensure prioritisation of maternal and newborn health in their Development and Annual Implementation Plans*

- Conduct annual district planning meetings on maternal and neonatal health, with technical support from professional associations
- Conduct annual district review meetings on maternal and neonatal health, with technical support from professional associations
- Train DPUs on integration of maternal and newborn health into the development programmes

PRIORITY 5: COORDINATION AND MANAGEMENT

Strategy 5: Strengthen Coordination and Management of Maternal and Newborn Health Care Services

Interventions and Key Activities

- (i) ***Improve multi sectoral partnership, collaboration and coordination between and among all stakeholders***
- Lobby for multi-sectoral partnership for maternal and newborn health at national, district and community levels
 - Transform the Infant and Maternal Mortality Task Force into a Multi Sectoral Technical Working Group to oversee maternal and newborn health policy development and review progress on implementation of the Road Map
 - Ensure that maternal and newborn health is in the agenda for the Joint Review Mission and National Health Assembly
- (ii) ***Promote effective public/private partnership***
- Support operations of the Partnership for Maternal, Newborn and Child Health (PMNCH) committee
 - Build partnership with the media to promote safe motherhood programmes
 - Hold regular meetings with stakeholders for Maternal and Newborn health to promote effective family health issues
 - Support professional associations to provide technical support for maternal and newborn health programmes

PRIORITY: COMMUNITY INVOLVEMENT AND PARTICIPATION

Strategy 6: Empower communities to ensure a continuum of care between the household and the health care facility

- (i) ***Empower communities to create demand for maternal and newborn health services***
- Launch a national sensitisation campaign for maternal and newborn health (highlight risks of delivery by unskilled attendants; and promote use of clean water, pit latrines and immunization among others)
 - Review, develop and disseminate health promotion materials on birth preparedness, danger signs and emergency preparedness **including emergency transport and communication systems at community level**
 - Mobilize and sensitise communities, particularly at sub county level, on maternal and newborn health
- (ii) ***Strengthen the capacity of health planning teams and health facilities to manage Maternal and Newborn Health Services***
- Develop National Guidelines for Village Health Teams (VHTs)/Community Resource Persons (CORPs), Health Sub Districts (HSDs) and District Health Teams (DHTs) reflecting and prioritising maternal and newborn health services
 - Train the **VHT/CORPs including traditional birth attendants**, HSDs and DHT on implementation and monitoring of maternal and neonatal health interventions
 - Provide guidelines, equipment and management packages to the VHT/CORPs, HSD and DHT
 - Sensitise communities on Maternal and Newborn Health issues including birth preparedness, danger signs, timely referrals, gender issues and on the importance of information systems

- Train/Orient community leaders on use of verbal autopsy information in maternal and perinatal deaths at community level
- Establish a reward mechanism for good performance for maternal and newborn health at Health Sub Districts

PRIORITY 7: MONITORING AND EVALUATION

Strategy 7: Strengthen monitoring and evaluation mechanisms for better decision making and service delivery of Maternal and Newborn Health Services

Interventions and Key Activities

- (i) ***Improve accessibility and utilization of quality data and information for planning and management of maternal and newborn health programmes***
 - Identify priority research areas and develop a research agenda on maternal and newborn health
 - Conduct formative and operational research on maternal and newborn health, including appropriate birthing practices and newborn health needs assessment
 - Disseminate evidence based information for programme management and service provision
 - Sensitize and train health management teams at all levels on utilization of health information
 - Strengthen capacity of stakeholders to utilize HMIS and death review/audit reports for decision making and management at district and health sub-district levels

- (ii) ***Review the Health Management Information System (HMIS) to capture all essential information on Maternal and Newborn Health***
 - Review clinical practice protocols and guidelines, print and disseminate sufficient copies
 - Review and update HMIS in line with the Road Map and establish linkage with Community Information System
 - Harmonise HMIS (MOH) and LOGICS (Ministry of Local Government)

- (iii) ***Strengthen MOH and Local Government capacity for monitoring and evaluation***
 - Establish and support a steering committee to oversee the implementation of maternal and newborn health programmes at HSD levels
 - Review and print maternal and newborn death review guidelines and ensure they are readily available at national and district levels
 - Provide guidelines and records documents for domiciliary care

- (iv) ***Provide technical support supervision to enhance quality of care***
 - Provide technical assistance to the Reproduction Health Division and to the districts
 - Conduct bi-annual joint monitoring and supervision visits to districts
 - Support regional and district teams to carry out technical support supervision regularly based on the performance improvement framework, particularly for EmOC

- (v) ***Conduct maternal and newborn death audits and reviews***
 - Institutionalise and make mandatory maternal and newborn death audits and reviews at HSD level and above
 - Analyse maternal and newborn death audit reports at district and national level

- Review Secrecy of Information Act to enable conducting of audits and community involvement
- Make maternal and newborn deaths notifiable conditions

(vi) *Establish a Monitoring and Evaluation System for the Road Map*

- Develop a comprehensive gender responsive national monitoring and evaluation framework
- Provide appropriate Monitoring and Evaluation tools
- Establish a functional data base for maternal and newborn health programmes
- Develop monitoring and evaluation plans
- Conduct mid term (2010) and end evaluation (2015) of Road Map

3.0 INSTITUTIONAL FRAMEWORK

The Road Map will be nationally executed and implemented through the line ministries and other national institutions including civil society and professional organizations, cultural and faith based institutions, non-governmental and community based institutions, as well as academic institutions within the context of HSSP II and the Poverty Eradication Action Plan (PEAP).

The Road Map implementation will utilize the existing structures within ministries and other implementing partners. At the national level, the Multi Sectoral Technical Working Group on Infant and Maternal Mortality will oversee the maternal and newborn health policy development and monitor and review progress on implementation of the National Road Map for Accelerating Reduction of Maternal and Neonatal Mortality and Morbidity.

The Ministry of Health will coordinate implementation of the Road Map at the national level and district level in Partnership with the Ministry of Local Government. Monitoring and Evaluation of the Road Map will be anchored on Results Based Management and aligned to the National Integrated Monitoring and Evaluation System under the Prime Minister's Office and the PEAP Monitoring Framework. Effective coordination and collaboration will facilitate the best use of available resources by minimizing duplication of efforts, aligning quality control standards, and ensuring that the efforts of all stakeholders are harmonized towards achievement of the common goal and objectives.

ROLES & RESPONSIBILITIES OF PARTNERS AND STAKEHOLDERS FOR MATERNAL AND NEWBORN HEALTH

Parliament:

- Promote and support maternal and newborn health activities in constituencies
- Increase allocation of resources for maternal and newborn health activities
- Counter negative information on maternal and newborn health activities, especially on family planning among politicians

Ministry of Finance, Planning and Economic Development:

- Mobilization and allocation of resources
- Advocate for maternal and newborn health issues through the Population Secretariat

Ministry of Health:

- Ensure creation of enabling environment for the implementation of the Road Map and provide the appropriate technical and financial support
- Strengthen the health systems to deliver quality maternal and newborn care especially at all subcounties
- Advocate for increased national commitment to the reduction of maternal and newborn morbidity and mortality
- Ensure sufficient funding for maternal and newborn health especially at HC111 and HSD
- Provide policies, standards and guidelines for quality integrated service delivery
- Provide technical support for maternal and newborn health services delivery
- Conduct support supervision, monitoring and evaluation of maternal and newborn health programmes
- Develop and disseminate materials on sexual and reproductive health
- Coordinate and conduct formative and operational research

Ministry of Lands, Water and Environment:

- Mapping availability of water sources for all health facilities
- Provide safe water to all Health Centres IIIs
- Ensure availability of pit latrines or other waste disposal mechanism at all Health Centres III and IV

Ministry of Agriculture, Animal Industry and Fisheries:

- Prioritise support for food production to meet the nutritional needs of women and children as identified by the health sector.
- Support food “insecure vulnerable” districts to develop strategies for food security
- Participate in health sector reviews and planning to meet the nutritional needs of the population
- Preservation and storage of food items (food security)

Ministry of Gender, Labour and Social Development:

- Mobilization the communities to utilize maternal and newborn health services
- Mainstreaming gender in health issues, particularly maternal and newborn health, including engendering the budget.
- Advocacy and prevention of Gender Based Violence
- Develop policies for social protection of vulnerable groups
- Prioritise support for districts with poor RH indicators in implementing gender programmes especially to increase utilization of maternal and newborn health services

Ministry of Works, Housing and Communication:

- Set and disseminate building standards especially for health units at HSDs and lower health units to ensure safety, adequate privacy and space
- Support stakeholders to ensure adequate maintenance of public buildings
- Construction and maintenance of roads for accessing to health facilities to facilitate patient flow and referral of patients
- Establishment and/or tapping on to the corporate communication network to facilitate communication, particularly for referrals

Ministry of Education and Sports:

- Education of population, particularly girls, to have a literate population, which can read and write and interpret information for promoting and adopting healthy life styles
- Incorporating public health training into the curricula of schools at all levels
- Training of health workers
- Responsible for public human resources policies and development

Ministry of Public Service:

- Maintenance of payroll of civil servants (health workers inclusive)
- Finalization and implementation of incentive scheme for health workers in hard to reach areas
- Ensure entry onto the payroll of new recruits
- Revision of Human Resource Deployment Regulations to ensure implementation of maternal and newborn services, advocacy and community mobilization especially at all Sub Counties in the country
- Revision of Human Resources for Health Policy to update standing orders for civil servants in line with maternal and newborn health care needs

Ministry of Local Government/District Local Governments

- Provide incentives for retention of recruited health workers with priority assistance to districts with poor RH indicators
- Delivery of health services
- Supervision and monitoring of health service delivery in the respective districts
- Ensure availability of pit latrines in every household
- Ensure that maternal and newborn health issues are integrated in the development plans

Districts:

- Disseminate the Road Map to all stakeholders in the District Council
- Ensure health plans at district and Sub County level prioritise maternal and newborn health
- Coordinate and supervise implementation of maternal and newborn health services by all stakeholders at district level
- Provide technical support for quality maternal and newborn services with priority at sub county and level and HSD
- Design an operational plan and budget for implementing maternal and newborn health programmes
- Adapt, produce and disseminate IEC materials to address local issues and needs on maternal and newborn health
- Conduct community mobilization for utilization of maternal and newborn health services especially at Sub County level

Corporates/ Private companies (Communication, Power and transport)

- Establish subsidies for services in health facilities
- Participate in provision of social responsibilities

Local Council V members, District leaders and Sub county leaders

- Counter negative information on maternal and newborn health services and disseminate the correct information

Communities and Religious Leaders:

- Establishment and/or strengthening of community based monitoring tools with other partners for maternal and newborn health
- Advocate for increased use of community resources for the implementation of the Road Map
- Participate in monitoring of maternal and newborn health services for availability, accessibility and quality
- Lobby district health managers to make sure quality maternal and newborn health information and services are available and accessible to all communities
- Encourage and support communities to use maternal and newborn health services
- Integrate maternal and newborn health activities into community based programmes

Development Partners:

- Provide financial and other resources especially to the Health Sector, Education, Local Government and Ministry of Gender, Labour and Social Development for maternal and newborn health
- Provide technical guidance at national level to the Health Sector and the national Technical Working Group
- Support and facilitate implementation, monitoring and evaluation of maternal and newborn health services and the Road Map

NGOs and FBOs:

- Contribute to strengthening policies for maternal and newborn health:
- Implement maternal and newborn health activities at district and community levels
- Integrate maternal and newborn health activities into NGO and FBO programmes
- Participate in the monitoring and evaluation of maternal and newborn health services and the Road Map at national, district and community levels

Media Houses/Practitioners:

- Prioritise the delivery of maternal and newborn health information and messages through media channels

4.0 GUIDING PRINCIPLES

The following principles will guide the planning and implementation of the Roadmap to ensure effectiveness, ownership and sustainability in Uganda.

Evidence-based: Ensuring that the interventions are based on up-to-date evidence and are cost-effective.

Health systems support: Focusing on a continuum of care using a life cycle and services linked to primary health care, as an entry point, for engaging community resources and strengthening of the referral system.

Complementarities: Building on existing programmes and recognizing the comparative advantages of the different partners and non-health sectors in the planning, implementation and evaluation of maternal and newborn health programmes.

Partnership: Promoting partnership, coordination and joint programming among stakeholders including the private sector, academia, professional councils, civil society organizations and communities at all levels in order to improve collaboration, maximize resources, and avoid duplication.

Division of labour: Defining roles and responsibilities of all players in the implementation, monitoring and evaluation of the identified activities for increased synergy.

Appropriateness and relevance: Having a clear understanding of the status and local perception of maternal and newborn health in the country.

Transparency and accountability: Promoting a sense of stewardship, accountability and transparency on the part of the government as well as other stakeholders for enhanced sustainability.

Equity and accessibility: Supporting scaling-up of cost-effective interventions that promote equitable access to quality health services with greater attention to the youths, poor and vulnerable groups, especially in rural and underserved areas.

Phased planning and implementation: Promoting implementation in clear phases with timelines and benchmarks that enable re-planning for best results.

Human right and gender in health: The right to life is a basic human right. Gender will be mainstreamed throughout the programme and a human rights approach will be the basis of planning and implementation.

5.0 COSTING AND FINANCING OF THE ROAD MAP

Uganda has been implementing road map activities even before its adoption. However there is need to scale up some of the interventions but also implement proven Scale up in selected districts/ provinces/ regions that are implementing

Costing of the Road Map was necessary to serve as an indicator of the resources required to implement Road Map. The costing took into consideration the current funding modalities for maternal and newborn health interventions. The costing has anticipated the contribution of the private sector and the community. The costed Road map will be used as to advocate for improved coordination amongst stakeholders and to negotiate for integration of maternal and child health activities into existing operational plans of other programmes (e.g. HIV, malaria, TB) so as to establish synergies and maximize on limited resources.

There are some interventions in the road map which are the responsibilities of other sectors such as MOES, MOLG and MOGLSA, and ministry of Energy and Minerals, Agriculture, Works, Housing and communication, therefore there will be a need to coordinate budgetary allocations for the specific activities and interventions.

Resources for the sustainable implementation of the Road Map will be secured through existing mechanisms (e.g. SWAp and other resource allocation opportunities), as well as other sources.

The following assumptions have been taken into consideration:

- Health will continue to be a priority of government in terms in resource allocation with no further reduction in MOH budgetary allocations
- Enough political support and funding are provided for implementation.
- Stakeholders will commit to supporting the implementation of the National Road Map.
- The Memorandum of understanding for SWAPs will be binding
- Private sector will continue to undertake social responsibilities in health
- The Road Map will be integrated into national long-term development plans and process so that sustainable implementation and scaling up is secured.
- The Road Map will be used to back up proposals for funding
- Fundraising activities for the Road Map (Airlines, Lottery, Golf and other sports tournaments, Concerts, Private sector, Male sponsorship of activities, private donations).

6.0: PRIORITY INDICATORS

HIERARCHY OF AIMS	ACTIVITY	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE AND TARGET			RESPONSIBLE INSTITUTION (S)
			2005	2010	2015	
Goal To accelerate the reduction of maternal and neonatal morbidity and mortality.		<ul style="list-style-type: none"> ▪ Maternal Mortality Ratio ▪ Neonatal Mortality Rate 	435 29	400 25	354 <20	MFPED, MOH MoLG, MGLSS, Development Partners, CSOs PNFP Institutions
Objective 1 To increase the availability, accessibility, utilization and quality of skilled care during pregnancy, childbirth and postnatal period at all levels of the health care delivery system		<ul style="list-style-type: none"> ▪ Skilled care attendant at birth ▪ Caesarean section rate ▪ Availability of EmONC Facilities ▪ % of pregnant women receiving at least 2 doses of IPT ▪ % of pregnant women attending ANC at least 4 times ▪ Prevalence of anaemia in pregnant women ▪ % of HIV +ve delivered women that received prophylactic ARVS ▪ % of population that knows danger signs during pregnancy, child birth and postnatal period ▪ Coverage of 2 doses of TT ▪ Proportion of institutional deliveries ▪ % of women receiving postpartum care in health facilities within the first 7 days ▪ %of HSDs with functional referral system ▪ % health facilities staffed according to staffing norms 	42% 3% 14% 36% 48% 52% 35% 35% 15%	50% 10% 40% 60% 60% 40% 50% 50% 75% 60% 40% 50%	75% 15% 70% 80% 75% 30% 70% 75% 80% 80% 75% 70% 75%	MFPED MOH MoLG Development Partners CSOs PNFP Institutions

HIERACHY OF AIMS	ACTIVITY	OBJECTIVELY VERIFIABLE INDICATORS	BASELINE AND TARGET			RESPONSIBLE INSTITUTION (S)
			2005	2010	2015	
Objective 2 To promote and support appropriate health seeking behaviour among pregnant women, their families and the community.		▪ Percentage of women attending 4 focused ANC visits	42%	50%	70%	MFPED MOH MoLG MGLSS Development Partners CSOs PNFP Institutions
		▪ % of population with knowledge of at least 3 danger signs in pregnancy and child birth	35%	80%	95 %	
		▪ % of mothers initiating BF within the 1st hour after birth	46%	60%	80%	
		▪ Proportion of HIV positive women receiving ART		30 %	70%	
		▪ IPT 2 coverage	17%	60%	85%	
Objective 3 To strengthen family planning information and service provision for women/men/couples who want to space or limit their childbearing thus preventing unwanted and/or untimely pregnancies that increase the risk of a maternal death		▪ Contraceptive Prevalence Rate	23.7%	35%	50%	MFPED MOH MoLG MGLSS Development Partners CSOs PNFP Institutions
		▪ Unmet need for family planning	40.6%	20%	5%	
		▪ % increase in Couple years of protection	10%	50%	70%	

ANNEX I: BUDGET FOR ROAD MAP 2007-2010 (US \$)

		Activities	Years				TOTAL
			2007	2008	2009	2010	
1.1	1.1.1	Review undergraduate training and internship programmes to allow adequate exposure to obstetrics and newborn care	0	20,000	13,327	0	33,327
	1.1.2	Develop a policy to guide professional development after graduation from medical institutions	0	35,359	0	0	35,359
	1.1.3	Review/ develop, print and disseminate National Standards and clinical protocols for Maternal and Newborn Care (90,000	110,000	100,445	50,000	350,445
1.2	1.2.1	Review the Human Resource Deployment Regulations to suit the needs of various levels of health care	0	29,589	0	0	29,589
2.1	2.1.1	Support training in administration and management for health workers. (contribute 20 % of budget)	0	80,000	80,000	80,000	240,000
	2.1.2	Implement an incentive scheme for health workers in hard to reach areas	1,170,637	1,170,637	1,170,637	1,170,637	4,682,548
	2.1.3	Construct and maintain maternity waiting shelters near H. facilities in districts with poor transport system	0	249,000	255,308	264,616	768,924
2.2	2.2.1	Rehabilitate the Health Centres IV and III and the hospitals/Construct staff accommodation	995,438	995,438	995,438	995,438	3,981,752
	2.2.2	Procure and distribute standard equipment for MNH	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000
	2.2.3	Facilitate “outreach” teams with fuel, screens and allowances	0	449,000	449,000	449,000	1,347,000

	Activities	Years				TOTAL
		2007	2008	2009	2010	
	2.2.4 Procure and distribute job aides for MNH including client cards/ “women’s passports”	50,000	250,000	200,000	250,000	750,000
	2.2.5 Procure and distribute , MNH drugs, supplies& contraceptives for HUs (30 % Supplies + contraceptives but less condoms)	5,500,000	5,500,000	5,500,000	5,500,000	22,000,000
	2.2.6 Improve functionality of 7 Regional blood banks and establish 7 new regional b. banks to supply HCIV and Hospitals	2,389,600	2,334,000	2,512,000	2,586,800	9,822,400
2.3	2.3.1 Support National logistics management (MNH to support 20% of total costs of training similar to one of 2005 by DELIVER	0	30,000	50,000	0	80,000
	2.3.2 Review curriculum for Basic FP for Health workers & procedural manual	20,000	0	0	0	20,000
	2.3.3 Skills development of health workers to provide the full method mix for family planning at different levels.	311,000	542,400	362,400	240,000	1,455,800
	2.3.4 Conduct FP/RH campaign activities	100,000	0	0	120,000	220,000
2.4	2.4.1 Procure and install communication equipment in 20% of the villages, all hospitals and HCIVs & 50% of HCIIIs. Assume 50% op. costs for Hus and Village phones for income generation as well.	546,783	546,783	546,783	546,783	2,187,132
	2.4.2 Procure motorised ambulances (200) for emergency transport for Health Centres IVs and District Hospitals,	1,150,000	1,150,000	1,150,000	1,150,000	4,600,000
	2.4.3 Review/develop relevant guidelines on referral system and disseminate them	2,058	0	0	0	2,058
2.5	2.5.1 Review the training manual(s) for delivery of adolescent friendly sexual and reproductive health services	22,500	0	0	0	22,500

	Activities	Years				TOTAL
		2007	2008	2009	2010	
	2.5.2 Procure TVs, decks, DVDs CDs, Record books for Adolescent health friendly services and ANC	200,000	200,000	250,000	250,000	900,000
	2.5.3 Train health workers in delivery of ADFHS	125,000	125,000	125,000	125,000	500,000
	2.5.4 Train peer providers for friendly adolescent sexual and reproductive health issues	52,000	52,000	52,000	52,000	208,000
	2.5.5 Support parent peer programmes for adolescent sexual and reproductive health	51,017	51,017	51,017	51,017	204,068
	3.1.1 Review and revise a competency based professional training curriculum	0	5,371	0	0	5,371
	3.1.2 Equip institutions with teaching and learning materials (50 institutions)	50,000	200,000	650,000	100,000	1,000,000
	3.1.3 Support 6 weeks residence /mentoring of Medical officers at district hospitals before posting to health sub districts	18,000	57,000	60,000	45,000	180,000
	3.1.4 Conduct technical updates/ skills training for supervisors, tutors, and clinical instructors (emphasis on skills and competencies)	10,000	10,000	10,000	10,000	40,000
	3.1.5 Provide Essential New born care and resuscitation training to health workers	55,500	89,250	41,250	21,750	207,750
3.1	3.1.6 Train health service providers on newborn resuscitation skills, Life Saving Skills and Post Abortion Care	135,000	270,000	270,000	270,000	945,000
4.1	4.1.1 Conduct advocacy meetings for increase in health sector budget allocations	10,000	10,000	10,000	10,000	40,000

	Activities	Years				TOTAL
		2007	2008	2009	2010	
	4.1.2 Prepare and print technical briefs to advocate for maternal and newborn health in Budget Framework Papers	50,000	50,000	50,000	50,000	200,000
	4.1.3 Update and disseminate the REDUCE advocacy tool	50,000	0	0	0	50,000
	4.1.4 Hold annual meetings with the parliamentary social committee on maternal and newborn health issues	2,906	2,906	2,906	2,906	11,624
	4.1.5 Support relevant parliamentary committees/fora to advocate for maternal/ neonatal health issues / Family Planning	19,573	19,573	19,573	19,573	78,292
4.2	4.2.1 Conduct annual district review meetings on maternal and neonatal health, with technical support from professional associations	112,951	112,951	112,951	112,951	451,804
	4.2.2 Train DPOs on integration of maternal and newborn health into the development programmes	0	12600	23,200	23,200	59,000
	4.2.3 Sensitise relevant Parliamentary For a and Committees	2,906	2,906	2,906	2,906	11,624
5.1	5.1.1 Lobby for multi-sectoral partnership for maternal and newborn health at national, district and community levels	2,712	1,356	0	0	4,068
	5.1.2 Transform the IMR and MMR Task Force into a multi sectoral Tech. Working Group to -oversee maternal and newborn health	9,915	10,481	9,915	9,915	40,226
	5.1.3 Support operations of the Partnership for Maternal, Newborn and Child Health (PMNCH) committee	400	400	400	400	1,600
	5.1.4 Prepare MNH briefs for JRM and NHA	1,218	1,218	1,218	1,218	4,872

		Activities	Years				TOTAL
			2007	2008	2009	2010	
5.2	5.2.1	Build partnership with the media to promote safe motherhood programmes	7,344	7,344	7,344	7,344	29,376
	5.2.2	Hold regular meetings with stakeholders for MNH	2,240	2,240	2,240	2,240	8,960
	5.2.3	Support professional associations to provide technical support for MNH	5,000	5,000	5,000	5,000	20,000
6.1	6.1.1	Launch a national sensitisation campaign for maternal and newborn health	160,000	160,000	160,000	160,000	640,000
	6.1.2	Review, develop, print, disseminate and distribute health promotion materials	760,000	1,200,000	1,200,000	1,200,000	4,360,000
6.2	6.2.1	Print National Guidelines for Village Health Teams (VHTs)/Community Resource Persons (CORPs),	5,546	0	0	0	5,546
	6.2.2	Orientation of Health Educators on MNH	0	18,000	27,000	27,000	72,000
	6.2.3	Support the TOT, VHT/CORPs/ CBD & HSDs and DHT on implementation & monitoring of MNH interventions (RH responsible for 20% total cost) unit cost \$22. (650,000 VHTs in 4 years	200,000	450,000	900,000	900,000	2,450,000
	6.2.4	Provide supplies, equipment, pregnancy registers Flip charts) and management packages to the VHTs/CORPs, HSDs and DHTs (unit cost \$ 11)	444,000	2,222,000	2,666,000	4,444,000	9,776,000
	6.2.5	leaders on use of verbal autopsy information in maternal and newborn deaths at community level	90,000	18,000	18,000	18,000	144,000
	6.2.6	Establish a reward mechanism for good performance for maternal and newborn health at Health Sub Districts	0	12,000	12,000	15,000	39,000

		Activities	Years				TOTAL
			2007	2008	2009	2010	
7.1	7.1.1	Conduct formative and operational research on maternal and newborn health	0	100,000	50,000	50,000	200,000
	7.1.2	Disseminate evidence based information for programme management and service provision	0	30,000	20,000	20,000	70,000
	7.1.3	Sensitize and train district health management teams at all levels on utilization of health information including MDR		60,000	40,000	35,000	135,000
	7.1.4	Review and update HMIS in line with the Road Map and establish linkage with Community Information System (CIS)	0	0	11,442	0	11,442
	7.1.5	Harmonise HMIS (MOH) and LOGICS (Ministry of Local Government)	0	0	7,000	6,557	13,557
7.2	7.2.1	Establish and support a steering committee to oversee the implementation of maternal and newborn health programmes	7,000	47,500	47,500	47,500	149,500
	7.2.2	Review and print maternal audit and newborn death review forms and ensure they are readily available at all levels	0	35,246	0	30,246	65,492
7.3	7.3.1	Provide technical assistance to the Reproductive Health Division and to the districts	0	50,000	50,000	50,000	150,000
	7.3.2	Conduct bi-annual joint monitoring and supervision visits to districts	25,000	25,000	25,000	25,000	100,000
	7.3.3	Support regional and district teams to carry out technical support supervision regularly	50,000	50,000	50,000	50,000	200,000
7.4	7.4.1	Institutionalise and make mandatory maternal and newborn death reviews at HSD levels and above	30,000	83,000	83,000	83,000	279,000

	Activities	Years				TOTAL
		2007	2008	2009	2010	
7.4.2	Analyse maternal and newborn death audit reports at national level	3,000	7,000	7,000	7,000	24,000
7.4.3	Review Secrecy of Information Act to enable conducting of audits and community involvement	0	3,075	0	0	3,075
7.4.4	Meeting -National committee for maternal and newborn notifiable conditions	0	1,192	1,192	1,192	3,576
7.5.1	Develop a gender responsive national monitoring and evaluation framework	1,143	0	0	0	1,143
7.5.2	Provide appropriate Monitoring and Evaluation tools	6,171	0	0	0	6,171
7.5.3	Develop /adapt MNH monitoring and evaluation plans	14,403	0	0	0	14,403
7.5.4	Conduct mid term (2010) and end evaluation (2015) of Road Map	0	0	0	70,000	70,000
	GRAND TOTAL	16,117,961	20,362,832	21,517,392	22,815,189	80,813,374

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GLOSARY OF TERMS AND DEFINITIONS

Antenatal care: Care for the woman and foetus during pregnancy.

Bona bagawale: This is the National Poverty Eradication Programme highlighted in President's Manifesto. The word translates/means "**Prosperity For All**".

Community: As used in this document, a group of people sometimes living in a defined geographical area, who share common culture, values and norms.

Counselling: As used in this document, interaction with a woman to support her in solving actual or anticipated problems, reviewing options, and making decisions. It places emphasis on provider support for helping the woman make informed decisions.

Danger/Emergency signs: Signs of life-threatening conditions which require immediate intervention and may end fatally if not attended to.

Emergency Obstetric Care (EmOC): Basic EmOC includes parental (administered by IV) antibiotics; parental oxytocic drugs; parental sedatives for eclampsia; manual removal of placenta; manual removal of retained products; assisted vaginal delivery. Comprehensive EmOC includes surgery (caesarean section); anaesthesia; and blood transfusion in addition to all of the basic EmOC (Maine et al., 1997).

Infant Mortality Rate (IMR): is the number of newborns dying under a year of age divided by the number of live births during the year. The infant mortality rate is also called the infant death rate. Related statistical categories:

- Perinatal mortality only includes deaths between the foetal viability (28 weeks gestation) and the end of the 7th day after delivery.
- Neonatal mortality only includes deaths in the first 27 days of life but before one year.
- Postnatal death only includes deaths after 28 days of life before one year.
- Child mortality includes deaths within first five years of birth.

Infant Mortality: is the death of infants in the first year of life.

Maternal Mortality: also "obstetric death" is the death of a woman in relation to a pregnancy. According to the WHO, "A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes."

Generally there is a distinction between a **direct maternal death** that is the result of a complication of the pregnancy, delivery, or their management, and an **indirect maternal death** that is a pregnancy-related death in a patient with a pre-existing or newly developed health problem. Other fatalities during but unrelated to a pregnancy are termed accidental, incidental or non-obstetrical maternal deaths.

Midwife: Refer to the definition for "Skilled Attendant"; see Appendix 2 for a list of the minimum skills necessary for a skilled attendant at birth.

Neonatal Mortality: Deaths of babies during the first 28 completed days of life.

Parenteral : Refers to drugs that are administered by injection (intravenously or intramuscular)

Partograph is a tool that can be used by midwifery personnel to assess the progress of labour and identify when life saving intervention is necessary.

Postnatal care: Care for the baby after birth. For the purposes of this document, up to two weeks.

Postpartum care: Care for the woman provided in the postpartum period, e.g. from complete delivery of the placenta to 42 days after delivery.

Referral hospital: A hospital with a full range of obstetric services including surgery and blood transfusion and care for newborns with problems.

Skilled attendant: The term skilled attendant or provider refers exclusively to people with midwifery skills (for example, doctors, midwives, nurses) who have been trained to proficiency in the skills necessary to provide competent care during pregnancy and child birth.

Skilled Attendance: “Skilled attendance” refers to the process by which a pregnant woman and her infant are provided with adequate care during labour, birth and the postpartum and immediate newborn periods, whether the place of delivery is the home, health centre or hospital. Skilled attendance has also been defined as “encompassing (1) a partnership of skilled attendants (health professionals with skills to provide care for normal and/or complicated deliveries), and (2) an enabling environment of equipment, supplies, drugs and transport for referral” (Graham et al., 2001: 97).

Stillbirth: Birth of a baby that shows no signs of life at birth (no gasping, breathing or heart beat).

Total fertility rate: Total number of children a woman would have by the end of her reproductive period if she experienced the currently prevailing age-specific fertility rates throughout her childbearing life.

Traditional Birth Attendant (TBA) is a person who assists the mother during childbirth and who initially acquired her skills by delivering babies herself or through an apprenticeship to other TBAs (WHO, 1992, cited in Sibley et al. 2002). TBAs are not considered skilled attendants at birth, even if trained.