

Republic of Zambia

Roadmap for Accelerating Reduction of Maternal, Newborn and Child Mortality, 2013-2016

No Woman Should Die Giving Life
Committing to Child Survival: A Promise Renewed

Ministry of Community Development,

Ministry of Health

Mother and Child Health

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Acronyms and Abbreviations

AIDS Acquired Immune Deficiency Syndrome

ANC Antenatal Care
ARVs Anti-retroviral Drugs

BHCP Basic Health Care Package

BMI Body Mass Index

CAM Combined Approach Matrix
CBAs Community Based Agents
CBDs Community Based Distributors

CBoH Central Board of Health
CCT Conditional Cash Transfer
CDEs Classified Daily Employees

CEDAW Convention on the Elimination of All Forms of Discrimination Against Women

CHAZ Churches Health Association of Zambia

CHESSORE Centre for Health, Science and Social Research

CHU Child Health Unit (is it used anywhere?)

CHVs Community health volunteers **CHWs** Community Health Workers

cIMCI Community IMCI

CORDAID Catholic Organization for Development Aid

CPs Cooperating Partners

CRC Convention on the Rights of the Child

CSO Central Statistical Office
CSOs Civil Society Organizations
DBS Direct Budget Support
DEM Direct Entry Midwifery

DFID Department for International Development

DHMT District Health Management Team

DHO District Health Office

DMMU Disaster Management & Mitigation Unit (Office of the Vice-President)

EGZ Equity Gauge Zambia

EmONC Emergency Obstetric and Newborn Care EPI Expanded Program on Immunization

FAMS Financial and Administrative Management System

FANC Focused Antenatal Care

fCHW formalised and trained Community Health Worker

FNDP Fifth National Development Plan

GDP Gross Domestic Product

GFHR Global Forum for Health Research

GIDD Gender in Development Division (Ministry of Gender)

GRZ Government of the Republic of Zambia

HAHC Hospital Affiliated Health Centre

HC Health Centre

HCC Health Centre Committee

HCP Health Communications Programme
HIV Human Immunodeficiency Virus

HMIS Health Management Information System

HRH Human Resources for HealthHSS Health Systems Strengthening

HSSP Health Systems & Support Programme

ICESCR International Covenant on Economic, Social and Cultural Rights

IHP International Health PartnershipsILO International Labour Organization

IMCI Integrated Management of Childhood Illness

IPT Intermittent Preventive Treatment

ITN Insecticide Treated NetsJAR Joint Annual Review

JASZ Joint Assistance Strategy for Zambia

LAPS Leadership, Accountability and Partnerships for Sustainability

LCMS Living Conditions and Monitoring Survey

M&E Monitoring & Evaluation

MCDMCH Ministry of Community Development, Mother and Child Health

MDG Millennium Development GoalsMDRs Maternal Death Review Committees

MIBS Ministry of Information & Broadcasting Services
MLGH Ministry of Local Government and Housing

MLSS Ministry of Labour & Social Security

MMR Maternal Mortality Ratio

MNCH Maternal, Newborn and Child Health
MoAL Ministry of Agriculture and Livestock

MoE Ministry of Education, Science, Vocational Training and Early Education

MoF Ministry of Finance
MoH Ministry of Health

MoU Memorandum of Understanding

MTWSC Ministry of Transport, Works, Supply, and Communications

MTEF Medium Term Expenditure Framework

MTR Mid-Term Review

NGOs Non-Governmental Organizations
NHCs Neighbourhood Health Committees
NHSP National Health Strategic Plan

NMR Neonatal Mortality Rate

ODA Official Development Assistance

ORS Oral Rehydration Salts
P4P Paying for Performance
PE Personnel Emoluments

PEPFAR President's Emergency Program for AIDS Relief

PETS Public Expenditure Tracking Survey

PHC Primary Health Care

PMTCT Prevention of Mother-To-Child Transmission

PNC Postnatal Care

PRA Participatory, Reflection and Action approaches

QDS Quality of Delivery Survey RBF Results Based Financing

RCHU Reproductive and Child Health Unit

RED Reaching Every District (Immunization Strategy)

RHC Rural Health Centre

RHCS Reproductive Health Commodity Security

RHU Reproductive Health Unit SAG Sector Advisory Group

SBS Sector Budget Support

SIDA Swedish International Development Agency

SMAGs Safe Motherhood Action Groups

SMI Safe Motherhood Initiative

SNDP Sixth National Development PlanSOPs Standard Operating Procedures

SWAp Sector Wide Approach

TB Tuberculosis

TBA Traditional Birth Attendant

TFR Total Fertility Rate

tTBAs Trained Traditional Birth Attendants

UHC Urban Health Centre

UN United Nations

UNDP United Nations Development Programme

UNIFPA United Nations Population Fund
UNICEF United Nations Children's Fund
URTI Upper Respiratory Tract Infections

USAID United States Agency for International Development

USD United States Dollar

USG United States Government

WB World Bank

WHO World Health Organization

WHR World Health Report

ZDHS Zambia Demographic and Health Survey

ZMW Zambian Kwacha

Foreword

Over the past two decades, Zambia has followed through and implemented a number of effective interventions to reduce the high levels of maternal, newborn and child morbidity and mortality. The country scored successes in some (such as the high one-time antenatal care attendance levels); while encountering and identifying challenges in others. Long-term predictable, responsive partnerships and committed funding pledges have emerged as important enabling factors for success; with good governance being at the core of this relationship. The Government of the Republic of Zambia (GRZ) is a signatory to the Safe Motherhood Initiative, the relevant Human Rights treaties (CEDAW, the ICESCR, and the CRC), the ICPD Plan of Action and the MDGs. Further, the International Health Partnerships (IHP+) initiative has identified some of these challenges and suggestions to remedy these have been put forward. Zambia is a signatory to the IHP+ initiative and subscribes to these principles as well as to the principles in the Paris Declaration. Health partnerships in Zambia have matured sufficiently to serve as a strong backbone on which to anchor and implement this maternal, newborn and child health (MNCH) policy initiative.

In addition, experience over the years has identified the need for a change in "the way of doing business". Health is not just about health and the responsibility of the Ministry of Health and Ministry of Community Development Mother and Child Health (MCDMCH) alone. It requires roles and responsibilities beyond the line ministries to effectively involve other providers, other line ministries and other non-state actors including civil society and public-private partnerships. This concept should apply not just at national level but at all levels of planning, implementing and evaluation stages of the priority MNCH interventions. This document contains a framework to ensure all that can participate are given an opportunity and space to do so. The government recognizes as critical the life-cycle phases of pregnancy, birth, postnatal, newborn and childhood. As such government has given high priority to, and will mainstream, MNCH activities to make pregnancy, childbirth and the postnatal, newborn and childhood safe in Zambia. This mainstreaming has seen the introduction of a new Ministry – Community Development, Mother and Child Health. This Ministry will partner with Ministry of Health in ensuring continuum of care from community to all appropriate levels.

The 2008 Global Countdown Report suggested that many of the necessary ingredients are in place to accelerate progress towards achievement of the health-related MDGs in Zambia. Additively, the 2012 Global Countdown report acknowledged that although some progress had been made towards attaining the same goals, the progress was insufficient. In furthering existing gains, there has been wide and participatory stakeholder involvement in the development of this Zambia MNCH Road Map. It builds on existing interventions and other known effective interventions selected for scale-up. The packages of interventions have been costed and funding gaps identified. Monitoring and evaluation is achieved and will continue to be achieved through a strengthened HMIS, regular Zambia Demographic and Health Surveys (ZDHS); and a built-in plan for assessment of implementation (which includes a mid-term review). The Road Map is result-focused [through use of the Health Sector Performance Monitoring Framework (HPMF)]; with use of both routine and non-routine data sources (including special surveys). In addition to the Global & Zambia Countdown reports; there has been a National launch of CARMMZ, which is the Campaign for Accelerated Reduction of Maternal Mortality in Zambia.

Government is conscious of its roles and responsibilities but also aware of its limitations in implementing these noble intentions. The experiences over the last two decades bear witness to this. It is with this background and with this spirit of commitment that I would like to call upon all our partners (old and new) to join government in embarking on this MNCH initiative in the spirit of togetherness and shared purpose so that we may achieve the set Millennium Development Goals by 2015 and finally attain equitable and universal coverage. This MNCH roadmap is intended to provide guidance for all stakeholders in maternal and child health for strategic and programme planning, implementation and monitoring and evaluation.

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We would also like to acknowledge the team work which existed between the Ministry of Health and the Ministry of Community Development, Mother and Child Health in accepting this document as a roadmap that will be followed as the line ministries work with all other partners.

Finally, we would like to thank the technical working group (TWG), led by the Director, Mother and Child Health in the Ministry of Community Development, Mother and Child Health, that was put together in early 2013 to strengthen the original roadmap and to focus it even more on the high impact interventions that would make a great contribution to the survival of Zambian mothers and children based on a critical analysis of the bottlenecks that constrain our achievements. This TWG with membership from the UN system, US Government, the Zambian Paediatric Association, the University of Zambia, the Churches Health Association of Zambia and other line ministries such as the Ministry of Finance, Ministry of Local Government, Ministry of Chiefs and Traditional Affairs and the Ministry of Education, worked hard to enrich this final version.

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Executive Summary

More than 20 years following the global launch of the Safe Motherhood Initiative (SMI), the maternal mortality ratio (MMR), and infant and under-5 mortality rates (IMR and U-5MR) in Zambia remain amongst the highest in the world. The maternal mortality ratio had risen from an estimated 200 per 100,000 live births in 1992 to 729 per 100 000 live births in 2001 – 2002. The 2007 Zambia DHS estimated the MMR to be 591 deaths per 100,000 live births, still among the highest in the world. Low attendance by skilled birth attendants at delivery coupled with low postnatal attendance, especially in rural areas, has resulted in an unacceptably high neonatal mortality rate (34/1000 live births) and an infant mortality rate of 70 per 1,000 live births. Despite implementing known effective child survival strategies such as the Expanded Program on Immunization (EPI) and the Integrated Management of Childhood Illness (IMCI), as well as nationwide nutrition supplementation programmes over the last 10-15 years, the Under-5 mortality rate has remained high, and was estimated at 119 per 1000 live births in the 2007 Zambia DHS.

Despite spirited efforts in implementing many of the known effective maternal neonatal and child health and family planning (MNCH/FP) interventions, as part of the broad strategy to help fulfil the above obligations, the country still has persistently high maternal, newborn and child morbidity and mortality rates. High antenatal care attendance rates (at least one visit) and high full immunization coverage rates in the EPI programme, were recorded. However, lower progress was attained in other indicators. This Road Map has reviewed the current state of affairs in the implementation of various high impact interventions with a view to guide the revised implementation arrangements for optimal impact.

The previous implementation of maternal, newborn and child health programmes by the Zambian government was confronted by many challenges that included: (i) a weakened health system, with weak referral systems and absence of emergency systems for handling obstetric, neonatal and child health emergencies, (ii) competing priorities, (iii) inadequate and short-term financial resources, (iv) poor logistics for management of drugs, family planning commodities, vaccines and equipment. and (v) poor co-ordination (and 'handovers') amongst implementing partners, Over the years, this situation was made worse by a severe shortage of human resource for health (HRH) that has been brought about by a combination of low HRH development, ineffective management practices and the continuing brain drain of skilled personnel both within and outside the country. Other factors that prevented attainment of high outcome coverage rates included (a) the high medical bias in programme implementation and (b) unclear policies governing relevant professional practice, practice environments and task-shifting approaches.

This Road Map is premised on an approach that puts emphasis on actions to accelerate progress towards high and equitable coverage of priority maternal, newborn, and child health interventions along the continuum of care within the five phases of the lifecycle: (a) the pre-pregnancy and adolescent reproductive health needs, (b) care and well-being during pregnancy, (c) the phase of child birth, (d) postnatal phase and its special needs, (e) the needs of the newborn period, as well as (f) the childhood phase. It is also premised on the recognition of the critical role that communities and community based structures can play in providing care to families who do not have easy access to a health facility and in ensuring behaviour change for improved MNCH survival practices.

The Governance Action Plan between government and donors to the Zambian health sector should thus serve as a firm launch pad for mobilizing the required financial resources in support of this MNCH Road Map initiative in Zambia. In this regards, the proposed implementation framework has costed the interventions in terms of packages of interventions (and associated packaged of activities) that address each phase of the lifecycle for a continuum of care approach. This arrangement of costing interventions and activities into packages will enable all possible contributors (big or small) to provide any resources, in line with their mandate, and to follow through such programmes for greater transparency & accountability. It thus provides a framework for building strategic partnerships for increased investment in maternal, newborn and child health at institutional, community and programme levels.

The general objective of the Road Map is to accelerate the reduction of maternal, newborn and child mortality rates sufficiently in order to enable Zambia attain the set MDGs by 2015. Its specific objectives are to: (i) provide skilled attendance during pregnancy, childbirth, and the postnatal period, at all levels of the health care delivery system, (ii) strengthen the capacities of individuals, families, communities, line Ministries, and the private sector to share responsibility and play their role in efforts to significantly improve maternal, newborn and child health (MNCH) outcomes for universal coverage to attain the set MDGs. The implementation at country level will be in a period of 4 years up to 2016.

Indicators for monitoring and evaluation have been developed to monitor and evaluate progress. Annual country reports will be shared among partners and with the Regional Economic Communities and the African Union. All the partners will be urged to support the mid-term reviews and end of implementation review.

The success of the implementation of this Road Map will depend on the commitment of the Zambian Government, Ministry of Health, Ministry of Community Development, Mother and Child Health and all partners to invest in maternal, newborn and child health.

Chapter 1: Overview

1.1 Country Profile

Zambia is a landlocked sub-Saharan country in South Central Africa, between 8° and 18° south latitudes and longitudes 22° and 34° east. It has a total surface area of 752,614 square km and shares boundaries with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of the Congo and Tanzania.

Administratively, the country is divided into ten provinces, namely Central, Copperbelt, Eastern, Luapula, Lusaka, Muchinga, Northern, North-Western, Southern and Western provinces which are further sub-divided into districts.

The country's population has continued to grow. The 1969, 1980, 1990, 2000, and 2010 censuses estimated the population of Zambia to be at 4.1, 5.7, 7.8, 9.9 and just over 13 million respectively. The annual population growth rate has shown a decline from 3.1 between 1969-80, to 2.7 percent between 1980 and 1990; to 2.4 percent between 1990-2000; though it increased to 2.8 percent between 2000 and 2010.

The total population is 13,092,666. The population by province ranges from 2.20 million (16%) in Lusaka province to 0.71 million (6%) in North-western. High inter-censal (2000 to 2010) population growth rates have been recorded for provinces such as Lusaka (4.7 percent), Northern (3.4 percent) and Southern (2.9 percent). Western Province recorded the lowest population growth rate at 1.4 percent.

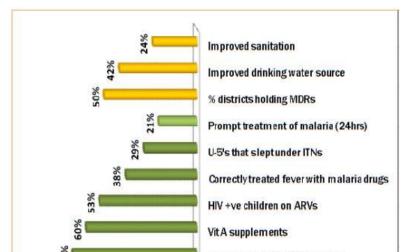
The country is sparsely populated with a density of 17.4 persons per square kilometre. Lusaka Province was the most densely populated province with 100.1 persons per square kilometre while North Western Province was the least densely populated province with 5.8 persons per square kilometre.

Zambia is one of the most urbanized countries in sub-Saharan Africa with about 39 percent of the population in 2010 living in urban areas – an increase from 35 percent in 2000. There is a wide variation by province with Lusaka and Copperbelt provinces having the highest urban population and Northern and Eastern provinces the least. The population of Zambia continues to be termed as 'young' with a high proportion of persons (45%) below the age of 15 years. This holds the potential of a large proportion of young persons expected to enter into reproductive ages (15-49years).

1.2 Why this roadmap is necessary

This road map has been developed in response to the need for accelerated actions for Zambia to meet the health related Millennium Development Goals. There are known effective interventions for MNCH which if universally scaled up have potential to significantly decrease maternal, newborn and child deaths. Zambia has adopted and implemented most of these effective MNCH interventions, achieving success in some, but minimal and limited progress in others.

Coverages for the different interventions along the continuum of care:



A number of reasons have contributed to poor coverage, including:

- (i) a weakened health system, with weak referral systems and absence of emergency systems for handling obstetric, neonatal and child health emergencies
- (ii) competing priorities
- (iii) inadequate and short-term financial resources
- (iv) poor logistics for management of drugs, family planning commodities, vaccines and equipment.
- (v) inadequate co-ordination (and 'handovers') amongst implementing partners,

These problems have affected MNCH programming in other African countries. A regional meeting, convened by WHO AFRO in 2004, critically reviewed these issues and came to a consensus on the way forward to attaining the regional targets for MDGs 4 and 5 by 2015. The meeting resolved that each country in the region develop a costed Road Map on MNCH, that identifies and addresses its own problems with the strategies and interventions required to overcome bottlenecks to adequate coverage of the same interventionsⁱ;. This updated roadmap responds to this identified need and presents an outline to address the problems of high maternal, infant and under-5 mortality rates in Zambia over the next four years.

1.3 The guiding framework and approach

The time from pre-pregnancy through the first month of the newborn's life is divided into several periods: pre-pregnancy; pregnancy; labour, delivery, the neonatal period up to 5 years of age. The "continuum of care" for reproductive, maternal, newborn, and child health includes integrated service delivery for mothers and children across these time periods and also across place (i.e., the various levels of home, community, and health facilities). The approach will be to universally scale-up the implemention of high impact interventions along the continuum of care.

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ⁱ An analysis of the bottlenecks for MNCH interventions is detailed in Chapter 3

Chapter 2: Situation Analysis

2.1 Key issues in maternal newborn and child health in Zambia

The Countdown Report of 2012 documents that Zambia not on track for reducing under five mortality ("On track" indicates that the under-five mortality rate for 2010 is less than 40 deaths per 1,000 live births or that it is 40 or more with an average annual rate of reduction of 4% or higher for 1990–2010). Although Zambia has achieved reductions in maternal, neonatal and child mortality rates, current levels, are still unacceptably high. Unless additional and significant efforts are made, Zambia may not attain the desired MDG 4 and 5 targets by the year 2015 $[^1,^2]$. There is thus need to examine current efforts and approaches in order to ensure that set targets are achieved. Effective MNCH interventions that if scaled up can prevent deaths are known. Strategies on how to operationalize and scale up these interventions is the challenge (24).

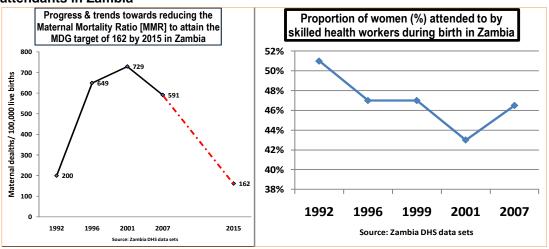
The campaign for Accelerated Reduction of Maternal and child Mortality in Africa (ARMMA) was launched by the African Union in June 2010 with the theme "no women should die while giving birth". This effort emphasised the need for a multi-sectoral response to reducing maternal deaths and improving safe motherhood.

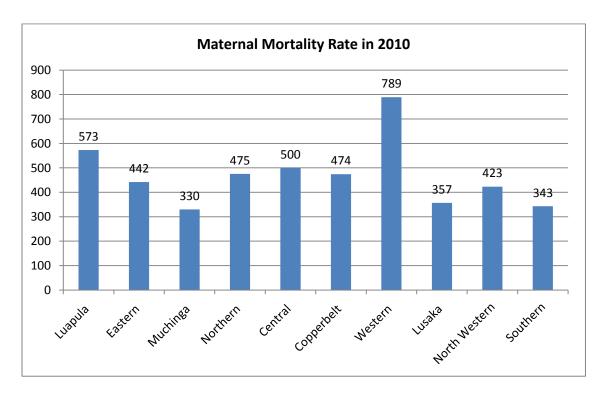
The Child Survival Call to Action convened in June 2012 by the Governments of Ethiopia, India and the United States, together with UNICEF, to examine ways to spur progress on child survival committed countries to lowering child mortality rates to 20 or fewer deaths per 1,000 live births by 2035 – an important milestone towards the ultimate aim of ending preventable child deaths. Governments (including Zambia) and partners emerged from the Call to Action with a revitalized commitment to child survival under the banner of *A Promise Renewed (APR)*. Committing to Child Survival: A Promise Renewed, affords an opportunity to rejuvenate efforts in reducing under-five mortality and to reduce on the divides and disparities in coverage for identified high impact interventions.

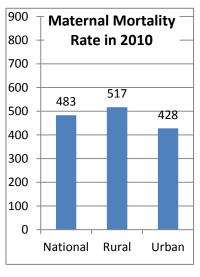
2.2 Maternal Mortality

The maternal mortality ratios rose markedly from an estimated 200 per 100,000 live births in 1992 to 729 deaths per 100,000 live births in 2001 – 2002 [ZDHS]. In 2007, this ratio reduced to 591 per 100,000 live births. The MDG target set for MMR by 2015 in Zambia is a reduction to 159. The factors that are associated with the high MMR in Zambia include challenges to accessing services (1st and 2nd delays, cultural factors, poor referral system, transport difficulties, and other factors). Poor antenatal coverage contributes to high levels of maternal mortality. The antenatal care attendance for at least one visit at a health facility is above 92%.

Figure 1: Trends in the maternal mortality ratio and births attended by skilled birth attendants in Zambia







Western, Luapula, Central and Northern provinces have the highest maternal mortality rates in the country. The rural locations experience higher levels of maternal mortality as compare to the urban areas.

2.2.1 Causes of maternal mortality

The direct causes of maternal mortality in Zambia are post-partum haemorrhage (34%), sepsis (13%), obstructed labour (8%), pregnancy hypertensive disorders – eclampsia (5%), and abortion complications (4%). Indirect causes include malaria (11%), HIV (10%) and others (17%) [3]. The category of others comprises of an assortment of causes that includes chronic malnutrition and anaemia, TB, respiratory diseases; as well as the non-communicable diseases, such as cardiovascular disease (e.g. high blood pressure) and diabetes [4 ,5,6,7,8]. Interventions to reduce maternal mortality will need to focus on addressing both the direct causes of maternal mortality, as well as the indirect causes. In addition to these causes, maternal mortality is also attributable to gaps in the continuum of care from pre-pregnancy, through to pregnancy, child birth, and the immediate postnatal period. [9].

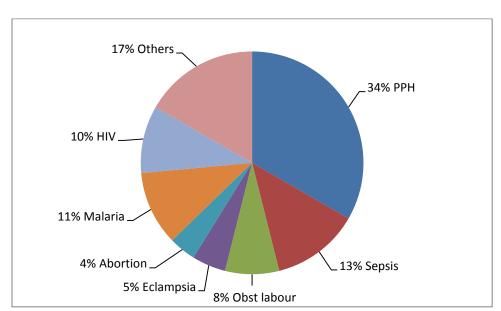


Figure 2: Causes of maternal deaths (2008)

2.2.2 Factors contributing to maternal morbidity/mortality

2.4.1 The three delays

The major factors contributing to the resulting high MMR in Zambia include the three delays in accessing health services. These are:

Delay in decision to seek care

- Low status of women
- Poor understanding of complications and risk factors in pregnancy and of when medical interventions are needed
- Previous poor experience of health care
- Acceptance of maternal death
- Financial implications

Delay in reaching care

· Distance to health centres and hospitals

ii HIV prevalence in adult men and women is estimated to be 14.3% based on the 2007 ZDHS.

- Availability of and cost of transportation
- Poor roads
- Geography e.g. mountainous terrain, rivers

Delay in receiving adequate health care

- Poor facilities and lack of medical supplies
- Inadequately trained and poorly motivated medical staff
- Inadequate referral systems

Most maternal deaths occur at home or on the way to the health facility. The 2007 Zambia DHS, found that a large proportion of maternal and neonatal deaths occur during the first 24 hours after delivery. Early neonatal deaths contributed to as much as 71.1% of all newborn deaths.

Poor access to postnatal care

Prompt postnatal care is important for both the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her baby. It is recommended that all women receive a postnatal check within 6 hours of delivery at a health facility. Subsequent visits are recommended at six days and six weeks after giving birth. It is expected that most women who have given birth at home should at least be reviewed by a midwife within 48 hours[10].

2.4.2 Poor Maternal Nutrition

This is a serious contributing factor to poor health status. As many as 19.2 percent of women of reproductive age have a low body mass index (BMI <18.5; 2007 ZDHS), 2.5% have very short stature (less than 145cm) and up to 50 percent of pregnant women tend to be anaemic. Low pre-pregnancy BMI and short stature are risk factors for poor birth outcomes and obstetric complications.[11].Underweight in women is also associated with micronutrient deficiencies taking the form of anaemia (29% among non-pregnant women) and Vitamin A deficiency [12]. However, the prevalence of anaemia among pregnant women is higher (46.9%) [13 , 14]; resulting from a combination of micronutrient deficiencies (iron, folic acid, vitamin A), as well as malaria and HIV infections [15 , 16 , 17]. Anaemia is a predisposing factor to maternal deaths resulting from post-partum haemorrhage and sepsis. Overweight and obesity are risk factors for nutrition-related non-communicable diseases such as type II diabetes, cancer and heart diseases and 5.4 percent of women are overweight/obese (BMI > 30 kg/m 2) 10 . Diabetes and hypertension contribute to the risk of maternal mortality. , while

2.5 Neonatal, Infant and Under-5 Mortality

The ZDHS 2002, 2007 has reported a significant decline in overall child mortality rates. The neonatal mortal rate (NMR) however, decreased minimally from 37 per 1000 live births in 2002 to 34 per 1000 live births in 2007. The infant mortality rate has decreased from 95 to 70 per 1000 live births. Under five mortality has decreased from 168 to 119 per 1000 live births during the same period. The NMR accounts for 27% of the U5MR and is a reflection of maternal health during pregnancy, delivery and the post partum period.

2.5.1 Causes of neonatal and under five mortality

The majority of neonatal deaths (80%) are due to sepsis, prematurity and asphyxia. Beyond the neonatal period, the 2010 Annual Health Statistical Bulletin of the Ministry of

Health cites pneumonia, malaria and diarrhoea as leading contributors to the high under-5 mortality in Zambia (figure 3)ⁱⁱⁱ.

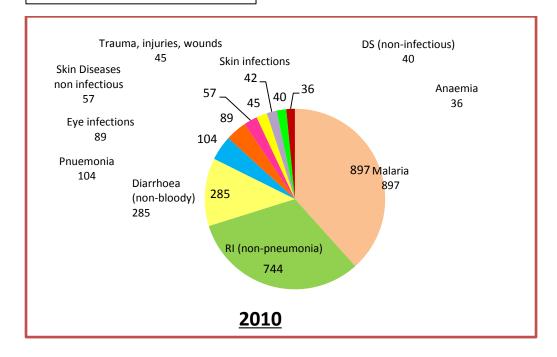
Diarrhoea is one of the leading causes of death in Under 5 children in Zambia (16%). The problem is related to the lack of development in communities and families. The lacking of sanitation and water facilities are major concerns. Rotavirus vaccination has been introduced in the country. Expanding the pilot experience is important, because rotavirus vaccine will decrease a huge burden of diseases and avert thousands of preventable deaths. To reduce diarrhoea will be hygiene, health education, water supply improvement, hand washing with soap and the improved care a community level (iCCM) and health facilities (IMCI), ensuring quality of care and essential and basic commodities (ORS, Zinc). The expected change is that 67% of children under 5 that take ORT and fluids will increase to 90%.

Pneumonia is also a leading cause of death in Under 5 children in Zambia (15%). Pneumococcal vaccination is to be launched. This will reduce the number of deaths from pneumonia.

Figure 3: Trends in leading causes of deaths among children under 5 at health facilities (Health Centres and Hospitals) in Zambia 2006-2010

INSERT LINE GRAPH HERE

10 major causes of morbidity Incidence per 1,000 under5 population



With a relatively high prevalence of HIV/AIDS, perinatal transmission of HIV and its progression to AIDS is another contributor to the under-5 mortality rate in the country.

Factors contributing to under five mortality

Poor Nutrition

_

iii Chapter 3 describes the maternal and neonatal mortality attributable to lack of coverage of high impact interventions

Available data shows that child malnutrition (manifesting as stunting – 45%, wasting – 5%, underweight – 15%) contributes up to 42 % of all under five deaths in Zambia. In terms of outcomes, child malnutrition manifests as Vitamin A deficiency (54%), anaemia (53%) and iodine deficiency (4%) [18 , 19 , 20 , 21].

Other factors

The other factors that contribute to under five mortality are inadequate essential newborn care (due to low postnatal care); morbidity due to malaria, pneumonia and diarrhoea.

Chapter 3: Bottleneck Analysis for MNCH Interventions

Background to Bottleneck Analysis

Currently, the high impact MNCH interventions are not universally accessible. Implementation has omitted such effective interventions. The family and community package tends not to be effectively linked with the health system. These omissions in implementing effective MNCH interventions result in uneven achievements of impacts /outcomes. There is an urgent need to concentrate on adequately linking the community initiatives to the facility based interventions if the gaps in the continuum of care model is to be reduced.

In spite of the observed omissions in implementation of the complete MNCH packages, significant progress has been made in child survival globally and within the country. However significant numbers of children continue to die from largely preventable and treatable causes (figure 5).

Figure 4: Causes of Under-5 Mortality in Zambia in 2011 (source: Child Health Epidemiology Reference Group)

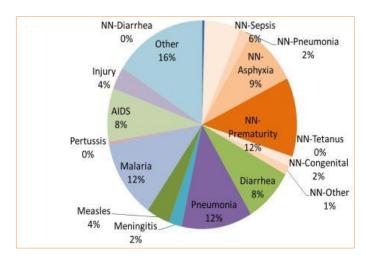
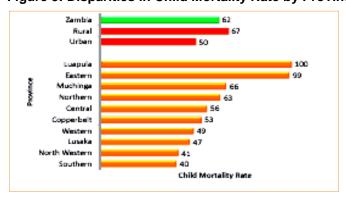


Figure 5: Disparities in Child Mortality Rate by Province, Zambia 2010



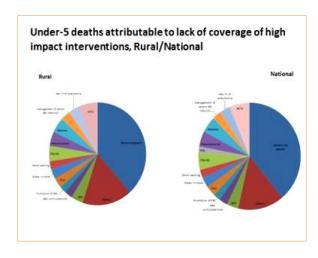
There are wide divides and disparities that exist within the country between the urban and rural populations and among the marginalized populations in these localities (figure 8). The rural areas have a child mortality rate of 67 per 1000 live births as compared to the urban locations whose rate is at 50 per 1000 live births. Furthermore, provinces with the highest mortality rates are Luapula, Eastern

and Muchinga. Except for the provincial capitals, these provinces are predominantly rural.

Under Five deaths attributable to lack of adequate coverage

The lack of adequate coverage with high impact interventions was analysed in order to gauge how the low levels of implementation of each intervention contributes to the overall under five mortality. The figure below describes the under-5 deaths that are attributable to the low of coverage of high impact interventions in the rural areas as compared to the national picture in this respect.

Figure 6: Under five deaths attributable to lack of coverage of high impact interventions



For the most part there is minimal difference between the rural and national picture in the under-5 deaths attributable to low of coverage high impact interventions. One difference however, is that more deaths are attributable to the lack of adequate coverage for Insecticide Treated Nets/Indoor Residual Spraying (TN/IRS) for the whole country when compared to the rural areas. This pattern is observable to a lesser degree for interventions related to pneumonia and measles.

Evidence points to five strategic shifts that would accelerate progress globally and in countries in order to achieve this. This country Road Map is therefore premised on these strategic shifts that entail increasing efforts in those geographical locations where most under-five deaths occur:

- i) prioritizing budgets and committing to action plans to end preventable child deaths;
- ii) refocusing country health systems on scaling-up access for high burden populations in underserved populations, in the rural and urban/peri-urban low-income groups;
- iii) targeting the biggest opportunities for impact, such as neonatal conditions,
- iv) scaling up and sustaining the demand and supply of highest impact, evidence-based solutions and investing in innovation to accelerate results;
- v) creating a supportive environment through the education of girls and women, empowering women to make decisions, enacting smart policy for inclusive economic growth and addressing environmental factors, such as sanitation and hygiene.

A critical component of these strategies is the aspect of mutual accountability which constitutes creating transparency and mutual accountability for results from global to local levels, unifying child survival voices through shared goals and common metrics, investing in systems to capture data, monitor and evaluate progress and share knowledge and sharing regular updates to reflect the current state of knowledge and progress.

This Road Map also offers new and revitalised implementation approaches that incorporate a focus on changing the mind set on three fronts:

Evidence based country plans which involves sharpening government-led action plans and aligning development support with national strategies

 Transparency and mutual accountability which encompasses building on mechanisms to monitor and report progress; compiling and disseminating annual national I progress reports and promoting accountability through provincial and national fora Communication and social mobilisation which comprises mobilising the child survival community around ending preventable deaths; disseminating new data, modeling innovative approaches and sharing lessons learned and celebrating national progress

Identifying the potential impact of scaling up interventions

Generating evidence-based country plans which involves sharpening government-led action plans for appropriate expansion of child health interventions in our setting, entailed that an evaluation be done to identify how much impact can be achieved by scaling up different child survival interventions. The Lives Saved Tool (LiST), currently in use worldwide, was used for this purpose. It permits the estimation of additional number of lives saved when scaling up key interventions and provides a user friendly tool for child survival planning in developing countries. It uses country specific health status data, current intervention coverage levels and estimates the sizes of interventions based on the best available evidence²² for desired impact levels. It assists in counteracting current emphasis on one-size-fits-all intervention packages, by suggesting which specific interventions are more likely to have an impact under different conditions. ²³ The results of the in-country LiST analysis are illustrated in figure 10 below.

Figure 7: Relative proportion of interventions needing additional effort to reduce U5MR in Zambia to 20 per 1000 live births by 2035

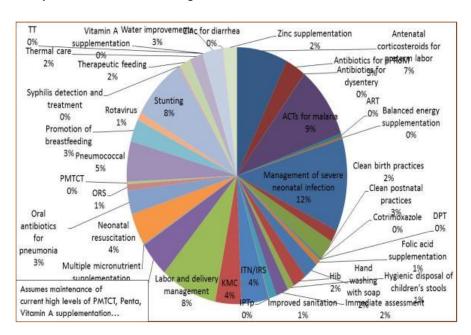


Figure 7 demonstrates the range of child survival interventions and the percentage contribution of each intervention to reducing mortality. For instance, management of severe neonatal infection would contribute towards a reduction in mortality of 12%, ACTs for malaria – 9%, labour and delivery management – 8% and so on. It was on this basis that packages of high impact interventions which would ensure attainment of targets were identified and prioritised in each programme area. In the domain of child health for example, the package of high impact interventions includes the Integrated Management of Childhood Illnesses/ Integrated Community Case Management –Artemisenin based Combination Therapy (IMCI/iCCM-ACTs) for Malaria, Oral Antibiotics for Pneumonia, Oral Rehydration Salts (ORS), Antibiotics for Dysentery, Zinc for diarrhoea, Expanded Programme of Immunisation (EPI) – Haemophilus influenza type B (Hib), Pneumococcal, Rota, Measles and Diphtheria Pertussus Tetanus (DPT); Malaria-ITNs/IRS; Paediatric Human Immune Virus (HIV)-Antiretroviral Therapy (ART) with Cotrimoxazole prophylaxis— a total of 8 interventions.

Results of The Bottleneck Analysis

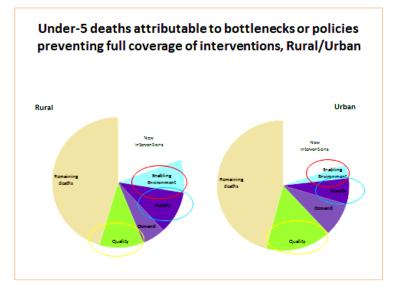
In order to best understand what has hampered progress in attaining adequate levels of coverage with high impact interventions, a bottlenecks analysis was performed using the modified Tanahashi model for identifying bottlenecks for service coverage (1978).²⁴ The bottleneck analysis looks at three supply-side determinants and two demand-side determinants that constrain the level of effective coverage possible to achieve for a selected intervention (tracer intervention) within the current health system. The determinants are availability of commodities, availability of human resources, geographical accessibility, initial utilization, continue utilization, and effective coverage level

A tracer intervention functions as a proxy for all the interventions in each of the four packages of interventions assigned to each service delivery mode. Analyzing "determinants of coverage" for each tracer through the use of a bottleneck analysis allows the identification of the health system bottlenecks that constrain the achievement of effective coverage level for the specific package of interventions. The logic of building interventions together, grouping them by sub-packages and conducting the bottleneck using one intervention as a "tracer" is that the coverage determinants for each intervention in the sub package are delivered in a similar manner. The analysis of constraints on the tracer is then able to function as a proxy for the analysis of system barriers facing other interventions in the same sub-package. Three major criteria for choosing a tracer for a bottleneck analysis included: The tracer was selected only if data are available for each of its six determinants: availability of commodities, availability of human resources, geographical accessibility, initial utilization, continue utilization, and effective coverage level.

- 1. The tracer is an internationally recommended intervention, with proven and quantified efficacy on mortality reduction.
- 2. The tracer is nationally relevant.
- 3. The tracer should be representative of the other indicators within its intervention group, in terms of facing similar health system constraints at the chosen serviced delivery level, for accurate assessment of costs in overcoming system bottlenecks.²⁵

The bottleneck analysis was performed for 4 determinants of coverage namely, an **enabling environment** (which entails looking into social norms, legislation/policy budget/expenditure and management/coordination), **supply** (pertaining to availability of commodities, availability of human resource and geographical), access to delivery points, **demand** (initial utilisation of services and timely continuous utilisation) and **quality of services** (which has to do with effective coverage or good quality services). The ensuing text illustrates the process of the bottleneck analysis using a child health tracer intervention (the treatment of pneumonia). A similar process was followed for maternal health high priority interventions, the results of which are documented below. The figure below illustrates the contribution made by these 4 determinants for rural and urban areas.

Figure 8: Under five deaths attributable to bottlenecks or policies preventing full coverage of interventions



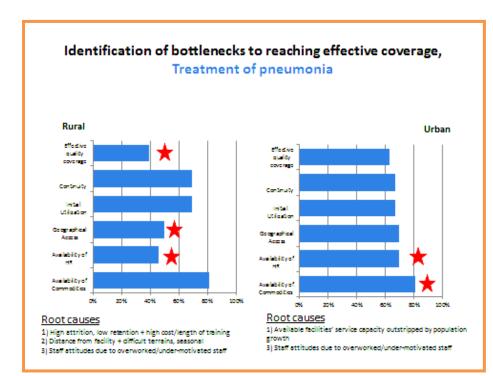
The analysis revealed that under-5 deaths attributable to bottlenecks or policies that prevent the full coverage of interventions were mainly in the domain of an enabling environment; supply and quality aspects which are more important in the rural locations than in urban areas Where bottlenecks were more around demand issues.

For each package of interventions, a tracer intervention was identified and

was analysed based on the above 4 coverage determinants. In the case of the child health package of interventions for instance, the treatment of pneumonia was the tracer intervention.

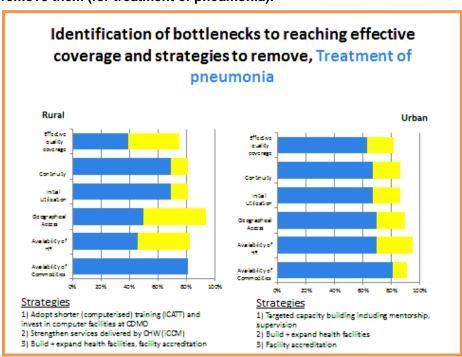
A comparison was made between urban and rural areas in the case of oral antibiotics for (treatment of) pneumonia. The root causes for the bottlenecks were high staff attrition; low human resource retention with high cost/length of training; long distances from the health facility and difficult geographical terrains together with seasonal factors; and health staff attitudes consequent to overwork/under-motivation for the rural areas. In the urban context, availability of commodities, the available service capacity of the health facilities being outstripped by population growth and staff attitudes due to overworked/under-motivated staff were the root causes. The figure below illustrates this analysis. The items bearing an asterisk represent the bottle necks.

Figure 9: Identification of bottlenecks to reaching effective coverage (for treatment of pneumonia)



For each tracer intervention, strategies that would mitigate for the bottlenecks and enable adequate coverage levels were pinpointed. The figure below illustrates this aspect. The portion in yellow demonstrates the level of effort required to get to effective coverage levels.

Figure 10: Identification of bottlenecks to reaching effective coverage and strategies to remove them (for treatment of pneumonia):



By removing the bottlenecks and implementing the strategies, a proportion of child deaths will be averted. For the rural areas, implementing strategies in addressing issues of geographical access. effective quality coverage requires and ensuring availability of

human resource require relatively more effort than continuity of use of services for instance. In the urban context, this latter strategy contributes more necessary effort. The figure below portrays the relative proportion of interventions that require additional effort to reduce child mortality overall.

It is envisaged that implementation of adequate levels of coverage of high impact interventions will translate into reductions in under-5 mortality. Additional efforts in managing severe neonatal infections (12%), ACTs for malaria (9%), labour and delivery

management (8%) and Kangaroo Mother Care (KMC, 4%) would contribute towards a 33% effort that is necessary to achieve targets in these four interventions. This added effort will yield the expected impact as illustrated in the figure below for urban and rural areas. The solid portions of the chart represent the current level of effort, whilst the shaded area signifies the additional input required to attain effective coverage. For treatment of pneumonia the doubling up of efforts would achieve the necessary coverage.

Figure 11: The proportion of under-5 deaths prevented by intervention through implementing strategies

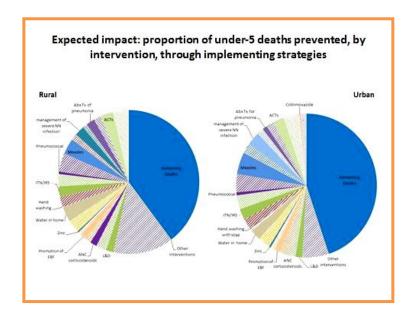


Figure 12: Proportion of under-5 deaths prevented by removing bottlenecks or implementing policies through strategies

Implementing strategies to remove bottlenecks in the area of quality and demand in the rural areas and an enabling environment and supply aspects in the urban locations will contribute largely to reductions in under 5 deaths.

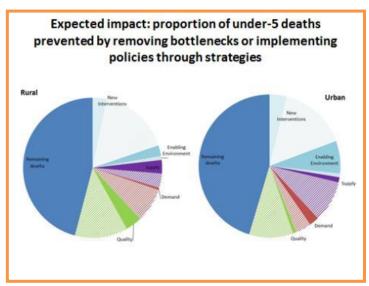
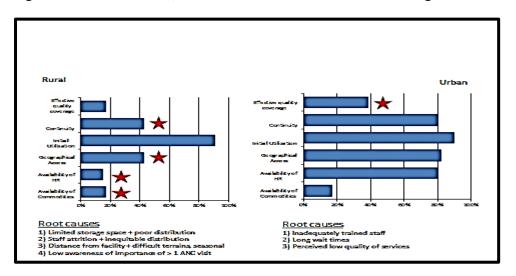
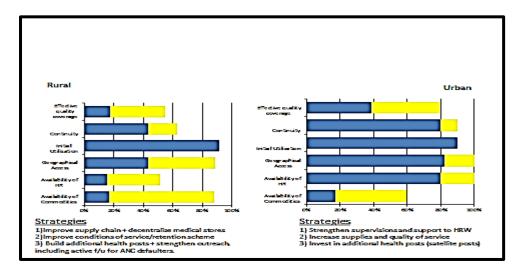


Figure 13: Antenatal care, Identification of bottlenecks to reaching effective coverage



The bottlenecks to achieving adequate antenatal coverage were identified as continuity, geographical access, availability of human resource and availability of commodities for rural centres and effective quality coverage for urban locations. The figure below illustrates the strategies and the additional effort required to achieve effective ANC coverage. For the rural areas availability of commodities together with improvement of geographical access would result in the desired improvement. For urban areas, making improvements in effective quality coverage and availability of commodities would be important.

Figure 14: Antenatal care strategies to remove bottlenecks to reaching effective coverage



The figure below shows the bottlenecks to achieving effective coverage for skilled birth attendance at birth. In this respect, in both the rural and urban areas, Availability of commodities and availability of human resource are bottlenecks.

Figure 15:Skilled attendance at birth Identification of bottlenecks to reaching effective coverage

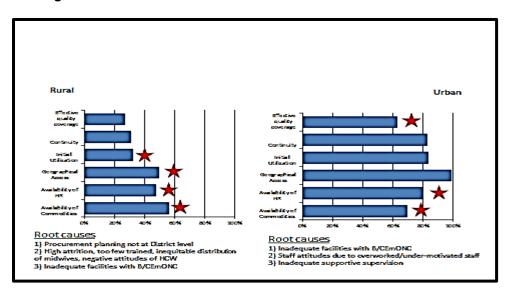
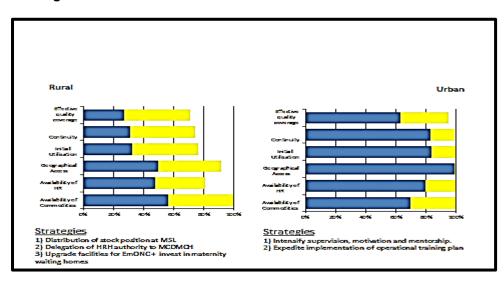


Figure 16 below, illustrates the strategies that need to be implemented in order to attain effective coverage for skilled attendance at birth.

Figure 16:Skilled attendance at birth, strategies to remove bottlenecks to reaching effective coverage



Relatively more effort (about 40%) is necessary for nearly all areas in the rural locations as compared to the urban centres.

The bottleneck analysis has been performed for other tracer interventions in maternal health and also in the other priority strategic areas namely, nutrition and water and sanitation. Addressing the identified bottlenecks in the scaling up of implementation of high impact interventions, will put the national MNCH programme on the right footing for attaining adequate effective coverage.

Chapter 4: Strategic Framework

Maternal, Newborn and Child Health Strategic Plan: 'The Road Map'

This enhanced plan builds on existing efforts being undertaken by the Ministry of Health and the Ministry of Community Development Mother and Child within existing national health programmes, interventions and strategies. The call for enhanced actions to reach the set MDG targets follows a growing consensus on the kinds of interventions that have proven effective in contributing to the reduction of maternal, newborn and child deaths.

The framework proposed by the Paris Declaration along with the signing of the global IHP+ compact serve as a further indicator of commitment to creating the right environment for sustained and successful partnerships in health and in MNCH.

The approach advocated in this strategic plan centres on implementing the effective high impact interventions using a revised focus that stresses:

- a) Implementing the continuum of care approaches (emphasizing linkages between the pre-pregnancy phase, pregnancy, birth, postnatal, the newborn and childhood periods) and the points of service delivery, that is from home to health facilities.
- b) Using an integrated approach that ensures engagement and synergy between the health system, communities, other line ministries and the private sector.
- c) Strengthening partnerships with the donor community and the private sector for sustainable long-term predictable financing to achieve universal coverage.

The selected high impact interventions have been defined and grouped according to phases of the life-cycles. For each intervention there are suggested strategies and activities to be undertaken (in an integrated manner, but all contributing to progress on one selected indicator / intervention):

- (i) By the health system (ensuring internal linkages and synergy between different departments/units in the Ministry of Community Development, Mother and Child Health and Ministry of Health and),
- (ii) At the community level, and
- (iii) Through multi-sectoral approaches.

Thus there are packages of interventions for each phase of the life-cycle, as well as packages of strategies and/or activities within each selected intervention. This makes it possible for funding entities with different capacities and mandates to choose and fund appropriate programmes. A costing related to the strategies prioritised for the removal of bottlenecks in the priority strategic areas (child health, maternal health, nutrition and water and sanitation), has been systematically estimated and included in the road map budget based on estimated effect size of the strategy and future coverage targets (see Chapter 8).

Required paradigm shifts

The operationalisation of this Road Map requires that there be a paradigm shift in the way of 'doing business', to help resolve policy conflicts, and replace such policy conflicts with 'win-win' strategies. This requires putting focus on impacts realized rather than on the magnitude of inputs and processes. [²⁶].

Zambia was identified as one of the 68 countries which are in need of accelerated actions to attain their set MDG targets according to The Cape Town Countdown to 2015 report 2008. This report further suggested that it could take up to 10 years of focused implementation of known high impact interventions to produce desired MDG impacts. The

2010 countdown report indicates that insufficient progress has been made in attaining MDG 4 and 5.

The Zambia Countdown to Millennium Development Goals on maternal and child health prioritizes key interventions to be undertaken by 2015 to include the scaling up of Maternal health interventions, namely Family Planning; Adolescent reproductive health FANC; Emergency Obstetric & Neonatal Care (EmONC) services; Maternal Death Review (MDR) committees; community involvement through Safe Motherhood Action Groups (SMAGs), (g) Prevention of Mother to Child Transmission of HIV (PMTCT); and Reproductive Health Commodities Security (RHCS) [27]. For child health interventions Essential newborn care (at facility and community levels); Expanded Programme of Immunization; IYCF; IMCI (including iCCM); and ETAT.

General Objective

The general objective of this Road Map is to accelerate the reduction of maternal, newborn and child mortality rates sufficiently in order to enable Zambia to achieve progress in achieving MDG targets.

Specific Objectives

The specific objectives are to:

- (i) provide skilled attendance during pregnancy, childbirth, and the postnatal period, at all levels of the health care delivery system,
- (ii) strengthen the capacities of individuals, families, communities, line Ministries, and the private sector to share responsibility and play their role in efforts to significantly improve maternal, newborn and child health (MNCH) outcomes for universal coverage to attain the set MDGs. The accelerated implementation of high impact interventions will occur within in a period of 4 years up to 2016.

Advancing the concept of equity in the Zambian context

With previous programming in MNCH, the focus has been on distribution of inputs (whether to districts, provinces or facilities). The equity focus has not been taken beyond this, in terms of how the inputs reach intended beneficiaries. This Road Map focuses on both the targeting the main beneficiaries of services (pregnant women, infants and children) as well as where they live (whether located in rural, urban or hard-to-reach areas). Thus there is prioritization of vulnerable populations. The following table shows the necessary paradigm shifts towards ensuring a continuum of care for mothers, neonates and young children.

Required paradi	am shifts towards	a continuum of c	care for mothers.	neonates, and children

conflicts		
Competing voices of	1. Mothers, neonates, and children all benefit from essential packages in a	
advocates for health	continuum of care	
of women and	2. MDG 4 and 5, for child survival and maternal health, respectively, are both	
children, with those	intimately linked with health of neonates	
for newborn babies	3. More attention on health of mothers, neonates, and children, but need for	
not heard	financial investment	
	4. Global health-policy shift; organisations with disparate agendas formed the	
	Partnership for Maternal, Newborn and Child Health in 2005	
	Systematic, phased strengthening of health systems (including	
Facility-based vs.	community-based care) with emphasis on Primary Health Care which	
community care;	focuses on universal coverage of essential packages for health of	
	mothers, neonates, and children	
Vertical vs. horizontal	2. Integration between essential packages for health of mothers, neonates,	
programming	and children and integration of these packages with other	
	programmes, such as those for HIV, malaria, and vaccine-preventable	
	diseases	
	3. Community-based approaches to promote healthy behaviours and	
	demand for skilled care; to deliver selected essential interventions to	
	under-serviced populations; and to improve supply and quality of clinical	
	care	
Global tracking vs.	1. Tracking of MDGs, including vital statistics such as births and deaths,	
national and district	funding for health, and the coverage and equitable distribution of	
needs	essential Interventions	
	2. Promotion of accountability of governments and partners, with a focus on	
	results	
	National stewardship with decentralisation and district management	
Competing interests	Country-led action with support from donors harmonised to accelerate	
of many partners,	progress, and broader partner inputs such as professional and non-	
donors, and	governmental organisations, in the spirit of the Paris Declaration	
governments		
Source: Kate J Kerber,	Joseph E de Graft-Johnson, Zulfiqar A Bhutta, Pius Okong, Ann Starrs, Joy E	

Lawn; Continuum of care for maternal, newborn, and child health: from slogan to service delivery.

Lancet 370: 1358-69 (2007)

Vision

Universal and equity of access to cost-effective quality MNCH care services as close to the family as possible and contributing to creation of a vibrant and entrepreneurial population to attain Zambia's socioeconomic vision 2030

Mission Statement

A two-pronged approach is advocated as follows:

- 1) To bring about a paradigm shift and thereby implement selected known effective MNCH interventions in an integrated manner in order to accelerate the reduction in morbidity and mortality associated with maternal, newborn and child health.
- 2) To ensure integration as well as maximize benefits from teamwork, resources and comparative advantages of all stakeholders within the health sector, the community, international partners and the local business community (the multi-sectoral domain).

Goal

To attain set 2016 targets by accelerated reduction of maternal, newborn and childhood morbidity and mortality.

Objectives

The following are the objectives set for this MNCH Strategic Plan

- a) To reduce maternal mortality from 591 (in 2007) to 159 per 100,000 live births by 2016
- b) To reduce neonatal mortality from 34 to 20 per 1,000 live births by 2016
- c) To reduce Under-5 mortality rate from 119 to 63 per 1000 live births 2016

Key Strategies to be implemented

The key strategies that will be implemented have been based on the results of the bottleneck analysis. Below is an elaboration of the selected strategies:

Advocacy and Resource Mobilization

- Advocacy efforts will focus on raising the prioritization of MNCH services in the development agenda; emphasizing the following issues:
- Mindset change "Pregnancy, the newborn and childhood periods are not diseases to warrant dying. They are mere physiological states of function with an associated degree of vulnerability to ill-health. As such, no one should be allowed to die for passing through these phases of the life-cycles". This calls for enhanced advocacy efforts for increased allocation to the health budget.
- Increasing the budget allocation for MNCH interventions including FP and nutrition; with the target being to mobilize resources from internal and external sources in order to complement the Government's efforts towards reducing maternal, newborn and childhood deaths
- Revision of laws, legislations and policies that hinder effective provision of maternal, newborn and childcare services
- Improving the production, employment, deployment and retention of a skilled health work force at all levels
- Developing of and pushing for effective policies and strategies as well as effective implementation of MNCH interventions for equity and universal coverage
- Institutionalize the Maternal Death Reviews and newborn deaths audits make maternal deaths to be made notifiable events

Regular caucus with parliamentarians and local traditional leaders

Health System Strengthening

Health system strengthening for MNCH will comprise of improving service delivery by:

- Improving the capacity of MNCH programme management at all levels including planning for implementation, monitoring and evaluation
- · Increasing the levels of health workers,
- Adopting Results Based Management (RBM) approaches,
- The health management information system (HMIS),
- The logistics management of medical products, vaccines and technologies,
- Increased financing to comply with Abuja target of 15%,
- Improving the infrastructure for service delivery, and
- Strengthened planning, leadership and governance arrangements as well as managing the interpersonal relations among them, for more equitable and sustained improvements across the selected interventions to help achieve the set goals and impacts.
- Integrated outreach services to be supported and implemented
- Provide and maintain the necessary infrastructure, logistics and equipment to support the effective delivery of comprehensive MNCH intervention packages.

Capacity development

- The strategy aims to increase the number of skilled health workers, as well as the knowledge and skills of existing service providers and supervisors so that quality care is provided (with emphasis that includes equipping skilled health workers with appropriate social skills - in addition to using their technical skills)
- Developing user friendly protocols, guidelines and mechanisms for ensuring steady availability of essential MNCH and FP commodities at all times.
- Strengthening the availability and capacity of the Basic and comprehensive EmOC facilities to ensure skilled availability of essential maternal and newborn services at dispensaries, health centres and hospitals
- Impart and strengthen skills for planning and management of MNCH and FP services, including nutrition, to District Health Officials.

Referral System

- Referral systems will be improved to ensure equitable access to quality MNCH services by making available appropriate transportation and improving linkages between community and referral facilities
- Communications equipment (e.g., radio calls and mobile phones) will be installed in hospitals, health centres and at selected health posts.
- Community structures for handling MNCH emergencies will be established and oriented on emergency preparedness and response.
- Mothers' waiting shelters will be established, as perceived appropriate.
- The Village Banking concept will be introduced in selected districts for sustainability of the referral system. Neighbours come together in financial support groups called "Village Banks." Individuals borrow working capital for their microenterprises, and because they have little to offer for collateral, the group guarantees those loans. As businesses grow, families earn more, purchase more nutritious foods, and parents are better able to send their children to school. After a year or more, many Village Bankers make significant improvements to their businesses, their homes, and their lives. Because neighbours support each other while growing their businesses, Village Banking helps invigorate entire communities (see annex 2).

Research, Monitoring & Evaluation

 Capacity building for conducting operational research will be strengthened at all levels. Districts will be encouraged to identify areas for priority research.

- Essential monitoring tools and indicators will be updated and mainstreamed into the HMIS. Data will be generated periodically to monitor the milestones and improvement of services provided at health facilities.
- The DHS/census and other special surveys, will be strengthened to include subanalysis related to MNCH in order to complement or validate MNCH outcomes.
- Periodic reviews and reporting will be carried out every two years to assess progress. A mid-term review of this roadmap will be conducted, in 2014 and an end of term review will be conducted in 2016 to report on the attainment of the MDGs.

Community Mobilization

Communities will be mobilised to participate fully in initiatives aimed at improving maternal, newborn and child care, with a focus to achieve positive outcomes along the '9 domains' of community empowerment (iv). The following strategies will also help to contribute to this goal:

- Educating and sensitising communities on community-based MNCH interventions
- Mobilizing resources at the village level for MNCH including emergency referral as well as building and strengthening health facilities.
- Orienting the facility governing committees to the MNCH Strategic Plan to ensure effective implementation of the plan at the health facility and community levels
- Institutionalizing 'village health days'
- Establishing community champions/local leaders

Behaviour Change Communication (BCC)

- Use of BCC approaches will be intensified towards adoption of positive behaviours for quality MNCH including nutrition and adolescent sexual reproductive health.
- The BCC activities will target community-based initiatives particularly in addressing birth preparedness, with an emphasis on birth planning for individual couples, transport in case of emergency, and promotion of key MNCH practises at the household and community levels and
- Use of targeted mass campaigns.
- Having traditional leaders to champion MNCH

Fostering Partnerships and Accountability

Part of the paradigm shift that needs to occur in implementing MNCH interventions is a change on the front of partnerships and accountability. Transparency and mutual accountability now which encompasses building on mechanisms to monitor and report progress; compiling and disseminating annual global progress reports and promoting accountability through regional & global forums.

Effective implementation of this MNCH Strategic Plan will require galvanizing political will and mobilizing resources for long-term sustainable MNCH interventions.

iv Consensus has emerged and identified the following 9 domains of an empowerment programme as a basis for creating 'capable communities'. This happens if the programme: improves stakeholder participation; increases problem assessment capacities; develops local leadership; builds empowering organisational structures; improves resource mobilisation; strengthens links to other organisations and people; enhances stakeholder ability to 'ask why'; increases stakeholder control over programme management; and creates an equitable relationship with outside agents.

Guiding principles

Implementation of the roadmap will be governed by the following key principles:

Equity of access: Equal access to IMCI services for all children of Zambia,

regardless of their location, gender, race, social, economic and

cultural status.

Affordability: Affordable healthcare services to all children with emphasis on

Community level IMCI interventions taking into account the

socio-economic status of the people.

Cost-effectiveness: In line with the health reforms, IMCI will be implemented using

the most efficient and cost-effective delivery of healthcare

services, always ensuring value for resources used.

Accountability: Accountability for the resources utilized to implement IMCI

services and to the communities served at all levels of

healthcare delivery.

Partnerships: IMCI interventions need to reach and converge at household

and community level to achieve substantial improvement in child survival, growth and development. Partnership with all the stakeholders, taking full advantages of the synergies provided

by each stakeholder group will be given prominence.

Decentralization: Devolution of key responsibilities, including planning,

organization, coordination and control of IMCI activities from the centre to the districts, health centres and communities where

these services are provided.

Leadership: Appropriate, efficient and effective leadership in the

implementation of the Strategic Plan, at all stages of the

healthcare delivery system.

Continuum of care approach: This approach calls for establishing strong linkages between interventions previously provided in isolation for maternal, newborn and child health services; recognizing that the health of the mother is directly linked to the health of her child, and vice-versa. As the mother and /or child passes through their MNCH life cycles the effective interventions should incorporate a phase to prepare for what is expected for accessing the next phase of care as well as preparing sufficient hand-over notes for service providers in the next life-cycle phases to ensure continued quality care services.

Human rights, health rights with a gender and equity focus

As humans, mothers and their offspring have a right to life, and the health system exists to ensure and protect this right. The passage through the life cycle phases of motherhood and childhood should never be a death trap. The country's health system, and a strengthened health system for that matter, should therefore ensure that the 'physiological vulnerability' of mothers and their off springs does lead to avoidable sickness and deaths. In addition, a health rights approach in implementing interventions stresses that "everyone has the right to access the highest level of care that a country's health system can afford, without discrimination by gender, age, geographical location, poverty, religion, etc". Hence the selected effective interventions will be scaled in coverage to ensure universal access by all, irrespective of gender, age, geographical location, poverty, religion, etc. The proposed 3-Dimensional focus should help to ensure that the right of communities to participate in making decisions that affect their health and well-being is upheld and implemented.

Gender will be considered in its comprehensive form, ensuring attention to the expected roles of women as well as the supportive roles men should play to ensure effective outcomes from the selected MNCH interventions. The Ministry of Health will work closely with the Ministry of Gender to identify health and MNCH related issues that need to be addressed through broad harmonization of government policies. Equity should be seen in terms of the target groups for interventions, irrespective of where they live and with a focus to progressively reach everyone in need over time. The equity focus should recognize that women and children are vulnerable, especially if of poor socioeconomic status, from rural areas, and if living in hard-to-reach areas. This will require going beyond the usual attention in terms of how the delivery of services is planned, vulnerable needy recipients of services identified and how the high impact MNCH interventions are targeted to reach such vulnerable population groups.

Progressive realization of rights

It is recognized that the need to fulfill the above rights must be undertaken within the available resources that Zambia can afford and reaching all populations. In recognition of this reality and to ensure attaining the MDG targets set for 2015, the strategic approach used will implement high impact interventions to attain the MDGs by 2015; but always being conscious that there are still some populations that have not been reached. Between 2015 and 2019, the selected interventions will be implemented to achieve universal access and coverage (aiming for between 80% - 95% coverage throughout each district). The equity-focus in the vision and mission statements speaks to this promise.

Universal coverage: As long as there is someone out there that is in need of MNCH services, and has not been reached today; we should not rest but keep increasing coverage till everyone is eventually reached with these effective interventions.

Partnerships

The MNCH partnerships will tap on the experiences gained in the early part of the Zambian health reforms and build on these through continued innovations. Existing partnerships will be strengthened to ensure that there is:

- (i) gender equity
- (ii) integration in the implementation of interventions and avoid policy conflicts
- (iii) evidence-based decision-making in implementation
- (iv) complementarity rather that competition in order to ensure equitable access
- (v) an equitable distribution of benefits
- (vi) resource mobilization
- (vii) commitment and coordination.

Division of labour (Roles and Responsibilities):

At each level of implementation there will be a focus on division of labour and shared roles in planning, implementation as well as in monitoring and evaluation of activities; taking advantage of comparative advantages and desire for synergy to maximize gains.

Implementation

Implementation will start in a progressive manner to accommodate learning and health system strengthening. The initial phase will have targets set to achieve the set MDG targets for 2016. It is expected that the latter part (after 2016) will achieve faster results to reach universal coverage goals within a 4-year implementation framework proposed for Zambia's MNCH Road Map.

Chapter 5: Implementation Arrangements

This MNCH Strategic Plan is designed to ensure accelerated reductions in the high rates of maternal, newborn and Under-5 child mortality in Zambia. It is recognized that it will be implemented in the context of human resources for health (HRH) shortage as well as the weak health system and infrastructure. The plan also takes into account experiences with grassroots (community) participation and Sector Wide Approaches (SWAps) and will expand and strengthen those that have shown, or have the potential, for improving MNCH outcomes.

The MCDMCH and MoH will work closely with other line ministries and government departments, cooperating partners and non-governmental organisations to implement interventions in MNCH.

The Governance Plan of Action (of 2009) stands out as a good example of how mutual accountability can be strengthened – a central component in multi-stakeholder partnerships for development. Implementing this plan requires sustained engagement and focus, while consolidating on gains made and addressing new challenges in a spirit of give and take.

Other new and promising initiatives to help accelerate the attainment of set MDG targets in Zambia

Cumulatively, an enabling environment has been created from various initiatives undertaken by different partners working in health. The Zambia Health Worker Retention Scheme (ZHWRS) for instance is helping to retain and redistribute skilled health workers to needy areas, despite the severe HRH crisis faced. Similarly, other Performance-Based Financing (PBF) initiatives undertaken by various partners and government are contributing to quality delivery of interventions.

The above initiatives are not without challenges. For example, due to inadequate funding the ZHWRS has funding for 1,650 health workers out of the estimated 11,000 health care workers who could benefit from it. The other challenge is how to ensure that such initiatives benefit all aspects of service delivery. These initiatives can be implemented in such a manner that skilled midwives are available where they are needed. This MNCH Strategic Plan will benefit from these on-going innovations for addressing and overcoming some challenges in the implementation of MNCH interventions.

Packages of interventions for Reproductive Health, Maternal, Neonatal and Child care (RH/MNCH)

This document describes the key effective interventions for RH/MNCH care organised in packages across the continuum of care from pre-pregnancy, through pregnancy, childbirth, postnatal care and care of the child. These packages will apply at community level, the facility levels and through multi-sectoral stakeholder support. These packages will provide guidance on the essential components needed to assure quality care from high impact interventions (see Chapter 6).

Specific Roles and Responsibilities at different levels

The following are the roles and responsibilities of stakeholders in the MNCH:

Ministry of Health and Ministry of Community Development, Mother and Child Health

Will take the lead to:

- Mobilize required resources,
- Raising awareness and advocating for action on MNCH interventions,
- Mobilize the required high level and all-round political will to raise the prioritization of MNCH programmes to attain the MDGs,
- Provide guidance and coordination for universal coverage levels on the selected interventions, and
- Providing an enabling environment for policy dialogue
- Monitor and evaluate progress.

The following specific (but not exclusive) roles and responsibilities will be played by different stakeholders at the national level (MCDMCH and MOH – HQs):

National level (MCDMCH-HQ)

The different directorates at MCDMCH HQ, under the supervision and coordination of the Permanent Secretary – will take on the following roles and responsibilities to help coordinate MNCH strategies at primary care level:

Department of Mother and Child Health

- Overall coordination, programme management, planning for implementation and the Monitoring & Evaluation of this MNCH initiative
- In partnership with MOH, developing and optimizing guidelines on MNCH packages relating to:
 - Mother Health
 - Newborn health
 - Child Health
 - Adolescent health
 - Nutrition
- Developing and optimizing guidelines on communicable and noncommunicable packages
- Research (surveillance and programme intelligence)
- Stakeholder mobilization and generating required political will

Department of Community Development

- Developing guidelines and systems for identifying the poor and vulnerable MNCH clients
- Facilitate the establishment of community mechanisms to support emergency transportation for MNCH services
- Promote parental support for adolescents to access information and health services

Department of Social Welfare

- Working with MoH and Ministry of Labour and Social Security, advocate to government for a National Social Protection Policy Framework
- Incorporate in the National Social Protection Policy the need for social cash transfers to needy MNCH clients for improved access to effective interventions

Department of Planning and Information (MCDMCH) and Directorate of Planning and Policy (MOH)

- Resource mobilization
- Resource allocation
- Sustaining MNCH partnerships at national level

- Advocate for gender issues to improve MNCH decision-making at all levels
- Support and promote rights-based approach to programming for MNCH
- Advocate for revision of laws, legislations and policies to improve MNCH

Department of Human Resource and Administration(MCDMCH) and Directorate of Human Resources and Administration (MOH)

- HRH development and distribution
- HRH management guidelines
- Creating Positive Practice Environments (PPEs) for motivation and retention of health workers
- HRH specialized training (in-service training)
- Incentive and motivation schemes for skilled health workers and midwives
- On-going research on HR

Directorate of Technical Support Services (MOH)

- MNCH Operational guidelines
- Capacity development in the health system
- Capacity development at community level
- Performance Assessments
- Monitoring of implementation

Directorate of Clinical Care & Diagnostic Services (MOH)

- Drugs and supplies
- Diagnostic services
- EmONC Equipment
- Referral systems

Provincial Directors of Health

- Disseminate the MNCH Strategic Plan to their respective districts and line ministries
- Incorporate MNCH activities into the Provincial Development Coordination Committee Plans (PDCCPs)
- Support capacity development in MNCH in the districts
- Coordinate and maintain effective MNCH partnership with key stakeholders at provincial level (Min. of Local Government and Housing, Min. of Community Development, Mother and Child Health, Min. of Education, Science, Vocational Training and Early Education, Min. Of Transport, Works, Supply and Communication, Min. of Labour & Social Security, NGOs, CBOs, etc)
- Conduct and build research capacity in the regions and districts
- Provide technical support for effective planning and implementation of the integrated MNCH activities in provinces.
- Coordinate, monitor and supervise MNCH activities in the province
- Technical support for training and ensuring quality in service provision
- Support districts in analysis and utilization of MNCH data and disseminate/report to the national level
- Capacity building and scale-up plans

District level

- Disseminate MNCH Strategic Plan to all stakeholders in the District, including to the NGOs, FBOs and other private sector partners.
- Incorporate MNCH activities into the District Development Coordination Committee Plans (DDCCPs)
- Coordinate and supervise all MNCH activities planned and implemented by all stakeholders in the district

- Provide technical support for quality MNCH services
- Capacity development for facility and community MNCH interventions
- Follow up maternal, neonatal and child death reviews at the health facility level (health posts, health centres, district hospitals, other 1st level hospitals, as well as at voluntary agencies and private hospitals) and at the community level.
- Regular briefings to the District Health Boards to ensure 'buy-in' and adequate resource allocation for implementation and monitoring of the MNCH interventions
- Ensuring Reproductive Health Commodity Security (RHCS)
- Capacity building and scale-up plans

Facility Level (Health Posts, Health Centres & Hospitals)

- Incorporate MNCH activities into facility health plans
- Provide quality MNCH services
- Implement quality improvement approaches such as RBF/PBF, integrated management of health programmes and using 3-Dimensional [health system, community & multi-sectoral] collaborative approaches
- Ensure timely forecasting, procurement and availability of essential equipment, supplies and drugs for MNCH service provision
- Conduct maternal, neonatal and child death reviews, involving the community
- Health facility committees to monitor and ensure quality MNCH service provision
- In partnership with Ministry of Community Development, Mother and Child Health, the Health Centre Committees (HCCs) will be responsible for supervision and implementation of MNCH activities in their areas. Other community groups involved in health (NHCs, SMAGs and other CBOs, NGOs, etc) will be linked to the health system through the HCCs with and through whom the assigned roles and responsibilities will be discharged. The Health centre level will provide technical and supportive supervision to community interventions (CHWs, TBAs, SMAGs, HCCs, NHCs, Women Groups, CBOs, etc)

MNCH at Community level

The suggested responsibilities will include:

- Increasing the demand for utilisation of quality services
- Facilitating the development and monitoring of community MNCH action plans
- Mobilizing the community to participate in community MNCH interventions
- Establishing and/or managing Social Health Insurance (SHI) and Social Cash Transfer Schemes (SCTS) at community level,
- Leveraging community resources for the implementation of MNCH interventions by implementing the Village Banking Concept (see Annex)
- Aligning continuum of care and 'whole community' demand side approaches
- Integrating the continuum of care and whole community approaches to ensure
 that the maximum possible attention is paid to maternal and newborn health, while
 ensuring the whole community is sensitised and motivated to "own" the
 intervention and actively engage in strategies to improve maternal and newborn
 health in the community.
- Undertaking holistic approaches to empower communities to address the sociocultural and economic factors that affect MNCH and survival.
- Ensuring that that girls, women, newborns and children secure appropriate information and healthcare throughout all phases of pre-pregnancy, pregnancy, delivery and the postnatal period and during childhood.
- Capacity building for HCCs, NHCs, SMAGs, TBAs, CBOs and NGOs in the selected interventions to maximise their support for and participation in the MNCH programmes. The role of tTBAs is now focussed on referral to health facilities, educating the community on safe motherhood and birth preparedness.
- Community and stakeholder meetings to engage the whole community and share key messages, in order to contribute to reducing the 'three delays' that contribute to maternal mortality and morbidity. This could be done through better

understanding of danger signs, knowing when to seek skilled care; encouraging gate-keepers to prioritise MNCH, and allowing and supporting women to: (i) attend ANC, (ii) eat well during pregnancy, (iii) ensure funds are available for transport and healthcare costs, (iv) improve child nutrition, etc.

- Combining the continuum of care and whole community approaches will help to address the 'three delays'.
 - a) Delay 1: Both community members and TBAs will be better prepared to detect danger signs during pregnancy, delivery and the postnatal period; male involvement and increased couple communication will help to expedite decision making and shift power relations to overcome social constraints and facilitate women delivering at health facilities.
 - b) Delay 2: Supporting the formation of mechanisms to ensure speedy transportation of women to facilities (rather than resorting to ineffective/dangerous traditional care practices or waiting for the arrival of a distant tTBA) when labour starts; building (technically sound but culturally appropriate) mothers' waiting shelters; or involving chiefs to help remove barriers possibly by using their traditional powers of authority.
 - c) Delay 3: Enabling the community to contribute in resolving identified demand side blockages and barriers.

At the Multi-Sectoral level

Roles and Responsibilities of other Ministries

Based on the list of selected effective MNCH interventions, the following key line Ministries should be involved to ensure that the reduction of maternal, newborn and child mortality is high on their agenda.

i) Ministry of Finance (MOF)

- Give priority to health, especially MNCH, in budget guidelines for allocation of resources
- Increase financial resources for health and especially implementation of MNCH activities as guided by the MNCH Strategic Plan
- Mobilizing resources for MNCH by increasing allocations received from the Government and the Direct Budget Support received from Cooperating Partners
- Include maternal, newborn and child health indicators in the national development plan monitoring and evaluation framework.
- Support infrastructural development, rehabilitation and maintenance to improve access to MNCH services

ii) Ministry of Local Government and Housing (MLGH)

- Provide technical support in support of MNCH collaboration to municipal and councils for planning and implementation of District Development Plans.
- Mobilize funds to support implementation of MNCH related District Development Plans
- WASHE to address issues of safe water and sanitation.

iii) Ministry of Education, Science, Vocational Training and Early Education (MoE)

- Promote universal access to education, especially education for girls and women (to help raise the education level of mothers)
- Review and update components of MNCH and SRH in various school and pre-service curricula in collaboration with MoH; particularly on provision of adolescent friendly services

iv) Ministry of Agriculture and Livestock (MOAL)

 Help to combat malnutrition and anaemia by promoting food security and diversification at household, community, district and national levels

v) Ministry of Labour and Social Security (MLSS)

- Working with MoH and Ministry of Labour on advocacy to government for a National Social Protection Policy Framework
- Incorporate in the National Social Protection Policy the need for social cash transfers to needy MNCH clients for improved access to effective interventions.
- Developing guidelines and systems for identifying the poor and vulnerable MNCH clients
- Advocate for adoption and ratification of the International Labour Organisation's Maternity Protection Convention 183 (ILO, convention 183)

vi) Ministry of Transport, Works, Supply and Communication

- Improve road networks to facilitate access to services at primary and referral levels, especially in rural areas where MNCH death rates are the highest in Zambia
- Ensuring that roads to EmONC and Basic EmONC sites are accessible throughout the year
- Promote the development, availability of and access to appropriate technology to support MNCH service provision
- Toll-free numbers or reduced rate cell phone emergency calls for MNCH related referral communications between communities and health system
- Developing and enabling the use of cell phones for collection and sending
 of health data to health facilities by CHWs; as well as using cell phones for
 communication on referral services on MNCH.

vii) Ministry of Information and Broadcasting Services (MIBS)

- Promote positive RH behaviours including early health care seeking for MNCH services.
- Disseminate information aimed at promoting early care seeking behaviour for MNCH and use of preventive care services

viii) Ministry of Gender and Child Development (Gender in Development Division – GIDD)

- Identifying health risks during pregnancy and the postnatal period to be addressed through wider government policy interventions for contributing to success on MNCH
- Working with and supporting MNCH policy development efforts of the Ministry of Health

ix) Ministry of Commerce, Trade and Industry

- Encouraging and supporting business initiatives by the private sector to develop increased coverage with the mobile phone network in rural and hard-to-reach areas of the country in support of MNCH interventions
- Advocating for wider use of mobile phones for increased communication between communities and health facilities in support of referral and data collection purposes

x) Office of the Vice-President (Disaster Management and Mitigation Unit)

• Identifying and mitigating the negative effects of disasters on pregnant women, neonates and children during disasters

xi) Ministry of Chiefs

- Identifying and facilitating the role of champions for MNCH among traditional leadership
- Ensuring that traditional customs and practices that do not contribute to maternal and child survival are not fostered

Cooperating Partners (and/or Donors)

- Provide technical and financial support for the coordination, planning, implementation, capacity development and monitoring and evaluation of MNCH services
- Advocate for increased global and national commitment to the reduction of maternal, newborn and child morbidity and mortality
- Mobilise and allocate resources for the implementation of MNCH interventions

NGOs

- Community mobilization and advocacy
- Information sharing
- Implementation of interventions in collaboration with government (MOH and MCDMCH)

Addressing social barriers to MNCH services

- Innovations in identifying barriers and devising strategies to overcome them (e.g. overcoming financial and geographical barriers to accessing care)
- Generating the needed wider community support to the implementation of the selected effective MNCH interventions (through grassroots advocacy).
- Mobilising resources to implement strategies that are intended to address the barriers that women face in accessing quality MNCH services (such as ensuring adequate nutrition, avoiding malaria etc) as well a serving to support community income generating activities.

Supporting evidence-based implementation & national health policy development (thus ensuring that women have more say in matters that affect their health and well being)

- Balancing and helping to make fit for purpose both the supply and demand sides for the successful delivery of this MNCH strategic plan.
- Building community capacity for effective advocacy for accessible quality services, particularly with regard to ensuring that facilities are not only furnished and equipped and have sufficient skilled healthcare workers, but also that facility staff are providing quality services, including woman-friendly care.
- Supporting communities in providing feedback on local MNCH service provision, including producing short case studies on sensitive issues, and make their voices

heard on how their needs can be better met to influence health service officials to effect improvements.

- Advocating for the rights of women and children.
- Implementing community based strategies to promote healthy behaviours during pregnancy, child birth, post-partum period, childhood and adolescence
- Complementing government efforts in the provision of quality MNCH services
- Helping to disseminate the MNCH Strategic Plan to accelerate the reduction of maternal, newborn and child morbidity and mortality
- Mobilizing and allocating resources for implementation of the MNCH Strategic Plan

Cross cutting issues

- Male involvement is vital as women tend to have little or no decision-making power on critical MNCH issues.
- Encouraging men to take more responsibility in RH and child care.
- Equipping young people with adequate knowledge so they can access suitable services to meet their sexual and reproductive health (SRH) information and service needs (creating youth friendly SRH services).
- Appropriate cultural sensitivity in discussing difficult issues that may not be culturally acceptable in Zambia - issues surrounding mother, newborn and child health.
- Raising the awareness of communities on the importance of supporting girls and women who have never given birth to attend MNCH meetings – for these are key stakeholder groups that can benefit and thus experience better health in the future when they themselves become pregnant.
- Ensuring the social acceptability and fit of MNCH interventions with local values.
- Keeping a focus on adolescents' needs, particularly through initiating 'youth-friendly' sexual and reproductive (SRH) services and accessible safe abortion services within the context of universal access to reproductive health services (MDG 5 target 2) through local and national level advocacy.

The Private Sector

- Complement Government efforts in the provision of quality MNCH services
- Invest in commodities and supplies for MNCH interventions

The Research and Training Institutions

- Undertaking relevant MNCH research to provide evidence for policy directions and to guide implementation,
- Reviewing and updating curricula to ensure relevant MNCH issues are adequately addressed.
- Contextualizing global knowledge on effectiveness of MNCH interventions for local situations and purpose,
- Providing contextualized technical advice and updates on current developments on MNCH and SRH to policy makers
- Providing independent and credible evidence on performance of MNCH programmes

Chapter 6: Interventions within the phase of life cycle and expected magnitude of change 2013 – 2016

Summary packages of selected effective interventions in Zambia's Road Map for accelerated MNCH activities to attain MDGs 4 & 5

	Maternal, Neonatal & Child Health Road Map Logical Framework: Maternal, Nev	wborn a	nd Chile	d Health	Interve	ntions		
	Goal: To significantly and progressively reduce Maternal, Neonatal & the Under 5 mortality rates in							
	E: To strengthen national & local capacities for universal access to known effective interventions during pregnancy, ch	ildbirth, p						
	Phase of Life- Cycle Packages of Effective Interventions & Expected Outputs/Outcomes/Impacts:							achieved)
Cycle	1 1 1	2010	2011	2012	2013	2014	2015	Source of baseline ZDHS 2007 T7.3.1 and
	1. Reduce unmet need for contraception for married women from 26.5% to 14%	2%	2%	2%	2%	2%	3%	T7.3.2 unmet need
Pre-	2. Modern contraceptive prevalence rate in reproductive aged women increased from 24.6% to 50%	3%	3%	4%	5%	5%	5.4%	ZDHS 2007 T5.4 current use any modern method
pregnancy &	3. Reduce the proportion of Teenage pregnancy and motherhood from 27.9% to 18%	1%	1%	1%	2%	2%	3.1%	ZDHS 2007 T4.9 Teenage pregnancy & motherhood
Adolescence	4. Reduce problems with access to health services for women (of reproductive age) from 73.5% to 42% by 2015	3%	4%	5%	6%	7 %	6.5%	ZDHS 2007 T9.10 Problems in accessing health care. (At least one problem)
	5. Increase the percentage of women accessing the first ANC visit within the first trimester from 19.2% to 58%	6%	6%	6%	7%	7%	7.2%	ZDHS 2007 T9.2 Number of ANC visits and timing of first visit
	6. Increase the % of women accessing 4+ (or more) visits to Focused Antenatal Care (FANC) from 60.3% - 80%	1%	2%	2%	4%	5%	5.7%	ZDHS 2007 T9.2 Number of ANC visits and timing of first visit
Brognanov	7. Increase the coverage of pregnant women taking 2 or more doses of IPT from 70.2% to 80%		1%	2%	2%	2%	1.8%	MIS2010, T14, Use of intermittent preventive treatment (IPT) by pregnant women
Pregnancy	8. Increase coverage with PMTCT services from 80% to 95%	4%	3%	3%	2%	2%	1%	UNGASS, 2011 Zambia Country Progress Report. Table 5: Key indicators for the universal access of PMTCT (2010 baseline)
	9. Increase the % of pregnant women who are informed of signs of pregnancy complications from 73.3% to 95%	4%	4%	4%	4%	4%	1.7%	ZDHS 2007 T9.3 Components of ANC
	10. Increase the proportion of pregnant women sleeping under ITNs from 47.7% to 80%	5%	5%	6%	6%	6%	4.3%	MIS2010, T11, Use of mosquito nets by women and pregnant women
Deliver	11. Increase the proportion of institutional deliveries (47.7%) and by skilled attendants (46.5%) to 70%	2%	3%	4%	4%	4.5%	5%	ZDHS 2007 T9.5. Place of delivery. Table 9.6 Assistance during delivery.
Delivery	12. Increase the coverage with EmOC facilities to all districts (from 68% to 100%)	2%	4%	5%	7%	7%	7%	МОН
	13. Increase coverage with appropriate uterotonics to prevent haemorrhage countrywide from 20% - 80% of births	5%	7%	12%	12%	12%	12%	MOH
	14. Increase postnatal attendance with skilled care (within 2 days) from 38.7% to 55%	1%	2%	2%	2.3%	4%	5%	ZDHS 2007. T9.8 Timing of 1st postnatal
Post-natal	15. Increase the proportion of eligible HIV+ pregnant and postnatal women accessing ARVs from 60.5% to 95%	6%	6%	6%	6%	6%	4.5%	2009 data as cited in NHSP 2011-15 as 61%; 69% cited by unicef, Target 95% UNGASS

Maternal, Neonatal & Child Health Road Map Logical Framework: Maternal, Newborn and Child Health Interventions Goal: To significantly and progressively reduce Maternal. Neonatal & the Under 5 mortality rates in Zambia to meet the set MDG4 and MDG 5 targets OBJECTIVE: To strengthen national & local capacities for universal access to known effective interventions during pregnancy, childbirth, postnatal, neonatal and childhood at all levels of the health system Year of implementation (+ magnitude of change achieved) Phase of Life-Packages of Effective Interventions & Expected Outputs/Outcomes/Impacts: 2010 2011 2012 2013 2014 2015 Source of baseline Cycle ZDHS 2007. T11.2 16. Increase the proportion of women initiating early breastfeeding (within 1hour) from 56.5% to 90% 4% 4.5% 5% 6% 7% Initial breastfeeding 17. Increase capability in all EMONC facilities for the management of prematurity and newborn problems to No assumption on baseline 20% 20% 20% 20% 20% but progressive increase to reduce perinatal deaths (baseline to 100%) Neonatal universal coverage No assumption on baseline 18. Increase proportion of districts implementing Kangaroo care to achieve universal coverage (baseline to 100%) 20% 20% 20% 20% 20% 20% but progressive increase to universal coverage 19. Increase coverage with IMCI-trained clinicians at at all health facilities (from 65% to 100%) 6% 6% 6% 6% 6% 5% MOH 20. Sustain/ increase coverage with full immunization (over 80%) using RED strategy to all districts under one 1% 2% 3% 3% 3% 3% ?baseline HMIS 2008 year MIS2010, T10, Use of 21. Increase the proportion of children Under-5 sleeping under ITNs from 52.3% to 90% 6% 6% 7% 7% 7% 4.7% mosquito nets by children 22. Increase % of HIV+ children born from HIV+ pregnant women accessing ARVs from 53% - 90% 4% 5% 6% 7% 7% 8% Source 23. Increase the proportion of children with fever receiving correct treatment from 38% to 90% Childhood 24. Increase % of sick children accessing treatment for malaria within 24 hours from 31.2% - 90% 5% 6% 7% 10% 10% 10% MICS & DHS MIS2010, T15, Prevalence 25. Increase % of sick children with acute respiratory infection receiving correct treatment - 68% to 90% 6% 8% 10% 11% 12% 11.8% and prompt treatment of fever among children 26. Increase Vitamin A supplementation from 60% to 90% 3% 3% 4% 4% 4% 4% Child Health Week Report 27. Increase the % of children that take ORT and Fluids for diarrhoea from 67% to 90% 5% 5% 5% 5% 5% 5% 27, children with diarrhoea that take ORT and Zinc 3% 3% 4% 4% 4% 5% DHS Indicators need to be set to 28. Increase number of DHOs with strengthened capacity to analyse data, plan & implement programmes to 100% establish baseline against which to gauge progress to (universal target) universaility ZDHS 2007, T11.1 29. Decrease prevalence of stunting among children Under 5 years reduced from 45.4% to 35% 1% 1% 1% 2% 2.4% Nutritional status of children Cross-30. Decrease proportion of women (non-pregnant) that are anaemic reduced from 29% to 19% 2% 1% 1% 1% 2% 3% Source? NFNC cutting/ Multi-ZDHS 2007. T 2.6 31. Increase the coverage of households with access to improved source of drinking water sources from 41.9-80% 6% 6% 6% 7% 7% 7.1% sectoral Household drinking water ZDHS 2007. T2.8 32. Increase the coverage of households with access to improved sanitation from 23.9% to 80% 6.1% 10% 10% 10% 10% 10% Household sanitation facilities No assumption on baseline 33. Strengthen people participation in MNCH (% districts holding Maternal Death Reviews) to 100% (universal but progressive increase to target) universal coverage Note: In cases where baseline data was not readily available, only the target was set for 2015. The mid-term review is expected to provide more information to support a baseline from 2012/3

Packages of activities for the selected MNCH interventions in the Zambia MNCH Road Map [Logical Framework]

		Objective(s)	Required [behaviour]	ir	ndicator values		Source of	Assumption
		, , , , , , , , , , , , , , , , , , , ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
	Goal Impact	To reduce maternal mo	rtality ratio in Zambia by	y 2015				
Goal	Goal targets	Universal coverage; Equitable coverage;	Using the 3D- combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels of the health system	Maternal Mortality Ratio (MMR)	MMR 591/100,000 live births (2007)	162/100,000 live births by 2015	ZDHS, MDR reports	Long-term funding available for planned activities
	Goal Change	sector (and at all levels access		more closely and in more effer resource mobilization & optim				
Phase of Li	ife-Cycle: Pre-pregna							
Effective In	ntervention 1		r contraception for wom	en in married women				
Interventio	·	Attain universal coverage with modern contraceptives for optimal child spacing and manageable number of children at households in Zambia	Contraceptive advice, commodities & information more easily available, accessible and affordable in public and private sectors	Unmet need	26.5% (2007)	14% (2015)	ZDHS, MTR reports	Long-term funding available for planned activities
Effective In	ntervention 2	Increasing prevalence	rate with modern contra	ceptive among women in repr	oductive age group			
Interventio	n targets	Reduce unwanted pregnancies	More women in the reproductive age groups easily & affordably accessing modern contraceptive commodities.	Prevalence of modern contraceptive among women in reproductive age groups	24.6% (2007)	50% (2015)	ZDHS, MTR reports	Long-term funding available for planned activities;
Effective In	ntervention 3	Reduce the proportion	of Teenage pregnancy a	and motherhood				
Interventio	n targets	SRH education to youths; Implementing adolescent-friendly	More conducive environment for access by teenagers	Prevalence of teenage pregnancy and motherhood	27.9% (2007)	18%	HMIS, ZDHS, Non- routine data	

	Objective(s)	Required [behaviour]	Ir	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
	reproductive health services	and to seek modern contraceptive commodities				sources	
Effective Intervention 4	Reduce problems in ac	cess to health services	of women of reproductive age				
Intervention targets Strategic Shifts for Pre-pregna	Introduction of social health insurance services; Enact social protection policies /laws	Social protection policies identify the vulnerability of women & children for prioritized access to care	Proportion of women accessing care	73.5% (2007)	42%	HMIS, ZDHS, Non- routine data sources	
Coverage Determinants	may r hase of the Life Sycie	. (Dased on Tracer inter	Strategies for Intervention	mous of contraceptives			
Enabling Environment	Social Norms Legislation/Policy		 Receptive environme Establishing fit with the Sensitize traditional Acknowledgment and Generating high political 		tion (BCC campaigns he community plays eased commitment a	in community engagem	ent
	es in political landscapes ection policies [introductio r women in times of need	do not affect MNCH n social cash transfe					
	Budget/Expenditure		Resource mobilizationAdvocacy for increase[Increased commitment	on for MNCH/FP services on committees at all level sed allocations to the hea lent and resources for MN Health Insurance (SHI) co	- s [Results-Based Fir llth budget ICH/FP.	nancing schemes,	

	Objective(s)	Required [behaviour]	Indicator values			Source of	Assumption		
	, ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·		
	Management/ Coordinati	ion	 Linking MNCH action plans to other national strategies, fertilizer support programmes, food sec programme]; Creating high level leadership & advocacy on MNCH/FP services, Integrate adolescent sexual reproductive health (ASRH) into programmes Involve young people in programmes and their evaluation; Integrate ASRH in school curriculum Task shifting Lobby for a functional Community HMIS Deployment of Focal Points People at the central, provincial and district levels. Standardize all materials, training and IEC Systems strengthening and coordination of partners 						
	Availability of commoditie	es	Improvement of supplyEnsure availability of FF	ibution ent and increased budget allo chain management at all le	evels of the sector	Commodities Budget-l	ine		
Supply	Availability of human res	ources	 use of lay health worker Train more HCPs (inclu Incentivise the HCPs es Employ retired HCWs Task shifting 	uding returnees/retirees)* ding in LTFP methods and pecially those deployed in a line in the pre-service curric	the rural areas	e capacity f or the tra	ining schools		
	Geographic access to de	elivery points	 Expand outreach service Rehabilitation, Maintena Increase Health Staff Invest in infrastructure to Link up with line ministrict to health care. Strengthens the referral Strengthen outreach se Strengthen community 	es/campaigns/national hea ince and Equipment o address the geographica es to improve the road net system, ambulance, radio rvices	alth days al barrier work and transport s or phone	ystem so that there is	equity of access		

	Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
			Support community-baseContribute to criteria or r			edy in the community,	etc]		
Demand	Initial utilization of service Timely continuous utiliza		 Social Marketing/Mass Communication Mass Media + Community Mobilization/Home visits Defaulter Tracking/reminders/recall Formation of women groups on health; Develop youth-friendly reproductive health committees; Formation of SMAGs; Community based distribution of contraceptives Encourage more male involvement, Formation of parent groups on adolescent SRH; Strengthen community referral systems for long term FP methods, Sensitize Parents, Elders and traditional initiators 						
Quality	Effective coverage, or go	ood quality of services	Refresher Training/in-se Supervision/feedback/au Monitoring/peer review/te Regulation Funding for Mentorship/se Community role in auditi Ensure availability of FP Provide Job AIDs to be te	rvice training/reminders idit* eam problem solving-le supervision, follow up ng RBF incentives, and ADRH supplies	s* earning				
Phase of Life-Cycle: Pregnan	су								
Effective Intervention 5	Increase the % of wom	en accessing first ANC v	within the first trimester						
Intervention targets	Attain universal coverage with at least 1 ANC visit during pregnancy; with increasingly more of these done in the 1st trimester	Increasingly more pregnant women start ANC visits early and in 1st trimester	The % of pregnant women accessing 1st ANC visit within the first trimester	19.2% (2007)	58% (2015)	ZDHS, HMIS, MTR reports	Long-term funding available for planned activities		
Effective Intervention 6		en accessing 4+ visits to	o Focused Antenatal Care (FA	NC) from 60.3% to 80	%				

	Objective(s)	Required [behaviour]	Ir	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Intervention targets	Attain universal coverage of pregnant women making 4+ and quality FANC visits.	More pregnant women value higher quality FANC services and make at least 4+ visits for ANC.	% of women that make 4+ visits to Focused Antenatal Care (FANC)	60.3% (2007)	80% (2015)	ZDHS, HMIS, MTR reports	Long-term funding available for planned activities
Effective Intervention 7	Increase the coverage	of pregnant women takii	ng 2 or more doses of IPT fron	n 70.2% to 80%			
Intervention targets	Attain universal coverage of pregnant women taking 2 or more doses of IPT	Increasingly more pregnant women value the role of IPT in protecting the unborn; and thus receive 2 or more doses of IPT.	% of pregnant women that receive 2 or more doses of IPT	70.2% (2010)	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 8	Proportion of HIV+ preg	gnant women accessing	ARVs for e-MTCT				
Intervention targets	Attain universal coverage on pregnant women who take up PMTCT services	Increasingly more pregnant women become aware of and take part in PMTCT activities.	% of pregnant women who access ARVs for e-MTCT	85% (UNGASS 2011 Zambia Report)	95%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities Strengthened integration in MNCH
Effective Intervention 9	Pregnant women who k	now the danger signs o	f pregnancy				
Intervention targets	Attain universal coverage on pregnant women who know correct danger signs of pregnancy	Increasingly more pregnant women become aware of danger signs in pregnancy.	% of pregnant women who know the danger signs of pregnancy	73.3% (2007)	95%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 10	Proportion of pregnant	women sleeping under	ITNs				
Intervention targets	Attain universal coverage on pregnant women sleeping under	Increasingly more households and pregnant women	% of pregnant women that sleep under ITNs	47.7% (2010 MIS)	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for

	Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption		
	(4)	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
	ITNs	value the role of ITNs in protecting against malaria during pregnancy.					planned activities		
Strategic Shifts for Pregnancy	Phase of the Life Cycle	e (Based on Tracer Interventi	on: Focused Antenatal Ca	re)					
Coverage Determinants			Strategies for Intervention	on					
Enabling Environment	Social Norms		Sensitization and awatigma reduction: Mass	d myths about IPT and Pregareness of safe pregnancy as sensitization on benefits and ment & capacity for healthy	nd motherhood; nd countering beliefs,	des			
	Legislation/Policy		Increased advocacy f	or /and on health (MNCH) is	sues				
	Budget/Expenditure		 Allocation of adequate funds to ensure quality service provision: Procure supplies, commodities and equipment for FANC, Procure PMTCT commodities MIP prevention and IPT commodities New protocols and guidelines for PMTCT 						
	Management/ Coord	dination	 Standardize all mater Develop Woman-Frie Expand range of ANC Implement Monitoring Supervision the SMA 		materials, HMIS evel		nd trimester 12 – 14		
Supply	Availability of commo	odities	Ensure availability of	stribution ment FANC supplies ly distribution of MIP/IPT col IEC materials, job aids and testing equipment & supplie	low charts for IPT an				

Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption
	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
		Scale up of Essential in	nedicines logistics improve	ment programme (EN	MLIP)	
Availability of human res		 Improved conditions of Develop Positive profest environment Strengthen / introduce Frand nurses stay in class D districts are on the Zete Technical support and reference Increase the number of schools (Introduce 2 into Direct midwifery training Advocacy for correct humber of the Expedite implementation Delegation of authority in posts Lobby with PSMD for reference Orient PHO and DHO on Participation in HR tech Refresher training of HMU Updated workforce with Training of PMTCT province Skilled lay counsellors 	Retention scheme for Midwa C and D rural districts; enambia Health Worker Retenantorship/supervision, fol s: Community counselling skilled midwives by: training akes per year per training man resource placement entorship and supervision of training operation plar for MCDMCH to appoint he cruitment and deployment in rational use of HR nical working group to influted the current protocols in IP	s) for midwives to operives and nurses in the sure that at least 50% attion Scheme by 2015 low up of HWs services and more midwives and institution); of HWs attitute and the sealth professionals in of skilled health work the sealth professionals and the sealth work the sealth professionals in the sealth work the sealth professionals in the sealth work the sealth	terms of pre-approve	more midwives rses in class C and or the training
Geographic access to de	elivery points	Rehabilitation, MaintenaIncrease Health Staff		·		
		Invest in infrastructure a	unication networks: All we and mother waiting homes system, ambulance, radio	to address the geogr		
		_	Link ANC sessions to oth	er delivery services/p	oackages & postnatal	care services

	Objective(s)	Required [behaviour]	li li	ndicator values		Source of	Assumption	
	. ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
Demand	Initial utilization of service Timely continuous utilization Effective coverage, or go	es	 Social Marketing/Mass Communication Mass Media + Community Mobilization/Home visits Community participation including male involvement Trainings for influential community leaders to encourage their subjects to come early for ANC Training and supervision of SMAGs Use of community structures i.e. SMAGs to reach communities with safe motherhood messages, mesbirth preparedness, IPT and MIP, PMTCT (Group counselling sessions; Increased confidentiality; VCT Provider initiated CT services) Sustain / Increase the percentage of at least 1 ANC visit during pregnancy Social support services to pregnant women; Identification of pregnant mothers including pregnant teenagers Identification of the poor / needy through the SMAGs Conditional cash transfer for the poor: Social cash transfer schemes and advocacy for enactment of sor protection policies addressing vulnerability in the MNCH life cycles Performance incentives Defaulter Tracking/reminders/recall On-going sensitization & awareness on 4+ FANC services; and awareness on the importance of IPT in pregnancy; Awareness raising on PMTCT Sensitization & awareness of PMTCT services Refresher Training/in-service training/reminders* 					
Quality			 Refresher Training/in-ser Supervision/feedback/au Monitoring/peer review/te Regulation 	dit*	ning			
Phase of Life-Cycle: Delivery								
Effective Intervention 11	Proportion of institutio	nal deliveries and those	by skilled attendants					
Intervention targets	Attain universal coverage on institutional deliveries by skilled health workers	Increasingly more pregnant women value giving birth under supervision by skilled health workers (midwives)	by skilled health workers 46.5% (SBA) 2007 routine data sources (MTR)					
Effective Intervention 12	Coverage of EmONC fa	acilities to all districts			·			
			43					

	Objective(s)	Required [behaviour]	İr	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·
Intervention targets	Attain universal coverage with EmONC facilities to / and within all Districts in Zambia	Increasingly more districts join the EmONC initiative and the optimum number of facilities within districts have EmONC capacities	% of Districts with EmONC capacity; Caesarean section rates (%)	3%	100% 5%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 13	Coverage with appropr	iate uterotonics to preve	ent haemorrhage countrywide				
Intervention targets	Attain universal coverage with misoprostol among pregnant women that deliver at home.	Increasingly more pregnant women value the role & use of misoprostol in preventing postpartum bleeding when delivering at home.	% of pregnant women who used misoprostol after delivery at home	20%	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 17	Capability in all EmON	C facilities for the manag	gement of prematurity and nev	vborn problems to redu	ice perinatal deaths		
Intervention targets	Attain universal coverage in the provision of incubators and resuscitation rooms at all EmONC facilities, countrywide	Increasingly more facilities get equipped with incubators and resuscitation rooms to treat prematurity and hypothermia in the newborn	% of EmONC facilities with incubators & resuscitation rooms for neonates	baseline	100%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Strategic Shifts for Delivery Ph	ase of the Life Cycle: (Bas	sed on tracer interventio	n – Emergency Obstetric and	Neonatal Care)			
Coverage Determinants			Strategies for Intervention				
Enabling Environment	Social Norms		 Strengthen community pa Engagement of the traditi Multi-stakeholder BCC ca Raising the general levels Promotion of girl child edit 	onal and religious leader Impaigns; Radio, TV, Po s of education for women	sters, Newspaper art through gender targ	icles, Drama, Poetry, e	c

	Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
	Legislation/Policy		 Improved condition of services for health workers through retention schemes Advocacy for discharge of mothers 24 hours post delivery Advocacy for registration births and birth certificates at district level Advocacy for registration of maternal & new-born deaths (including community deaths) 						
	Budget/Expenditure		 Increase government fur 	nding for maternal health sing, strengthen and coord	ervice; desegregate		terventions		
	Management/ Coordin	ation	 Standardized MNCH trai Scale up and saturate E Strengthen Maternal hea Strengthen maternal hea Strengthen Maternal Dea 		cols and guidelines ide				
Supply	Availability of commodities Strengthen procurement (buffer stocks) Strengthen storage/distribution Local supply management Provision of equipment and ensure commodity security Ensure MNCH commodity security at all levels through the scale up of								
	Availability of human re	esources	 Pre service training (including returnees/retirees)* Inclusion of EMONC in pre-service curriculum Strengthen MNCH components in pre-service curriculum Increased Midwifery school training capacity Increase number or health workers in the health facilities particularly in the rural areas trained in E Strengthen pre service and in-service training of HCP in MNCH programs & EmONC Task shifting 						
	Geographic access to	delivery points							

	Objective(s)	Required [behaviour]	l	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
			Better road network to ea	ase access to care			·
Demand	Timely continuous utili Effective coverage, or		Reducing direct household Social Marketing/Mass (I) Mass Media + Community Performance incentives Defaulter Tracking/remin Distribution of 'Baby Man Behaviour change community community and awarer saving lives Strengthening of community lives Strengthening of community transport mesure set up community IGA full Health promotion talks on Post-Natal care within 24 Postnatal care at 6 days Incentives for post-natal Conducting outreach ser Sensitization and awarer Strengthen technical sup Advocate for on – going in the social sup	communication by Mobilization/Home visit ders/recall na Packs' to incentivize n unication addressing my ness on danger signs in th ness of uterotonics (e.g. r nity capacity & participati construction of mothers al attitudes on deliveries chanisms for referrals ands for referral of mother in importance of postnatal hours and 3days of delivent and 6 weeks of delivery care: Incentives to skilled vices for home visits for f ness of birth registration in port and mentorship	nothers to deliver at heths and misconception he postpartum period nisoprostol) in prever on in skilled delivery waiting shelters by skilled attendants; ers in labour & postnaticare (PNC) through very (including home delial midwives; Incentives PNC ncentives	Health Center ons through SMAGs onting postpartum hae tal mothers the SMAGs deliveries) veries)	morrhage and
Quality			 Strengthen MDR commit Refresher Training/in-ser Supervision/feedback/au Monitoring/peer review/te Regulation 	tees vice training/reminders* dit*			
Phase of Life-Cycle: Postnat	al						
Effective Intervention 14	Postnatal attendance	e with skilled care (within 2	2 days)				

	Objective(s)	Required [behaviour]	In	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Intervention targets	Increase the number of mothers that seek and attend skilled postnatal care services within 2 days of giving birth	Increasingly more mothers value the advantages of postnatal care services by skilled health workers and attend these services	% of mothers attending skilled postnatal care within 2 days of giving birth	38.7% (ZDHS, 2007)	55% (2015)	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Strategic Shifts for Postnatal Ph	ase of the Life Cycle: (Ras	ed on tracer intervention	n - Postnatal attendance with	in 2 days)	•	•	•

Strategic Shifts for Postnatal Phase of the Life Cycle: (Based on tracer intervention – Postnatal attendance within 2 days)

Coverage Determinants		Strategies for Intervention
Enabling Environment	Social Norms	 Strengthen community participation Engagement of the traditional and religious leaders in advocating for MNCH services Sensitization & Awareness raising importance of post natal care Multi-stakeholder BCC campaigns; Radio, TV, Posters, Newspaper articles, Drama, Poetry, etc Raising the general levels of education for women through gender targeting approaches Promotion of girl child education and women empowerment
	Legislation/Policy	 Advocacy for women's health issues Standardized guidelines for postnatal care Advocacy for discharge of mothers 24 hours after delivery Advocacy for registration births and birth certificates at district level Advocacy for registration of maternal & new-born deaths (including community deaths)
	Budget/Expenditure	Increased funding for high impact maternal health services
	Management/ Coordination	 Standardized MNCH training manuals, I.EC, protocols and guidelines Strengthen Maternal health data collection Monitoring & Evaluation Strengthen SMAGs implementation of postnatal services
	Availability of commodities	Ensure availability of commodities for the emergency trolley for management of postpartum haemorrhage, eclampsia, newborn resuscitation
Supply	Availability of human resources	 Increase the number of skilled midwives by training more midwives and increase capacity for the training schools Introduce 2 intakes per year per training institution (midwifery) Direct midwifery training

	Objective(s)	Required [behaviour]		ndicator values		Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
			 Advocacy for correct human resource placement Technical support for mentorship and supervision of HWs• 						
	Geographic access to	delivery points	 Strengthen of the facility referral system Scale up and saturate EMONC services country wide Infrastructure rehabilitation (Mothers' waiting homes and Delivery rooms) Strengthen community systems and use of community health structures - SMAGS Strengthen communication systems Transport services Easier availability of public transport services countrywide Better road network to ease access to care 						
Demand	Initial utilization of services Distribution of 'Baby Mama Packs' to incentivize mothers to deliver at Health Center Behaviour change communication addressing myths and misconceptions through SMA Timely continuous utilization Distribution of 'Baby Mama Packs' to incentivize mothers to deliver at Health Center Behaviour change communication addressing myths and misconceptions through SMA Sensitization and awareness on danger signs in the postpartum period								
Quality	Effective coverage, or	good quality of services		ART clinic for HIV-positive					

	Cycle: Neonatal Goal Impact Goal targets Goal Change	Universal coverage; Equitable coverage	Changes (Outcomes) rtality rate in Zambia fro Using the 3D- combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels of the health system	w 34 per 1,000 live births to 20 Neonatal Mortality Rate (NMR)	NMR 34/1,000 live	target value for 2015	verification	Long-term funding
Go	Goal Impact Goal targets	Universal coverage; Equitable coverage	Using the 3D- combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels of the	Neonatal Mortality Rate	NMR 34/1,000 live	20/1,000 live		
Go	Goal targets	Universal coverage; Equitable coverage	Using the 3D- combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels of the	Neonatal Mortality Rate	NMR 34/1,000 live	20/1,000 live		
		Equitable coverage	combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels of the		,	20/1,000 live		
	Goal Change	The health system and	Health System		births (2007)	births by 2015	ZDHS, MDR reports	available for planned activities
Go				more closely and in more efferesource mobilization & optimi				
Effective Interve	vention 16	Proportion of women in	itiating early breastfeed	ling				
Intervention tarç	rgets	Attain universal coverage of mothers that initiate early & exclusive breastfeeding	Increasingly more women value breastfeeding; and initiate this early	% of mothers initiating early breast feeding; % of mothers that use exclusive breast feeding	56.5%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Interve	vention 18	Proportion of districts in	mplementing Kangaroo	care to achieve universal cover	erage			
Intervention targ		Attain universal coverage of districts that implement Kangaroo care	Increasingly more districts implement and provide Kangaroo care services in the care of the newborn.	% of districts that implement Kangaroo care.	50%	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Strategic Shifts	s for Neonatal Pha	ase of the Life Cycle: (Bas	sed on tracer intervention	on –Management of neonatal i	nfections)			
Coverage Deterr	rminants			Strategies for Intervention				
Enabling Enviro	onment	Social Norms		Developing & sustaining of Developing & sustaining of raising]	, ,	•		wareness

	Objective(s)	Required [behaviour]	li	ndicator values		Source of	Assumption		
	·	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·		
	Legislation/Policy		 Incorporation of new-born health in policy documents (NHSP, child health policy), Incorporation of new-born care in IMCI guidelines 						
	Budget/Expenditure		Finalize ,cost and disseminate the new-born health framework for scaling up new-born health interventions						
	Management/ Coordina	tion	Recruit of the focal pointFormation of Neonatal H	nt and coordination and m for new born health, ealth TWG, (consider this of the finalized framework	to be part of Child H	ealth Technical work			
	Availability of commoditi	ies	 Enhance knowledge and and emergency Include commodities for a Finalize development of the second commodities. 	newborns at risk of bacter if skills of HWs on common new-born health in the RH the National supply chain contents of the essential	dity management fo Commodity Securit strategy to ensure co	y Strategy ommodity security			
Supply	Availability of human res	Availability of human resources		g in neonatal health care tners to support training o ies breath)	-	·	•		
	Geographic access to d	Geographic access to delivery points		 Lobby construction of additional HFs with maternity wing in order to allow postnatal mothers stay for least 48 hours prior discharge Increase access to neonatal health care NHC: train, supervise and provide mentorship to CBVs (SMAGCHW); Use of outreach sites (i.e. Early identification and referral of neonatal infections – all based volused of the strengthen the referral system for neonatal complications 					
Demand	Initial utilization of service	ces	Health education and awPromotion and provision	areness on neonatal infect of hygienic cord and skin	ctions & hypothermia				
	Timely continuous utiliza	 Develop & sustain community capacity to promote healthy behaviours and practices General hygiene practices emphasizing hand washing Dispelling myths that hinder access (taking) of neonates to health facilities] 							
Quality	Effective coverage, or g	ood quality of services	Source for funding to streProvision of adequate, fu	on needs (HR information engthen mentorship nctional appropriate equi lardized national guideline	pment based on hea	Ith facility need asse	ssment		

		Objective(s)	Required [behaviour]	Ir	ndicator values		Source of	Assumption
		. ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·
Phase of L	ife-Cycle: Childhood							
	Goal Impact	To Reduce the high Un		e in Zambia from 119 per 1,000				
Goal	Goal targets	Universal coverage; Equitable coverage; 80% RED strategy coverage	Using the 3D- combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels	Under 5 Mortality Ratio (U-5MR)	U-5MR 119/1000 live births (2007)	63/1,000live births by 2015	ZDHS, MDR reports	Long-term funding available for planned activities
	Goal Change			more closely and in more effer resource mobilization & optim				
Effective In	ntervention 19	IMCI-trained healthcare	providers managing si	ck children				
Interventio	n targets	Attain universal coverage with trained IMCI clinicians at public health facilities	Increased health facilities have IMCI-trained clinicians that apply and adhere to IMCI algorithms.	% of facilities with IMCI- trained clinicians;	65%	100%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective In	ntervention 23	Children with fever reco	eiving correct treatment					
Interventio	-	Attain universal coverage of quality care for children with fever that are correctly treated	Increasingly more children with fever receive correct treatment in line with IMCI guidelines.	% of children with fever that are correctly treated	38%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective In	ntervention 24	Sick children accessing	g prompt treatment for	malaria (within 24 hours)				
Interventio	n targets	Attain universal coverage of children sick with malaria that receive prompt treatment with effective anti-malarial drugs	Increasingly more caretakers realise and take sick children promptly (in 24hrs) for effective malaria treatment.	% of children sick with malaria that promptly receive anti-malarial drugs within 24 hrs	31.2%	90%	MIS, HMIS, ZDHS, Non-routine data sources (MTR)	Long-term funding available for planned activities

	Objective(s)	Required [behaviour]	Ir	ndicator values		Source of	Assumption
	, ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·
Effective Intervention 25	Sick children with acute	e respiratory infection re	eceiving correct antibiotic trea	tment			
Intervention targets	Attain universal coverage of children sick with acute respiratory tract infection that correct treatment	Increasingly more children receive correct treatment for acute respiratory tract infections; as both caretakers and health workers realise the value of this treatment.	% of children sick with acute (upper) respiratory tract infections & receive correct treatment	68%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 27	children with diarrhoea	that take ORT and Zinc					
Intervention targets Strategic Shifts for Childhood:	Attain universal coverage of children Under 5 sick with diarrhoea that receive ORT and fluids	Increasingly the effective role of ORT and fluids in diarrhoea treatment is valued and that more children under 5 sick with diarrhoea are treated with ORT and fluids	% of children Under-5 that take ORT and Fluids for diarrhoea.	67%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
·	(Dased on tracer intervent	on – Oral Antibiotics to					
Coverage Determinants			Strategies for Intervention				
Enabling Environment	Social Norms		 Sensitization & awarenes fevers in children Sensitization & awarenes Scale up behaviour change 	s raising among tradition	nal healers on when to	o refer sick children to h	•
	Legislation/Policy				· ·		
	Budget/Expenditure		Advocacy for GOVT to m Advocacy for increased fi Explore other ways of fur	nancial partner support			

	Objective(s)	Required [behaviour]	ı	ndicator values		Source of	Assumption		
	, ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
			 Advocate for provision of minimum investigative services fee (e.g CXR) Improve efficient use of available resources within health sector including allocation from the district grant meant for community based interventions 						
	Management/ Coordinate	Review National Health Policy to include use of antibiotics by CHWs Advocate for approval of use of antibiotics by CHWs by the National Professional Council Regularly update, disseminate and utilize IMCI/iCCM guidelines Develop scale up plan Build capacity at national and sub-national level to enhance monitoring mechanisms of IMCI Enhance reporting mechanism for IMCI/iCCM Develop and institutionalize key performance indicators at all levels Availability of commodities Timely forecasting [planning] of procurements-anticipate and ensure the long procurements.							
	Availability of commod	ities	Government don't hinderStrengthen supply chair	service delivery system for oral antibiotics echanism of iCCM comm t (buffer stocks)	s, low osmolarity OR	S and zinc tablets	rocedures of		
Supply	Availability of human re	esources	 Strengthen supportive st Develop standards for ed Increase Health Staff Conduct periodic monito Advocate for cabinet app Update/ revise job descr Conduct in-service traini Conduct pre-service traini Advocate with private se Adopt shorter (computer Improve incentives for freexceptional on PEs GDF 	pervision and mentorship quitable distribution of staffing of trained qualified state of the proposed estate of th	f to critical areas. aff and CHWs ablishment for MNCH evels to include responsional responsibility and re	onsibilities for IMCI in g staff y in Provinces acilities at CDMO.			
	Geographic access to	delivery points	 Housing, schooling and least facilities Build and expand health 	·	ovating infrastructure	9			

	Objective(s)	Required [behaviour]	I	ndicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
			 Implement quality improve Strengthening services dependent in the services of the se	t community level that imprement mechanism e.g face elivered by community bartnership to improve access	cility accreditation sed health workers ((6 wk trained) and/or ou	itside of static	
Demand	Initial utilization of servi	ces	Reducing indirect houselSocial Marketing/Mass (nold expenditures on healt Communication	th (CCT, vouchers, r	eimbursement)		
	Timely continuous utiliz	ation	 Mass Media + Community Mobilization/Home visits, Scale up behaviour change communication Defaulter Tracking/reminders/recall Strengthening services delivered by community based health workers and/or outside of static health faci (SMAGS, iCCM, Outreach services) Explore other ways of funding the sector e.g. Social Health Insurance to address causes of hidden costs Improve efficient use of available resources for community based interventions Strengthening systems at community level that improves interface with health facilities 					
Quality	Effective coverage, or g	ood quality of services	 Scale up training in Essential & Community based New Born care and conduct supportive supervise. Training in Refresher Training/in-service training/reminders* Provide tools and guidelines for all levels. Monitoring/peer review/team problem solving-learning. Supervision/feedback/audit* Regular monitoring & Evaluation of IMCI implementation. Targeted [cadre and skill] capacity building including mentorship/supervision. Implement quality improvement mechanism e.g facility accreditation. Utilize systemic mechanisms such as the government Performance Management System (Annual 					
Effective Intervention 20	full immunization und							
Intervention targets	Attain universal coverage (80%) of fully immunized children using the RED strategy in all Districts	apply the RED	% of districts attaining 80% full immunization coverage	69% (HMIS, 2008 Statistics Bulletin)	100%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	

	Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
Effective Intervention 26	Vitamin A supplementa	tion						
Intervention targets	Attain universal coverage with micronutrient supplementation in children Under-5 years old.	Increase numbers of health workers, caretakers and communities value the importance of micronutrient supplements ensuring children U-5 receive it.	% of children that receive Vitamin A supplements	60%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	
Strategic Shifts for Childhoo	d: (Based on tracer interventi	on – Full immunization	under one year)					
Coverage Determinants			Strategies for Intervention					
Enabling Environment	Social Norms		 Leadership & partnership in EPI programmes Sensitization & awareness raising on effectiveness of immunizations; Dispelling negative perceptions about immunizations Educating communities on EPI; 					
	Legislation/Policy			VII 2. 1,				
	Budget/Expenditure	Budget/Expenditure		 Advocacy at SAG level to ensure that health sector ear marked funds for EPI programme Improving efficient use of available resources within health sector - including the allocation from the distr grant meant for community activities Advocate for increased budget allocation for programme implementation particularly outreach activities at district level. Strengthening services delivery through outreach Use existing formal community structures such as community development and social welfare, Build and expand health facilities in urban areas Explore public private partnership to improve access 				
	Management/ Coordination	on	Institutionalize the use of	to ensure that health sec of updated monthly Immu of available resources wit	unization monitoring to	ool to monitor performar	nce	
Supply	Availability of commoditie	s	Strengthen procurementStrengthen storage/dist	nt (buffer stocks)		, ,		

	Objective(s)	Required [behaviour]	ļ.	ndicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
			 Local supply management Develop guidelines for v Lobby, plan and budget for the procurement of cold chairs are procurement of cold chairs are procured to the procurement of c	accine management practor procurement of vaccir eplacement, repair and promotional level staff hancin equipment and mainter pole procurement systems; accine management practor	ne refrigerators and content of the reventive maintenance of supply and logistic of cold chain (for Effective distribution)	ce of cold chain equipm tics for EPI or static & mobile stati		
	Availability of human res		 Pre service training (including returnees/retirees)* Use of lay health worker GRZ and Private sector to increase output from training institutions. Redistribute the available staff to critical areas. Encourage local training and bonding to retain skilled staff Increase number of trained community health assistants Re introduce training of family health nurses Link responsibility for vaccine management to specific officer in the province/district medical capacity building of sub-national level staff handling and maintenance of cold chain equipm Lobby for establishment of province/district cold chain equipment officer Task shifting during EPI Defining basic activities to be done by community volunteers (e.g. Weighing children, etc); Ur tasks to lighten burden on skilled health workers 					
	Geographic access to de		 Expand health facilities Expand outreach service Rehabilitation, Maintenar Increase Health Staff Strengthening services d Use existing formal commodities Build and expand health Explore public private pate Adopting the RED strateg Provision of EPI services Regular and routine prov Regular mass vaccinatio 	elivery through outreach, nunity structures such as facilities including health artnership to improve accor- gy at all facilities; through r ision of vaccination from	including through co community developm posts ess nobile/ outreach facil static & mobile statio	nent and social welfare		
Demand	Initial utilization of service	ces	Social Marketing/Mass (Mass Media + Community	Communication				

	Objective(s)	Required [behaviour]	li	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
	Timely continuous utiliza		 Performance incentives Defaulter Tracking/reminders/recall Promote behaviour change communication Strengthening services delivered outside of static health facilities as close to population centres as (strengthen defaulter tracing through outreach services) Linking communities to social safety net such as community empowerment programmes social cast Strengthening systems at community level that improves interface between the communities and he facilities Strengthening services delivery through outreach Build and expand health facilities in urban areas Explore public private partnership to improve access Targeted [cadre and skill] capacity building including mentorship/supervision Provide appropriate infrastructure, equipment and supplies according to the service delivery level.I Utilize systemic mechanisms such as the government Performance Management System (Annual F Appraisal System) - currently is rolled out. Forming health worker reception committees during mobile EPI days/sessions 				
Quality Effective Intervention 21	Effective coverage, or go		 Forming health worker reception committees during mobile EPI days/sessions Refresher Training/in-service training/reminders* Supervision/feedback/audit* Monitoring/peer review/team problem solving-learning Regulation Strengthen capacity building, mentorship and supportive supervision Regular monitoring adherence of SOPs, guidelines and protocols Implement quality improvement mechanism e.g facility accreditation Provide appropriate infrastructure, equipment and supplies according to the service delivery level. Utilize systemic mechanisms such as the government Performance Management System (Annual Performance Appraisal System) - currently is rolled or Conduct data audits to inform decision making and planning at district level Strengthen capacity of HMIS to deliver real time data for programming. Continuous advocacy to raise the profile of routine immunization services 				
			To (6 1 11 11 1 1 1 5	L 50 00/ /M/O	1000/	T. 11410 - 70110 N	
Intervention targets	Attain universal coverage of children Under-5 that sleep under ITNs	Increasingly more households value the role of ITNs and ensure children	% of children Under-5 sleeping under ITNs	52.3% (MIS)	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned

	Objective(s)	Required [behaviour]	Indicator values			Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
		Under-5 use them.					activities		
Strategic Shifts for Childhood	l: (Based on tracer interve	ention – Children Under-5 s	sleeping under ITNs)						
Coverage Determinants			Strategies for Intervention						
Enabling Environment	Social Norms		 Leadership & partnerships on malaria control Sensitization & awareness raising on effective malaria interventions; Dispelling negative perceptions about malaria control interventions Intensify behaviour change communication messages on ITN 						
	Legislation/Policy								
	Budget/Expenditure		 Government increase allocation of specific and sufficient funds for malaria control and prevention. Creation of 3 year ITN procurement and distribution plan. 						
	Management/ Coordination								
Supply	Availability of commodities		Strengthen storage/distribution						
	Availability of human resources		 Pre service training (including returnees/retirees)* Increase Health Staff Task shifting of ITN distribution to community level or private sector(NGO/FBOs) Strengthen linkage and coordination between national level, provincial and especially the district level-(build capacity of Environmental Health personnel in provinces and districts in Malaria control and prevention) 						
	Geographic access to delivery points		Task shifting of ITN distribution to community level or private sector(NGO/FBOs)						
Demand	Initial utilization of services		 Social Marketing/Mass Communication Mass Media + Community Mobilization/Home visits 						
	Timely continuous utilization		 Performance incentives Defaulter Tracking/reminders/recall 						

	Objective(s) Required [behaviour]		Indicator values			Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
Quality	Effective coverage, or good quality of services		 Refresher Training/in-service training/reminders* Supervision/feedback/audit* Monitoring/peer review/team problem solving-learning Increase monitoring and supervision of staff involved on ITN programming 					
Effective Intervention 22	HIV+ children accessing	g ARVs		·	·			
Intervention targets	Attain universal coverage of HIV+ children born from HIV+ mothers that access ARVs	Increasingly more paediatric ARV formulations are procured and that more HIV+ children born of HIV+ mothers access ARVs	% of HIV+ children from HIV+ mothers that access ARVs	53%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	
Strategic Shifts for Childhood	: (Based on tracer interventi	on – HIV+ children acc	essing ARVs)	•				
Coverage Determinants			Strategies for Intervention					
Ooverage Determinants			orategies for intervention					
Enabling Environment	Social Norms		 Leadership & partnerships in the fight against HIV & AIDS Reducing stigma; Providing social support to affected families; Support and care for orphans & vulnerable children 					
	Legislation/Policy							
	Budget/Expenditure		Lobby, plan and budget for procurement of DBS bundles					
	Management/ Coordination							
	Availability of commodities		Integrate forecasting and quantification of stocks for paediatric HIV management					
Supply	Availability of human resources		 Integrate management of paediatric HIV into pre-service curriculum for health workers Establishment of mentors at province/district levels Strengthen supervisory role of the Clinical Care Specialist/Experts to ensure all HIV positive children less than two years of age are commenced on treatment Build capacity of all health care workers on target setting and result based management for Paediatric HIV 					

Required [behaviour]	Objec	Indicator values			Source of	Assumption	
Changes (Outcomes)		Verifiable indicator	Baseline value & Year	target value for 2015	verification	·	
		management Redistribute the available staff to critical areas.					
Geographic access to delivery points		 Strengthening services delivery through outreach Use existing formal community structures such as community development and social welfare, Build and expand health facilities in urban areas (satellites) Explore public private partnership to improve access Improve sample referral system and expansion of the SMS technology for delivery of results 					
3	emand Initial (Immunization coverage high, link CTX prophylaxis to immunization visits and innovative delivery mechanisms (e.g. have CTX packaged during EPI services) Strengthen mother-baby follow up through SMS (scale-up of RemindMi application) Provide incentives to community health workers to strengthen mother-baby follow up Develop and implement communication strategies and utilize various channels to communicate information Innovations to prompt screening and linkage of HIV exposed children to services (Social welfare officers and community development officers: Link to RemindMi application) Strengthening services delivered outside of static health facilities as close to population centres as possible (mobile/outreach services) on regular basis Linking communities to social safety net such as community empowerment programmes social cash transfers Strengthening systems at community level that improves interface between the communities and health facilities Implement community level activities and strengthen male involvement and couple counselling Political support and influence by opinion leaders to involve men at all levels Targeted [cadre and skill] capacity building including mentorship/supervision Provide appropriate infrastructure, equipment and supplies according to the service delivery level. Implement quality improvement mechanism e.g facility accreditation Utilize systemic mechanisms such as the government Performance Management System (Annual Performance Appraisal System) - currently is rolled out. Provide tools and quidelines for all levels 					
d quality of services	Effecti						
		Provide apprenticeship for new paediatric ART graduate trainees					
	oss-cutting/ Multi-sectoral						
ldren Under 5 years ant) that are anaemic							
Increasingly more efforts are made to improve agriculture and availability of	tervention targets Attain covera supple haema	 % children Under 5 that are stunted; % anaemia among non- pregnant women 	45% 29%	35% 19%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned	
			<u> </u>	ailability of pregnant women	ailability of pregnant women	ailability of pregnant women	

	Objective(s)	Required [behaviour]	Indicator values			Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
	combat malaria in pregnancy; and to improve the nutrition of children to prevent stunting and malnutrition	food to ensure reduction of anaemia during pregnancy and the proportion of stunting among Under-5 children.					activities		
Strategic Shifts for Childhoo	od: (Based on tracer intervention		nd Young Child Feeding)						
Coverage Determinants			Strategies for Intervention						
Enabling Environment	Social Norms		BCC campaign on MIYCF (emphasis on interpersonal communication at community level) Target Chiefs, community leadership						
	Legislation/Policy		 Increased advocacy targeting policy makers in key line ministries (health, education, community development local government) 						
	Budget/Expenditure								
	Management/ Coordinatio	n							
	Availability of commodities	3	Strengthen procuremen Strengthen storage/distr Local supply manageme Home fortification in mos Expansion of cash transibehaviours)	bution nt it vulnerable households er/food vouchers (should	d have some condition	ns, eg related to some	nutrition		
Supply	Availability of human resources		 Expansion of food fortification and bio- fortification Pre service training (incld. returnees/retirees)* In country graduate programmes (BSc and masters have has just being initiated) Establish Alternative Livelihood package for community volunteers (
	Geographic access to delivery points		 Increase Health Staff Increase outreach services to cover more sites regularly Use of low cost transport such us ox carts, bicycles etc 						
Demand	Initial utilization of services	3	Social Marketing/Mass Mass Media + Communi	Communication					

	Objective(s)	Required [behaviour]	İr	ndicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
	Timely continuous utiliza	tion	Reducing indirect househ Defaulter Tracking/remine Expand Community IYCF	ders/recall	Ith (CCT, vouchers, r	eimbursement)		
Quality	Effective coverage, or go	od quality of services	Refresher Training/in-serMonitoring/peer review/te		ning			
Effective Intervention 31	Coverage of household	s with access to improv	red source of drinking water s	ources				
Intervention targets	Attain universal coverage with households that have access to improved sources of drinking water (using chlorine, boiling, boreholes, tap water, etc)	Increasingly more efforts are made to ensure that more households have access to improved sources of drinking water - to prevent diarrhoea and waterborne diseases in children under-5	% of households with access to improved sources of drinking water.	24%	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	
Strategic Shifts for Childhoo	d: (Based on tracer intervent	ion – Water supply)						
Coverage Determinants			Strategies for Intervention					
Enabling Environment	Social Norms		 Produce and disseminate more communication material. MLGH to complete the advocacy and communication strategy and implement it. Engage traditional leaders (e.g. chiefs, headmen) in community sensitization and promotion of safe water supply services 					
	Legislation/Policy	Legislation/Policy		ne formulation of national mplementation. the policy implementatio dite the operationalization udgetary resources to pl	n on of decentralized ba	sic service delivery for	WASH. Local	
Budget/Expenditure • Ensure sustained and predictable funding for provision of water supply services. • GRZ to increase budgetary allocation for the sector, prioritization of allocation in differe • GRZ should increase funding to reach the more than 5 million people with safe water s • Equitably allocate finances for high impact with a focus on low coverage, remote and v						services. ocation in different area vith safe water supply fo	vices. on in different areas. safe water supply facilities.	

	Objective(s)	Required [behaviour]	li	Indicator values		Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
	Management/ Coordinati	on	 Strengthen district WASH water supply facilities. Strengthen water supply 		nanage their				
	Availability of commoditie		Local supply managementStandardization of comm	nt .		,			
Supply	Availability of human reso	ources	 Pre service training (including returnees/retirees)* MLGH to improve the incentive and on time payment of salaries, Provide capacity building training at all levels and have monitoring mechanisms in place to monitor outputs the training. MLGH should take measures that will enable it to recruit and retain district staff, and ensure that each district has a minimum of one dedicated staff member to water supply programme. Increase Health Staff MLGH should employ appropriate low-cost technologies to equitably reach remote and vulnerable communities. Appropriate low cost technologies include reticulation systems using gravity fed and solar-power systems, development of surface water supplies such as spring development, manual drilling, hand-dug wells, etc. 						
	Geographic access to de	livery points							
Demand	Initial utilization of service	es	Social Marketing/Mass CReducing indirect househ				,		
	Timely continuous utilizar	iion	 Performance incentives Defaulter Tracking/remine Community sensitization Government takes action 	on community manageme		al interference.			
Quality	Effective coverage, or go	,	 Government takes action to enforce the national policy and stop political interference. Refresher Training/in-service training/reminders* Supervision/feedback/audit* Monitoring/peer review/team problem solving-learning Regulation Increase budgetary allocation 						
Effective Intervention 32	Coverage of household	s with access to improv	ved sanitation						
Intervention targets	Attain universal coverage with households that have access to improved sanitation water (using Toilets, VIP latrines, Flash toilets, etc)	Increasingly more efforts are made to ensure that more households have access to improved sanitation services - to prevent diarrhoea	% of households with access to improved sanitation services	42%	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities		

	Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
		and water-borne diseases in children under-5						
Strategic Shifts for Childhoo	od: (Based on tracer interv	rention – Sanitation and Hyg	giene)					
Coverage Determinants			Strategies for Intervention	1				
Enabling Environment	Social Norms		 Advocate with private s MLGH to complete the Standardise and disset 	I not just work on be inform sector to produce odourles advocacy and communica minate key messages to fa lers (e.g. chiefs, headmen	s soap ation strategy and impl amilies and communition	lement it		
	Legislation/Policy		 MLGH should expedite the formulation of national policy on sanitation and hygi CPs should advocate for the policy implementation Government should expedite the operationalization of decentralized basic serv Hygiene. Advocate for local authorities to have budgetary resources to plan and implementation 					
	Budget/Expenditure		 Policies in place should be able to finance the programme Government should ensure sustained funding for infrastructure for sanitation Government should increase budgetary allocations in proportion to about 7 million people without access to sanitation facilities. Financing should be equitably allocated for high impact with a focus on low coverage, remote and vulnerable communities 					
	Management/ Coordi	nation	involve cross-sectoral MLGH should strength	enabling leadership and ta partners and harness the o en the Sanitation and Hyg haps upgrade the WASH o	contribution that can be iene unit by upgrading	e brought from partne the its mandate, pov	ers	
	Availability of commo	dities	Standardization of com	nmunity based affordable t	echnologies			
Supply	Availability of human	resources	and have monitoring mMLGH should take me	ncentive and on time payr echanisms in place to mo asures that will enable it to staff members each dedic	nitor outputs of the tra recruit and retain dist	ining. trict staff, and ensure	that each district	

	Objective(s)	Required [behaviour]	Ir	dicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
	Geographic access to de	livery points	 MLGH should employ appropriate low-cost technologies to equitably reach remote and vulnerable communities. Appropriate low cost technologies include elevated sanitation facilities, ecological sanitation and ot techniques. 					
Demand	Initial utilization of services Sustained community sensitization and behavioral change communication (BCC) Introduce more cost effective and durable latrine construction techniques					,		
	Timely continuous utilizat	tion						
Quality	Effective coverage, or go	od quality of services	Increase budgetary alloca	ation				

Packages of activities for the selected MNCH interventions in the Zambia MNCH Road Map [Logical Framework]

		Objective(s)	Required [behaviour]	İr	ndicator values		Source of	Assumption
			Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
	Goal Impact	To reduce maternal mo	rtality ratio in Zambia by					
Goal	Goal targets	Universal coverage; Equitable coverage;	Using the 3D- combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels of the health system	Maternal Mortality Ratio (MMR)	MMR 591/100,000 live births (2007)	162/100,000 live births by 2015	ZDHS, MDR reports	Long-term funding available for planned activities
				more closely and in more effe				
	Goal Change	,	s); maximizing synergy,	resource mobilization & optim	ization in implementing	known effective M	NCH interventions for	universal
Di Ci i	(O I D	access						
	fe-Cycle: Pre-pregna							
Effective In	tervention 1		r contraception for wom		L 0.0 F0/ (0.00T)	140/ (0045)	TOUG NET	
Intervention	•	Attain universal coverage with modern contraceptives for optimal child spacing and manageable number of children at households in Zambia	Contraceptive advice, commodities & information more easily available, accessible and affordable in public and private sectors	Unmet need	26.5% (2007)	14% (2015)	ZDHS, MTR reports	Long-term funding available for planned activities
Effective In	tervention 2	Increasing prevalence	rate with modern contra	ceptive among women in repr	oductive age group			
Intervention	n targets	Reduce unwanted pregnancies	More women in the reproductive age groups easily & affordably accessing modern contraceptive commodities.	Prevalence of modern contraceptive among women in reproductive age groups	24.6% (2007)	50% (2015)	ZDHS, MTR reports	Long-term funding available for planned activities;
Effective In	tervention 3	Reduce the proportion	of Teenage pregnancy a	and motherhood				
Intervention	n targets	SRH education to youths; Implementing adolescent-friendly	More conducive environment for access by teenagers	Prevalence of teenage pregnancy and motherhood	27.9% (2007)	18%	HMIS, ZDHS, Non- routine data	

	Objective(s) Required [behaviour]		lı	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
	reproductive health	and to seek modern				sources	
	services	contraceptive					
		commodities					
Effective Intervention 4	Reduce problems in ac	cess to health services	of women of reproductive age				
Intervention targets	Introduction of social	Social protection	Proportion of women	73.5%	42%	HMIS, ZDHS, Non-	
	health insurance	policies identify the	accessing care	(2007)		routine data	
	services; Enact social	vulnerability of women		(2007)		sources	
	protection policies	& children for					
	/laws	prioritized access to care					
		Care					
Coverage Determinants			Strategies for Intervention				
Enabling Environment	Social Norms		Sensitization and av	vareness raising (Multi-sta	skeholder BCC camr	vaigns): Social Marketin	α
g				ent on modern contracept			9
			 Establishing fit with 				
			Sensitize traditional				1
	Legislation/Policy			nd recognition of the role t itical will at all levels [Incre			
	Legislation// olicy			eadership & advocacy on		na resources for wincr	1/FF.
				es in political landscapes		and planned health pro	grammes
				ection policies [introduction		r schemes – e.g. condit	ional cash
			transfers systems fo	or women in times of need	, etc;		
	Budget/Expenditure			on for MNCH/FP services			
				on committees at all levels sed allocations to the hea		ancing schemes,	
			 Advocacy for increa 	sed allocations to the hea	Ith hudget		
			 [Increased commitm 	nent and resources for MN Health Insurance (SHI) co	ICH/FP.,		

	Objective(s)	Required [behaviour]		Indicator values			Assumption		
	, ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·		
	Management/ Coordinati		 Linking MNCH action plans to other national strategies, fertilizer support programmes, food security programme]; Creating high level leadership & advocacy on MNCH/FP services, Integrate adolescent sexual reproductive health (ASRH) into programmes Involve young people in programmes and their evaluation; Integrate ASRH in school curriculum Task shifting Lobby for a functional Community HMIS Deployment of Focal Points People at the central, provincial and district levels. Standardize all materials, training and IEC Systems strengthening and coordination of partners Strengthen procurement (buffer stocks) 						
	Availability of confinduite	5 5	 Strengthen storage/dist Local supply management Advocacy for continued Ensure availability of FF 	ibution ent and increased budget allo		Commodities Budget-	line		
Supply	Availability of human res	ources	 Pre service training (including returnees/retirees)* use of lay health worker Train more HCPs (including in LTFP methods and ADRH) and increase capacity f or the training schools Incentivise the HCPs especially those deployed in the rural areas Employ retired HCWs Task shifting Inclusion of LTFP training in the pre-service curriculum 						
	Geographic access to delivery points Expand outreach services/campaigns/national health days Rehabilitation, Maintenance and Equipment Increase Health Staff Invest in infrastructure to address the geographical barrier Link up with line ministries to improve the road network and transport system so that there is exto health care. Strengthens the referral system, ambulance, radio or phone Strengthen outreach services Strengthen community participation Scale up youth friendly services for reproductive health services Support community-based distribution of contraceptives								

	Objective(s)	Required [behaviour]		ndicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
			Contribute to criteria or r	nechanisms for identifyi	ng the poor and the ne	edy in the community,	etc]	
Demand	Initial utilization of servic		Social Marketing/Mass Mass Media + Communi Defaulter Tracking/remir Formation of women gro Develop youth-friendly re Formation of SMAGs; Community based distrit Encourage male involve Formation of parent grou Strengthen community re	ty Mobilization/Home visited responsible to the state of the second responsible to the second re	nittees; term FP methods ,			
Quality	Effective coverage, or go	ood quality of services	 Sensitize Parents, Elders and traditional initiators Refresher Training/in-service training/reminders* Supervision/feedback/audit* Monitoring/peer review/team problem solving-learning Regulation Funding for Mentorship/supervision, follow up Community role in auditing RBF incentives, Ensure availability of FP and ADRH supplies Provide Job AIDs to be based on standardized national guidelines 					
Phase of Life-Cycle: Pregnar	ncy							
Effective Intervention 5	Increase the % of wom	en accessing first ANC	within the first trimester					
Intervention targets	Attain universal coverage with at least 1 ANC visit during pregnancy; with increasingly more of these done in the 1st trimester	Increasingly more pregnant women start ANC visits early and in 1st trimester	The % of pregnant women accessing 1st ANC visit within the first trimester	19.2% (2007)	58% (2015)	ZDHS, HMIS, MTR reports	Long-term funding available for planned activities	
Effective Intervention 6		en accessing 4+ visits to	o Focused Antenatal Care (FA	NC) from 60.3% to 809	/6			

	Objective(s)	Required [behaviour]	Ir	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Intervention targets	Attain universal coverage of pregnant women making 4+ and quality FANC visits.	More pregnant women value higher quality FANC services and make at least 4+ visits for ANC.	% of women that make 4+ visits to Focused Antenatal Care (FANC)	60.3% (2007)	80% (2015)	ZDHS, HMIS, MTR reports	Long-term funding available for planned activities
Effective Intervention 7	Increase the coverage	of pregnant women takii	ng 2 or more doses of IPT fron	n 70.2% to 80%			
Intervention targets	Attain universal coverage of pregnant women taking 2 or more doses of IPT	Increasingly more pregnant women value the role of IPT in protecting the unborn; and thus receive 2 or more doses of IPT.	% of pregnant women that receive 2 or more doses of IPT	70.2% (2010)	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 8	Proportion of HIV+ preg	gnant women accessing	ARVs for e-MTCT				
Intervention targets	Attain universal coverage on pregnant women who take up PMTCT services	Increasingly more pregnant women become aware of and take part in PMTCT activities.	% of pregnant women who access ARVs for e-MTCT	85% (UNGASS 2011 Zambia Report)	95%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities Strengthened integration in MNCH
Effective Intervention 9	Pregnant women who k	know the danger signs o	f pregnancy				
Intervention targets	Attain universal coverage on pregnant women who know correct danger signs of pregnancy	Increasingly more pregnant women become aware of danger signs in pregnancy.	% of pregnant women who know the danger signs of pregnancy	73.3% (2007)	95%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 10	Proportion of pregnant	women sleeping under	ITNs				
Intervention targets	Attain universal coverage on pregnant women sleeping under	Increasingly more households and pregnant women	% of pregnant women that sleep under ITNs	47.7% (2010 MIS)	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for

	Objective(s)	Required [behaviour]	I	ndicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
Strategic Shifts for Pregnance	ITNs cy Phase of the Life Cycle	value the role of ITNs in protecting against malaria during pregnancy. e (Based on Tracer Interventi	on: Focused Antenatal Care)				planned activities	
Coverage Determinants			Strategies for Intervention					
Ooverage Determinants			outlegies for intervention					
Enabling Environment	Social Norms	Social Norms		yths about IPT and Pregress of safe pregnancy and stitus at the safe pregnancy are stitus at the safe and the safe are the safe at the safe at the safe are safe at the safe are safe at the safe are safe are safe at the safe are	nd motherhood; d countering beliefs,	des		
	Legislation/Policy		Increased advocacy for /					
	Budget/Expenditure		 Allocation of adequate funds to ensure quality service provision: Procure supplies, commodities and equipment for FANC, Procure PMTCT commodities MIP prevention and IPT commodities New protocols and guidelines for PMTCT 					
	Management/ Coord	dination	 Explore and use of other Standardize all materials Develop Woman-Friendle Expand range of ANC seen Implement Monitoring & Supervision the SMAGs 	fora to disseminate new , training, Job Aids, IEC y ANC services rivices offered; Evaluation - Community I	materials, HMIS vel		nd trimester 12 – 14	
Supply	Availability of comm	odities	Strengthen procurement Strengthen storage/distrit Local supply manageme Ensure availability of FAI RHCS to ensure timely of Ensure availability of IEC Ensure availability of AR	bution nt NC supplies istribution of MIP/IPT cor materials, job aids and f ting equipment & supplies	low charts for IPT an			

Objective(s)	Required [behaviour]			Source of	Assumption		
	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
	, ,	Scale up of Essential medicines logistics improvement programme (EMLIP)					
Availability of human reso		environment Strengthen / introduce R and nurses stay in class D districts are on the Zar Technical support and m Task shifting on services Increase the number of s schools (Introduce 2 inta Direct midwifery training Advocacy for correct hum Technical support for me Expedite implementation Delegation of authority for posts Lobby with PSMD for reconstruction of PHO and DHO on Participation in HR technical Refresher training of HW Updated workforce with the Training of PMTCT provices Skilled lay counsellors	ervice ional environments (PPEs etention scheme for Midw C and D rural districts; en nbia Health Worker Reter entorship/supervision, foll : Community counselling s killed midwives by: training i han resource placement ntorship and supervision of of training operation plan or MCDMCH to appoint he eruitment and deployment rational use of HR ical working group to influ S he current protocols in IP	ives and nurses in the sure that at least 50% attion Scheme by 2015 ow up of HWs services and more midwives and institution); of HWs sealth professionals in of skilled health workence deployment and	e rural areas [Ensure 6 of midwives and nu 5] d increase capacity for terms of pre-approve	more midwives irses in class C and or the training	
Geographic access to de	livery points	 Rehabilitation, Maintenar Increase Health Staff Improved road & commu Invest in infrastructure ar 	s/campaigns/national heance and Equipment nication networks: All wend mother waiting homes bystem, ambulance, radio	ather roads for acces to address the geogr			
		Strengthen outreach services		·	ackages & postnatal	care services	

	Objective(s)	Required [behaviour]	Ir	ndicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
Demand	Initial utilization of service Timely continuous utilization Effective coverage, or go	tion	 Social Marketing/Mass Communication Mass Media + Community Mobilization/Home visits Community participation including male involvement Trainings for influential community leaders to encourage their subjects to come early for ANC Training and supervision of SMAGs Use of community structures i.e. SMAGs to reach communities with safe motherhood messages, messages, birth preparedness, IPT and MIP, PMTCT (Group counselling sessions; Increased confidentiality; VCT and Provider initiated CT services) Sustain / Increase the percentage of at least 1 ANC visit during pregnancy Social support services to pregnant women; Identification of pregnant mothers including pregnant teenagers Identification of the poor / needy through the SMAGs Conditional cash transfer for the poor: Social cash transfer schemes and advocacy for enactment of social protection policies addressing vulnerability in the MNCH life cycles Performance incentives Defaulter Tracking/reminders/recall On-going sensitization & awareness on 4+ FANC services; and awareness on the importance of IPT in pregnancy; Awareness raising on PMTCT Sensitization & awareness of PMTCT services Refresher Training/in-service training/reminders* Supervision/feedback/audit* Monitoring/peer review/team problem solving-learning 					
Phase of Life-Cycle: Delivery								
Effective Intervention 11	Proportion of institution	nal deliveries and those	by skilled attendants					
Intervention targets	Attain universal coverage on institutional deliveries by skilled health workers	Increasingly more pregnant women value giving birth under supervision by skilled health workers (midwives)	% of deliveries supervised by skilled health workers	47.7% (institutional) 46.5% (SBA) 2007	70%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	
Effective Intervention 12	Coverage of EmONC fa	cilities to all districts						

	Objective(s)	Required [behaviour]	İr	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Intervention targets	Attain universal coverage with EmONC facilities to / and within all Districts in Zambia	Increasingly more districts join the EmONC initiative and the optimum number of facilities within districts have EmONC capacities	% of Districts with EmONC capacity; Caesarean section rates (%)	3%	100% 5%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 13	Coverage with appropr	iate uterotonics to preve	ent haemorrhage countrywide				
Intervention targets	Attain universal coverage with misoprostol among pregnant women that deliver at home.	Increasingly more pregnant women value the role & use of misoprostol in preventing postpartum bleeding when delivering at home.	% of pregnant women who used misoprostol after delivery at home	20%	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 17	Capability in all EmONO	C facilities for the manag	gement of prematurity and nev	vborn problems to redu	ce perinatal deaths		
Intervention targets	Attain universal coverage in the provision of incubators and resuscitation rooms at all EmONC facilities, countrywide	Increasingly more facilities get equipped with incubators and resuscitation rooms to treat prematurity and hypothermia in the newborn	% of EmONC facilities with incubators & resuscitation rooms for neonates	baseline	100%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Strategic Shifts for Delivery Pha	se of the Life Cycle: (Bas	sed on tracer interventio	n – Emergency Obstetric and	Neonatal Care)			
Coverage Determinants			Strategies for Intervention				
Enabling Environment	Social Norms		 Strengthen community pa Engagement of the traditi Multi-stakeholder BCC ca Raising the general levels Promotion of girl child ed 	onal and religious leaders impaigns; Radio, TV, Pos s of education for women	ters, Newspaper arti through gender targ	cles, Drama, Poetry, et	с

	Objective(s)	Required [behaviour]		ndicator values		Source of	Assumption			
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification				
	Legislation/Policy		 Improved condition of services for health workers through retention schemes Advocacy for discharge of mothers 24 hours post delivery Advocacy for registration births and birth certificates at district level Advocacy for registration of maternal & new-born deaths (including community deaths) 							
	Budget/Expenditure		Increase government fur	nding for maternal health sing, strengthen and coord	service; desegregated		nterventions			
	Management/ Coordina	ation	 Mapping, partnerships with and coordination of implementing partners Standardized MNCH training manuals, I.EC, protocols and guidelines Scale up and saturate EMONC services country wide Strengthen Maternal health data collection Strengthen maternal health data collection Strengthen Maternal Death Reviews to inform decision making Develop a data base for HCP trained in MNCH & EmONC 							
Supply	Availability of commodi	ties	 Strengthen procurement (buffer stocks) Strengthen storage/distribution Local supply management Provision of equipment and ensure commodity security Ensure MNCH commodity security at all levels through the scale up of EMLIP program 							
	Availability of human re	esources	 Pre service training (including returnees/retirees)* Inclusion of EMONC in pre-service curriculum Strengthen MNCH components in pre-service curriculum Increased Midwifery school training capacity Increase number or health workers in the health facilities particularly in the rural areas trained in EmON Strengthen pre service and in-service training of HCP in MNCH programs & EmONC Task shifting 							
	Geographic access to o	delivery points	 Housing, schooling and hardship allowance Expand health facilities Rehabilitation, Maintenance and Equipment Increase Health Staff Scale up and saturate EmONC services country wide Strengthen of the referral system Infrastructure rehabilitation (Mothers' waiting homes and Delivery rooms) Strengthen communication systems Transport services Easier availability of public transport services countrywide; 							

	Objective(s)	Required [behaviour]	l	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
			Better road network to ea	ase access to care			·
Demand	Timely continuous utili Effective coverage, or		Reducing direct household Social Marketing/Mass (I) Mass Media + Community Performance incentives Defaulter Tracking/remin Distribution of 'Baby Man Behaviour change community community and awarer saving lives Strengthening of community lives Strengthening of community transport mesure set up community IGA full Health promotion talks on Post-Natal care within 24 Postnatal care at 6 days Incentives for post-natal Conducting outreach ser Sensitization and awarer Strengthen technical sup Advocate for on – going in the social sup	communication by Mobilization/Home visit ders/recall na Packs' to incentivize n unication addressing my ness on danger signs in th ness of uterotonics (e.g. r nity capacity & participati construction of mothers al attitudes on deliveries chanisms for referrals ands for referral of mother in importance of postnatal hours and 3days of delivand 6 weeks of delivery care: Incentives to skilled vices for home visits for f ness of birth registration in port and mentorship	nothers to deliver at heths and misconception he postpartum period nisoprostol) in prever on in skilled delivery waiting shelters by skilled attendants; ers in labour & postnaticare (PNC) through very (including home delial midwives; Incentives PNC ncentives	Health Center ons through SMAGs onting postpartum hae tal mothers the SMAGs deliveries) veries)	morrhage and
Quality			 Strengthen MDR commit Refresher Training/in-ser Supervision/feedback/au Monitoring/peer review/te Regulation 	tees vice training/reminders* dit*			
Phase of Life-Cycle: Postnat	al						
Effective Intervention 14	Postnatal attendance	e with skilled care (within 2	2 days)				

	Objective(s)	Required [behaviour] Indicator values			Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Intervention targets	Increase the number of mothers that seek and attend skilled postnatal care services within 2 days of giving birth	Increasingly more mothers value the advantages of postnatal care services by skilled health workers and attend these services	% of mothers attending skilled postnatal care within 2 days of giving birth	38.7% (ZDHS, 2007)	55% (2015)	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Strategic Shifts for Postnatal	Phase of the Life Cycle: (Bas	ed on tracer interventio	n – Postnatal attendance with	in 2 days)			

Coverage Determinants		Strategies for Intervention
Enabling Environment	Social Norms	 Strengthen community participation Engagement of the traditional and religious leaders in advocating for MNCH services Sensitization & Awareness raising importance of post natal care Multi-stakeholder BCC campaigns; Radio, TV, Posters, Newspaper articles, Drama, Poetry, etc Raising the general levels of education for women through gender targeting approaches Promotion of girl child education and women empowerment
	Legislation/Policy	 Advocacy for women's health issues Standardized guidelines for postnatal care Advocacy for discharge of mothers 24 hours after delivery Advocacy for registration births and birth certificates at district level Advocacy for registration of maternal & new-born deaths (including community deaths)
	Budget/Expenditure	Increased funding for high impact maternal health services
	Management/ Coordination	 Standardized MNCH training manuals, I.EC, protocols and guidelines Strengthen Maternal health data collection Monitoring & Evaluation Strengthen SMAGs implementation of postnatal services
	Availability of commodities	Ensure availability of commodities for the emergency trolley for management of postpartum haemorrhage, eclampsia, newborn resuscitation
Supply	Availability of human resources	 Increase the number of skilled midwives by training more midwives and increase capacity for the training schools Introduce 2 intakes per year per training institution (midwifery) Direct midwifery training Advocacy for correct human resource placement

	Objective(s)	Required [behaviour]	I	ndicator values		Source of	Assumption	
	, ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
			Technical support for me	ntorship and supervision	of HWs•		•	
	Geographic access to de	elivery points	 Strengthen of the facility referral system Scale up and saturate EMONC services country wide Infrastructure rehabilitation (Mothers' waiting homes and Delivery rooms) Strengthen community systems and use of community health structures - SMAGS Strengthen communication systems Transport services Easier availability of public transport services countrywide Better road network to ease access to care 					
Demand	Initial utilization of servic	es		na Packs' to incentivize n				
	Timely continuous utiliza		 Distribution of 'Baby Mama Packs' to incentivize mothers to deliver at Health Center Behaviour change communication addressing myths and misconceptions through SMAGs Sensitization and awareness on danger signs in the postpartum period Sensitization and awareness of uterotonics (e.g. misoprostol) in preventing postpartum haemonest Strengthening of community participation in service delivery Helping with the design & construction of mothers' waiting shelters Combating negative social attitudes on deliveries by skilled attendants; Community referral support systems Promotion of male involvement in health seeking behaviour ; Community transport mechanisms for referrals Set up community IGA funds for referral of mothers in labour & postnatal mothers Health promotion talks on importance of postnatal care (PNC) through the SMAGs Post-Natal care within 6 hours and 2days of delivery (including home deliveries) Incentives for post-natal care: Incentives to skilled midwives postnatal mothers; Sensitization and awareness of birth registration (include incentives Continued support to teenage and single mothers Referral to/linkage with ART clinic for HIV-positive mother 					
Quality	Effective coverage, or go	ood quality of services						
Phase of Life-Cycle: Neonatal								
Goal Impact	To reduce neonatal mo	rtality rate in Zambia fro	om 34 per 1,000 live births to 2	0 per 1,000 by 2015				

	Goal targets	Universal coverage; Equitable coverage	Using the 3D-combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels of the health system	Neonatal Mortality Rate (NMR)	NMR 34/1,000 live births (2007)	20/1,000 live births by 2015	ZDHS, MDR reports	Long-term funding available for planned activities	
	Goal Change			more closely and in more efferesource mobilization & optimi					
Effective Inte	ervention 16	Proportion of women in	itiating early breastfeed	ling					
Intervention		Attain universal coverage of mothers that initiate early & exclusive breastfeeding	Increasingly more women value breastfeeding; and initiate this early	% of mothers initiating early breast feeding; % of mothers that use exclusive breast feeding	56.5%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	
Effective Inte	ervention 18	Proportion of districts i	mplementing Kangaroo	care to achieve universal cove	erage				
Intervention	targets	Attain universal coverage of districts that implement Kangaroo care	Increasingly more districts implement and provide Kangaroo care services in the care of the newborn.	% of districts that implement Kangaroo care.	50%	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	
Strategic Shi	ifts for Neonatal Pha	se of the Life Cycle: (Bas	sed on tracer intervention	on –Management of neonatal ii	nfections)				
Coverage De	terminants			Strategies for Intervention					
Enabling Env	vironment	Social Norms		Developing & sustaining of Developing & sustaining of raising]				Awareness	
		Legislation/Policy		 Incorporation of new-born health in policy documents (NHSP, child health policy), Incorporation of new-born care in IMCI guidelines 					
Budget/Expenditure • Finalize ,cost and disseminate the new-born health framework for scaling up new-born healt				ng up new-born health	interventions				

	Objective(s)	Required [behaviour]		ndicator values		Source of	Assumption	
	• , ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·	
	Management/ Coordinati	on	 Establish the management and coordination and mechanism for new born health: Recruit of the focal point for new born health, Formation of Neonatal Health TWG, (consider this to be part of Child Health Technical working group) Support implementation of the finalized framework for new born health in Zambia at all levels. 					
	Availability of commodition	98	Antibiotic therapy for the Enhance knowledge an and emergency Include commodities for Finalize development of Review and upgrade the neonatal health	or neonatal health care y Strategy ommodity security	e for both routine			
Supply	Availability of human resources		 Plan for TOT/HWs training in neonatal health care Case management of neonatal sepsis, meningitis and pneumonia Engage Cooperating partners to support training of other components of neonatal health care; neonatal resuscitation(helping babies breath) 					
	Geographic access to delivery points		 least 48 hours prior disc Increase access to neon CHW); Use of outreach 	ditional HFs with materni narge atal health care NHC: tra sites (i.e. Early identificat system for neonatal comp	in, supervise and pro ion and referral of ne	vide mentorship to Cl	BVs (SMAGS,	
Demand	Initial utilization of servic	es		vareness on neonatal infe of hygienic cord and skin	• • •	a		
	Timely continuous utiliza	tion	 Develop & sustain community capacity to promote healthy behaviours and practices General hygiene practices emphasizing hand washing Dispelling myths that hinder access (taking) of neonates to health facilities] 					
Quality	Effective coverage, or go	od quality of services	 Ensure placement based Source for funding to str Provision of adequate, for 	d on needs (HR information	on system) nipment based on hea	-	ssment	
Phase of Life-Cycle: Childhood								
Goal Impact	To Reduce the high Un	der 5 child mortality rate	e in Zambia from 119 per 1,00	0 to 62 per 1,000 by 201	5			

Goal t	targets	Universal coverage; Equitable coverage; 80% RED strategy coverage	Using the 3D-combined approach matrix in planning & implementation to accelerate effective MNCH interventions at all levels	Under 5 Mortality Ratio (U- 5MR)	U-5MR 119/1000 live births (2007)	63/1,000live births by 2015	ZDHS, MDR reports	Long-term funding available for planned activities
Goal (Change			more closely and in more efferesource mobilization & optimi				
Effective Intervention	on 19	IMCI-trained healthcare	providers managing sid	ck children				
Intervention targets	s	Attain universal coverage with trained IMCI clinicians at public health facilities	Increased health facilities have IMCI-trained clinicians that apply and adhere to IMCI algorithms.	% of facilities with IMCI- trained clinicians;	65%	100%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention	on 23	Children with fever rece	iving correct treatment					
Intervention targets	s	Attain universal coverage of quality care for children with fever that are correctly treated	Increasingly more children with fever receive correct treatment in line with IMCI guidelines.	% of children with fever that are correctly treated	38%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention	on 24	Sick children accessing	prompt treatment for r	malaria (within 24 hours)				
Intervention targets		Attain universal coverage of children sick with malaria that receive prompt treatment with effective anti-malarial drugs	Increasingly more caretakers realise and take sick children promptly (in 24hrs) for effective malaria treatment.	% of children sick with malaria that promptly receive anti-malarial drugs within 24 hrs	31.2%	90%	MIS, HMIS, ZDHS, Non-routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention	on 25	Sick children with acute	respiratory infection re	eceiving correct antibiotic trea	tment			
Intervention targets	S	Attain universal coverage of children sick with acute respiratory tract infection that correct	Increasingly more children receive correct treatment for acute respiratory tract infections; as	% of children sick with acute (upper) respiratory tract infections & receive correct treatment	68%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities

	Objective(s)	Required [behaviour]	I	ndicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
	treatment	both caretakers and health workers realise the value of this treatment.						
Effective Intervention 27	children with diarrhoea	that take ORT and Zinc						
Intervention targets	Attain universal coverage of children Under 5 sick with diarrhoea that receive ORT and fluids	Increasingly the effective role of ORT and fluids in diarrhoea treatment is valued and that more children under 5 sick with diarrhoea are treated with ORT and fluids	% of children Under-5 that take ORT and Fluids for diarrhoea.	67%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities	
Strategic Shifts for Childhood	d: (Based on tracer intervent	ion – Oral Antibiotics fo	r Pneumonia Facility level)					
Coverage Determinants			Strategies for Intervention					
Enabling Environment	Social Norms		 Sensitization & awareness raising on effective management of fevers; Dispelling negative perception fevers in children Sensitization & awareness raising among traditional healers on when to refer sick children to health Scale up behaviour change communication in all its nuances e.g mentor grand mothers 					
	Legislation/Policy			•				
	Budget/Expenditure		 Advocacy for GOVT to meet the Abuja target Advocacy for increased financial partner support Explore other ways of funding the sector e.g. Social Health Insurance Advocate for provision of minimum investigative services fee (e.g CXR) Improve efficient use of available resources within health sector including allocation from the district grant meant for community based interventions 					
	Management/ Coordinati	on	 Adopt the IMCI strategy for clinical care Review National Health Policy to include use of antibiotics by CHWs Advocate for approval of use of antibiotics by CHWs by the National Professional Council Regularly update, disseminate and utilize IMCI/iCCM guidelines 					

	Objective(s)	Required [behaviour]	Ir	dicator values		Source of	Assumption	
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
			 Develop scale up plan Build capacity at national and sub-national level to enhance monitoring mechanisms of IMC Enhance reporting mechanism for IMCI/iCCM Develop and institutionalize key performance indicators at all levels 					
	Availability of commoditie	es	 Timely forecasting [plann Government don't hinder Strengthen supply chain Support good storage measurement Strengthen procurement Strengthen storage/distrik 	service delivery system for oral antibiotics echanism of iCCM commo (buffer stocks)	s, low osmolarity OR	S and zinc tablets	cedures of	
Supply	Availability of human reso	ources	 Strengthen supportive supervision and mentorship for Develop standards for equitable distribution of staff to critical areas. Increase Health Staff Conduct periodic monitoring of trained qualified staff and CHWs Advocate for cabinet approval of the proposed establishment for MNCH at MCDMCH Update/ revise job description at PMO and DMO levels to include responsibilities for IMCI implementation Conduct in-service and pre-service training on IMCI; including use of retirees Advocate with private sector to increase training institutions, particularly in Provinces Adopt shorter (computerised) training (ICATT) and invest in computer facilities at CDMO. Improve incentives for frontline health workers, e.g. lobby for MOH and MCDMCH to be considered as an exceptional on PEs GDP ratios Use of lay health worker 					
	Geographic access to delivery points		 Housing, schooling and hardship allowance Expand health facilities Build and expand health facilities in urban areas Explore public private partnership for building/renovating infrastructure Strengthening systems at community level that improves interface with health facilities Implement quality improvement mechanism e.g facility accreditation Strengthening services delivered by community based health workers (6 wk trained) and/or outside of state health facilities (iCCM) Explore public private partnership to improve access by increasing number of facilities 					
Demand	Initial utilization of service		Reducing indirect househ Social Marketing/Mass C	old expenditures on healt	th (CCT, vouchers, re			
	Timely continuous utiliza	tion	Mass Media + CommunitDefaulter Tracking/remind		5			

	Objective(s)	Required [behaviour]	li	ndicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Quality	Strengthening services delivered by community based health workers and/or outs (SMAGS, iCCM, Outreach services) Explore other ways of funding the sector e.g. Social Health Insurance to address of Improve efficient use of available resources for community based interventions Strengthening systems at community level that improves interface with health facil Scale up behaviour change communication in all its nuances, e.g mentor grand more scale up training in Essential & Community based New Born care and conduct supering in Refresher Training/in-service training/reminders* Provide tools and guidelines for all levels Monitoring/peer review/team problem solving-learning Supervision/feedback/audit* Regulation Regular monitoring & Evaluation of IMCI implementation Implement quality improvement mechanism e.g facility accreditation Utilize systemic mechanisms such as the government Performance Management Training CHWs on cIMCI; Knowledge of when to refer for CHWs		 Strengthening services delivered by community based health workers a (SMAGS, iCCM, Outreach services) Explore other ways of funding the sector e.g. Social Health Insurance to Improve efficient use of available resources for community based interv Strengthening systems at community level that improves interface with the Scale up behaviour change communication in all its nuances, e.g mentor Scale up training in Essential & Community based New Born care and of Training in Refresher Training/in-service training/reminders* Provide tools and guidelines for all levels Monitoring/peer review/team problem solving-learning Supervision/feedback/audit* Regulation Regular monitoring & Evaluation of IMCI implementation Implement quality improvement mechanism e.g facility accreditation Utilize systemic mechanisms such as the government Performance Mail Training CHWs on cIMCI; Knowledge of when to refer for CHWs 			o address causes of hid ventions health facilities or grand mothers conduct supportive sup	ervision
Effective Intervention 20	full immunization under	one year	•				
Intervention targets	Attain universal coverage (80%) of fully immunized children using the RED strategy in all Districts	Increasingly all district in Zambia apply the RED strategy to attain 80% coverage on fully immunized children under 1 year.	% of districts attaining 80% full immunization coverage	69% (HMIS, 2008 Statistics Bulletin)	100%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Effective Intervention 26	Vitamin A supplementa	tion					
Intervention targets	Attain universal coverage with micronutrient supplementation in children Under-5 years old.	Increase numbers of health workers, caretakers and communities value the importance of micronutrient supplements	% of children that receive Vitamin A supplements	60%	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities

	Objective(s)	Required [behaviour]		Indicator values Raseline value & target			Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification		
		ensuring children U- 5 receive it.						
Strategic Shifts for Childhoo	od: (Based on tracer inter	vention – Full immunization	under one year)					
Coverage Determinants			Strategies for Intervention					
Enabling Environment	Social Norms			ess raising on effectivenes ceptions about immunizati				
	Legislation/Policy		J	,				
	Budget/Expenditure		 Advocacy at SAG level to ensure that health sector ear marked funds for EPI programme Improving efficient use of available resources within health sector - including the allocation from the distrigrant meant for community activities Advocate for increased budget allocation for programme implementation particularly outreach activities at district level. Strengthening services delivery through outreach Use existing formal community structures such as community development and social welfare, Build and expand health facilities in urban areas Explore public private partnership to improve access 					
	Management/ Coord	lination	Institutionalize the use of	to ensure that health sect of updated monthly Immu of available resources witl	nization monitoring to	ing tool to monitor performance		
Supply	Availability of commo	odities	 Lobby, plan and budget Develop policy to guide Capacity building of sul Procurement of cold characteristics Training & capacity to m 	ribution	ne refrigerators and or preventive maintenand ling supply and logis enance of cold chain (stem	ce of cold chain equi stics for EPI		

	Objective(s)	Required [behaviour]		Source of	Assumption				
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
	Geographic access to c	sources	Use of lay health worker GRZ and Private sector Redistribute the available Encourage local training Increase number of train Re introduce training of Link responsibility for va Capacity building of sub Lobby for establishment Task shifting during EPI Defining basic activities tasks to lighten burden of Expand health facilities Expand outreach services Rehabilitation, Maintena Increase Health Staff Strengthening services of Use existing formal com Build and expand health Explore public private p Construction of health por Adopting the RED strate Provision of EPI services	to increase output from trace staff to critical areas. and bonding to retain skilled community health assifamily health nurses occine management to speonational level staff hand of province/district cold of the bedone by community an skilled health workers bes/campaigns/national health workers delivery through outreach, munity structures such as facilities in urban areas artnership to improve accepts gy s at all facilities; and through	aining institutions. led staff stants cific officer in the p fling and maintenanchain equipment office volunteers (e.g. Weig alth days including through co community developr ess ugh mobile/ outreach	e of cold chain equipn r ghing children, etc); Un mmunity health assista nent and social welfare	nent Idertaking basic		
Demand	Initial utilization of servi	ces	Social Marketing/MassMass Media + Communi	ons campaigns (child healt Communication ity Mobilization/Home visit					
	Timely continuous utiliz	ation	 Performance incentives Defaulter Tracking/reminders/recall Promote behaviour change communication Strengthening services delivered outside of static health facilities as close to population centres (strengthen defaulter tracing through outreach services) Linking communities to social safety net such as community empowerment programmes social Strengthening systems at community level that improves interface between the communities an facilities Strengthening services delivery through outreach 						

	Objective(s)	Required [behaviour]	Ir	Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·
Quality	Effective coverage, or go		Use existing formal common Build and expand health and expand health are Explore public private participations. Strengthening systems are facilities Targeted [cadre and skill] and Provide appropriate infrast Utilize systemic mechanists Appraisal System) - current Mobilizing women & child Forming health worker remarked Refresher Training/in-ser Supervision/feedback/aude Monitoring/peer review/tee Regulation Strengthen capacity build Regular monitoring adherent provide appropriate infrast Utilize systemic mechanists Performance Manageme Conduct data audits to in	veen the communities a vision to the service delivery le unagement System (And essions to the service delivery le stem) - currently is rolle	vel.I nual Performance		
			 Strengthen capacity of HI Continuous advocacy to 				
Effective Intervention 21	Children Under-5 sleep	ing under ITNs			1 11111111111		
Intervention targets	Attain universal coverage of children Under-5 that sleep under ITNs	Increasingly more households value the role of ITNs and ensure children Under-5 use them.	% of children Under-5 sleeping under ITNs	52.3% (MIS)	90%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities
Strategic Shifts for Childhood:	(Based on tracer intervent	tion – Children Under-5	sleeping under ITNs)				
Coverage Determinants			Strategies for Intervention				

	Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption		
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	·		
Enabling Environment	Social Norms		 Leadership & partnerships on malaria control Sensitization & awareness raising on effective malaria interventions; Dispelling negative perceptions about malaria control interventions Intensify behaviour change communication messages on ITN 						
	Legislation/Policy								
	Budget/Expenditure			allocation of specific and s procurement and distributi		aria control and preve	ntion.		
	Management/ Coordinate	ation							
	Availability of commodi	ties	Strengthen storage/dis	tribution					
Supply	Availability of human re	esources	 Pre service training (including returnees/retirees)* Increase Health Staff Task shifting of ITN distribution to community level or private sector(NGO/FBOs) Strengthen linkage and coordination between national level, provincial and especially the district level-(build capacity of Environmental Health personnel in provinces and districts in Malaria control and prevention) 						
	Geographic access to	delivery points		stribution to community lev			,		
Demand	Initial utilization of serv		Social Marketing/Mass Mass Media + Commu Performance incentive Defaulter Tracking/ren	nity Mobilization/Home vis s	its				
Quality	Effective coverage, or	good quality of services	Refresher Training/in-service training/reminders* Supervision/feedback/audit* Monitoring/peer review/team problem solving-learning Increase monitoring and supervision of staff involved on ITN programming						
Effective Intervention 22	HIV+ children access	ing ARVs			1 0				
Intervention targets	Attain universal coverage of HIV+	Increasingly more paediatric ARV	% of HIV+ children from HIV+ mothers that access	53%	90%	HMIS, ZDHS, Non-routine data	Long-term funding		

	Objective(s)	Required [behaviour]		Source of	Assumption				
		Changes (Outcomes)	Verifiable indicator	Indicator values Baseline value & Year	target value for 2015	verification			
	children born from HIV+ mothers that access ARVs	formulations are procured and that more HIV+ children born of HIV+ mothers access ARVs	ARVs			sources (MTR)	available for planned activities		
Strategic Shifts for Childhoo	d: (Based on tracer interventi	on – HIV+ children acco	essing ARVs)						
Coverage Determinants			Strategies for Intervention	on					
Enabling Environment	Social Norms		 Leadership & partnerships in the fight against HIV & AIDS Reducing stigma; Providing social support to affected families; Support and care for orphans & vulnerable children 						
	Legislation/Policy								
	Budget/Expenditure		Lobby, plan and budget fo	r procurement of DBS bund	lles				
	Management/ Coordination	on							
	Availability of commoditie	S	Integrate forecasting	and quantification of stocks	for paediatric HIV ma	nagement			
Supply	Availability of human reso	urces	 Integrate management of paediatric HIV into pre-service curriculum for health workers Establishment of mentors at province/district levels Strengthen supervisory role of the Clinical Care Specialist/Experts to ensure all HIV positive children less th two years of age are commenced on treatment Build capacity of all health care workers on target setting and result based management for Paediatric HIV management 						
	Geographic access to del	Geographic access to delivery points		 Redistribute the available staff to critical areas. Strengthening services delivery through outreach Use existing formal community structures such as community development and social welfare, Build and expand health facilities in urban areas (satellites) Explore public private partnership to improve access Improve sample referral system and expansion of the SMS technology for delivery of results 					

	Objective(s)	Required [behaviour]		In	dicator values		Source of	Assumption		
	, ,	Changes (Outcomes)	Vei	rifiable indicator	Baseline value & Year	target value for 2015	verification	·		
Demand	Timely continuous utilization			 Immunization coverage high, link CTX prophylaxis to immunization visits and innovative delivery mechanisms (e.g. have CTX packaged during EPI services) Strengthen mother-baby follow up through SMS (scale-up of RemindMi application) Provide incentives to community health workers to strengthen mother-baby follow up Develop and implement communication strategies and utilize various channels to communicate information Innovations to prompt screening and linkage of HIV exposed children to services (Social welfare officers and community development officers: Link to RemindMi application) Strengthening services delivered outside of static health facilities as close to population centres as possible (mobile/outreach services) on regular basis Linking communities to social safety net such as community empowerment programmes social cash transfers Strengthening systems at community level that improves interface between the communities and health facilities Implement community level activities and strengthen male involvement and couple counselling Political support and influence by opinion leaders to involve men at all levels 						
Quality Cross-cutting/ Multi-sectoral	Effective coverage, or good quality of services			 Targeted [cadre and skill] capacity building including mentorship/supervision Provide appropriate infrastructure, equipment and supplies according to the service delivery level. Implement quality improvement mechanism e.g facility accreditation Utilize systemic mechanisms such as the government Performance Management System (Annual Perfo Appraisal System) - currently is rolled out. Provide tools and guidelines for all levels Provide apprenticeship for new paediatric ART graduate trainees 						
Effective Intervention 29		ildren Under 5 years nant) that are anaemic								
Intervention targets	Attain universal coverage of supplementation with haematinics & to combat malaria in pregnancy; and to improve the nutrition of children to prevent stunting and malnutrition	Increasingly more efforts are made to improve agriculture and availability of food to ensure reduction of anaemia during pregnancy and the proportion of stunting among Under-5 children.	3.	are stunted;	45% 29%	35% 19%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities		

	Objective(s)	Required [behaviour]		Indicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Strategic Shifts for Childhoo	od: (Based on tracer interventio	n – Maternal, Infant ar	nd Young Child Feeding)				
Coverage Determinants			Strategies for Intervention	1			
Enabling Environment	Social Norms		BCC campaign on MIN Target Chiefs, commu	'CF (emphasis on interpernity leadership	sonal communication	at community level)	
	Legislation/Policy		Increased advocacy ta local government)	rgeting policy makers in ke	y line ministries (heal	th, education, commu	nity development ,
	Budget/Expenditure						
	Management/ Coordination	١					
Supply	Availability of commodities		 Expansion of cash transplant behaviours) 	stribution		s, eg related to some	nutrition
	Availability of human resou	irces	 In country graduate p 	cld. returnees/retirees)* rogrammes(BSc and ma ivelihood package for com		ing initiated)	
	Geographic access to deliv	very points	Increase Health StaffIncrease outreach serv	vices to cover more sites re	egularly		
Demand	Initial utilization of services		Social Marketing/MassMass Media + Commu	Communication Inity Mobilization/Home vis	its		
	Timely continuous utilization	on	 Reducing indirect house Defaulter Tracking/rem Expand Community IY 		aith (CCT, vouchers, r	eimbursement)	
Quality	Effective coverage, or good	d quality of services	Refresher Training/in-s	service training/reminders* //team problem solving-lea	rning		

	Objective(s)	Required [behaviour]	İr	Source of	Assumption				
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
Effective Intervention 31	Coverage of household	ls with access to improv	ved source of drinking water sources						
Intervention targets Strategic Shifts for Childhood	Attain universal coverage with households that have access to improved sources of drinking water (using chlorine, boiling, boreholes, tap water, etc) d: (Based on tracer intervent	Increasingly more efforts are made to ensure that more households have access to improved sources of drinking water - to prevent diarrhoea and water- borne diseases in children under-5 ion – Water supply)	% of households with access to improved sources of drinking water.	24%	80%	HMIS, ZDHS, Non- routine data sources (MTR)	Long-term funding available for planned activities		
Coverage Determinants			Strategies for Intervention						
Enabling Environment	Social Norms		 Produce and disseminate more communication material. MLGH to complete the advocacy and communication strategy and implement it. Engage traditional leaders (e.g. chiefs, headmen) in community sensitization and promotion of safe water supply services 						
	Legislation/Policy		 MLGH should expedite th Political will to reinforce in CPs should advocate for Government should expend authorities should have been authorities. 	mplementation. the policy implementati dite the operationalizat	on ion of decentralized ba	asic service delivery for	WASH. Local		
	Budget/Expenditure Management/ Coordinati	on	 authorities should have budgetary resources to plan and implement WASH programmes. Ensure sustained and predictable funding for provision of water supply services. GRZ to increase budgetary allocation for the sector, prioritization of allocation in different areas. GRZ should increase funding to reach the more than 5 million people with safe water supply facilities. Equitably allocate finances for high impact with a focus on low coverage, remote and vulnerable comm Strengthen district WASH committees and rural water supply offices to support communities manage t 						
	, and the second		 Strengthen district WASH water supply facilities. Strengthen water supply 				iariaye irleli		
Supply	Availability of commoditie	es	Local supply managemerStandardization of comm		technologies.				

	Objective(s)	Required [behaviour]		Source of	Assumption				
	, ,,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification			
	Availability of human r	esources	 MLGH to improve the in Provide capacity building the training. MLGH should take mean 	uding returnees/retirees) centive and on time paym g training at all levels and sures that will enable it to edicated staff member to	nent of salaries, have monitoring med recruit and retain dis	trict staff, and ensure th			
	Geographic access to	delivery points	 Increase Health Staff MLGH should employ appropriate low-cost technologies to equitably reach remote and vulnerable communities. Appropriate low cost technologies include reticulation systems using gravity fed and solar-power systems development of surface water supplies such as spring development, manual drilling, hand-dug wells, 						
Demand	Initial utilization of serv	ces		Communication hold expenditures on hea	alth (CCT, vouchers, r	reimbursement)			
	Timely continuous utili	 Performance incentives Defaulter Tracking/reminders/recall Community sensitization on community management of water supply Government takes action to enforce the national policy and stop political interference. 							
Quality	Effective coverage, or	good quality of services	Refresher Training/in-seSupervision/feedback/au	rvice training/reminders* ıdit* eam problem solving-lear	, ,				
Effective Intervention 32	Coverage of househo	lds with access to impro-							
Intervention targets	Attain universal coverage with households that have access to improved sanitation water (using Toilets, VIP latrines, Flash toilets, etc)	Increasingly more efforts are made to ensure that more households have access to improved sanitation services - to prevent diarrhoea and water-borne diseases in children under-5	to improved sanitation services routine data sources (MTR)						

	Objective(s)	Required [behaviour]	ļ.	ndicator values		Source of	Assumption
	, , ,	Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
Coverage Determinants			Strategies for Intervention				
Enabling Environment	Social Norms Legislation/Policy		 Communication should n Advocate with private set MLGH to complete the at Standardise and dissemi Engage traditional leader hygiene services. MLGH should expedite th CPs should advocate for 	ctor to produce odourless dvocacy and communicat nate key messages to far is (e.g. chiefs, headmen) ne formulation of national the policy implementation	soap ion strategy and impl nilies and communiti in community sensiti policy on sanitation a	lement it es zation and promotion and hygiene.	n of sanitation and
			 Government should expended Hygiene. Advocate for local author programmes. 	ities to have budgetary re	esources to plan and	•	
	Budget/Expenditure		 Policies in place should be Government should ensured the Government should incress anitation facilities. Financing should be equicommunities 	re sustained funding for it asse budgetary allocations	nfrastructure for sani s in proportion to abo	out 7 million people w	
	Management/ Coordinat	ion	 MLGH should provide en involve cross-sectoral pa MLGH should strengthen coordination remit (perha 	rtners and harness the co the Sanitation and Hygie	ontribution that can be one unit by upgrading	e brought from partner the its mandate, pov	ers
	Availability of commoditi	es	Standardization of comm	unity based affordable te	chnologies		
Supply	Availability of human res	ources	 MLGH to improve the income and have monitoring med MLGH should take meas has a minimum of one st 	chanisms in place to moni ures that will enable it to i	tor outputs of the tra recruit and retain dist	ining. trict staff, and ensure	that each district
	Geographic access to de	• •	 MLGH should employ ap communities. Appropriate low cost tech techniques. 	propriate low-cost techno nnologies include elevated	logies to equitably red sanitation facilities,	each remote and vuln	erable
Demand	Initial utilization of service	es	Sustained community se Introduce more cost effect				

	Objective(s)	Required [behaviour]	In	dicator values		Source of	Assumption
		Changes (Outcomes)	Verifiable indicator	Baseline value & Year	target value for 2015	verification	
	Timely continuous utilizat	tion					
Quality	Effective coverage, or go	od quality of services	Increase budgetary allocations	ation			

The Monitoring and Evaluation Plan

Phase of Life		Intervention	Objective verifia	ble indicator			Source of	verification			Information
Cycle	Goal	number (as above)	Indicator Description	Baseline	Target (2015)	Responsible person	Data collection method	Data Source	Frequency	Assumption	use
		1	Unmet need for modern contraception (married women)	26.5%	14%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Non-routine data sources	ZDHS	5 Years	Sustainable partnerships; long-term funding	All partners
			Prevalence rate of modern contraception			MCDMCH M&E	Routine data,	ZDHS	5 Years	Sustainable	All
Pre-		2	(women of reproductive age)	24.6%	50%	MoH [M&E] unit; RH specialist	Non-routine data sources	HMIS	Annual	partnerships; long- term funding	partners
pregnancy & Adolescence			Prevalence rate of teenage pregnancy			MCDMCH M&E coordinator:	Routine data,	ZDHS	5 Years	Sustainable	All
		3	and motherhood	27.9%	18%	MoH [M&E] unit; RH specialist	Non-routine data sources	HMIS	Annual	partnerships; long- term funding	partners
	To reduce maternal mortality in	4	% of women with problems in accessing health care	73.5%	42%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Non-routine data sources	ZDHS	5 Years	Social protection policy enacted	MoH, MoFNP, MLSS, MCDSS
	Zambia in		% women attending (first) ANC visit in 1st			MCDMCH M&E coordinator:	Routine data,	ZDHS, MTR	5 & 2.5 years	Sustainable	All
	order to achieve the	5	frimester 19.2%	58%	MoH [M&E] unit; RH specialist	Non-routine data sources	HMIS	Annual	partnerships; long- term funding	partners	
	set target of 159/100,000	6	% women attending 4+	60.3%	80%	MCDMCH M&E coordinator;	Routine data, Non-routine	ZDHS, MTR	5 & 2.5 years	Sustainable	All
	live births by	0	ANC visits	00.5%	00 %	MoH [M&E] unit; RH specialist	data sources	HMIS	Annual	partnerships; long- term funding	partners
	2015	7	% pregnant women	70.2%	70%	MCDMCH M&E coordinator;	Routine data, Non-routine	ZDHS, MIS, MTR	5 & 2.5 years	Sustainable partnerships; long-	All
Pregnancy		1	taking 2+ doses IPT	70.270	1070	MoH [M&E] unit; RH specialist	data sources	HMIS	Annual	term funding	partners
		8	% pregnant women put on prophylaxis for	80%	95%	MCDMCH M&E coordinator;	Routine data, Non-routine	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-	All
		Ŭ	PMTCT	0070	3070	MoH [M&E] unit; RH specialist	data sources	HMIS	Annual	term funding	partners
		9	% pregnant women 9 who know danger 73.3% 95° signs of Pregnancy		95%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Non-routine data sources	ZDHS	5 Years	Sustainable partnerships; long-term funding	All partners
		10	% pregnant women sleeping under ITNs	47.7%	80%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Non-routine data sources	ZDHS	5 Years	Sustainable partnerships; long-term funding	All partners

Phase of Life Cycle	Goal	Intervention number (as above)	Objective verifiable indicator			Source of verification					Information
			Indicator Description	Baseline	Target (2015)	Responsible person	Data collection method	Data Source	Frequency	Assumption	use
Birth	11		% institutional deliveries and %	47.7%,		MCDMCH M&E coordinator:	Routine data,	ZDHS, MTR	5 & 2.5 years	Sustainable	All
		skilled attendance during delivery	& 46.5%	70%	MoH [M&E] unit; RH specialist	Non-routine data sources	HMIS	Annual	partnerships; long- term funding	partners	
		12	% Districts covered with EmONC facilities	68%	100%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Routine data, Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
								HMIS	Annual		
		13	% mothers used appropriate uterotonic after delivery	20%	80%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Non-routine data sources	ZDHS	5 Years	Sustainable partnerships; long-term funding	All partners
Post-natal		14	% mothers attended to by skilled care within 2 days of giving birth	38.7%	55%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Routine data, Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
								HMIS	Annual		
			% of eligible HIV+ mothers that access ARVs	60.5%	95%	MCDMCH M&E coordinator; MoH [M&E] unit; RH specialist	Routine data, Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
								HMIS	Annual		
Neonatal	To reduce neonatal mortality rates from 34/1,000 to 20/1,000 by 2015	16	% mothers that initiate early breast feeding	56.5%	90%	MCDMCH M&E coordinator; MoH [M&E] unit; Child Health Specialist	Non-routine data sources	ZDHS	5 Years	Sustainable partnerships; long-term funding	All partners
		17	% EMONC facilities with capability to	Baseline	Baseline to 100% universal	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Routine data, Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
			manage prematurity and newborn problems					HMIS	Annual		
		18	% of districts implementing	Baseline	Baseline to sal) universal 100%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Routine data, Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
			Kangaroo care					HMIS	Annual		
Childhood	To reduce Under-5 mortality rates from 119/1,000 to 63/1,000	19	% facilities with IMCI- trained clinicians	65%	100%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Routine data, Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
								HMIS	Annual		
		20	% districts attaining 80% full immunization coverage	65%	100%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Routine data, Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
								HMIS	Annual		
	63/1,000 by 2015	21	% Under-5 children that slept under ITNs	52.3%	90%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Non-routine data sources	ZDHS	5 Years	Sustainable partnerships; long-term funding	All partners

Phase of Life		Intervention	Objective verifia	ble indicator			Source of			Information	
Cycle	Goal	number (as above)	Indicator Description	Baseline	Target (2015)	Responsible person	Data collection method	Data Source	Frequency	Assumption	use
		00	% of HIV+ children	500/	000/	MCDMCH M&E coordinator;	Routine data,	ZDHS, MTR	5 & 2.5 years	Sustainable	All
		22	from HIV+ mothers that access ARVs	53%	90%	MoH [M&E] unit; CH Specialist	Non-routine data sources	HMIS	Annual	partnerships; long- term funding	partners
		23	% children with fever that are correctly treated	38%	90%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable, long- term funding	All partners
		24	Increase % of sick children accessing treatment for malaria within 24 hours	31.2%	90%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable, long- term funding	All partners
		25	% children sick with acute respiratory infection that are correctly treated	68%	90%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Non-routine data sources	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-term funding	All partners
		26	% children Under-5	60%	90%	MCDMCH M&E coordinator;	Routine data, Non-routine	ZDHS, MTR	5 & 2.5 years	Sustainable partnerships; long-	All
			that receive vitamin A supplementation	60%	3070	MoH [M&E] unit; CH Specialist	data sources	HMIS	Annual	term funding	partners
		27	% children Under-5 that take ORT/Fluids for diarrhoea	67%	90%	MCDMCH M&E coordinator; MoH [M&E] unit; CH Specialist	Non-routine data sources	ZDHS	5 Years	Sustainable partnerships; long-term funding	All partners
		00	% DHOs with capacity to analyse data, plan and	D l'	4000/	MCDMCH M&E coordinator;	Routine data,	ZDHS, MTR	5 & 2.5 years		All
		28	implement MNCH programmes	Baseline	100%	MoH [M&E] unit; CH Specialist	Non-routine data sources	HMIS	Annual		partners
	To significantly	29	Prevalence of stunting	45 40/	35%	MCDMCH M&E coordinator;	Routine data,	ZDHS, MTR	5 & 2.5 years		All
	reduce Maternal,	29	among children Under- 5 years	45.4%	35%	MoH [M&E] unit; CH Specialist	Non-routine data sources	HMIS, NFNC	Annual		partners
Cross-cutting	Newborn and Childhood	30	% anaemia in pregnancy	46.9% (1999)	20%	MCDMCH M&E coordinator;	Routine data, Non-routine data	HMIS, NFNC	5 & 2.5 years	Sustainable partnerships; long-	All
areas	mortality rates	30	% anaemia in Non-PW	29% (2003)	19%	MoH [M&E] unit; RH specialist NFNC	sources; NFNC	HMIS, NFNC	Annual	term funding	partners
	in Zambia to meet MDG targets	31	% of households with improved sources of drinking water	41.9%	80%	MCDMCH M&E coordinator; MoH [M&E] unit; EH specialist	Routine data, Non-routine data sources	ZDHS	5 Years		All partners
		32	% of households with improved sanitation	23.9%	80%	MCDMCH M&E coordinator; MoH [M&E] unit; EH specialist	Routine data, Non-routine data sources	ZDHS	5 Years		All partners

Phase of Life		Intervention	Objective verifia	able indicator	ſ		Source of			Information	
Cycle	Goal	number (as above)	Indicator Description	Baseline	Target (2015)	Responsible person	Data collection method	Data Source	Frequency	Assumption	use
		33	% of districts holding		100%	MCDMCH M&E coordinator;	Routine data, Non-routine data	ZDHS, MTR	5 & 2.5 years		All
		33	Maternal death reviews		100 /0	MoH [M&E] unit;	sources	HMIS	Annual		partners
			=	75					1		1

Notes: RH = Reproductive Health; CH = Child Health; EH = Environmental Health; ZDHS = Zambia Demographic & Health Survey; MTR = Mid-Term Review

Chapter 7: Monitoring and Evaluation Framework

As much as possible, one agreed indicator of maternal, newborn and child health interventions will be evaluated, as listed in the selected MNCH interventions for Zambia. In the majority of cases, quantitative indicators will be used, but these will be supplemented with qualitative indicators obtained through periodic and commissioned studies. Both the routine and non-routine health information systems will be used as sources of indicators of progress. The indicators will be updated from time to time as need arises

National level Indicators

Sources of data will be obtained from a combination of HMIS, District Health Surveys, Household surveys, Health Facility Surveys, Demographic and Health Surveys (DHS), Performance and Expenditure Tracking Surveys / Quality of Delivery Surveys (PETS/QDS), Malaria Indicator Surveys (MIS) and Financial records. The information obtained will, whenever possible, be disaggregated along equity stratifiers such as gender, age groups, education attainment, income/ wealth quintiles, level of the health system and geographical location (rural and urban).

Family Planning Indicators

- The unmet need for modern contraception for women in reproductive age groups
- The unmet need for modern contraception for women in married women
- Modern contraceptive prevalence rate increased
- The proportion of teenage pregnancy and motherhood (have had birth or are currently pregnant)
- Women not facing problems in accessing health care services

Maternal Health Indicators

- The % of women accessing first ANC visit within the first trimester
- The % of women accessing 4+ visits of Focused Antenatal Care (FANC)
- The coverage of pregnant women taking 2 or more doses of IPT
- The % coverage with PMTCT services (% pregnant women put on prophylaxis for PMTC)
- The % of pregnant women who know the danger signs of pregnancy
- Prevalence of anaemia (Hb <11g/L) in pregnancy
- The proportion of pregnant women sleeping under ITNs
- The proportion of institutional deliveries (and those delivered by skilled attendants
- Coverage with EmONC facilities to all districts
- Coverage with appropriate uterotonics to prevent haemorrhage countrywide
- Postnatal attendance with skilled care (within 2 days)
- Women of reproductive age faced with difficulties in accessing health care services
- The proportion of eligible HIV+ pregnant women accessing ARVs
- Number of DHOs with strengthened capacity to analyse data, plan and implement MNCH programmes

Neonatal Indicators

- The proportion of women initiating early & exclusive breastfeeding
- Proportion of EMONC facilities with capability to manage prematurity and newborn problems
- The proportion of districts implementing Kangaroo care to achieve universal coverage

Child Health Indicators

Coverage with trained IMCI clinicians at all health facilities

- Sustain/ increase coverage with full immunization using RED strategy to over 80% in all districts
- The proportion of children Under-5 sleeping under ITNs
- % of HIV+ children born from HIV+ pregnant women accessing ARVs
- The proportion of children with fever receiving correct treatment
- % of sick children with malaria accessing treatment within 24 hours
- % of sick children with acute respiratory infection receiving correct treatment
- % Vitamin A supplementation
- % of children that take ORT and Fluids for diarrhea

Community Level indicators

- Number of DHOs with strengthened capacity to analyse data, plan and implement MNCH programmes
- % women anaemic (in pregnancy and not in pregnancy), % children underweight; % children stunted
- The coverage of households with access to improved drinking water sources
- The coverage of households with access to improved sanitation
- Strengthen people participation in MNCH (% districts holding Maternal Death Reviews)

Political will and Commitment Indicators

- Proportion of Government budget allocated to health
- Proportion of MoH budget allocated to MNCH and FP interventions
- Proportion of District Health budgets allocated to MNCH and FP interventions
- Existence of policies to guide implementation of the selected MNCH interventions
- Inter-sectoral collaboration on MNCH interventions at national and district level

Measuring Progress in MNCH Plan implementation

- Adoption of the Plan by partners and pledges made (the Zambia MNCH Partnership)
- Pledges actually delivered (resources remitted in line with pledges made)
- Total resources mobilized for the MNCH Strategic Plan
- % of Resources mobilized that are on budget

Annual progress reporting and tracking on indicators will be conducted through the use of a score card (Page 108). The purpose of the scorecard is to serve as a tool to ensure better record keeping methods are put in place and to use data for decision making to track progress in health care coverage for MNCH. Score cards at sub-national level will be used as a motivator for health managers in the form of friendly competition between regions. Rating of scores will be on the basis of judgments with the traffic-light system: green for "target achieved" if 75-100% of the target accomplished; amber for "on track" if 50 to 74% of the target accomplished; and red for "not on track" if less than 50% of the target accomplished.

"....Achieving equal opportunities for health and strong health outcomes for everyone in society, and levelling up the health gradient is an ambitious and complex goal, which requires knowledge and action in a wide range of areas. This goal cannot be achieved by the health sector alone, but is a shared responsibility across sectors and involves partnership working...." http://www.health inequalities.eu/pdf.php? id=68410efc3d bc18f8b1a0ea Oe5e1fa4ef

Hence "Addressing the challenges thatforestall progress to meet the set MDG targets on MNCH in Zambia requires building appropriate capacities in health workers, in the functioning of the health system at community level and acrossother sectors (including line Ministries) based on knowledge partnership working and actions in a wide range of areas

Chapter 8: Budget and Estimation of Funding Needs

General approach

The ultimate goal of the Zambian Government's development plan is *sustained economic growth and poverty reduction* thus improved quality of life of all Zambians *especially those in rural areas*. The health sector, water and sanitation as well as nutrition, are among the priority strategic areas which Government aspires to focus on to reduce poverty in Zambia. The Roadmap to accelerate reduction of maternal, newborn and child mortality (MNCH Roadmap) builds on and is intended as a practical realization on the government's development agenda in the health sector. The MNCH Roadmap uses evidence based strategies resulting from rigorous bottleneck analysis. The plan aims to implement high impact interventions and ensure optimal delivery of quality health services. The Roadmap's bottleneck analyses, strategies and high impact intervention selection were undertaken through an equity focused approach, thus identification of rural and peri-urban [deprived segments of society] as the main target population sub-groups. The estimation of funds to deliver the services proposed in the plan was conducted in-keeping with the above principles and approaches.

Methodology

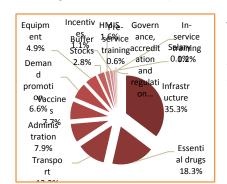
Existing models such as the Marginal Budgeting for Bottleneck (MBB) toolkit and the Lives Saved Tool (tool) were combined into a platform to estimate additional fund requirements and the expected impact during the road map period. Four components constitute the additional budget, the governance and management budget at district, provincial and national levels; clinical services that are individual oriented; population oriented scheduled services and family oriented community based services. Bottleneck analysis methodology was the entry point in the costing analysis. Local experts from the Government of Zambia and partners, led by the Ministry of Community Development, Mother and Child Health, undertook a rigorous bottleneck analysis which fed into the selection of strategies to address the identified bottlenecks. For example, if geographical access is identified as a bottleneck in rural areas, strategies such as housing, schooling and hardship allowance, compulsory rotation or contracting out, expansion of health facilities. expansion of outreach services among others could form the list of priority strategies proposed. Any costs related to the strategies prioritised for the removal of this bottleneck will be systematically estimated and included in the road map budget based on estimated effect size of the strategy and future coverage targets. Difference in coverage will determine the necessary increase of coverage and the additional budget. Incremental cost is the function of the increase in coverage, the number of additional service production unit (SPU) required and input price.

Certain funds are required for long term purposes such as investment in buffer stocks, health posts or satellite health centres construction. Particular attention was paid to making sure the exact timing and proportion of use of such funds are adjusted. Also an assessment was made regarding requirements of working capital such as equipment maintenance which involved estimating the amount of funds blocked in various current assets and the amount of funds likely to be generated for short periods for the two groups of population. In summary, requirement estimates for both capital and recurrent expenditure were calculated and they were translated into yearly monetary funds based on expert groups' forecast.

Analysis of 2012 budget was also done to identify current spending or budget allocation related to the interventions selected in the road map. This baseline budget was used to compute the yearly **total funding** requirements.

Costing outputs

The costs are presented in three ways: per interventions related to a stage in the life cycle; per mode of delivery and on a rural-urban disaggregation. This brings out the subtle cost differences related to the strategies selected for particular bottlenecks.



There is an observable difference between the urban and rural areas with respect to cost drivers for the respective items. Infrastructure development assumes a larger portion in the urban areas (40.0%) as compared to 35.3%in the rural areas. The contribution attributable to transportation costs

in the rural areas (12.2%) appreciably exceeds the proportion observed for the urban areas (4.7%). Cost drivers for essential drugs exhibit a similar pattern whilst other items are essentially similar for the geographical divide. As illustrated below (table 2), the calculated total cost required to achieve the road map targets suggests Zambia needs to mobilize about USD 700 million (ZMK 3.5 trillion) within a 4 year-period or \$12.22 (ZMW 61) per capita per year on average to reduce child mortality by about 39% in both rural and urban areas: from 148 deaths per 1000 live births to 91 per 1000 live births in rural

Figure 17: Cost distribution for rural areas

and from 118 per 1000 live births to 72 per 1000 in urban. Maternal mortality will be also reduced by 28% by 2016: from 517 to 368 per 100,000 live births in rural and from 428 to 295 live births in urban. In summary the road map aimed at saving an average of more than 27,000 lives (26,000 under-five children's lives and 1,000 mothers' lives) per year.

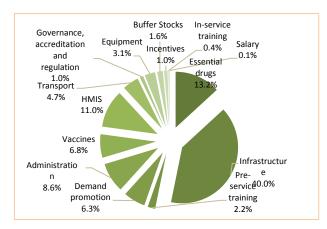


Figure 18: Cost distribution for urban areas

Table 2: Total budget requirement in USD

Focus area		High impact interventions	Baseline (2012)	2013	2014	2015	2016	Total 2013-2016
	1	ANC	4,769,458	5,185,397	5,452,629	5,719,861	5,987,093	22,344,98
	2	Delivery care	47,474,874	50,300,816	52,102,145	53,903,474	55,704,802	212,011,237
	3	Neonatal preventive	124,486	170,288	216,090	261,892	307,693	955,963
Maternal and	4	Neonatal curative	168,056	180,253	190,598	200,943	211,288	783,082
neonatal health	5	Newborn care	640,783	6,511,074	7,259,708	8,008,341	8,756,975	30,536,099
	6	LLINS	2,936,555	3,255,692	3,255,692	3,255,692	3,255,692	13,022,770
	7	РМТСТ	2,188,246	2,494,201	2,709,643	2,925,084	3,140,526	11,269,453
	8	FP & Reproductive health	11,644,386	12,462,400	13,280,414	14,098,429	14,916,443	54,757,687
	9	Case management of illnesses (Pneumonia, malaria, diarrhoea)	842,023	3,785,860	6,680,093	9,574,325	12,468,558	32,508,837
Child Health	10	Immunization (including. PCV, Rota)	1,248,901	4,997,143	8,035,595	11,074,046	14,112,498	38,219,281
	11	Paediatric AIDS	326,773	901,567	1,292,232	1,682,897	2,073,561	5,950,257
	12	Nutrition (EBF, Micronutrients, malnutrition)	307,983	2,835,490	4,926,085	7,016,680	9,107,275	23,885,530
Cross- cutting/ Multi-sectoral	13	WASH (Sanitation, safe water, hand washing)	2,117,378	9,447,538	13,082,435	16,717,331	20,352,228	59,599,531
	14	Systems strengthening	9,290,099	43,235,320	46,224,958	46,114,672	49,308,815	184,883,764
		TOTAL	\$ 84,080,000	\$ 145,763,041	\$ 164,708,316	\$ 180,553,667	\$ 199,703,447	690,728,471
		Per capita	\$ 6.47	\$ 10.73	\$ 11.82	\$ 12.62	\$ 13.58	\$ 12.22

Analysis of additional incremental costs suggests there is a need to allocate 2/3 of the total funds requirement to infrastructure (35%), essential drugs (18%) and transport costs (12%) in rural areas. In urban, more than half of the additional costs should go to infrastructure (40%) and essential drugs (13%).

Limitations

The latest national data for Zambia is from the period 2007 to 2010- the Demographic and Health Survey in 2007, the Census of 2010 and the 2010 Malaria Indicator Survey. Consequently the baselines used and some parameters used default values during the modelling and may not reflect exactly the situation for the two groups of population, results should be interpreted with caution. Based on experience elsewhere for more than a decade, in general calculations done to estimate funds requirement of the Zambia Maternal Neonatal and Child health & Nutrition are robust and provide the most accurate forecast. However results presented here should be limited to advocacy purposes and should not stop us to develop more decentralised operational plans.

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Appendices

Modified Tanahashi Model

Determinants		Definitions
Enabling	Social Norms	Widely followed social rules of behaviour
Environment	Legislation/Policy	Adequacy of laws and policies
	Budget/Expenditure	Allocation and disbursement of required
	ManaganantiOaandinatian	resources
	Management/Coordination	Roles and Accountability/ Coordination/Partnership
Supply	Availability of commodities	Essential Commodities/inputs required to
		deliver a service or adopt a practice
	Availability of human	Adequacy of availability and/or training of
	resources	human resources to provide intervention
	Geographic access to delivery	Physical access (time/distance) to
	points	intervention delivery points
Demand	Initial utilisation of services	Use of services by target population
	Timely continuous utilisation	Continuity in service, practice
Quality	Effective coverage or good quality of services	Completion of an effective intervention in terms of content, frequency and quality (national or international norms)

Annex 2

Community Managed Microfinance/Community Saving and Credit Scheme (Village Banking) – Based on a Report by the Churches Health Association of Zambia (CHAZ) – January to December 2010***

By providing very poor families with small loans to invest in their microenterprises, Village Banking empowers them to create their own jobs, raise their incomes, build assets, and increase their families' well-being. Neighbours come together in financial support groups called "Village Banks." Individuals borrow working capital for their microenterprises, and because they have little to offer for collateral, the group guarantees those loans. As businesses grow, families earn more, purchase more nutritious foods, and parents are better able to send their children to school. After a year or more, many Village Bankers make significant improvements to their businesses, their homes, and their lives. Because neighbors support each other while growing their businesses, Village Banking helps invigorate entire communities. Village Banking is designed to reach the poorest of the working poor.

Most poor people in Zambia have limited access to appropriate financial services in rural areas, with most financial institutions (Fls) concentrating on urban areas. Most of the services that are offered by the Fls are based on credit, with limited opportunities to save. The saving options normally attract high maintenance costs in form of bank charges and ledger fees.

Most poor people do not look at financial services to fund investment or income generating activities (IGAs) but to investing their way out of poverty. Their need, instead, is for service that enables them to manage household cash-flow so that their economic options are broader and less constrained.

Most FILs target the well off as their client base and leave the rural population who normally do not have collateral as a result cannot access finance from these FIs. The poorest members of society need quick and flexible access to small loans. They are looking for small sums of money to manage household cash flows and expand their livelihood activities. The availability of small amounts of money from saving and credit in away that is clear, simple and efficient is of much is of much greater importance than having access to formal FIs, whose services are more complex, slower to respond, with high maintenance cost and usually less flexible in terms of what can be financed and how it is reimbursed.

Village banking gets round these problems, by dealing with a very small pool of savers and borrowers, transparency can be assured and costs can be negligible. In addition, village banking demands very little by way of time and skill to operate. Thus, the large majority of earnings are retained in the village banking, whose ownership is vested in its members.

The CHAZ village banking model was developed in October, 2010 at Chipembi RHC, in Chibombo District with initial training and funding from Dan church AID (DCA). CHAZ planned to form four (4) groups, but after sensitisation of the community, twenty (20) groups were formed comprising of four hundred and three (403) members –two hundred and sixty nine (269) women and one hundred and thirty four men due to high demand for the program. The pilot project was to be implemented over a one year period from 1st October 2010 to 30th September 2011. However, CHAZ in consultation with DAC revised the implemented period (January 2011 to December 2011) because of the increase in the number of groups formed (from 4 to 20) and also the fund were received towards the end of the year, 2010 when most of the target beneficiaries were engaged in farming activities which made it difficult for CHAZ to train field workers to start the village banking activities. However the training of field workers was conducted in February 2011. The total pilot project budget was ZMK71, 921,290.06 approximately DKK87, 688.57.

The CHAZ village banking has based operating as an informal banking run by the community of a village in the target catchment areas. The bank's customers, who are at the same time members and owners, deposit money with the group on monthly basis in the village bank, for saving and borrowing of small loans for various purposes. The members, whose basic structure is much more like a support group (10-25/30 people), develop a constitution which governs the operations of the village bank addressing issues such as minimum amount to be saved on a monthly basis, interest rate disciplinary actions etc. The group maintain their own records and elect their own leaders. Leadership is made up of a chair person for overall

coordination of the saving and credit activities, secretary responsible for recording all activities, treasurer responsible for safe keeping of the cash box, two money counters responsible for counting the group money, three key holders responsible for keeping keys to the money box. The income obtained through interest on loans is redistributed to owners at a yearly sharing out, In addition to saving and loans scheme the village banks also create a social fund from very minimal contributions (coming late for meetings, forgetting the rules and keys, making noise etc) The repayment period of loans is usually three (3) months but a member is allowed to pay interest on loans in the period 1st and 2nd months. In the 3rd month a member is expected to pay both principal and interest.

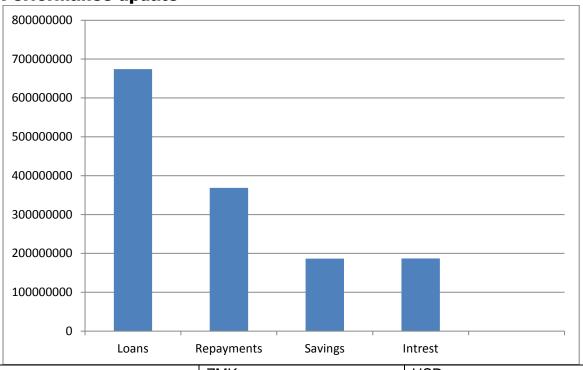
The goal of the village banking program is to improve the livelihoods of the poor people in the target rural communities by providing financial services to groups or individuals that are in the extreme levels of poverty so that they can engage in IGAs/business activities that will eventually increased their wealth. The specific objectives of village Banking program are:

- To improve the financial security of the poor people in the target rural communities
- To in prove the food security of the poor people in the target rural communities.

In terms of human resource for the programme, the Chipembi Field Officer and Field Agents that were sensitised and trained by CHAZ at the beginning of the program have continued mobilising and sensitising community, forming new groups, training both new and old saving groups and providing technical support to saving groups

The village banking data base in the period under review recorded saving groups and membership as follows:(i)thirty seven (37)saving groups(Chipembi-25 and St. Theresa's-12) comprising of four hundred and ninety (490) members- three hundred and sixty three (363) females and one hundred and twenty seven (127) males.

Performance update



	ZMK	USD
Loans	674,001,511.00	134,800.30
Repayments	368,404,200.00	73,680.84
savings	186,399,000.00	37,279.80
Interest	187,128,213.00	37,425.64

In the period under review the data base recorded savings groups cumulate income and Expenditure as follows:(i) loans paid out to members of six hundred seventy four million and one thousand five hundred

and eleven kwacha(674,001,511.00);(ii)loan repayments from savings group of hundred and four thousand two hundred kwacha (368,404,200.00);(iii)saving of one hundred eighty six million three hundred ninety nine thousand kwacha (186,399,000.00);(iv) interest repaid on loans of one hundred twenty eight thousand two hundred and thirteen kwacha (187,128,213).

Achievements

- Saving group members have expanded their fields and acquired assets such as animals, radio, iron sheet, constructed new houses and many more. This has resulted in improved food and financial security of members translating in members improved standard of living and poverty reduction.
- Saving group members have members have to continued to manage their own money, access loan
 capital from their own saving than depending on donated capital or borrowing, manage their own
 business resulting in members increased knowledge in financial and business education
- The spreading of HIV/AIDS has continued to reduce as most of the women no longer depend much on men for money as they are now able to save and borrow from their own bank and invests in small business. in addition, stigma in the PLWHAs has continued to reduce as more of them become members of saving group and are able to save borrow from group fund.
- Saving group member have continued to engage themselves in health education before the saving and lending activities start. This has resulted in members increased knowledge of health issues.
 Furthermore, malnutrition among children has continued to reduce as saving group members are now able to educate each other on malnutrition and to provide nutritious food for their children.
- More parents and guardians are now able to save and borrow from their village bank and invest in small scale business ventures. This has resulted in children and OVCs who had stopped start attending school.
- Field Agents have continued to form savings group resulting in more community members who have never accessed money firm FIs now able to access loan capital from their own bank and start small business

Lesson learnt

- There is high community participation in saving and credit activities if saving group members are
 from the same catchment areas, they know each other, are involved in decision making, elect
 their own leaders, supervised by fellow community members and can benefit from the group
 directly or indirectly.
- Village banking program has received favourable responses from the local leadership, CHI
 management staff and communities. This is evidence by the number of groups formed
 immediately after sharing out in Chipembi and following the sensitization in St. Theresa's.
- Village banking is a micro finance scheme which is fitting very well in the Zambia setting and we
 feel that this needs to be scaled up to CHAZ target rural communities in view of alleviating
 poverty.

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