

# Briefing for the Day of the African Child

Reaching Millennium Development Goal 4:

What progress has Africa made and what more needs to be done?

June 16, 2009







## Introduction

This briefing document reviews examples of the progress that Africa has made in reaching the Accelerated Action Towards *Africa Fit for Children* 2008 – 2012 as adopted by the African Union and Member States in the agreed actions related to *Enhancing Life Chances and Child Survival* and looks at what more needs to be done. The commitment, “Enhancing Life Chances,” entails strengthening health systems to provide quality maternal and child health services; scaling up essential interventions to reduce maternal morbidity and mortality and reduce neonatal mortality; scaling up a minimum package of proven child health interventions; and supporting family and community based actions that enhance children’s health, nutrition and well-being including potable water, improved sanitation and hygiene, appropriate young child feeding practices and food security measures.

Unless otherwise stated, all the data in this briefing comes from the 2009 edition of UNICEF’s *The State of Africa’s Children*, which reviews where the African continent stands on child survival.

## Some Progress Being Made

In countries lying north of the Sahara – Algeria, Egypt, Libya, Morocco and Tunisia – the average under-five mortality rate for 2006 was 30 per 1,000 live births, meaning that approximately 1 in every 33 children died before their fifth birthday. Since 1990, these five countries in North Africa have reduced their child mortality rate by 56%, putting them well on track to Millennium Development Goal 4, which seeks to reduce the under-five mortality rate by two-thirds between 1990 and 2015.

The adoption of effective anti-measles strategies in Africa has resulted in a 64% annual reduction in the number of deaths of children under-five caused by measles between 2000 and 2006, from over 500,000 to just 180,000. Botswana, Malawi, Namibia, and South Africa have reduced measles deaths to near zero.

In stark contrast, the child survival trend in sub-Saharan Africa has shown more limited progress. In 2007, the latest year for which firm estimates are available, the under-five mortality rate for sub-Saharan Africa was 148 per 1,000 live births, meaning that roughly 1 in every 7 children failed to reach their fifth birthday – the highest rate of under-five mortality in the world. 43% of all children who die in sub-Saharan Africa under-five (1.9 million children) die in just three countries, Democratic Republic of Congo (DRC), Ethiopia and Nigeria.

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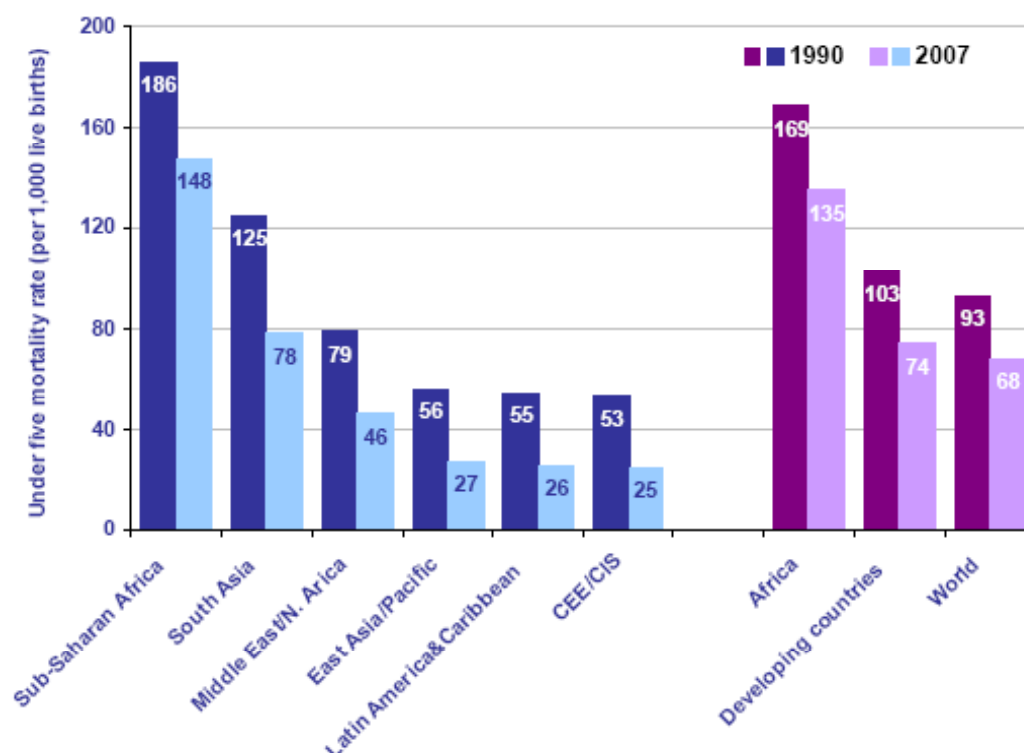
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## Where are children most at risk?



Source: UNICEF (2009), Child Survival and Development in Africa, MDG Status and trends: an overview of MDGs 1,4,5,6 &7 in Africa, available from [www.childinfo.org/files/Progress\\_towards\\_MDGs\\_1,4,5,6,7\\_January2009.pdf](http://www.childinfo.org/files/Progress_towards_MDGs_1,4,5,6,7_January2009.pdf)

As can be seen in the figure above, since 1990, sub-Saharan Africa has made limited progress in reducing under-five child mortality (21%), as against a 41% reduction in the Middle-East/ North Africa region and a 51% reduction in East Asia/Pacific region. In sub-Saharan Africa the actual numbers of children under-five dying each year, have increased from 4.1 million in 1990 to 4.5 million in 2007<sup>2</sup>. Today, around half of the world's under-five deaths occur in sub-Saharan Africa.

The persistence of high levels of child mortality can be explained at three separate but related levels: the direct causes of death (or major child killers), secondary and underlying or structural causes<sup>3</sup>.

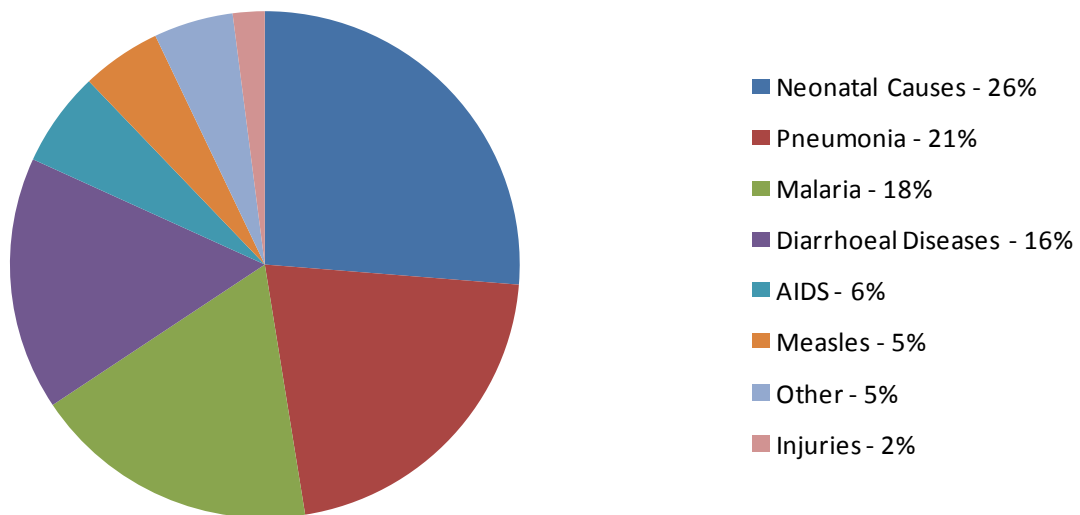
<sup>2</sup> UNICEF (2008) The State of the World's Children

<sup>3</sup> WH Mosley, LC Chen 'An analytic framework for the study of child survival in developing countries', *Population and Development Review*, 10, 1984, pp25-45



## *Why are Children Dying? The Big 5 Killers of Children Under-five*

### **Annual Under 5 Mortality**



Distribution of under-five deaths by cause, sub-Saharan Africa (2000-2003) - Source: CHERG, available at [www.who.int/whosis/en](http://www.who.int/whosis/en) as quoted in UNICEF (2009), *Child Survival and Development in Africa, MDG Status and trends: an overview of MDGs 1,4,5,6 &7 in Africa*, [http://www.childinfo.org/files/Progress\\_towards\\_MDGs\\_1\\_4\\_5\\_6\\_7\\_January2009.pdf](http://www.childinfo.org/files/Progress_towards_MDGs_1_4_5_6_7_January2009.pdf) Note: Total does not add to 100 percent because of rounding

There is a clearly defined set of diseases that cause more than 90% of child deaths in under-fives. These are, principally, pneumonia, measles, diarrhoea, malaria, HIV and AIDS, and a set of neonatal conditions.

#### **1) Neonatal Causes (1.2 million annual deaths)**

Deaths in the first month of life account for approximately one quarter of deaths in children under-five in sub-Saharan Africa. As countries reduce deaths of children under the age of five from improved care after the first month of life, the proportionate number of children dying in the neonatal period increases.<sup>4</sup> While a number of countries in Africa have seen recent gains in child survival, neonatal mortality has remained mostly stagnant over the last decade. Deaths in the first month of life are primarily due to birth asphyxia (not breathing at birth), complications of preterm birth, and severe infections such as sepsis and pneumonia.<sup>5</sup> Neonatal tetanus is still a major killer of African newborns despite being preventable through tetanus toxoid immunisation during pregnancy that costs less than 50 cents of a US Dollar.<sup>6</sup> Approximately one-third of lives could be saved through improved family and community care alone, such as improved hygiene at birth, both in facilities and at home when access to health facilities is limited, early and exclusive breastfeeding and recognition, timely and appropriate care-seeking, and treatment for newborn infections.<sup>7</sup>

4 Lawn, J.E., S. Cousens, and J. Zupan, *4 million neonatal deaths: when? Where? Why?* Lancet, 2005. 365(9462): p. 891-900.

5 Lawn, J.E., K. Wilczynska-Ketende, and S.N. Cousens, *Estimating the causes of 4 million neonatal deaths in the year 2000*. Int.J.Epidemiol., 2006. 35(3): p. 706-718.

6 Lawn, J., K. Kerber, and Eds, *Opportunities for Africa's Newborns: practical data, policy and programmatic support for newborn care in Africa*. 2006, Cape Town: PMNCH, Save the Children, UNFPA, UNICEF, USAID, WHO.

7 Ibid.



*“4 year-old Joyce Lojasi carrying her neighbor, 2-year old Esnart Michael home after attending the Early Childhood Development Program at the Tiyanjane ECD Center in Manjawira Village, T. A. Mponda.”*

### The Malawi Success Story

*Although child mortality remains high by global standards, Malawi has achieved significant progress in reducing the under-five mortality rate from 210 per 1,000 live births in 1990 to 111 per 1,000 in 2007. If current progress is sustained, Malawi could attain its target for MDG 4.*

*However, at 33 per 1,000, the neonatal mortality rate accounts for nearly a third of under-five deaths. Complications from preterm birth are a leading cause of death of newborns in the first month of life. Kangaroo mother care (KMC) is an evidence-based, cost-effective method of keeping small babies warm, promoting breastfeeding and reducing infections through continuous skin-to-skin contact with the mother.*

*With nearly 60% of deliveries taking place in health facilities, Malawi has introduced KMC in 13 central hospitals and district-level facilities and is moving toward countrywide scale up. In addition, the Ministry of Health and partners are piloting a community-based maternal and newborn care package in six districts. Sustainability is promoted through essential newborn care and KMC training as part of pre-service and in-service education for health workers.*

*Immunisation has improved from 60% to 99% in two years (2004 to 2006); and two doses of vitamin A supplement up from 0% to 86% in the same period. Stunting was reduced from 53% in 2005 to 46% in 2007, through wide-scale food security programmes, community therapeutic feeding, and promotion of exclusive breastfeeding to six months (now 57%).*

### 2) Pneumonia (940,000 annual deaths)

Pneumonia accounts for more than a fifth of all child deaths. Many developing countries are implementing innovative strategies to identify and manage pneumonia closer to home.<sup>8</sup> Case management of pneumonia at community or primary care level, with care providers trained to recognise the danger symptoms and to administer oral antibiotics, **would save 700,000 lives a year assuming 95% coverage was achieved.**<sup>9</sup> The antibiotics to treat pneumonia cost less than one US Dollar and community health workers have been trained for as little as US\$100 per trainee to diagnose and treat pneumonia in a community. **Malawi has begun to rollout community case management for pneumonia, soon to be followed by Zambia and Uganda.**

8 Marsh, D.R., et al., *Community case management of pneumonia: at a tipping point?* Bull World Health Organ, 2008. 86(5): p. 381-9.

9 The Lives Saved Tool (LiST) is based on *The Lancet* Child Survival and Neonatal Survival series modelling for lives saved and is now built into a widely accepted demographic software package (Spectrum™). LiST is a module that incorporates recent mortality rates by country and cause of death data for newborns and children based on definitions and estimates established by the Child Health Epidemiology Group (CHERG). The LiST tool models the impact of increasing coverage of individual interventions on the reduction of neonatal deaths by specific cause of death. The increases in coverage are linked to cause-specific mortality effect estimates. A prototype of the tool can be downloaded at: <http://www.healthpolicyinitiative.com/index.cfm?id=software&get=Spectrum>



### 3) Malaria (800,000 annual deaths)

The key to malaria control and preventing childhood deaths from malaria is a combination of providing long-lasting insecticide treated nets or treating existing nets, indoor residual spraying to kill and repel mosquitoes, drugs for malaria prevention, and treating fever with anti-malarial drugs. At present fewer than 8% of children in sub-Saharan Africa sleep under treated nets.



The distribution of insecticide treated nets (new nets cost about USD 10 whilst treating an existing net costs USD 3) in all malaria endemic countries would save 570,000 lives, assuming 95% coverage was achieved. Linking insecticide treated nets, indoor residual spraying, and treatment of malaria would save an additional 150,000 lives.

Good examples for rolling out malaria prevention and treatment plans have been carried out in Ethiopia, Mali, Niger, Sao Tome e Principe, and Zambia. All five countries have distributed Insecticide Treated Nets (ITNs) to between 68% and 100% of the vulnerable population, with recorded usage rates of between 44% and 63%; also in all five countries between a third and two-thirds of all fever cases are being treated. Although these five countries show dramatic improvement over the last six years they are still falling short of the agreed 80% use coverage targets.<sup>10</sup>

#### The Liberia Success Story

*After the end of the second civil war in late 2003, the new President Johnson-Sirleaf declared health a national priority and guaranteed to build on the improvements begun by the transitional government (2003-2005). The per capita health spending went up from 9 to 28 USD. All user fees were suspended at the beginning of 2007 to improve access for poor people.*

*There was a clear targeting of budget to maternal and child health: Immunisation (up from 38% to 91% in two years - 2004 to 2006); and malaria prevention and treatment (insecticide treated bed net use by under-five and pregnant women up from 3% in 2005 to over 30% in 2007 and malaria treatment coverage increased to 60%). Polio has also been eradicated.*

*Liberia's under-5 mortality rate has reduced significantly in recent years and as a result an additional 23,000 child lives have been saved each year. If Liberia continues this rate of progress it could be one of the few countries in sub-Saharan Africa to meet MDG 4 by 2015. (All data from Liberia Demographic and Health Survey 2007: LISGIS, M.o.H.a.S.W., National AIDS Control Program, Macro International Inc., 2007: Calverton, Maryland, USA.)*

<sup>10</sup> World Malaria Report 2008 – WHO: available at <http://malaria.who.int/wmr2008/malaria2008.pdf>



#### 4) Diarrhoea (720,000 annual deaths)

The oral rehydration salts needed to prevent a child from dying from diarrhoea cost less than 50 cents of a US Dollar. UNICEF estimates that this simple solution has saved 40 million children's lives since it was introduced in India in 1971, yet in sub-Saharan Africa just 31% of children with diarrhoea receive oral rehydration therapy. If oral rehydration therapy were to be rolled out in all African countries this would save 550,000 lives a year assuming 95% coverage was achieved. Oral rehydration has been especially effective in Lesotho and Tanzania.

#### 5) HIV and AIDS (300,000 annual deaths)

Over 90% of HIV infections in children are passed on by their mothers during pregnancy, labour, delivery, and breastfeeding. Antiretroviral drug therapy can greatly reduce the chances that transmission will occur during childbirth and through breastfeeding and is essential to tackling AIDS-related child mortality in Africa. The simplest drug, Nevirapine,<sup>11</sup> costs four US dollars and would save 140,000 lives, assuming 95% coverage was achieved, by reducing mother to child transmission of HIV during childbirth. Kenya, Nigeria, South Africa and Zimbabwe account for nearly half of all HIV related under-five deaths (146,000).

#### The Botswana Success Story

*In many countries in Africa, despite the beneficial effects and low cost of Nevirapine for HIV+ mothers, many women decline to use the drug or follow-up with counselling because of the discrimination and social implications associated with the disease and the lack of access. Botswana has been particularly effective in tackling stigma and ensuring effective community-based sexual and reproductive health care including universal HIV testing, integrated PMTCT and antenatal and childbirth care services, appropriate counselling to overcome stigma and support for infant feeding, and provision of antiretroviral therapy. The Youth Health Organisation (YOH) – a youth run NGO – has played an active role in tackling discrimination and stigma – taking its HIV and AIDS prevention message to young people through art festivals, drama and youth forums.*

*Botswana has been able to reduce the HIV transmission rate from mothers to their babies to 4% through nearly universal coverage of HIV testing during antenatal care and provision of antiretroviral drugs for mothers and babies at risk. Botswana's under-five mortality rate has reduced from 87 per 1,000 to 40 per 1,000 since 2000 and as a result an additional 4,000 children's lives a year have been saved. Botswana is now among the ten countries with the lowest under-five mortality rates in Africa and could be the first country in sub-Saharan Africa with a major burden of HIV and AIDS to get on track to meet MDG 4 if the current rate of progress is continued. (All data from UNICEF Country Report 2008)*

<sup>11</sup> More effective combined therapies are now being introduced with greater efficiency but also at a higher cost.





## *Secondary causes of child death*

The key secondary factors that shape the survival prospects of children are: the capacity, quality and accessibility of health systems, under nutrition, the availability of clean water, safe sanitation, and female literacy.

### **Health Systems**

Health systems and how they function play a fundamental role in determining the survival prospects of young children. At their best, health systems should be equipped, staffed and organised to deliver effective and equitable services related to health promotion, disease prevention, and appropriate care and treatment to all children and their families, including the poorest and most marginalised. Yet in many poor countries, this is the exception rather than the rule. Poor people struggle to access basic healthcare because services are not within easy reach, are understaffed, not open or ill-equipped, not culturally compatible, or because the direct or indirect costs of treatment are prohibitive. The question of reducing barriers to accessing healthcare is particularly important. This can include addressing user fees at facilities, improving community understanding of and participation in management of facilities, and bringing care beyond clinic walls through community based health workers.



### **Strengthening systems**

Recently, there has been a new and welcome interest in the question of health system strengthening. The AU Health Strategy for Africa (2007 - 2015), the Paris Declaration on Aid Effectiveness (2003), and the International Health Partnership (2007) are indications of this. They represent a move away from a focus on disease-specific funds and sectoral intervention strategies that have sometimes been pursued at the expense of a focus on comprehensive and equitable health systems.

Health financing mechanisms that were set up with a narrower remit – for example, the Global Fund to fight HIV, TB and Malaria and the Global Alliance for Immunisation and Vaccines (GAVI) – now recognise their role in strengthening health systems and have changed their funding guidelines to take account of this.

But the scale and distribution of child mortality across the world's poorer countries requires that national governments and international donors increase substantially their investment in health systems. Many of the interventions necessary to prevent or treat the killer diseases of children and to improve the health of mothers should be provided at the community level by national health systems. These would include immunisation against basic diseases, vitamin A supplementation, oral antibiotics to treat pneumonia, malaria medicines, essential antenatal, and postnatal care and management of moderate and severe malnutrition.



## Malnutrition

According to UNICEF, malnutrition is an underlying cause of over a third of all under-five annual deaths in Africa. Most of these deaths are not attributed directly to malnutrition, but to diseases that move in on vulnerable children whose bodies and immune systems have been weakened by hunger and micronutrient deficiencies. The damage done by malnutrition starts when a child is still in the womb, a particularly critical period for cognitive and physical development is from the first weeks in the womb until the second year of life.<sup>12</sup> The physical and mental consequences of stunting during this time are irreversible.

**Good examples for reducing malnutrition are Tanzania (41% exclusive breastfeeding) and Uganda (60% exclusive breastfeeding), who are reducing stunting by 1% to 2% a year.**<sup>13</sup> Counselling and education for early and exclusive breastfeeding fortification or supplementation with vitamin A and zinc has the greatest potential to reduce the burden of child morbidity and mortality. Improvement of nutrition counselling, food supplements, and cash transfers in poor populations could substantially reduce the burden of disease related to malnutrition. While there are some short-term opportunities, long-term investment is essential to improve the education, economic status, and empowerment of women as a permanent means to reducing under-five mortality.<sup>14</sup>

## The Libya Success Story

*The Libyan Government has targeted girl's education and women's literacy with the result that only 12% of Libyan women are now illiterate. This has led to a much greater knowledge among women about recognising danger signs for common child killers such as pneumonia and better understanding of the importance of nutrition and of spacing births.*

*They have also prioritised antenatal care and attended births – so 94% of all pregnant women attend antenatal care (an average of six visits) and skilled health personnel attended 98% of all births. 94% of children are breastfed and the average period for breastfeeding is 11.7 months; as a result only 5% of children are underweight.*

*With the help of the World Health Organisation malaria has been eliminated. Immunisation coverage is nearly universal.*

*The under-five mortality rate was reduced from 41 to 18 per 1,000 between 1990 and 2007. Libya is one of five countries on track to achieve MDG 4 in North Africa. (All data from the Arab Family Health Survey – 2007)*

12 Black, R.E., et al., *Maternal and child undernutrition: global and regional exposures and health consequences*. Lancet, 2008. **371**(9608): p. 243-260.

13 Teller CH, A.S. *Reducing Child Malnutrition in Sub-Saharan Africa: Surveys Find Mixed Progress*. 2009 [cited; Available from: <http://www.prb.org/Articles/2008/stuntingssa.aspx/>.

14 Bhutta, Z.A., et al., What works? Interventions for maternal and child undernutrition and survival. Lancet, 2008. **371**(9610): p. 417-40.



*"A group of girls carrying water to their village; A Voz de Frelimo Village in the Xai Xai District, Mozambique."*

### Water and sanitation

Nearly 2 million children die each year because of a lack of clean water and a safe way of disposing of human waste.<sup>15</sup> Many of these deaths relate to diarrhoea, which spreads rapidly in unhygienic environments. Poorer children are at much greater risk because they tend to have more limited access to clean water than their better-off peers.

In high-income areas of cities in sub-Saharan Africa, people have access to several hundred litres of water a day, delivered into their homes at low prices by public utilities. Slum dwellers and poor households in rural areas of the same countries have access to much less than the 20 litres of water a day per person required to meet the most basic human needs. In fact, most of the 1.1 billion people categorised as lacking access to clean water use only about 5 litres a day.

Women and young girls carry a double burden of disadvantage since they are invariably the ones who sacrifice their time and their

education to collect water.<sup>16</sup> In addition, children caught up in a humanitarian crisis often suffer from a lack of access to clean water, as they and their families may be displaced, or warring parties may restrict access in order to punish a particular section of the population.

### Female Education

Children born to young and uneducated mothers are much more at risk. Girls under 19 have a 60% higher chance of their children dying before they reach 5 years of age compared to the average for sub-Saharan Africa. Children born to women with no education had more than twice the risk of death compared to children born to women with secondary education or higher. Children born to women less than 24 months after the previous birth had more than twice the risk of death than for children born to women at least 36 months after the previous birth.<sup>17</sup>

<sup>15</sup> UNICEF, Progress for Children: A world fit for children, statistical review, UNICEF 2007

<sup>16</sup> UN Human Development Report, 2006, Beyond Scarcity: Power, poverty and the global water crisis, UNHCR, 2006

<sup>17</sup> Statistics from latest DHS reports for 44 African countries [www.measuredhs.com](http://www.measuredhs.com) – unpublished analysis by R.G.Hartill, Save the Children





*"Mother and child in Konso, Ethiopia."*

### **The Ethiopia Success Story**

*Although child mortality remains high by global standards, Ethiopia has achieved significant progress in reducing the under-five mortality rate from 204 per 1,000 live births in 1990 to 119 per 1,000 in 2007; however infant mortality reduced more slowly from 122 to 75 per 1,000. If current progress is sustained, Ethiopia could attain its target for MDG 4.*

*Health spending has been prioritized towards an innovative Health Extension Package; with now 30,000 paid health extension workers trained and deployed to local health posts in rural communities throughout the country (there were none in 2005).*

*This has led to significant improvements in immunization coverage of children and women of reproductive age, in malaria prevention and treatment for pregnant women and children under five, and increased number of "model households" with demonstrated changes in practice of environmental health and personal hygiene, safe water use, and health seeking behaviour. This has been accompanied by the Accelerated Health Service Expansion Programme, which provides improved emergency obstetric and newborn care at health center and district hospital level.*

## CALL TO ACTION

*To ensure that Africa becomes an Africa that is Fit for her Children, reaches MDG 4, and saves at least two and a half million children's lives per year by 2015 we call on all African Governments, civil society, international donors, and the business community to close the gap and help reduce newborn, child, and maternal deaths in Africa by committing to the following recommendations;*

- 1. Hold governments, financing institutions, and international donors accountable for providing long-term and predictable financing to achieve MDGs 4 and 5 and to meet the agreed AU target (Abuja declaration) that every African government will commit at least 15% of its national budget to the health sector. National governments must develop clear plans, with interim targets, benchmarks and resources for rolling out proven interventions across the continuum of care with a particular focus on the poorest. No low income country with a credible plan for reducing maternal, newborn, and child mortality should fail to achieve this objective because of a lack of donor resources.*
- 2. As framed in the AU Africa Health Strategy, take a health systems approach to addressing the main child killers, including efforts to improve quality, access and availability of care with attention to adequate trained staff and drug supplies, and equity of coverage to ensure that the poorest and most vulnerable are protected. It has been estimated that an 140% increase in the number of health workers across Africa is necessary to meet the health-related Millennium Development Goals, and these extra workers should be in place by no later than 2012.*
- 3. Improve coverage of high impact preventive and curative interventions that are proven to reduce newborn and child mortality, including immunizations, insecticide treated nets, breastfeeding and vitamin A, and timely and appropriate treatment of childhood killers like pneumonia, diarrhoea, and malaria. Closing the coverage gap will often require extending health care beyond clinic walls through community level health workers trained to promote healthy practices and to diagnose and treat the leading killers of children.*
- 4. Ensure universal coverage and access to a basic package of maternal, newborn, and child health care. Developing country governments should focus on the needs of the poorest and most marginalized communities, removing financial barriers (including informal payments, transport costs, and user fees at the point of delivery etc.) and other non-financial obstacles that deter poor people from accessing healthcare. They will set targets for reducing the gap in mortality rates and coverage of basic health care between the richest and poorest segments of the population.*
- 5. Tackle malnutrition and stunting by ensuring that nutrition support for pregnant and nursing mothers and all infants from 0 to 2, including support for exclusive breastfeeding, micronutrient supplementation, complementary feeding practices, as well as cash transfers and social protection programmes where appropriate.*
- 6. Support initiatives to ensure that adolescent girls access and stay in schools and promote good health-seeking behaviour among them so as to reduce early marriage and childbirth and other harmful practices, as young mothers and their newborn children face substantially greater mortality risks.*
- 7. Donors and African governments must increase investment in the water and sanitation sector, targeting resources to meet the needs of the poorest communities, especially in rural areas and urban slum districts.*