# XVII. ACHIEVING THE MILLENNIUM DEVELOPMENT GOAL TO REDUCE UNDER-FIVE CHILD MORTALITY: A UNICEF PERSPECTIVE

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## A. EXECUTIVE SUMMARY

"A child's right to survive is the first measure of equality, possibility, and freedom," UNICEF Executive Director Carol Bellamy said, in launching the 2004 *Progress for Children* report "It is incredible that in an age of technological and medical marvels, child survival is so tenuous in so many places, especially for the poor and marginalized. We can do better than this" (UNICEF, 2004c).

An estimated 11 million children die every year, the majority from preventable causes such as pneumonia, diarrhoea, malnutrition, malaria, measles, HIV/AIDS and neonatal causes. New country-by-country data in the 2004 UNICEF *Progress for Children* report (UNICEF, 2004a) reveals alarmingly slow progress in reducing child deaths despite the availability of proven, low-cost interventions. While 90 countries are on track to meet the target of reducing child deaths by two-thirds by 2015, 98 countries are considerably off track, and globally the pace of progress is far too slow. At the current rate of progress, the average global under-five death rate will have dropped only by one-quarter by 2015, far below the goal of a two-thirds reduction agreed to by world leaders in 2002.

This paper focuses mainly on Millennium Development Goal (MDG) number 4, which calls for the reduction of child mortality by two thirds, between 1990 and 2015. The goal implies an average annual rate of progress of roughly 4.4 per cent between 1990 and 2015. The UNICEF *Progress for Children* report reveals that no region has met that standard, though nearly 50 individual countries have. Some 78 countries have failed to average even two per cent progress per year in reducing child mortality. Those countries that have fallen short on progress since 1990 now have a much more daunting task. At least 39 countries must now reduce mortality by more than 8 per cent per year, on average, during the remaining years to 2015 in order to reach the MDG goal on reducing child mortality.

Child mortality rates vary considerably among regions and countries, but the most disturbing findings are that in some countries child mortality rates are on the increase. In several countries in Africa south of the Sahara and in the Commonwealth of Independent States, children are less likely to survive to their fifth birthday than they were in 1990.

Latin American and Caribbean countries have seen the most substantial improvement on average, although alarming gaps are opening up within countries there. The worsening poverty situation in some communities is preventing large groups of children within these countries from accessing basic health services and care.

At the service level, poor access and utilization of health services, poor quality of care, and the lack of skilled attendants during delivery and in the immediate postpartum period cause the largest proportion of preventable deaths. Infectious and parasitic diseases, such as diarrhoea and acute respiratory infections, followed by malaria and measles, are the next biggest killers of children. Acute respiratory infections and diarrhoea account for about one third of child deaths. Underlying most of this mortality is malnutrition, which contributes to more than half of all child deaths. Further, unsafe water and poor sanitation are also contributing factors.

HIV/AIDS has eroded hard won gains in improving child health, and it has become one of the major causes of increasing child mortality, particularly in Africa south of the Sahara. During 2003,

UNAIDS (2004) estimated that 630,000 children under 15 years of age were newly infected with HIV annually and 490,000 died. Other key factors behind rising child mortality rates are the effects of armed conflict, social instability and the resulting massive displacement of families and communities, and the increasing number of orphans resulting from HIV/AIDS.

Other population factors contributing to high under-five childhood mortality include: poverty; female illiteracy; violence and sexual abuse of women and girls; harmful traditional practices such as early marriages and female genital cutting; inadequate nutrition for girls; lack of access to basic maternal and child health care services, poor birth spacing, and high rates of teenage pregnancy. Families and communities need to be empowered to obtain basic health care services, to have knowledge about sound child care and nutrition practices, and to have access to knowledge and services to prevent, detect, and treat common child hood diseases, and refer severely ill children to the nearest health facility.

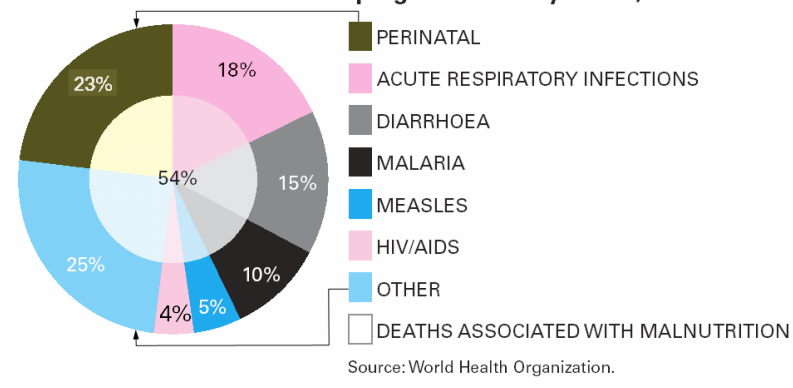
Regionally, much of the Middle East and Northern Africa, Latin America and the Caribbean, and East Asia and the Pacific are on track to reach MDG Goal 4. But Central and Eastern Europe, South Asia, and countries in Africa south of the Sahara will require dramatic measures if they are to achieve the MDG on reducing child mortality.

## B. Child Mortality: the Global Situation

An estimated 11 million children die every year, largely from preventable causes such as pneumonia, diarrhoea, malnutrition, malaria, measles, HIV/AIDS and neonatal causes, especially complications of low birth weight (figure XVII.1). This astonishing fact remains one of the greatest challenges of the 21st century despite unprecedented global economic development and technological advancement. UNICEF considers the child mortality rate to be a basic measure of a country's advancement.

Child mortality refers to the number of children who die before their fifth birthday, and is measured per 1,000 live births. For example, in 2002, the most recent year for which comprehensive data are available, industrialized countries had an average child mortality rate of 7 deaths per 1,000 live births; the least developed countries had a rate of 158 deaths per 1,000 births (UNICEF, 2004a). It is notable that almost 4 million of the child deaths in 2000 occurred in the neonatal period—the first month of life (Black, Morris and Bryce, 2004).

**Figure XVII.1.**
**Under-five deaths in developing countries by cause, 2002**




Source: World Health Organization.

This paper focuses mainly on Millennium Development Goal 4, which calls for the reduction of child mortality by two thirds, between 1990 and 2015. Other related Millennium Development Goals contributing to child mortality are:

MDG 1: Eradicate extreme poverty and hunger
MGD 2: Achieve universal primary education
MDG 3: Promote gender equality and empower women
MDG 5: Improve maternal health
MDG 6: Combat HIV/AIDS, malaria and other diseases
MDG 7: Ensure Environmental sustainability
MDG 8: Develop a global partnership for development

**Figure XVII.2. Worldwide distribution of child deaths**

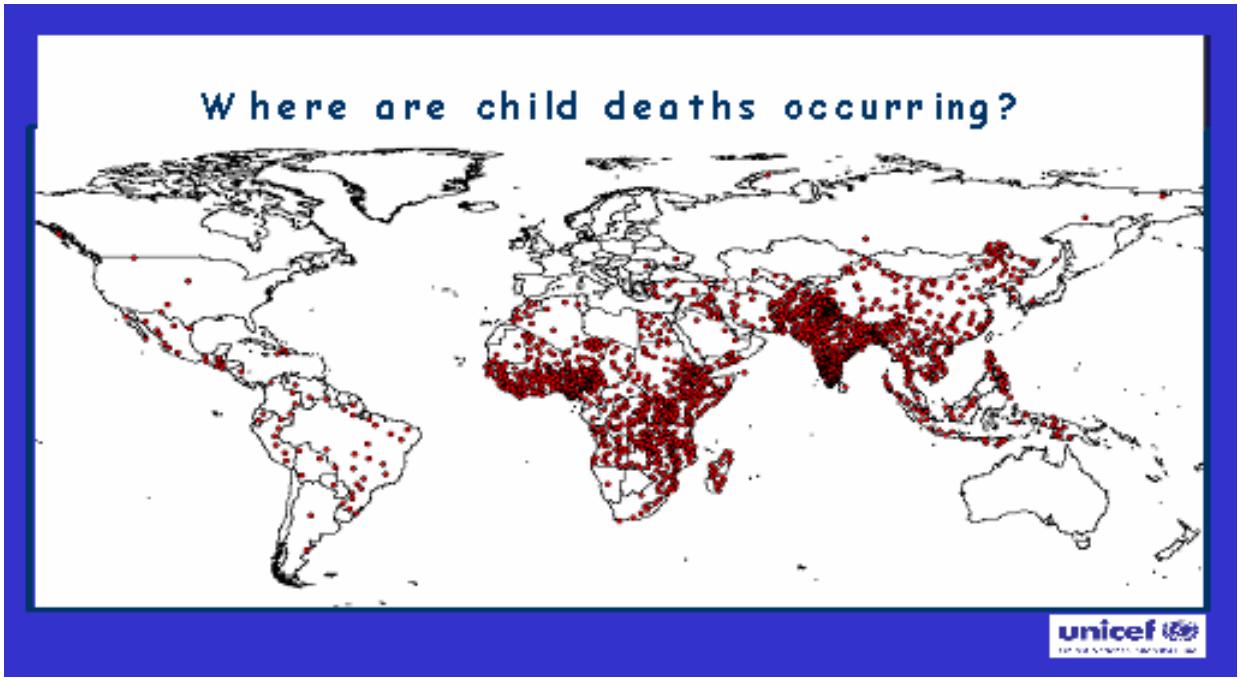
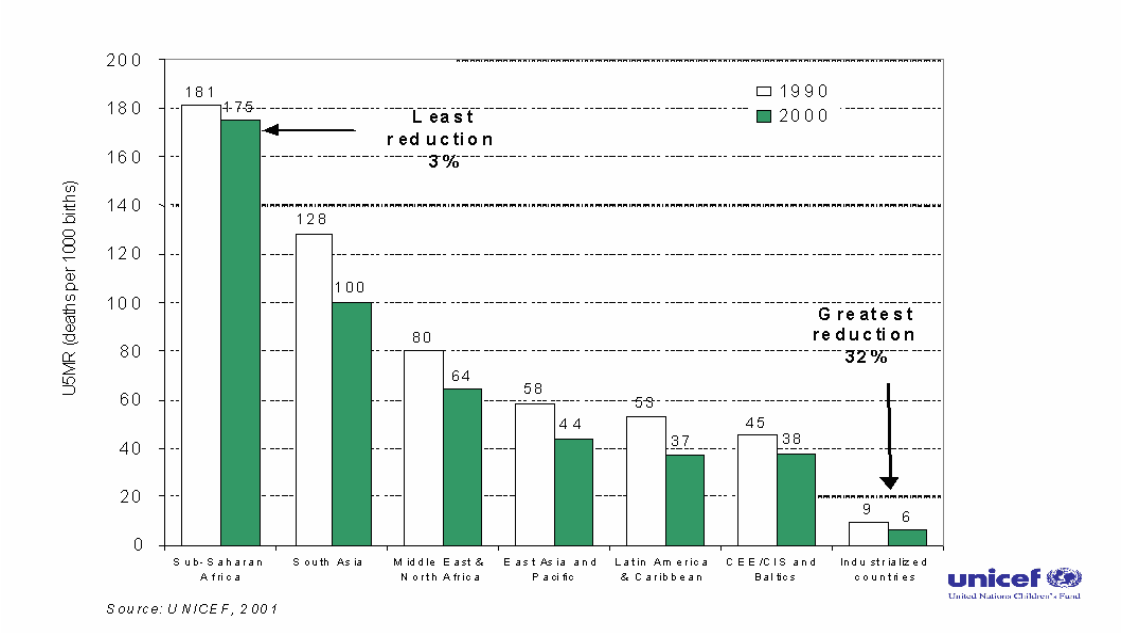


**Figure XVII.3. Under-five mortality rate, change over period 1990-2000**




The world has the means and know-how to prevent child deaths and improve child survival, growth and development. This can be attained by scaling up the implementation of low cost but effective interventions such as immunization, use of common antibiotics to treat pneumonia, use of the new oral dehydration solution and zinc supplementation to treat diarrhoea, prevention and treatment of HIV/AIDS, early treatment and prevention of malaria using insecticide-treated nets. giving micronutrient supplementation such as Vitamin A, promotion of exclusive breastfeeding and appropriate young child feeding practices, and provision of clean water and improved sanitation.

Of the 11 million deaths occurring annually in children under five year of age, 90 per cent occur in 42 countries—mostly developing countries in Africa south of the Sahara and in South Asia (Black, Morris and Bryce, 2003). It has been estimated that malaria alone kills at least one million children annually and results in US $10-12 billion lost in income, cost of health care and reduced productivity of workers. Malaria causes severe complications during pregnancy including severe anaemia, miscarriages and stillbirths. It is the commonest cause of preventable low birth weight in malaria-endemic countries. Low birth weight is the most important factor contributing to neonatal death.

If proven low cost interventions are scaled up to reach children and their families in poor and hard-to-reach communities, an estimated two thirds of such deaths can be prevented and the burden of illness will be reduced significantly (Jones and others, 2003). This will result in improved health for children, and will contribute significantly to poverty reduction and economic development in developing countries.

## C. UNICEF'S COMMITMENT TO IMPROVE AND SUSTAIN CHILD SURVIVAL

The United Nations Children's Fund's (UNICEF's) commitment to improve child survival growth and development has been the centrepiece of its work since its inception. The right of every child to life, survival and development is the foundation of UNICEF country programmes of cooperation in all countries where UNICEF is operating.

In the 1940-1950s, UNICEF was at the forefront in providing food and basic health services to children and families in war-torn countries, in accordance with its mandate. In the 1960-1970s,

UNICEF expanded its services to all developing countries where the lives of children were at risk. In the 1980s, UNICEF inspired and led a global child survival revolution focussed on child health and well-being. "GOBIFFF" summarized the programme strategy, standing for: growth monitoring for children; oral dehydration therapy as treatment for diarrhoea; breast-feeding and immunization. These were complemented by food security, female education and family spacing.

In the 1990s, UNICEF helped the world to achieve the first set of goals focussed on child health and well-being, which were set at the first World Summit for Children held in September 1990. The 1989 United Nations Convention on the Rights of the Child reaffirmed every child's right to the enjoyment of the highest standard of health in addition to other basic rights such as having access to quality education, protection against abuse, exploitation and violence.

In September 1994, the International Conference on Population and Development agreed on a Programme of Action on population and development, which among other things also focussed on helping to reduce child and maternal mortality rates.

In May 2002, the United Nations Special Session for Children reaffirmed the global commitment to a time-bound set of specific goals, among which is MDG Goal 4, aimed at reducing the under-five mortality rate by two-thirds by the year 2015.

UNICEF's experience over the last six decades has demonstrated that the world has the capacity and know-how to successfully reduce child mortality and attain the MDGs by 2015. It has been shown that giving Vitamin A supplementation to children can prevent the deaths of 250,000 children every year; use of oral dehydration therapy can prevent one million deaths from acute diarrhoea and dehydration, and immunization programmes can save the lives of 4 million children annually. Use of insecticide-treated bed nets to prevent malaria can reduce under-five mortality in malaria-endemic countries by 20 per cent; and improved breast-feeding and young child feeding practices can significantly reduce deaths from diarrhoea, infections and malnutrition.

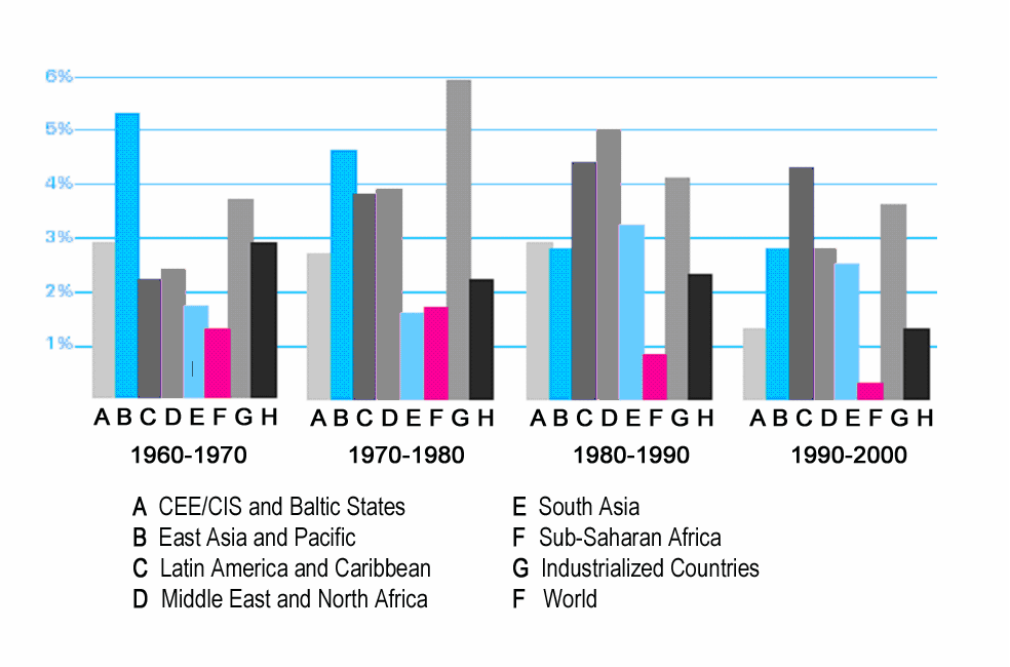
The paradigm shift for future UNICEF work is the successful scaling up of the above-mentioned high impact and cost-effective interventions. One approach to reducing child mortality is the UNICEF Accelerated Child Survival and Development programme in 11 countries in West Africa, covering a population of 16 million people. This programme, which is supported by the Canadian International Development Agency, provides high-impact packages of health interventions targeting mothers and children in communities. Activities include strengthening routine immunization, distribution of insecticide-treated nets at antenatal and under-five clinics to prevent malaria, Vitamin A supplementation and treatment of diarrhoea with oral rehydration therapy. This is beginning to impact positively in reducing child mortality. These interventions are combined with advocacy to empower families and communities to recognize, prevent and treat common childhood illnesses and to refer very ill children promptly to health centres.

Similarly, in Eastern and Southern Africa UNICEF is supporting the integrated management of childhood illnesses at community level, which empowers families and communities to treat malaria, pneumonia and diarrhoea at home. Parents and caregivers are empowered with knowledge on home management of malaria and other common childhood illnesses and are trained to recognize danger signs that require urgent referral of very ill children to hospital.

## D. GLOBAL TRENDS IN CHILD SURVIVAL

UNICEF estimates that 53 developing countries will achieve the MDG Goal 4, which aims at reducing under-five mortality rate by two-thirds between 1990 and 2015. In the early 1960s, 1 in 5 children in the world died before reaching their fifth birthday. By 2002 this had reduced to less than 1in 12 which still represents an estimated 11 million deaths per year- clearly still unacceptably high.

**Figure XVII.4. Average annual reduction rate of child mortality, 1960-2000**




A child's chance of survival depends very much on where he/she is born and lives. In 2002, seven of every 1,000 children died before reaching their fifth birthday in the industrialized countries, while in South Asia 97 out of 1,000 children die before 5 years of age, and in Africa south of the Sahara the under-five mortality rate was 174 out of every 1,000 live births. The latter is almost 25 times greater than that in industrialized countries (UNICEF, 2003; 2004a).

In 2000, in adopting the Millennium Development Goals, world Governments committed themselves to reduce the under-five mortality rate by two thirds. This means reducing the under-five mortality rate from 93 to 31 child deaths per 1,000 live births between 1990 and 2015. To reach this ambitious target, an average annual reduction of 4.4 per cent in the under-five mortality rate will be needed between 1990 and 2015.

It is evident that many countries will not meet that goal. Of 188 countries for which UNICEF has made estimates, 90 are likely to reach the goal, and 53 of these are developing countries (UNICEF, 2004a). There are wide variations in under-five child mortality rates in various regions. The rate of children dying before 5 years of age declined by one third in Latin America and the Caribbean between 1990 and 2000. By comparison, in Africa south of the Sahara, where over 40 per cent of under-five child deaths occurred, there was only slight progress in reducing the death rate.

The disturbing fact is that 1 out of every 6 children born in Africa south of the Sahara dies before reaching five years of age, as compared to 1 out of every 29 children in Latin America and the Caribbean and 1 out of every 143 children in industrialized countries.

Current estimates by UNICEF show that under-five child mortality will be reduced by 23 per cent globally over the 1990-2015 period (UNICEF, 2004a). This is well below the MDG goal of a two-thirds reduction. Hence there is no room for complacency, and we must redouble our efforts to achieve the set goals.

A number of countries, especially in Africa south of the Sahara and in Asia, have suffered a reversal in under-five mortality rates due to HIV/AIDS, malaria, malnutrition, natural disasters and political instability, and are therefore highly unlikely to attain MDG Goal 4. In such countries there is an urgent need to re-double efforts with the support of the international community.

Forty-two per cent of children who die before reaching five years of age are in Africa south of the Sahara. Malaria is still the major cause of death followed by pneumonia, diarrhoea and malnutrition. Currently, in many countries especially in Eastern and Southern Africa where the HIV/AIDS pandemic has peaked, HIV/AIDS has become one of the leading causes of death in children and young adults.

Africa South of the Sahara posses the greatest challenge in meeting MDG Goal 4. This region will need to increase its average annual reduction rate to 8.2 per cent which is almost double the rate initially estimated to achieve the 2015 target.

## E. Population Aspects in the Reduction of Under-five Mortality

### 1. *Supporting CEDAW*

UNICEF works together with other partners to support efforts towards gender equality, including ratification and implementation of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), and to strongly support the realization of the rights of children as enshrined in the 1989 Convention on the Rights of the Child. This includes empowerment of women to make decisions in critical matters affecting their lives, e.g., when and where to seek health care, poverty reduction for women; education for girls and women; reduction of work load; and access to land and property.

### 2. *Education for girls*

Implementing the goals regarding universal primary education for both boys and girls will also help in reducing child mortality. Education for girls will help reduce child mortality through education's impact on lowering fertility rates, delaying age of marriage, ensuring proper utilization of available health facilities, and improving child nutrition and care practices.

### 3. *Tackling harmful traditional practices*

Harmful traditional practices such as early marriage, dietary restrictions for female children, female genital mutilation or cutting, and excessive workload at home for girls, preventing them from going to school, should be actively discouraged, while good traditional practices should be identified and promoted. Early marriage, before a girl is fully developed physically and emotionally, can lead to problems during delivery and in child rearing. The immature girl's insufficiently developed pelvis may result in cephalo-pelvic disproportion result in difficulties during child birth leading to severe complications and death of the mother or child.

### 4. *Improving nutritional status of girls*

Good nutrition is essential for all children to ensure their normal physical and intellectual development. Often the nutrition of girls is compromised in favour of boys resulting in to incomplete physical development, anaemia, micronutrient deficiencies leading to hypothyroidism, etc.

### 5. *Family spacing*

Family spacing or having an interval of at least two years between births allows the mother to recover fully from the previous pregnancy, giving a chance for exclusive breast-feeding for at least six months and appropriate feeding during early childhood. It is also promotes strong mother-child bonding.

### 6. *Prevention of teenage pregnancies*

In some countries over one third of girls become pregnant before reaching age 18. Among other problems, such pregnancies are subject to a serious risk of septic abortion, which can result in the death of the girl. Those who survive may develop severe complications including scarring, which may in turn result in complications, including foetal death from asphyxia, in subsequent pregnancies.

### 7. *Prevention of violence, sexual abuse and exploitation against women*

Violence against women is common even during pregnancy when it may lead to miscarriages, complications during pregnancy and the death of the newborn child. The violence and sexual abuse are often perpetuated by immediate relatives. Civil and armed conflicts may increase the incidence of rape and sexual abuse against girls and women, and result in unwanted pregnancies. Under such circumstances protection for girls and women should be given top priority.

## F. Scaling up Cost Effective Intervention to Reduce Child Mortality

### 1. *What is needed?*

- Strong Government commitment and leadership to provide adequate resources for health care to children and their families.
- Support by donors, United Nations organizations, bilateral and multilateral agencies to provide resources and help build national capacity to scale up implementation of cost effective health interventions.
- Strengthening of national health systems to improve quality of care at national, district and community levels.
- Support for decentralization of health services to ensure equitable distribution of health services to reach rural populations and hard-to-reach communities.
- Community capacity building to ensure that communities are empowered to demand health services, to identify common childhood illnesses and take appropriate prevention and treatment measures, and to refer very ill children to the nearest health facilities.
- Support for implementation of integrated health programmes using a combination of delivery mechanisms at community level through static and outreach health services and create strong linkage with community health workers and NGOs.
- Provision of equitable delivery of health services including the targeting of high risk group such as young children, pregnant women, and displaced populations and hard-to-reach populations.
- Use of accurate morbidity and mortality data at national and sub-national levels for focussed planning, targeting interventions likely to have the highest impact and for regular monitoring of health care provision, to ensure high and equitable coverage and to identify resource needs and pinpoint bottlenecks.
- Linkage of child health programmes with maternal and child health programmes at health facility and community levels.
- Efforts to ensure effective linkages with programmes on education, provision of clean water and good environmental sanitation.

Challenges to achieving the MDG goal on the reduction of under-five mortality include the need for supporting changes in the following areas:

- Poverty reduction.
- Women's empowerment and improving their status in society.
- Resource mobilization to ensure adequate resources for health care.

- Sustained political commitment to implement enabling policies and translate knowledge into action.
- Strengthening national health systems and capacity building at all levels of health care in order to improve quality of care.
- Ensuring equitable provision of health services.
- Support for scaling up and increasing coverage of cost effective interventions to all children.
- Documenting and disseminating lessons learnt to ensure national coverage.
- Regular monitoring and evaluation to assess coverage and collect data for re-planning.

## G. CONCLUSION

- Eleven million children under age 5 die annually, and around two thirds of those deaths are due to conditions that are eminently preventable and treatable using cost effective interventions.
- The MDG on reduction of under-five child mortality is unlikely to be reached by the majority of countries, especially countries in Africa south of the Sahara and in South Asia.
- Scaling up cost-effective interventions to improve coverage and prevent child deaths is possible given strong Government commitment and leadership and with the support of the international community.
- A mixture of delivery strategies, including community participatory approaches, should be used in scaling up cost-effective interventions, in order to ensure large coverage of children and families in rural and remote areas.
- These efforts should take into account such factors such as: empowerment of women, improving education for girls; implementing CEDAW; tackling harmful traditional practices; improving nutrition for girls, birth spacing; reduction of teenage pregnancies, prevention of violence and sexual abuse against women, and community capacity development.
- There is an ongoing need for regular monitoring and evaluation to ensure coverage of high-risk groups and hard-to-reach populations.
- UNICEF is leading a coalition of partners to intensify global and country efforts to improve child survival and to meet the MDGs on child survival.

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