

# Saving Children's Lives

Why equity matters



**Save the Children**  
UK

# Saving Children's Lives

**Why equity matters**

**We're the world's independent children's rights organisation. We're outraged that millions of children are still denied proper healthcare, food, education and protection and we're determined to change this.**

**Save the Children UK is a member of the International Save the Children Alliance, working to change children's lives in more than 100 countries.**

Published by  
Save the Children  
1 St John's Lane  
London EC1M 4AR  
UK  
+44 (0)20 7012 6400  
savethechildren.org.uk

First published 2008

© Save the Children Fund 2008

Registered Company No. 178159

This publication is copyright, but may be reproduced by any method without fee or prior permission for teaching purposes, but not for resale. For copying in any other circumstances, prior written permission must be obtained from the publisher, and a fee may be payable.

Cover photo: Diganta, one, is malnourished. His family in Kurigram District, Bangladesh, are poor and struggle to feed him a nutritious diet. Save the Children is monitoring malnourished children like Diganta and improving families' access to information, income and healthcare.  
(Photo: Madhuri Dass/Save the Children)

Typeset by Grasshopper Design Company  
Printed by Park Communications Ltd, UK

Save the Children publications are printed on paper sourced from sustainable forests.

# Contents

<b>Executive summary</b>	<b>v</b>
It can be done	vi
Time to deliver	vi
Recommendations	vi
<b>1 Introduction</b>	<b>1</b>
Government commitments and progress to date	1
Where are children dying?	3
<b>2 Direct and secondary causes of child death</b>	<b>5</b>
Major child killers	5
Secondary causes of child death	7
<b>3 Underlying or structural causes</b>	<b>11</b>
Fragile and conflict-affected states	11
Climate change and natural disasters	12
The costs of poverty	12
<b>4 Wealth and Survival Index</b>	<b>14</b>
<b>5 Delivering for the world's children</b>	<b>19</b>
Appendix I: Save the Children/United Nations Development Programme Wealth and Survival Index	20
Endnotes	22

# Executive summary

The death of a child in infancy is an unbearable loss. In wealthy countries, this occurrence is now thankfully pretty rare. But in many of the poorest countries in the world, it is still shockingly commonplace. Save the Children believes and can demonstrate that, with determined action, it is possible to save millions of children's lives every year. The new Wealth and Survival Index – an innovative measure of performance on child mortality – highlights the critical importance of political and policy choices made at the national level, and the opportunity for all countries to enhance the survival prospects of their children.

**Globally, nearly 10 million children die before the age of five each year. Nearly 4 million of these children die within their first 28 days. Three million babies live less than a week, including up to 2 million who die on their first day of life.<sup>1</sup>**

**Nearly all child deaths – 99% – occur in developing countries. Sub-Saharan Africa accounts for around 4.8 million of all child deaths, while around 3.1 million are in South Asia. The latest available figures show the average child mortality rate (child deaths per 1,000 live births) is 160 per 1,000 in sub-Saharan Africa and 83 per 1,000 in South Asia. That compares with 6 per 1,000 in the UK.<sup>2</sup>**

In the year 2000, world governments committed themselves to the Millennium Development Goals (MDGs) – eight targets for poverty reduction and development. MDG 4 is specifically focused on child survival, calling for a reduction by two-thirds, between 1990 and 2015, in the under-five mortality rate. While a small number of countries are on track, at current rates of progress this target will not be achieved globally until 2045.<sup>3</sup>

Why has so little progress been made? The persistence of high levels of child mortality can be explained at three separate but related levels. Firstly, proven means for preventing or treating major killer diseases – including pneumonia, measles, diarrhoea, malaria, HIV and AIDS, and neonatal conditions – continue to be inaccessible to many children in the world's poorest countries.

Secondly, a series of factors means that millions of the world's poorest children remain highly exposed or vulnerable to infection, and much more likely to die than their richer peers. Children from poor families face weak and inequitable health systems, undernutrition, a lack of clean water and hygienic sanitation, and female illiteracy – despite available measures to combat all these factors.

These deaths are not therefore random events beyond our control. To a considerable extent, they are the outcome of political and policy choices taken (or not taken) by governments. They are also influenced by cultural, economic, environmental, political and social factors that governments and other actors could help to shape or mitigate. This is the third level of explanation, the structural or underlying causes of child mortality.

Of these structural causes, poverty, inequality and discrimination are particularly significant (and our main focus in this report). Children from the poorest families in the poorest countries are at greatest risk of dying. Poor mothers are more likely to lack adequate nutrition during pregnancy, struggle to access basic health services, and be unaware of cost-free steps that could enhance the survival prospects of their children.

Poor families also tend to live in the most insecure and hazardous environments and to be more vulnerable to economic and environmental shocks. Bad governance, violent conflict and worsening environmental trends, like climate change, are additional underlying causes that impact profoundly on the survival prospects of children.

## It can be done

If decisive action is taken now to address the direct, secondary and underlying causes of child mortality, the world has a chance of saving millions of children's lives and realising MDG 4 by 2015. But time is fast running out and developing countries, developed countries and civil society must take decisive action without delay.

Those developing country governments with the highest levels of child mortality should lead this effort, putting in place policies that give greater priority to the rights and needs of their poorest families and children. Progress in cutting child mortality is possible. The new Wealth and Survival Index, carried out for Save the Children by the United Nations Development Programme's Human Development Report Office, shows how certain countries are performing better than others relative to their levels of national income. While there are various reasons for this differing performance, accessible healthcare, investment in nutrition, clean water and safe sanitation, support for women's education, action against poverty and a focus on equity are common themes in many of the countries that have made progress.

There are also very clear obligations on the world's developed country governments and peoples to make child survival a much higher global priority, and to use their considerable resources, knowledge and other policy instruments more effectively to reduce levels of child mortality. Developed countries must end those policies that damage the development prospects of poorer countries – for example: massive subsidies for

agricultural trade that distort global food markets; restrictive rules on intellectual property that put certain products and technologies beyond the reach of the poor; and large-scale emissions of carbon that accelerate climate change.

There are responsibilities and opportunities for corporations, non-governmental organisations (NGOs) and other parts of civil society too. They can help to improve the survival prospects of the world's children by generating wealth, sharing resources and expertise, delivering services, advocating for governments to uphold their rights obligations to all children, and by ensuring that their own actions are consistent with children's rights.

Finally, alongside the moral and legal arguments for tackling child mortality, there are very real economic advantages that accrue to countries investing in the health, nutrition and education of their children. For example, recent research by Save the Children showed that a 5% improvement in child survival rates raises economic growth by 1 percentage point per year over the subsequent decade.<sup>4</sup>

## Time to deliver

The situation is urgent if we are to achieve the MDGs by 2015, but there are substantial national and global opportunities available in 2008 to galvanise political leaders and ordinary citizens to take decisive action. This is a critical year. It is vital that political leaders and civil society demonstrate a real commitment to get the MDGs on track.

## Recommendations

Developing country governments and international donors should:

- Agree clear benchmarks and outcome targets and publish annual reports specifically focused on the impact of their policies on maternal and child health and nutrition, including the resources allocated to this.
- Support an amendment to the existing MDG framework to include concrete equity objectives, such as halving the gap in child mortality between the richest and poorest 20% of countries' populations.

## Health

Developing country governments and international donors should:

- Increase investment in health systems, including in the development and retention of staff, in the financial, managerial and drug supply system, and in making sure that the systems operate effectively from household to hospital level.
- Eliminate those direct and indirect barriers, including user fees, that prevent poor people from accessing healthcare.
- Safeguard child health in humanitarian emergencies by further improvements to the United Nations Central Emergency Response Fund (CERF) and other humanitarian financing mechanisms, so that resources get through more quickly to children whose lives are at acute risk in conflict and disaster situations.

## Hunger and hygiene

Developing country governments and international donors should:

- Convene a major global summit on child and maternal undernutrition, bringing together governments, international institutions, the private sector and civil society, to help galvanise more effective action against undernutrition.
- Increase the resources allocated in support of maternal and child nutrition, increase the provision of community therapeutic care, and agree to report the impact of their policies and programmes regularly against the internationally-agreed indicator on nutrition (outlined in MDG 1).

- Promote appropriate infant feeding practices, including monitoring the adherence by governments and companies to the International Code on the Marketing of Breastmilk Substitutes.
- 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.

## Development that benefits the poor

Developing country governments and international donors should:

- Support inclusive and equitable development strategies that increase investment in pro-poor sectors, support livelihoods and help boost incomes and opportunities for the poorest families, including through country-level social protection programmes.
- Prioritise girls' literacy and education, tackle the barriers to educational access, particularly for girls from the poorest and most marginalised communities, and strengthen the quality of education provided.
- Provide more resources for Disaster Risk Reduction strategies in countries prone to disasters, where the poorest families will be most affected, and ensure that development strategies in those countries include measures for managing and mitigating the impacts of disasters on children.
- Uphold their obligations to children under the United Nations Convention on the Rights of the Child (UNCRC) and support civil society movements that hold their governments to account on these commitments.

# I Introduction

The death of a child in infancy is an unbearable loss. In wealthy countries, this occurrence is now thankfully pretty rare. But in many of the poorest countries in the world, it is still shockingly commonplace. A mother in sub-Saharan Africa, for example, is nearly 100 times more likely than a mother in a developed country to lose her child in the first five years of life.<sup>5</sup>

Across the globe, nearly 10 million children die before the age of five each year – that is one child every three seconds. Nearly 4 million children die within their first 28 days, during the “neonatal” period. Three million babies die within one week of birth, including up to 2 million who die on their first day of life.<sup>6</sup>

But these deaths are not random events beyond our control. To a considerable extent, they are the outcome of political and policy choices taken (or not taken) by governments. They are also influenced by cultural, economic, environmental, political and social factors that governments and other actors, like the private sector or civil society, could help to shape or mitigate.

This short report considers why millions of children under the age of five continue to die every year, when proven remedies and practical measures are available that could help to save them. It also proposes a number of policy responses that would help to reduce drastically the number of children who die.

## Government commitments and progress to date

Commitments to child survival are legal obligations enshrined in a series of international human rights instruments endorsed by the overwhelming majority of

the world’s governments. These include the United Nations Convention on the Rights of the Child (UNCRC), the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. For example, Article 6 of the UNCRC refers to children’s inherent right to life, survival and development, while article 24 calls on governments to “take appropriate measures to diminish infant and child mortality and to ensure the provision of necessary medical assistance and health care to all children”.<sup>7</sup>

Specific commitments have been made at key international conferences over the last two decades. The World Summit for Children in 1990 called for a worldwide reduction in child mortality to below 70 deaths per 1,000 live births by the year 2000 (or a one-third reduction if this yielded a lower mortality rate). By the end of the decade, however, the mortality reduction target was reached by only five of the 55 countries with an under-five mortality rate of 100 or more in 1990.<sup>8</sup>

## MDG 4 – child mortality

At the United Nations Millennium Summit in 2000, the world’s governments committed themselves to eight targets for poverty reduction and development. While each of these is important, four are especially relevant to the survival prospects of children. Millennium Development Goal 4 (MDG 4) calls for a reduction by two thirds, between 1990 and 2015, in the under-five mortality rate. There has been some movement here: in 2006, for the first time since records were kept, the number of children dying before the age of five is estimated to have fallen below 10 million, to 9.7 million.<sup>9</sup> That compares with an estimated 20 million under-five deaths in 1960.

While this overall trend is positive, the pace of improvement is appallingly slow and progress is far from uniform. Only seven of the 60 countries with the worst records on child mortality are on track to meet MDG 4: Bangladesh, Brazil, Egypt, Indonesia, Mexico, Nepal and the Philippines. Fourteen countries have actually seen an increase in child mortality rates since 1990. At current rates of progress, the goal of reducing under-five mortality by two thirds will not be achieved globally until 2045.<sup>10</sup>

## MDG 1 – poverty and hunger

Millennium Development Goal 1 (MDG 1) has two components. The first, more frequently quoted component is to halve, between 1990 and 2015, the number of people who live below the \$1 a day poverty line – a crucial step in addressing the underlying causes of child mortality.

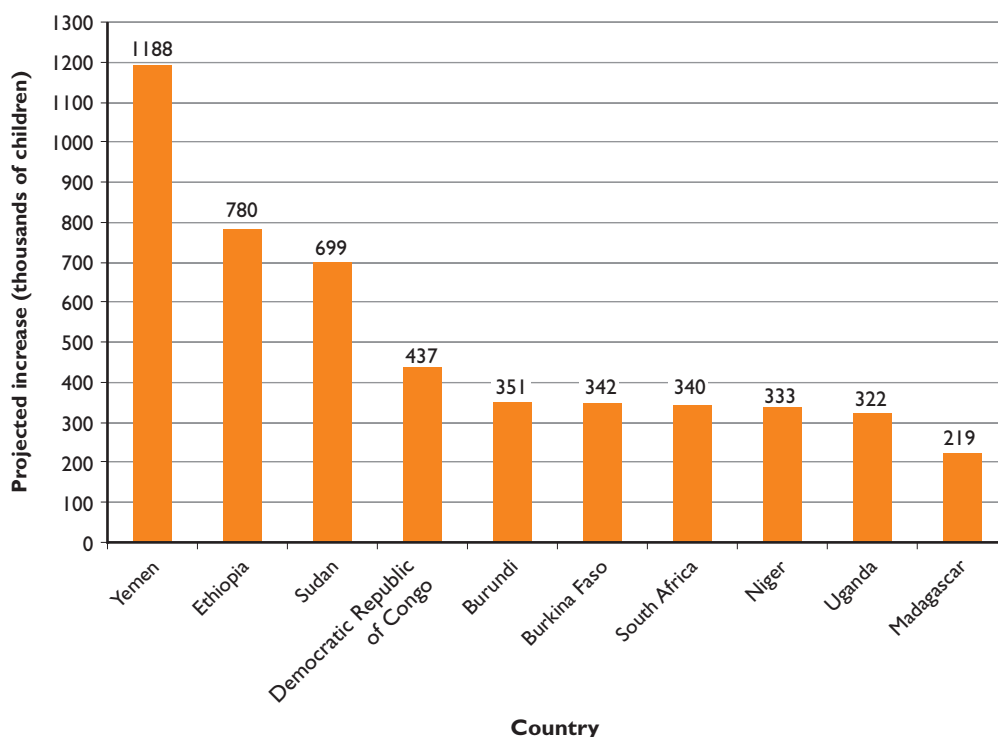
Less well known is the second aspect of MDG 1, which calls for a halving of the proportion of people who suffer from hunger, with a specific indicator on reducing underweight prevalence among children under five. Despite its critical importance to the survival prospects of children, progress has been limited. Today, 143 million children under the age of five continue to suffer from

undernutrition, mostly in South Asia and sub-Saharan Africa.<sup>11</sup> Moreover, according to current trends, by 2015 there will actually be more malnourished children than there are today. In sub-Saharan Africa, for example, there will be 3 million more underweight children in 2015 than there were in 2006.<sup>12</sup>

## MDG 5 – maternal mortality

Millennium Development Goal 5 (MDG 5) is also connected inextricably to the survival prospects of children. It calls for a reduction by three quarters, between 1990 and 2015, in the maternal mortality rate. An estimated 500,000 women die each year as a result of complications during pregnancy and childbirth.<sup>13</sup> Many of the factors that increase a woman's risk of death during or immediately after birth – inadequate nutrition and care throughout the pregnancy and limited access to health services before, during and after the birth – also make it more likely that her child will be stillborn or will die within the first few days of life. Although there has been some reduction in maternal mortality in middle-income countries, much less progress is being made in most low-income countries. Key interventions like skilled attendance at delivery and access to appropriate antenatal care are still unavailable to many of the world's poorest mothers.<sup>14</sup>

**Ten countries with the largest expected increase in underweight children under five, compared to 2006, if trends continue**



Source: Derived from UNICEF and UN ECOSOC data. Full details in endnote 12.

## MDG 6 – major diseases

Millennium Development Goal 6 (MDG 6) calls for action to halt and reverse the spread of HIV and AIDS and the incidence of malaria and other major diseases. As is noted in the next section, these are the diseases that account for a large number of child deaths. Progress has been mixed towards this goal. In 2007, an estimated 33.2 million people worldwide were living with HIV, mostly in sub-Saharan Africa, and there are an estimated 11.4 million children who have lost one or both parents to AIDS in the sub-Saharan Africa region.<sup>15</sup>

## MDGs ignore equity

Save the Children is a strong supporter of the MDGs as a set of international commitments that have helped to focus and galvanise political and public attention around concrete development outcomes. However, they have a significant design flaw: they ignore the issues of equity and distribution. The figures may tell us whether a country is on or off track with a particular MDG, but without further disaggregation it is impossible to know what this means for different economic and social groups, for girls as opposed to boys, or for different ethnic or caste groups.

Getting the MDGs on track will require a much more determined effort by developing and developed country governments, including a greater focus on issues of equity. It also requires governments to be more accountable for the impact of their policies on children.

## Recommendations

Developing country governments and international donors should:

- Agree clear benchmarks and outcome targets and publish annual reports specifically focused on the impact of their policies on maternal, neonatal and child health and nutrition, including the resources allocated to this.
- Support an amendment to the existing MDG framework to include some equity objectives, such as halving the gap in child mortality between the richest and poorest 20% of countries' populations.

## Where are children dying?

Nearly all child deaths – 99% – occur in developing countries. Sub-Saharan Africa has only 11% of the world's population but accounts for nearly half (nearly 4.8 million) of total child deaths worldwide, while South Asia accounts for around 3.1 million child deaths. The latest data available shows the child mortality rate (child deaths per 1,000 live births) as 160 per 1,000 in sub-Saharan Africa and 83 per 1,000 in South Asia. That compares with 6 per 1,000 in the UK.<sup>16</sup>

As shown in the following tables, the countries with the worst child mortality rates tend to be very poor and to have experienced war or violent conflict, such as Afghanistan, Angola, Chad, the Democratic Republic of Congo (DRC), Liberia and Sierra Leone.

Six countries – India, Nigeria, DRC, Ethiopia, Pakistan and China – account for 50% of all deaths of children under five.<sup>17</sup>

A similar pattern and concentration of countries is evident in relation to neonatal deaths. Of these, 98% take place in developing countries. More than two-thirds of all newborn deaths (2.7 million out of four million each year) occur in ten countries, with more than half of them occurring in just four large countries: India, China, Pakistan and Nigeria.<sup>18</sup> India alone accounts for more than 25% of the world's newborn deaths.<sup>19</sup>

## Tables on child mortality

### The ten countries with the highest numbers of children dying, 2006

	Population (thousands)	Number of children born per year (thousands)	Number of child deaths per year (thousands)	Under-5 child mortality rate (deaths per 1,000 live births)
<b>India</b>	1,151,751	27,195	<b>2,067</b>	76
<b>Nigeria</b>	144,720	5,909	<b>1,129</b>	191
<b>Democratic Republic of Congo</b>	60,644	3,026	<b>620</b>	205
<b>Pakistan</b>	160,943	4,358	<b>423</b>	97
<b>China</b>	1,320,864	17,309	<b>415</b>	24
<b>Ethiopia</b>	81,021	3,159	<b>389</b>	123
<b>Afghanistan</b>	26,088	1,272	<b>327</b>	257
<b>Bangladesh</b>	155,991	4,013	<b>277</b>	69
<b>Angola</b>	16,557	792	<b>206</b>	260
<b>Uganda</b>	29,899	1,406	<b>188</b>	134

### The ten countries with the highest under-five child mortality rates (deaths per 1,000 live births), 2006

	Population (thousands)	Number of children born per year (thousands)	Number of child deaths per year (thousands)	Under-5 child mortality rate (deaths per 1,000 live births)
<b>Sierra Leone</b>	5,743	262	71	<b>270</b>
<b>Angola</b>	16,557	792	206	<b>260</b>
<b>Afghanistan</b>	26,088	1,272	327	<b>257</b>
<b>Niger</b>	13,737	683	173	<b>253</b>
<b>Liberia</b>	3,579	184	43	<b>235</b>
<b>Mali</b>	11,968	579	126	<b>217</b>
<b>Chad</b>	10,468	482	101	<b>209</b>
<b>Equatorial Guinea</b>	496	19	4	<b>206</b>
<b>Democratic Republic of Congo</b>	60,644	3,026	620	<b>205</b>
<b>Burkina Faso</b>	14,359	641	131	<b>204</b>

Source for both tables: UNICEF, *The State of the World's Children, 2008*, UNICEF, 2007.<sup>20</sup>

# 2 Direct and secondary causes of child death

The persistence of high levels of child mortality can be explained at three separate but related levels:

- direct causes of death – major child killers
- secondary causes
- underlying or structural causes.<sup>21</sup>

## Major child killers

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.

A child's risk of dying on their first day of life is about 500 times greater than their risk of dying when they are one month old.<sup>22</sup> The first few hours of a baby's life are therefore critical, but far too often basic steps that could save the life of a child are not taken.

Four million children die each year during the neonatal period (within 28 days of birth), pointing to the enormous importance of maternal health and nutrition as a determinant of child survival.<sup>23</sup> Neonatal deaths can be attributed to severe infections (sepsis, pneumonia, diarrhoea, or tetanus), the consequences of being born prematurely, low birth weight, asphyxia and congenital defects. Many of these factors relate to the poor health of the mother during pregnancy, as well as to the lack of appropriate medical support over this nine-month period, during labour, and in the immediate hours and days after birth.

Around the world, pneumonia is the largest single killer of children under five. It is responsible for more child deaths than AIDS, malaria and measles combined. Each year, around 2 million children die from the disease globally, and a further 1 million infants are estimated to

die from severe infections, including pneumonia, during the neonatal period.<sup>24</sup> Diarrhoea accounts for nearly 2 million deaths of children under five each year.<sup>25</sup> Malaria causes 18% of child deaths in sub-Saharan Africa (that is 800,000 deaths) but only 1% of child deaths in Southeast Asia.<sup>26</sup>

AIDS accounts for only 3% of child deaths in the 42 countries that make up 90% of child deaths globally. But in some sub-Saharan countries like Zimbabwe and Botswana, AIDS is the direct cause of more than half of child deaths.<sup>27</sup> However, these figures almost certainly understate the real impact of AIDS, given the deaths of many doctors, nurses and other health workers from AIDS and the negative impact of this on already weak health systems.

## Can these diseases be prevented or treated?

In nearly all cases, the diseases that are killing children are preventable and treatable. The publications of the Bellagio Study Group, the Lancet Neonatal Survival Steering Group and others, provide very robust evidence for targeted interventions that can help to save children's lives.<sup>28, 29</sup>

Pneumonia, the biggest child killer, can be treated through community diagnosis and the use of antibiotics, while diarrhoea can be dealt with by oral rehydration therapy. Child deaths from malaria could be cut very significantly if all children in high-risk countries were to sleep under insecticide-treated bed nets. Immunisation of all children against diphtheria, pertussis and tetanus, hepatitis, polio and maternal/neonatal tetanus would cut child deaths: indeed, a significant part of the reduction in child mortality over the last decade can be attributed to the extension of immunisation coverage.

## Strengthening healthcare systems in Sierra Leone

Sierra Leone has the highest rate of child mortality in the world and one of the highest rates of neonatal mortality. One in four children born there will die before the age of five.

Sierra Leone's health system is chronically under-resourced, with most of the country's health centres lacking adequate numbers of trained staff, basic medical equipment and drugs. Fees for the use of health services and other barriers to access exclude large parts of the population from basic healthcare. Understanding of reproductive and sexual health matters is low, and many girls often become pregnant soon after puberty. A large number of young mothers also lack support during pregnancy and childbirth, and when raising their children, because they have been separated from their families or orphaned by war.

In 2005, Save the Children began a targeted programme to focus on the health issues facing girls, young mothers and their children in Kailahun District, eastern Sierra Leone. We provided basic reproductive health equipment, furniture and supplies to 15 health facilities in Kailahun, enabling us to meet the needs of half the

centres, including providing roofing and mosquito netting for the windows.

About half of these clinics have Maternal and Child Health Aides (MCH Aides), who help to prevent illness and death among mothers and newborn babies. We have also given refresher training for these MCH Aides on labour, delivery, and essential newborn care.

Now that the clinics are renovated and equipped, more women are attending for prenatal care, for the birth itself and afterwards – the neonatal period when newborn babies are most likely to contract disease and die. This enables staff to discuss a range of health and family planning issues with them, and to more quickly refer them to larger health facilities where appropriate.

Save the Children's work in Sierra Leone demonstrates that health system strengthening at a local level, through staff training, provision of equipment, and updating of facilities, clearly encourages more women and their children to use health services. We are working with the government and local non-governmental organisations (NGOs) to advocate for country-wide health system strengthening and the provision of community level health services targeted at the poorest communities.



ANNA KARI

**“I now know a lot more about how to take care of pregnant women and newborns”**

**Margaret (left), a Maternal and Child Health Aide, says she learned vital skills during the training she received from Save the Children.**

Anti-retroviral therapy could reduce the risk that mothers will pass on the virus to their infants – an essential intervention considering that more than 90% of HIV infections in infants are passed on by the mother during pregnancy, labour, delivery or breastfeeding. Mother-to-child transmission of HIV currently accounts for nearly 350,000 child deaths annually.<sup>30</sup>

A huge reduction in neonatal deaths is also possible if pregnant mothers can access appropriate support, including help to control the timing and frequency of pregnancies. Research suggests that a child who is born less than two years after the next oldest sibling is more than twice as likely to die, compared to when the next child arrives after three years.<sup>31</sup> The effective use of contraception can help mothers to control their fertility and space their pregnancies in a way that enhances their health and that of their babies. Another critical means for reducing neonatal deaths is to ensure an adequate and nutritious diet for mothers throughout pregnancy (addressed later in this report).

But, despite the fact that these proven interventions and policy responses could save millions of children's lives every year, they continue to be inaccessible to many mothers and their children in the world's poorest countries. To understand why, we need to consider a set of secondary causes: factors that influence which children are most exposed to infection and whether the outcome of that infection is recuperation or death.

## 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
- undernutrition
- the availability of clean water and safe sanitation
- 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 and are understaffed or ill-equipped, or because the direct or indirect costs of treatment are prohibitive. The question of barriers to accessing healthcare is particularly important. A number of studies have shown that when user fees are introduced, poor people's demand for primary health services falls, and when they are abolished it increases dramatically.<sup>32</sup> But the issue of costs is much broader than user fees. In most cases, user fees make up a small proportion of direct costs. Transport, drugs, informal payments to healthcare workers, accommodation, food expenses, and unexpected catastrophic health expenditures form the bulk of direct medical and non-medical costs.<sup>33</sup>

## Strengthening systems

Recently, there has been a new and welcome interest in the question of health system strengthening. The Paris Declaration on Aid Effectiveness (2003) and the recently launched 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 the importance of 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, described in the last section, should be provided at the community level by national health systems. These would include immunisation against basic diseases, vitamin A supplementation, oral antibiotics against malaria and dysentery, essential antenatal, obstetric and postnatal care, and the provision of community therapeutic care (CTC).

## Recommendations

Developing country governments and international donors should:

- Increase investment in health systems, including in the development and retention of staff, in the financial, managerial and drug supply system, and in making sure that the systems operate effectively from household to hospital level.
- Eliminate those direct and indirect barriers, including user fees, that prevent poor people from accessing healthcare.

## Undernutrition

The deaths of 3.5 million children each year (more than one third of all the children under five who die) can be attributed to the effects of undernutrition.<sup>34</sup> The damage done by undernutrition can start when a child is still in the womb, an indirect consequence of the poor nutritional intake of the mother, and globally 18 million babies are born with low birth weight each year.<sup>35</sup> A lack of certain micronutrients can also damage the health of the mother and her child. For example, iron deficiency affects around 42% of pregnant women,<sup>36</sup> and their children are at greater risk of low birth weight, prematurity, cognitive impairment and newborn death.<sup>37</sup>

Undernutrition weakens a child's immune system, making them more susceptible to disease and less able to fight off infection. A child is almost ten times more likely to die from key diseases if they are severely underweight than if they are of average weight for their age, and two and a half times more likely to die if they are even moderately underweight.<sup>38</sup> A particularly critical period for cognitive and physical development is from the first few weeks in the womb until the second year of life. If a child is chronically malnourished, or stunted, during this time, the effects are irreversible. No amount of subsequent intervention will make up for the damage done.

Despite its importance in fighting child mortality, child and maternal nutrition has been neglected by many developing country governments and by international donors. In 2006, Save the Children asked the Institute for Development Studies (IDS) to look specifically at donor policies towards chronic malnutrition, with a particular focus on the policies of the UK Department

for International Development (DFID) and the European Commission (EC). Their research findings,<sup>39</sup> published in April 2007, suggest that both of these donors treat chronic malnutrition as only a "medium-level" priority. For example, both the EC and DFID are failing to report their progress against the internationally-agreed nutrition indicator (part of Millennium Development Goal 1).

More recently, the Lancet's Maternal and Child Undernutrition series, published in January 2008, was highly critical of broader international efforts to deal with undernutrition, describing an international system where "leadership is absent, resources are too few, capacity is fragile and emergency response systems are fragmentary".<sup>40</sup> Overcoming these institutional and policy failings and creating a new political imperative around undernutrition is therefore essential to make substantial reductions in child mortality.

### How to tackle undernutrition

Effective interventions to tackle undernutrition are available.<sup>41</sup> Indeed, they are ranked as having amongst the highest returns to investment of any major development interventions.<sup>42</sup> But they remain inaccessible to many poor families.

One of the best means for ensuring a child's survival, strengthening their immune system and furthering healthy development is breastfeeding. Infants who are exclusively breastfed for the first six months of their life are ten times less likely to die from diarrhoea and 15 times less likely to die of pneumonia, in comparison with infants who are not breastfed.<sup>43</sup> Despite these benefits, many women lack the time to breastfeed because of the competing demands of work and household tasks such as collecting water and making food. The infant is therefore often left in the care of siblings and is only partially breastfed. Partial breastfeeding results in a three-fold greater increase in the risk of mortality.<sup>44</sup> Suboptimum breastfeeding is estimated to be responsible for 1.4 million child deaths each year.<sup>45</sup>

In many parts of the developing world, using infant formula can heighten the risk of child mortality if mothers are forced to use dirty water to make up the formula, or if the general conditions for preparing the milk are unhygienic. Pressure from baby milk manufacturers has sometimes led to mothers using

infant formula rather than breastmilk. There is a code of conduct for companies, setting out guidelines on the promotion of infant formula, but these have not always been adhered to.

There are a wide range of additional measures for preventing and treating undernutrition, including food supplements, cash transfers and counselling. If all these interventions were replicated at scale, it is estimated that they could reduce child deaths by about a quarter in the short term.<sup>46</sup>

One particularly effective intervention for treating severe acute malnutrition in children is community therapeutic care (CTC). CTC programmes involve the distribution of highly nutritious ready-to-use therapeutic food along with routine health supplies. The programmes tend to be implemented at the local level to have the greatest geographical reach, and encourage the highest possible levels of community understanding and participation.

The results are impressive. In hospitals – where severe acute malnutrition is traditionally treated – death rates have remained largely unchanged since the 1950s, at 20% to 30%. In contrast, a survey of 21 CTC programmes in Malawi, Ethiopia and Sudan between 2001 and 2005 reported mortality of just 4%.<sup>47</sup>

## Recommendations

Developing country governments and international donors should:

- Convene a major global summit on child and maternal undernutrition, bringing together governments, international institutions, the private sector and civil society, to help galvanise more effective action against undernutrition.
- Increase the resources allocated in support of maternal and child nutrition, increase the provision of community therapeutic care, and agree to report the impact of their policies and programmes regularly against the internationally-agreed indicator on nutrition (outlined in MDG 1).
- Promote appropriate infant feeding practices, including monitoring the adherence by other governments and companies to the International Code on the Marketing of Breastmilk Substitutes.

## 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>48</sup> Many of these deaths relate to diarrhoea, which spreads rapidly in unhygienic environments. So 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 Asia, Latin America and sub-Saharan Africa, for example, 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>49</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.

## Recommendation

Developing countries and international donors should:

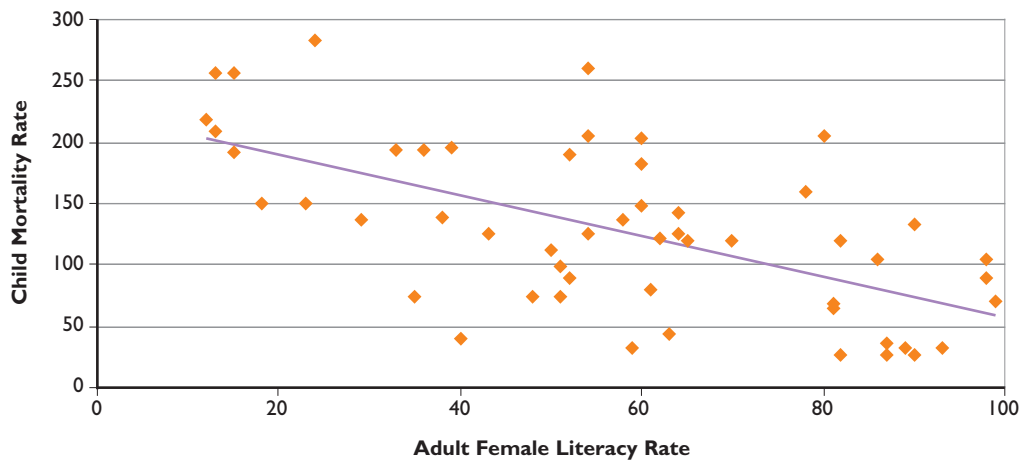
- Increase investment in the water and sanitation sector, targeting resources to meet the needs of the poorest communities, especially in rural areas and urban slum districts.

## Female literacy

Recent research findings from 35 demographic and health surveys suggest that children of mothers with no education are more than twice as likely to die or to be malnourished compared with children of mothers who have secondary education or higher qualifications.

Mothers with limited literacy and educational skills are also much less likely to receive trained support during pregnancy and childbirth. In Nigeria, for example, only 15% of births amongst uneducated women are assisted

## Adult female literacy and child mortality



Source: UNICEF, *The State of the World's Children, 2007*, UNICEF, 2006.<sup>50</sup>

by trained medical personnel, compared to 56% of births among women who have completed primary school, and 88% among women who have completed higher education.<sup>51</sup>

The research on the impact of adult female literacy on child mortality is compelling.<sup>52</sup> As suggested in the diagram above, there is a strong association between female literacy and child survival.

### Recommendations

- Prioritise girls' literacy and education, tackle the barriers to educational access, particularly for girls from the poorest and most marginalised communities, and strengthen the quality of education provided.

# 3 Underlying or structural causes

Underlying the immediate causes of child mortality and the secondary factors that increase a child's risk of early death are a set of deeper, structural causes. The major common threads that link these issues are poverty, inequality and discrimination, as examined later in this chapter.

However, there are also other significant underlying causes of child mortality, such as poor governance, conflict and climate change. These causes are discussed briefly below and will be the subject of future Save the Children research on child survival issues.

## Fragile and conflict-affected states

The nature and quality of governance can have a great impact on the survival prospects of children. As a recent report from the UK Department for International Development (DFID) put it: "Nearly half of all children who die before the age of five are born in fragile states. Child mortality is almost two-and-a-half times higher than in other poor countries and maternal mortality is also more than two-and-a-half times greater."<sup>53</sup>

Eight of the ten countries with the highest under-five mortality rates in the world have recently experienced violent conflict. In four of them – Afghanistan, Angola, Niger and Sierra Leone – more than one in every four children will die.

While it might seem obvious that countries involved in conflict or even post-conflict countries will have the highest child mortality rates, most of the children who die there are the indirect rather than direct victims of

violence. It is human displacement, damage to or lack of access to healthcare or food supplies, and the easy spread of disease that claims most lives. The international humanitarian system has made real strides in recent decades, but further reforms are needed to ensure that we have an international humanitarian system that can get resources through speedily to highly vulnerable children and their families.

**Ten countries with highest child mortality rates and their recent conflicts**

Under-5 mortality rate (deaths per 1,000 live births)	Country	Conflict
270	Sierra Leone	(1991–2000)
260	Angola	(1975–2002)
257	Afghanistan	(1978–ongoing)
253	Niger	(1992–1997)
235	Liberia	(1989–2003)
217	Mali	(1990–1994)
209	Chad	(1988–ongoing)
206	Equatorial Guinea	No armed conflicts
205	Democratic Republic of Congo	(1996–2001)
204	Burkina Faso	No armed conflicts

Source: UNICEF, *The State of the World's Children, 2008* and Uppsala Conflict Database.<sup>54</sup>

## Recommendation

Donors and members of the humanitarian community should:

- Safeguard child health in humanitarian emergencies by further improvements to the United Nation’s Central Emergency Response Fund (CERF) and other humanitarian financing mechanisms, so that resources get through more quickly to children whose lives are at acute risk in conflict and disaster situations.

## Climate change and natural disasters

Many of the main global killers of children, including malaria, diarrhoea and malnutrition, are highly sensitive to climatic conditions such as flooding and higher temperatures. This means the likely effects of climate change – increasingly frequent and severe natural disasters, temperature extremes, a global rise in sea levels, an increase in certain diseases, deteriorating crop yields and higher food prices – are likely to hit poor people the hardest, including the poorest and most vulnerable children.<sup>55</sup>

Responding to climate change will demand a range of other policy responses to mitigate its impact on the poorest communities, including poor children. Disaster Risk Reduction strategies are an important component of this and can help to save children’s lives.

## Recommendation

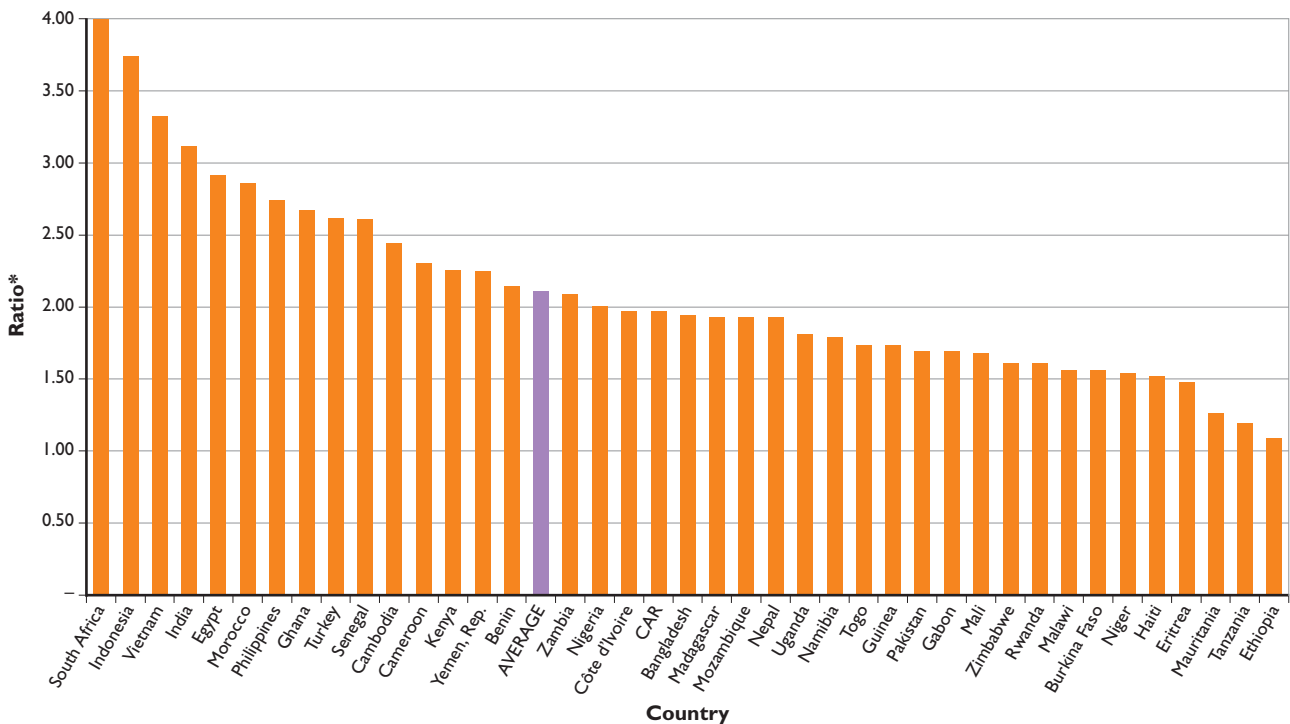
Donors and national governments should:

- Provide more resources for Disaster Risk Reduction strategies in countries prone to disasters, where the poorest families will be most affected, and ensure that development strategies in those countries include measures for managing and mitigating the impacts of disasters on children.

## The costs of poverty

There is a wealth of research evidence to show that, at the national level, poor children are more at risk of dying early than their better-off peers. One study suggests that the mortality rate of the poorest 20% of children is more than twice that of the richest 20% in the same country, as shown below.<sup>56</sup>

Child mortality ratios between the poorest and least poor quintile by country



\* Eg, a ratio of 4 implies that the poorest 20% of children are 4 times more likely to die than the richest 20%.

Source: adapted from D Gwatkin, R Davidson et al, *Socio-Economic Differences In Health, Nutrition, And Population Within Developing Countries: An overview*, World Bank, Sept 2007.

Another research analysis of 50 developing countries found that babies born to mothers in the poorest fifth of a population were nearly 30% more likely to die compared to those in the richest fifth. The same study found that babies born to mothers in rural areas were 21% more likely to die compared to those in urban areas.<sup>57</sup>

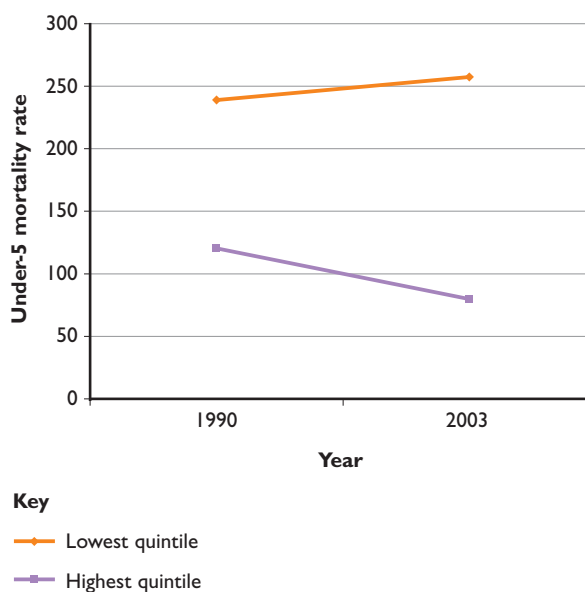
## Exacerbated by inequality

The damaging impact of poverty on the life prospects of children is further compounded by the effects of inequality. Unequal opportunities in life become reflected in unequal outcomes; in some cases rates of child mortality are deteriorating for the poorest households at the same time as they are improving for better-off households in the same country. The graph opposite shows this phenomenon clearly in the case of Nigeria.

Part of the explanation for this kind of disparity relates to the secondary causes of child mortality, as discussed in the previous chapter – particularly, unequal access to healthcare facilities and differences in nutritional status. In rural Nigeria, for example, children from the poorest socioeconomic group have to travel seven times as far to reach a health facility than children from the wealthiest group, and many are deterred from doing so.<sup>58</sup>

In developing countries in general, children in families in the poorest 20% of the population are on average more than three times more likely to be chronically malnourished than those in the richest 20%.<sup>59</sup> One stark example of this inequality is in Guatemala. Latin America is broadly considered a success story when it comes to nutrition, yet 65% of children in the poorest 20% of Guatemalan households are stunted – significantly higher than the worst national stunting rate of any country in the world.<sup>60</sup>

## Nigeria under-5 mortality rate – lowest and highest wealth quintiles



Source: Calculated by the Human Development Report Office of UNDP for Save the Children using World Bank data.

Recent research carried out by Save the Children looked at what it would cost families to purchase a healthy and nutritious diet for their children and for the adult family members. In the four countries that were examined – Bangladesh, Ethiopia, Myanmar (Burma) and Tanzania – it was found that a large proportion of children were not consuming an adequate diet and that the cost of such a diet was simply not affordable for the majority of the populations.<sup>61</sup>

In parts of South Asia, inequalities around child mortality have a strong gender dimension. In India, a girl is more likely to die between her first and fifth birthday than a boy. Girls are also more likely to be treated later, if at all, than boys. And one analysis of conditions in the Punjab showed that expenditure on healthcare during the first two years of life was two to three times greater for sons than for daughters.<sup>62</sup> It is worth noting, however, that – globally – more boys than girls die before the age of five.

# 4 Wealth and Survival Index

Links between poverty, inequality and child mortality are very strong, but it would be wrong to conclude that developing country governments are not in a position to improve the survival prospects of their children, even within existing resources. Politics and policy choices at the national level still matter.

The new Wealth and Survival Index,<sup>63</sup> carried out for Save the Children by the United Nations Development Programme's Human Development Report Office, shows how countries perform on child mortality in relation to their level of national income. It reveals considerable variation between countries. The figure in the right-hand column opposite represents the difference between a country's actual child mortality rate and the "expected" mortality rate given its income level.

**A figure of zero means that a country is performing as well as expected for its level of income per person. A positive number means the country is experiencing higher child mortality than its Gross National Income (GNI) per person would suggest. And a negative number indicates that it has lower child mortality than would be expected for its level of income per person.**

**Sierra Leone, for example, is estimated to have a child mortality rate that is 117 deaths per 1,000 live**

**births higher than it should be, given its current income level. By comparison, a country like Bangladesh is performing much better, with 32 less child deaths per 1,000 births than would be predicted by its per capita income level alone.**

## Explaining country performance

While there are a large number of variables that might explain differing performance across countries, quite a lot is already known from existing research about the determinants of child survival.

For example, Angola, which comes out worst in this index, suffered a lengthy civil war. Yet per capita income levels have increased each year since the conflict ended, and at levels far above the region's average. Indeed, it has a per capita income which is high enough to put it in the 'middle income country' category. So this imbalance between wealth and child survival might more plausibly be attributed to Angola's grossly unequal distribution of wealth, one of the worst in the world according to the UN.<sup>65</sup> While a small elite has benefited from Angola's abundant oil revenues, this resource has not brought benefits to the vast majority of the population and the country still has the second highest mortality rate in the world, at 260 deaths per 1,000 live births.

In contrast, the explanation for Bangladesh's much better performance in the Index partly relates to its introduction in 1998 of an Integrated Management of

## Wealth and Survival Index: the 41 countries that account for 90% of child deaths (2005)<sup>64</sup>

Country	Gross National Income per capita	Under-5 Mortality Rate per 1,000 births	Excess Mortality INDEX
Angola	2,335	260	162.00
Sierra Leone	806	271	117.58
Niger	781	256	100.94
Chad	1,427	208	84.35
Mali	1,033	218	77.52
Burkina Faso	1,213	203	70.89
Guinea	2,316	165	66.57
Nigeria	1,128	194	58.08
South Africa	11,110	68	51.26
Cameroon	2,299	149	50.18
Democratic Republic of Congo	714	205	45.29
Zambia	1,023	182	40.99
Rwanda	1,206	164	31.59
Ghana	2,480	119	24.13
Burundi	699	181	20.16
Mexico	10,750	36	17.55
Mozambique	1,242	145	14.12
Uganda	1,454	136	13.31
Côte d'Ivoire	1,648	129	12.83
Senegal	1,792	119	7.21
Pakistan	2,370	99	1.78
India	3,452	78	0.37
Cambodia	2,727	85	-4.91
Brazil	8,402	21	-10.29
Kenya	1,240	120	-10.97
Ethiopia	1,055	127	-12.41
Sudan	2,083	90	-13.96
China	6,757	25	-17.64
Philippines	5,137	33	-23.92
Madagascar	923	119	-27.33
Egypt	4,337	37	-28.74
Bangladesh	2,053	73	-31.69
Tanzania	744	122	-35.56
Indonesia	3,843	36	-36.04
Malawi	667	125	-38.27
Yemen	930	102	-43.94
Nepal	1,550	63	-56.33

Note: The table includes data for 37 of the 41 countries that account for 90% of child deaths, as data was not available for Afghanistan, Iraq, Myanmar (Burma) and Somalia.

Childhood Illness (IMCI) strategy. This aimed to improve family and community level understanding of health issues, as well as develop a stronger professional health sector. As a result, Bangladesh has seen improved training guidelines for health workers, better case management techniques, the wider availability of breastfeeding support and the introduction of new community-based services. IMCI has led to a threefold increase in the use of health services and improved health and nutritional outcomes for children.

Bangladesh has also been successful in boosting girls' school enrolment rates and promoting family planning. Bangladesh now has the highest percentage of women using contraception of any less developed country. Bangladeshi couples have smaller, healthier families, down from an average of more than six children in the 1970s to three today.<sup>66</sup>

## Certain countries make their resources count

The Wealth and Survival Index shows that countries with comparable levels of national income can differ very markedly in their performance on child survival. For example, Tanzania's GNI is US \$744 per person, while Sierra Leone's is only marginally higher at US \$805. The child mortality rate in Tanzania is 122 per 1,000 live births, but the rate in Sierra Leone is more than double that at 271 per 1,000. Similarly in Asia, Bangladesh's GNI is US \$2,053 per person while Pakistan's is \$2,370. But the child mortality rate in Bangladesh is 73 per 1,000 live births, while the rate in Pakistan is considerably higher at 99 per 1,000.

Some countries are also clearly better than others at translating economic growth into reductions in child mortality. Take Bangladesh and India, for example. India's GNI per capita has increased by a staggering 82% from US \$450 in 2000 to US \$820 in 2006. Its child mortality rate declined from 94 per 1,000 births to 76 per 1,000.

Over the same period, Bangladesh saw a much smaller 23% increase in GNI per capita, from US \$390 in 2000 to US \$480 in 2006, but its child mortality rate dropped from 92 to 69 – evidence that it is much more effective in tackling child mortality despite limited resources.<sup>67</sup> In fact, Bangladesh is one of only seven countries (out of the 60 that account for 94% of child deaths worldwide) that is on track to meet MDG 4 by 2015.

One of the explanations for India's poorer performance is the persistence of entrenched inequalities, including the caste system, that prevent poor families from improving their income, health and nutritional status. There are also large disparities between different states within India. For example, while the infant mortality rate in Orissa is 96 per 1,000 live births, in Kerala it is only 14 per 1,000.<sup>68</sup>

Therefore, while economic growth is hugely important to the prospects of poorer countries, it is a necessary but not a sufficient condition for securing better development outcomes for the world's poor. Rates of child mortality and other human development indicators will improve more rapidly if growth is complemented by a strong focus on equity, and by measures that address the structural causes of poverty, particularly for the most vulnerable.

## The economic benefits of child survival

Giving priority to both growth and equity can have additional benefits. When children die young, are stunted or otherwise damaged by undernutrition, or suffer prolonged ill-health, this has seriously negative implications for the development prospects of these countries. Stunted children grow up to be shorter, weaker and less healthy adults, achieve less at school and earn less over their productive lives.<sup>69</sup> They are also more likely to have children who are chronically sick, perpetuating poverty and disadvantage across the generations.

The research on this is very clear: there is strong evidence that improvements in child survival are positively correlated with higher levels of economic growth.<sup>70</sup> A recent Save the Children study showed that a 5% improvement in child survival raises economic growth by 1 percentage point per year over the subsequent decade.<sup>71</sup> Another study found that the same level of improvement in the under-five child mortality rate would increase economic growth by 0.85 of 1 percentage point.<sup>72</sup> This suggests that investments in health and nutrition are not simply social, but also hugely productive and cost-effective given their significant economic returns.

## Fighting inequity in India

India has the highest number of children dying before the age of five in the world. Nearly 2 million children die in India every year.

Rajasthan is a desert state in the western part of India and the infant mortality there is 65 per 1,000 live births – higher than the national rate in India, which stands at 57. Poverty is grinding, seeking medical help is seen as a luxury, and health services are often too far away to be accessible. Families follow strict patriarchal norms, which place severe restrictions on women's mobility, including their right to seek medical help.

Local practices such as child marriages give children an even harder start in life: young girls have babies while still in their teens and, without an education, they simply do not know how to keep their children well-nourished and free from disease. As a result, children are highly likely to grow up hungry, dirty and prone to catch easily preventable diseases such as pneumonia and diarrhoea.

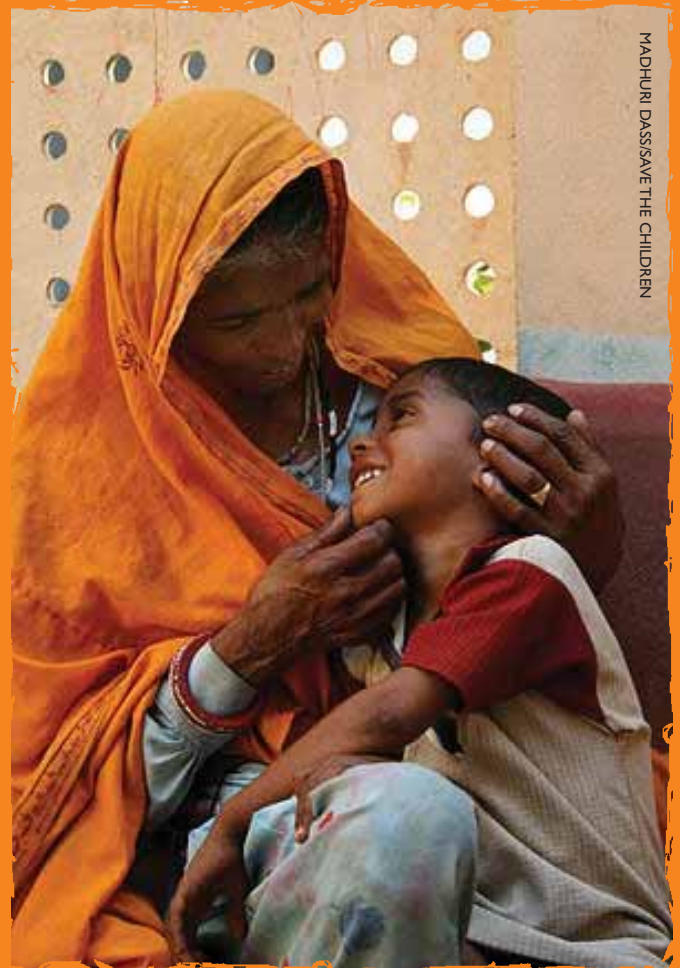
Save the Children is working in 40 villages of the Tonk district in Rajasthan to increase access to health services and increase awareness of easily preventable and curable diseases. We have established 13 baby care centres in remote villages not previously covered by government-run *anganwadi* [day care centres]. These baby care centres provide under-fives with supplementary nutrition to fight malnutrition, along with preschool learning activities to support healthy mental and social development.

We have also established a mobile clinic to cater for the everyday health needs of poor families. Advice on child health and nutrition are an important part of the service provided, and we have trained local women to encourage their peers to use the nearby public healthcare system when their families become sick.

Save the Children's experience in India emphasises the inequity that is often at the heart of the child mortality

crisis. Children of women whose movements are restricted and who lack education are far more likely to die of preventable causes. The importance of locally accessible health services is clear – not only to provide healthcare but to educate and advise families on their children's health and nutrition needs.

Save the Children is working with local non-governmental organisations (NGOs) and the Indian Government to improve the public provision of accessible health services, so that the most vulnerable and marginalised groups in society can access the healthcare they need.



MADHURI DASS/SAVE THE CHILDREN

**Shankar, four, lives with his grandmother Shanti in Rajasthan. He's gained 4 kg in four months thanks to supplementary nutrition from a Save the Children baby care centre.**

## Development that works for the poorest

Measures to tackle child mortality cannot therefore be divorced from broader issues of economic and social development, and from the political context in which this process happens. Cutting the number of child deaths requires much greater efforts by developing country governments, international donors and the private sector to combat poverty and to promote sustainable and inclusive economic development. While higher levels of economic growth will be an important part of this, a broader, pro-poor development strategy is also required to ensure that the proceeds of this growth are shared more equitably.

Pro-poor development is concerned not just with higher growth but with how that growth is created, ensuring that the poorest groups benefit to a greater extent. It includes breaking down the barriers that prevent poor people from gaining access to markets and financial services, increasing decent work for the poorest, promoting rural agricultural and non-agricultural productivity, and supporting female literacy.

Pro-poor development involves greater investment in the social sectors, like education, health, nutrition and social welfare, and action to reduce economic vulnerability, particularly through the provision of social protection programmes. It includes building up the

asset base (human, financial, social and physical) of the most vulnerable households, implementing cash transfer programmes for poor children, and supporting pensions or employment schemes.

But pro-poor development goes wider than pure economics. It is fundamentally about reducing inequalities of power and opportunity, and giving the poorest families a greater say in the decisions of governments at national and local levels. It addresses discrimination against ethnic, caste or religious groups, and particularly against women and children, and holds governments to account for their human rights obligations.

## Recommendations

Developing country governments and international donors should:

- Support inclusive and equitable development strategies that increase investment in pro-poor sectors, support livelihoods and help boost incomes and opportunities for the poorest families, including through country-level social protection programmes.
- Uphold their obligations to children under the United Nations Convention on the Rights of the Child (UNCRC) and support civil society movements that hold their governments to account on these commitments.

# 5 Delivering for the world's children

The aim of this short report is to stimulate debate and discussion on child mortality and to galvanise much more decisive action by developing and developed country governments, civil society, the private sector and others to help save millions of children's lives every year.

While some governments have shown real commitment to improving the lives of all their citizens, other governments and ruling elites are only likely to do so if they feel under greater public and political pressure. National and international civil society movements are therefore crucial. They have a key role to play in holding governments to account for their commitments on child survival, articulating the moral, legal and economic case for investing in children, and in putting forward concrete policy responses that will enhance children's prospects of living and thriving beyond their early years.

The experience of better performing countries, as set out in the Wealth and Survival Index, shows what is possible when governments tackle poverty, strengthen the rights and educational opportunities of women, invest in health system capacity (particularly at the community level), provide clean water and safe sanitation, and take action to combat hunger and malnutrition.

There is a huge amount that is now known about the kind of policy interventions that work to reduce levels of child mortality. The challenge and moral imperative for developing country and donor governments is to translate this knowledge into political will and leadership that can make a real difference to children's lives on the ground.

This year, 2008, is also critical for action at the global level. Political leaders and civil society must demonstrate a real commitment over the next 12 months to get the Millennium Development Goals (MDGs) on track. Key international meetings include the European Heads of State meeting in June, the G8 Summit in Japan in July and the special session of the UN General Assembly meeting in September.

There can be no greater test of the world's progress towards the MDGs than our collective success in relation to MDG 4. Working with others, Save the Children will be pressing political leaders to live up to their previous commitments and take action now to help save children's lives.

Almost ten million children still die every year. Further delay or inaction is inexcusable.

# Appendix I: Save the Children/United Nations Development Programme Wealth and Survival Index

All low and middle income countries

Country	Gross National Income per capita	Under-5 Mortality Rate per 1,000 births	Excess Mortality* INDEX
Angola	2,335	260	162.00
Sierra Leone	806	271	117.58
Niger	781	256	100.94
Swaziland	4,824	160	99.80
Chad	1,427	208	84.35
Mali	1,033	218	77.52
Burkina Faso	1,213	203	70.89
Guinea	2,316	165	66.57
Nigeria	1,128	194	58.08
Lesotho	3,335	132	52.57
Guinea-Bissau	827	203	50.93
Cameroon	2,299	149	50.18
Central African Republic	1,224	177	45.36
Democratic Republic of Congo	714	205	45.29
Zambia	1,023	182	40.99
Rwanda	1,206	164	31.59
Djibouti	2,178	133	31.36
Azerbaijan	5,016	89	30.84
Namibia	7,586	62	25.38
Mauritania	2,234	125	24.71
Ghana	2,480	119	24.13
Burundi	699	181	20.16
Benin	1,141	150	14.67
Mozambique	1,242	145	14.12
Uganda	1,454	136	13.31
Côte d'Ivoire	1,648	129	12.83
Gambia	1,921	116	7.83
Senegal	1,792	119	7.21
Suriname	7,722	39	3.31
Micronesia	7,242	42	2.96
Kiribati	4,597	65	2.29
Iran	7,968	36	1.94
Pakistan	2,370	99	1.78
India	3,452	78	0.37
Zimbabwe	2,038	105	-0.09
Guyana	4,508	63	-0.73
Algeria	7,062	39	-1.34
Dominican Republic	8,217	31	-1.45

\*See page 14 for full explanation of Index

Country	Gross National Income per capita	Under-5 Mortality Rate per 1,000 births	Excess Mortality INDEX
Cambodia	2,727	85	-4.91
Republic of the Congo	1,262	125	-5.05
São Tomé and Príncipe	2,178	96	-5.62
Togo	1,506	111	-9.86
Kenya	1,240	120	-10.97
Ethiopia	1,055	127	-12.41
Sudan	2,083	90	-13.96
Cape Verde	5,803	35	-15.58
Colombia	7,304	21	-17.59
China	6,758	25	-17.64
Ukraine	6,848	24	-17.95
Samoa (Western)	6,170	29	-18.38
Papua New Guinea	2,563	74	-19.15
Guatemala	4,568	43	-20.04
Belarus	7,918	14	-20.38
Peru	6,039	27	-21.49
Thailand	8,677	8	-21.61
Macedonia, FYR	7,200	17	-22.34
Morocco	4,555	40	-23.19
Bolivia	2,819	65	-23.19
Philippines	5,137	33	-23.92
Lao People's Dem. Rep.	2,039	79	-26.06
Jordan	5,530	26	-27.08
Madagascar	923	119	-27.33
Egypt	4,337	37	-28.74
El Salvador	5,255	27	-28.75
Solomon Islands	2,031	75	-30.28
Fiji	6,049	18	-30.41
Haiti	1,663	84	-31.68
Bangladesh	2,053	73	-31.69
Armenia	4,945	26	-32.91
Comoros	1,993	71	-35.25
Jamaica	4,291	31	-35.30
Tanzania	744	122	-35.56
Indonesia	3,843	36	-36.04
Albania	5,316	18	-37.14
Nicaragua	3,674	37	-37.39
Malawi	667	125	-38.27
Paraguay	4,642	23	-39.20
Ecuador	4,341	25	-40.70
Vanuatu	3,225	38	-43.18
Yemen	930	102	-43.94
Georgia	3,365	33	-45.96
Sri Lanka	4,595	14	-48.74
Honduras	3,430	29	-48.96
Tajikistan	1,356	71	-55.31
Nepal	1,550	63	-56.33
Syria	3,808	15	-57.52
Mongolia	2,107	45	-58.34
Uzbekistan	2,063	46	-58.46
Eritrea	1,109	78	-58.81
Vietnam	3,071	19	-64.73
Kyrgyzstan	1,927	43	-65.01
Moldova	2,100	20	-83.53

# Endnotes

## Executive summary

- <sup>1</sup> R Black, S Morris, J Bryce, 'Where and why are 10 million children dying every year?', *Lancet*, 361, 2003, pp 2226–2234
- <sup>2</sup> UNICEF, *The State of the World's Children, 2008*, UNICEF, 2007
- <sup>3</sup> UNICEF, *The State of the World's Children, 2006*, UNICEF, 2005
- <sup>4</sup> E Anderson and S Hague, *The Impact of Investing in Children: Assessing the cross-country econometric evidence*, ODI Working Paper 280, Overseas Development Institute, 2007

## I Introduction

- <sup>5</sup> Save the Children US, *State of the World's Mothers 2007*, Save the Children, 2007
- <sup>6</sup> R Black, S Morris, J Bryce, 2003, *op cit*, pp 2226–2234
- <sup>7</sup> Office of the United Nations High Commissioner for Human Rights, Convention on the Rights of the Child, 1990, <http://www2.ohchr.org/english/law/crc.htm> accessed 18 January 2008
- <sup>8</sup> R Black, S Morris, J Bryce, 'Where and why are 10 million children dying every year?', *Lancet*, 361, 2003, pp 2226–2234
- <sup>9</sup> CJ Murray, T Laakso, K Shibuya, K Hill, AD Lopez, 'Can we achieve Millennium Development Goal 4? New analysis of country trends and forecasts of under-5 mortality to 2015', *Lancet*, 370, 2007, pp 1040–1054
- <sup>10</sup> UNICEF, *State of the World's Children, 2006*, UNICEF, 2005
- <sup>11</sup> UNICEF, *Underweight (Statistics)*, 2007 <http://www.childinfo.org/areas/malnutrition/> accessed 16 January, 2008
- <sup>12</sup> Estimate based on applying the average annual rate of the reduction (AARR) in underweight prevalence 1990–2004 (*UNICEF Progress for Children: A report card on nutrition No. 4, 2006*) to the most recent survey data on underweight prevalence (*The State of the World's Children 2008*), and extrapolating the subsequent nine years to 2015, using predictions on population data from *World Population Prospects 2006: The 2006 Population Database*, <http://esa.un.org/unpp/>. 2006 base population data from *State of the World's Children 2008*. AARR data available for 88 countries.
- <sup>13</sup> Save the Children US, *State of the World's Mothers 2006, Saving the Lives of Mothers and Newborns*, Save the Children, 2006
- <sup>14</sup> UNICEF, *State of the World's Children, 2007*, UNICEF, 2006
- <sup>15</sup> World Health Organisation/UNAIDS, *Aids Epidemic Update*, WHO/UNAIDS, 2007

- <sup>16</sup> UNICEF, *The State of the World's Children, 2008*, UNICEF, 2007
- <sup>17</sup> UNICEF, *The State of the World's Children, 2007*, UNICEF, 2006
- <sup>18</sup> JE Lawn, S Cousens, J Zupan 'Four million neonatal deaths: When? Where? Why?', *Lancet*, 365, 2005, pp 1147–52
- <sup>19</sup> JE Lawn, S Cousens, J Zupan, 'Four million neonatal deaths: When? Where? Why?', *Lancet*, 365, 2005, pp 1147–52
- <sup>20</sup> UNICEF, *The State of the World's Children, 2008*, UNICEF, 2007

## 2 Direct and secondary causes of child death

- <sup>21</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
- <sup>22</sup> Save the Children US, *State of the World's Mothers 2006, Saving the Lives of Mothers and Newborns*, Save the Children, 2006
- <sup>23</sup> CJ Murray, T Laakso, K Shibuya, K Hill, AD Lopez, 'Can we achieve Millennium Development Goal 4? New analysis of country trends and forecasts of under-5 mortality to 2015', *Lancet*, 370, 2007; pp 1040–1054
- <sup>24</sup> UNICEF, *Progress for Children: A world fit for children, statistical review*, UNICEF 2007
- <sup>25</sup> UNICEF, *Progress for Children: A world fit for children, statistical review*, UNICEF 2007
- <sup>26</sup> Global Health Council, Child Mortality: Causes of death [http://www.globalhealth.org/child\\_health/child\\_mortality/](http://www.globalhealth.org/child_health/child_mortality/) accessed 16 January, 2008
- <sup>27</sup> R Black, S Morris, J Bryce, 'Where and why are 10 million children dying every year?', *Lancet*, 361, 2003, pp 2226–2234
- <sup>28</sup> *The Lancet*, Vol. 362, Issue 9377, 5 July 2003
- <sup>29</sup> *The Lancet*, Vol. 365, Issue 9463, 12 March 2005
- <sup>30</sup> UNICEF, *Progress for Children: A world fit for children, statistical review*, UNICEF 2007
- <sup>31</sup> Save the Children US, *State of the World's Mothers 2006, Saving the Lives of Mothers and Newborns*, Save the Children, 2006
- <sup>32</sup> Frost, L and Pratt, B, 'The Road Less Travelled: Barriers to poor children's healthcare utilisation in Developing and Transitional Countries', Save the Children UK, unpublished report, 2008
- <sup>33</sup> Frost, L and Pratt, B, 'The Road Less Travelled: Barriers to poor children's healthcare utilisation in Developing and Transitional Countries', Save the Children UK, unpublished report, 2008

<sup>34</sup> R Black et al, *Maternal and Child Undernutrition: Global and regional exposures and health consequences*, Paper 1, Lancet, Maternal and Child Undernutrition, Lancet, 2008, p5

<sup>35</sup> Save the Children US, *State of the World's Mothers 2006, Saving the Lives of Mothers and Newborns*, Save the Children, 2006

<sup>36</sup> E McLean, M Cogswell, I Egli, D Wojdyla and B de Benoist 'Worldwide prevalence of anemia in preschool aged children, pregnant women and non-pregnant women of reproductive age,' in K Kraemer, and M Zimmerman (eds), *Nutritional Anemia*, Sight and Life Press, 2007

<sup>37</sup> G Gleason and N Scrimshaw, 'An overview of the functional significance of iron deficiency' in K Kraemer, and M Zimmerman (eds), *Nutritional Anemia*, Sight and Life Press, 2007

<sup>38</sup> R Black et al, *Maternal and Child Undernutrition: Global and regional exposures and health consequences*, Paper 1, Lancet, Maternal and Child Undernutrition, Lancet, 2008, p9

<sup>39</sup> A Lindstrom, J Lawrence, H Greater, *DFID and EC Leadership on Chronic Malnutrition: Opportunities and constraints*, Institute of Development Studies/Save the Children UK, 2007

<sup>40</sup> Lancet, *Maternal and Child Malnutrition*, Lancet, 2008. editorial, p1

<sup>41</sup> Z Bhutta et al, 'Maternal and Child Undernutrition: What Works? Interventions for maternal and child undernutrition and survival', *Lancet*, 2008

<sup>42</sup> Copenhagen Consensus, cited in World Bank, 2006: *Repositioning Nutrition as Central to Development*, Washington DC: The World Bank

<sup>43</sup> R Black et al, *Maternal and Child Undernutrition: Global and regional exposures and health consequences*, Paper 1, Lancet, Maternal and Child Undernutrition, Lancet, 2008, p12

<sup>44</sup> R Black et al, *Maternal and Child Undernutrition: Global and regional exposures and health consequences*, Paper 1, Lancet, Maternal and Child Undernutrition, Lancet, 2008, p12

<sup>45</sup> R Black et al, *Maternal and Child Undernutrition: Global and regional exposures and health consequences*, Paper 1, Lancet, Maternal and Child Undernutrition, Lancet, 2008, p5

<sup>46</sup> Z Bhutta et al, 'Maternal and Child Undernutrition: What Works? Interventions for maternal and child undernutrition and survival', *Lancet*, 2008

<sup>47</sup> S Collins, N Dent, P Binns, P Bahwere, K Sadler and A Hallam, 'Management of severe acute malnutrition in children', *Lancet*, 368, 2006, pp 1992–2000

<sup>48</sup> UNICEF, *Progress for Children: A world fit for children, statistical review*, UNICEF 2007

<sup>49</sup> UN Human Development Report, 2006, *Beyond Scarcity: Power, poverty and the global water crisis*, UNHCR, 2006

<sup>50</sup> Data from UNICEF, *The State of the World's Children, 2007*, UNICEF, 2006. This diagram is based on a uni-variate linear regression analysis as opposed to a properly controlled multi-variate regression, and is employed for illustrative purposes only.

<sup>51</sup> Save the Children US, *State of the World's Mothers 2006, Saving the Lives of Mothers and Newborns*, Save the Children, 2006

<sup>52</sup> C Schell, M Reilly, H Rosling, S Peterson, A Ekström, 'Socioeconomic determinants of infant mortality: a worldwide study of 152 low-, middle-, and high-income countries', *Scandinavian Journal of Public Health*, 35, 3, 2007, pp288–97

### 3 Underlying or structural causes

<sup>53</sup> Department for International Development, *Why We Need to Work More Effectively in Fragile States*, DFID, 2005

<sup>54</sup> Under-5 mortality rate: UNICEF, *The State of the World's Children, 2008*, UNICEF, 2007. Conflict data: Uppsala Conflict Database, [www.pcr.uu.se/database/index.php](http://www.pcr.uu.se/database/index.php) accessed 18 January 2008

<sup>55</sup> Save the Children, *Legacy of Disasters: The impact of climate change on children*, Save the Children UK, 2007

<sup>56</sup> D Gwatkin et al, *Socio-Economic Differences In Health, Nutrition And Population Within Developing Countries: An overview*, World Bank, 2007, <http://go.worldbank.org/XJK7WKSE40> accessed 29 January 2008

<sup>57</sup> Save the Children US, *State of the World's Mothers 2006*, Save the Children, 2006

<sup>58</sup> UN Millennium Project 2005, *Who's got the power? Transforming health systems for women and children*, 2005 [http://www.unmillenniumproject.org/reports/tf\\_health.htm](http://www.unmillenniumproject.org/reports/tf_health.htm) accessed 18 January 2008

<sup>59</sup> D Gwatkin et al, *Socio-Economic Differences In Health, Nutrition, And Population Within Developing Countries: An overview*, World Bank, 2007, <http://go.worldbank.org/XJK7WKSE40> accessed 29 January 2008

<sup>60</sup> D Gwatkin et al, *Socio-Economic Differences In Health, Nutrition, And Population Within Developing Countries: An overview*, World Bank, 2007, <http://go.worldbank.org/XJK7WKSE40> accessed 29 January 2008

<sup>61</sup> Save the Children, *Running on Empty: Poverty and child malnutrition*, Save the Children UK, 2007

<sup>62</sup> C Victora, A Wagstaff, J Armstrong Schellenberg, D Gwatkin, M Claeson, J Habicht, 'Applying an equity lens to child health and mortality: more of the same is not enough', *Lancet*, 362, 2003, pp 233–241

### 4 Wealth and survival index

<sup>63</sup> This index was carried out by the Human Development Report Office of United Nations Development Programme for Save the Children UK and was calculated using per capita Gross National Income (GNI) data adjusted by purchasing power parity (PPP) from the World Bank and Under 5 mortality rates from UNICEF for 2005 for 133 countries; here we present the 41 countries that account for 90% of child deaths for which data are available in 2005. A log linear relationship was estimated by running a linear regression on mortality rates and the natural logarithm of GNI. In this index, a negative number implies that the country is performing better than its income level would predict by avoiding that number of deaths per 1,000, a positive number implies the reverse. So Angola is seeing approximately 162 extra child deaths per 1,000 than its level of national income implies, and Moldova is experiencing 83 less deaths per 1,000 than its level of income would suggest. Whilst it is clear that GNI and child mortality are closely correlated, the relationship is sensitive to the shape of the specification chosen which affects the country rankings. The full Index of 92 Low Income and Lower Middle Income countries can be found in Annex 1.

<sup>64</sup> Due to lack of Gross National Income (GNI) data it was not possible to calculate the index ranking for four countries: Afghanistan, Iraq, Myanmar (Burma), Somalia.

<sup>65</sup> UN, *The Millennium Development Goals Report 2005*, UN, 2005

<sup>66</sup> Demographic and Health Surveys, *Bangladesh, Standard DHS 2004*, DHS, 2005

<sup>67</sup> UNICEF, *State of the World's Children, 2008*, UNICEF, 2007. This is the most recent available data. The UNDP/Save the Children Index uses data from 2005.

<sup>68</sup> Cited in B Singh, 'Infant mortality rate in India: Still a long way to go', *Indian Journal of Pediatrics*, 74, 2007, pp 454

<sup>69</sup> C Victora *et al*, 'Maternal and child undernutrition: consequences for adult health and human capital', *Lancet*, 2008, pp 23–40

<sup>70</sup> R Barro and X Sala-i-Martin, *Economic Growth*, MIT Press, 2005

<sup>71</sup> E Anderson and S Hague, *The impact of investing in children: assessing the cross-country econometric evidence*, ODI Working Paper 280, Overseas Development Institute, 2007

<sup>72</sup> E Baldacci, B Clements, Q Cui and S Gupta, 'Social spending, human capital and growth in developing countries: implications for achieving the MDGs', Working Paper 04/217, Washington DC, International Monetary Fund, 2004

# Saving Children's Lives

## Why equity matters

Nearly 10 million children die before the age of five each year. But progress in cutting child mortality is possible.

The new Wealth and Survival Index in this report shows what can be done when governments tackle poverty, strengthen health systems, act on hunger and malnutrition, uphold the rights of women, and provide clean water and safe sanitation.

A huge amount is known about how to save children's lives. The moral imperative for developing country and donor governments is to translate this knowledge into decisive action.

Save the Children is pressing political leaders to live up to their commitments. The situation is urgent, but we can stop this senseless waste of life. Further delay or inaction is inexcusable.

**“This is an excellent new report from Save the Children. It highlights the scale of global child mortality and the policies that could help to save children's lives, including a greater focus on human rights and inequality. It deserves to be widely read.”**

**Glenys Kinnock MEP**

Labour MEP for Wales. Member of the European Parliament's Development and Co-operation Committee, and Labour Party Spokesperson on International Development in the European Parliament.

**“This report highlights the unacceptable levels of child mortality in many developing countries. Developing country governments, donors and others cannot afford to ignore the recommendations for stepping up action to meet Millennium Development Goal 4.”**

**Tony Baldry MP**

Conservative MP for Banbury. Previously Chairman of the House of Commons Select Committee on International Development during 2001–2005 Parliament.



**Save the Children**

UK

Save the Children

1 St John's Lane London EC1M 4AR UK

+44 (0)20 7012 6400 [savethechildren.org.uk](http://savethechildren.org.uk)