

A child dies every 15 seconds from lack of access to safe water.

On the Day of the African Child, mid-way through 2006, we look back over a humanitarian crisis in East Africa and forward to this year's hunger period in the Sahel. Children continue to suffer the adverse effects of water shortages that have decimated their families' livelihoods, and reduced food security across the region. In addition to the impact on health and nutrition of children, water scarcity adversely affects children in other equally detrimental ways, including risks to their protection, reduced access to education, child labour and other ways in which they are pulled in to help their families cope in times of stress.

Although rains have brought some relief in the Horn of Africa, levels of chronic malnutrition and stunting in children remain high and reflect a more complex situation than a one-off drought or emergency. As climate change leads to increasingly erratic weather patterns, it is clear that large swathes of the world will be facing longer droughts, more irregular weather, flash floods and dry spells, and greater desertification. This can lead to deeper poverty, as families lose income just as the price of food and water rise with the unpredictable weather. It is children in these vulnerable communities, and particularly the poorest children, who will bear the brunt of these changes. Water insecurity, especially in sub-Saharan Africa exacerbates problems facing already vulnerable communities such as poverty, displacement, conflict, weakened livelihoods and HIV/AIDS.

The impact of water shortages on child health and nutrition are well documented in malnutrition rates and the epidemiology of diseases caused by unsafe water. However, international attention and academic studies have ignored the severe and long-term impact of water shortages on children's protection, education and poverty and the particular needs of children during prolonged drought

Save the Children calls on the international humanitarian community to focus their attention on the toll water shortages are placing and will continue to place on the lives of children, and key actions to take *now* to improve the situation for the future. Specifically:

- **International donors to provide predictable funding for predictable crises** in a way that enables agencies to respond to early warning indicators of food insecurity and drought before the onset of humanitarian crises, and thus enable measures for adequate, sustainable provision of relief which will protect children's lives *and* allow for strengthened community preparedness against future disasters.
- **The particular vulnerabilities of children to be incorporated into early warning systems** for water shortages which include more hidden measures of child protection and education. Early warning indicators must acknowledge and capture the impact on the child to enable agencies to act accordingly.
- **Humanitarian and development interventions to be specifically designed** to include the impact on children of water shortages, including protection and education responses, as a matter of urgency.

Key facts about children and the lack of water¹

1. Over three million children in the Horn of Africa are currently affected by water shortages.
2. Diarrhoeal diseases are responsible for filling more than half the world's hospital beds. Each child in a developing country suffers an average of 10 attacks of diarrhoea before the age of 5.
3. The average distance walked to collect water in Africa and Asia is 6km.
4. Worldwide, approximately 443 million school days are lost annually due to diarrhoeal disease.
5. Only half of schools in developing countries have access to water and sanitation facilities.
6. Countries with improved water and sanitation have enjoyed annual per capita GDP growth of 3.7% compared to countries without improved access increased on average by 0.1%.
7. Two thirds of the world's population live in areas receiving only 25% of the world's rainfall.
8. 45% of African land is affected by desertification.

The impact of water shortages on child health

Water-borne diseases are responsible for filling more than half the world's hospital beds. Mortality rates are high in informal urban settlements and amongst crowded displaced populations where access to safe water is limited and sanitary conditions are poor. Displaced people are particularly vulnerable, especially if they are living in camps with no infrastructure and overcrowded conditions. In Northern Uganda, half of the 1.7 million IDPs in the country have access to less than 5 litres per person per day. The minimum standard for the provision of water in emergencies is 15 litres per person per day. (In East Africa currently each child typically consumes 10 litres per day. In the UK the average person uses 135 litres of water per day².)

"Today 400 million children do not even have enough safe water to live healthy lives. This is wrong. This is killing our future. We call on you to bring safe water to all the worlds' children as our human right." Ibrahim Adamu (15), President of the Nigerian Children's Parliament, at the World Water Forum, Mexico March 2006

Even where water is available, collecting it can be hard work as sources are further and further away from affected communities. Children as young as 9 or 10 are often tasked with providing water for the whole family. In many communities this responsibility typically falls to girls because of gender roles in the family. Carrying water is both an arduous and dangerous task. Full containers of water weigh up to 20 kilos, and carrying such burdens can cause damage to the spine and pelvis, creating future problems in pregnancy. The average distance walked to collect water in Africa and Asia is 6 km – a distance that increases dramatically in times of water stress³, and one that carries with it risks to these girls.



Joy Njoki, 7, often misses school to help her family in Ngara Mara, Isiolo.

The impact of water shortages on children's safety

In water scarce areas, tribal and ethnic competition can easily escalate into conflicts that threaten the lives or safety of children. One of the traditional strategies for coping with drought amongst pastoralists in the Horn of Africa is livestock raiding and this has become especially dangerous with the huge influx of guns into neighbouring countries from Somalia. Violent clashes between pastoralists and farmers are also common, for example in East Africa as clans compete for control of life-saving water sources. In one incident alone in Northeastern Kenya in March 2006, at least 30 people (including 16 children) were reported killed in inter-clan clashes over water resources.⁴



Rajab Lowoton, 7 rolls a water container to his home in Ngara Mara, Isiolo district of Kenya.

Finally, on an individual level, the simple task of water collection can be dangerous to children, particularly in areas of conflict. This is especially true when water is scarce, as children may have to travel before sunrise to distant water sources. Attacks and even rape are not uncommon, nor are attacks from wild animals in the bush, also desperate for water.

Child marriage in Kenya

"Yet again, it is children who bear the brunt of the crisis. This is not only seen in increased malnutrition rates as they suffer the effects of food shortages, but also as families seek solutions to cope with crisis that endanger the safety and well being of their children." *Save the Children protection assessment, Kajiado and Isiolo districts, Kenya, April 2006*

Save the Children child protection assessments in Kenya found significant increases in school drop-out rates, child labour and early marriage caused by this year's drought as families struggle to cope with food shortages and the loss of cattle.

- Children have been taken out of school in order to look after siblings and carry out domestic chores while their mothers look for food, to sell charcoal and to herd animals. Children as young as 10 herd animals on their own and may travel 10s of kilometres away from their homes.

- There are incidences of girls as young as 10 years being married early. This can be a drastic coping mechanism to reduce the number of mouths to feed at this time of famine, as girls can be married in exchange for cows or access to grazing land or water. One 10-year-old girl was married to a man in Kajiado district due to extreme pressure on the household during this period of drought. Her dowry was subsequently refunded, effectively buying the girl's release.

The impact of water shortages on education

Children miss school for a variety of reasons during water shortages – sickness, chores helping the family, the expense of school fees, livelihood coping mechanisms and sanitation and hygiene all play a part in pulling children out of education. Sickness from water-related diseases is one of the major contributors to absenteeism from school in developing countries. Worldwide it is estimated that 443 million school days are lost annually due to diarrhoeal disease⁵. The links between delayed mental development and water-related diseases, are also well established – it has been estimated that the average IQ loss per infection is 3.75 points and tests have shown that a child's short-term and long-term memory, executive function, languages, problem solving and attention all respond positively to de-worming.⁶



Masaine Lekalaile pumps water at a borehole in Kiltamany, Isiolo.

As noted above, girls, as one of the main carriers of water, also miss school as they must carry water in times of shortage. A reduction in the amount of time needed to carry water can be surprisingly effective at increasing attendance. For example, a project in Tanzania, which reduced the distance to water points from one hour to 15 minutes, led to an increase in school attendance of 12%.⁷ The introduction of community water points in India and Africa have also been shown to increase female literacy by up to 10% as a result of increased school attendance.⁸

The pastoralist tradition

The pastoralist way of life, generally considered to be one of the most effective coping strategies for life with limited access to water, also has a significant effect on school enrolment. In many pastoralist societies the women and children are left in settlements, while the men move with the livestock to search for water and pasture. In others, however, the entire family may move between available water points, making it difficult for the children to receive any kind of sustained education. Also, when water is scarce it is common for the herd to be split, with younger male family members accompanying part of the herd. Therefore, rather than attend school, children of 12 years and older are often grazing animals or looking for water for domestic use.

During droughts, education becomes a low priority in the struggle for survival, especially if school fees need to be paid, and enrolment plummets. As a result of the most recent drought in East Africa, only 14 out of 104 schools were still open in four districts in Somalia⁹.

The impact of water shortages on child poverty

It is at the household level that the lack of access to water has the most obvious impact on the lives of children and their families. As people lose livestock, their income drops precipitously just as prices for food, water, medicine etc are rising; the long-term effect is to reduce a child's chances of escaping the cycle of poverty and vulnerability. Money for medicines or hospital bills may become impossible to obtain, leaving children without critical care. When bought from private merchants, the prices of both water and food can skyrocket in times of shortages.

However, as their livestock dies during an extensive period of drought, or has to be sold under market value, people are increasingly unable to cope. This is currently the case in the Horn of Africa where it is estimated that it will take some 15 years for affected pastoralists to recover economically from the current drought.

It is not only in rural populations that the most vulnerable suffer from lack of access to water, however. Water in urban slums is often of questionable quality, and often many times more expensive. For example in slum areas of Nairobi, water is typically 10 times more expensive than piped water in rich suburbs, and three times more expensive than in London¹⁰.

What needs to be done?

Children are inheriting a world of erratic, unpredictable weather, water scarcity and food insecurity in developing countries, and especially in desert-bordering areas. Children in developing countries will be more at risk as they and their families struggle to cope with increasing cycles of drought and insecurity.

Gabriella, a young mother at a Save the Children food distribution in Isiolo, Kenya explains the need for long-term, sustainable solutions for her children, not just short-term relief: “I long for rain. When it rains the men [and youths/boys] will come back. Relief helps. But we need water to live. My children need water. I do not know what happens next year. Maybe it still gets worse for them ... and for their children.”

Save the Children’s emergency work in almost all cases is accompanied by long-term programmes to help people to earn a living and reduce child poverty. These programmes include such things as providing drought-tolerant seeds, helping families to replace lost livestock, or working with governments to support social welfare systems for the chronically poor. We work intensively with inter-agency teams or government to regularly collect and analyse information on food insecurity and poverty. Using a tool called the Household Economy Approach, we analyse the different ways that different types of people make a living. This enables us, among other outputs, to predict how children will be affected by drought, should it occur, and identify the underlying causes of poverty and food insecurity. However, early warning systems are only effective if donors and government act on them when the alarm is raised.

Save the Children interventions in schools in Kenya aim to provide safe water and hygiene education to increase access to water and raise enrolment. Improved water and hygiene facilities in schools has a direct impact on retention rates, especially for girls, and school water, sanitation and hygiene education is also generally successful. Children are effective educators and have been found to excel at passing on hygiene messages to their families – thus providing a dual benefit to health of affected communities.

Save the Children recommends that:

- **International donors provide predictable funding for predictable crises** in a way that enables agencies to respond to early warning indicators of food insecurity and drought before the onset of humanitarian crises, and thus enable measures for adequate, sustainable provision of relief which will protect children’s lives *and* allow for strengthened community preparedness against future disasters.
- **The particular vulnerabilities of children are incorporated into early warning systems** for water shortages which include more hidden measures of child protection and education. Early warning indicators must acknowledge and capture the impact on the child to enable agencies to act accordingly.
- **Humanitarian and development interventions are specifically designed** to include the impact on children of water shortages, including protection and education responses, as a matter of urgency.

Emergencies Section, Save the Children June 2006

¹ Health dignity and development: what will it take?, UN Millennium Project Task Force on Water and Sanitation, 2005; Global Challenge Global Opportunity, Trends In Sustainable Development, UNDESA, for the Johannesburg World Summit on Sustainable Development, 2002.

² Interviews with communities, Kajiado, Kenya and water survey on BBC online: www.bbc.co.uk

³ Global Challenge Global Opportunity, Trends In Sustainable Development, UNDESA, for the Johannesburg World Summit on Sustainable Development, 2002

⁴ <http://www.afrol.com/articles/15912>

⁵ Evaluation of the costs and benefits of water and sanitation at the global level, WHO, 2004.

⁶ Deworming for Health and Development, Report of the third global meeting of the partners for parasite control, WHO, 2005.

⁷ No water, no school, Oasis Spring/Summer 2004, WaterAid.

⁸ For her it’s the big issue: Putting women at the centre of water supply, sanitation and hygiene, WASH Evidence Report, Water Supply and Sanitation Collaborative Council (WSSCC), 2006.

⁹ Drought creating crisis for children in Horn of Africa, UNICEF press release, 2006
www.unicef.org/media/media_30941.html

¹⁰ Time to close the worrying water divide in the world, Kevin Watkins, The Standard (Kenya), 2006