

# Witness to climate change:

## *Learning from older people's experience*



**HelpAge  
International**

**age helps**

Drought in Ethiopia: John Cobb/HelpAge International

## Contents

- 2 Key points
- 2 Looking to the future
- 3 Older people's experience
- 4 Older people's awareness of climate change
- 4 How is climate change affecting older people?
- 5 Are older people particularly vulnerable to climate change?
- 7 Bridging knowledge and research gaps
- 8 Bringing older people to the policy table
- 9 What HelpAge recommends

Climate change and ageing are two of the biggest issues facing humanity this century, yet explicit links between the two are rarely made.

As world leaders prepare to negotiate a successor agreement to the Kyoto Protocol in Copenhagen, HelpAge International is calling for the voices of older people in developing countries to be heard.

This paper looks at older people's experience of climate change, their awareness of it and how it makes them vulnerable. It highlights older people's exclusion from climate change debates, identifies opportunities for influencing policy-making at the national level and makes recommendations for including older people's perspectives in discussions and adaptation strategies.

## Key points

In the late 1980s HelpAge International was one of a number of organisations that funded an oral history project in the Sahel. The authors of the accompanying publication, *At the Desert's Edge*, had this to say: “Only the elderly can cast sufficient light to answer the most difficult questions: what was the way of life: what was the land like: how and why has it come to its present pitiful state? And how and why did... farmers and nomads keep going, in the face of such odds?”<sup>1</sup>

Twenty years later, interviews carried out by HelpAge International with older people in nine countries in Africa, Asia and Latin America reveal that older women and men are affected by the changing climate, and want to play a role in climate change policy debates and adaptation initiatives.

Older people have told HelpAge that they face increased insecurity brought about by damage to their property, land, livestock, crops and livelihood. Despite not using the language of climate change, they are eloquent about what is happening to the environment around them. They have unique insights into tackling climate change in their communities and have asked to be included in national and community based debates on climate change.

HelpAge International is calling on policy makers to implement a package of “age-friendly” measures to enable older people to be included in adaptation measures within the “post-Copenhagen” agenda. These include:

- investing in age-friendly health systems, social protection and support for older farmers
- researching traditional knowledge on climate change, studying indigenous, drought-resistant crops, and developing land and agriculture policies that take into account climate change
- including issues of older people in any policy dialogues taking place during and after the Copenhagen Summit
- making climate change messages more accessible to older people.

## Looking to the future

Current opinion is that even if we are successful in limiting the increase in global temperature to 2°C – the call for the climate change deal – significant adaptation will be needed.<sup>2</sup> The poorest people in the poorest countries can expect even more hardship, and even the best-case scenario is bleak.

The estimated impact of a rise of 2°C could result in, for example, four billion people experiencing water shortages; 200 million people could be on the move each year by 2050 because of hunger, environmental degradation and loss of land; 375 million people could be affected by climate-related disasters by as early as 2015<sup>3</sup> and, due to warming temperatures, there could be up to 28 per cent increased exposure to malaria in Africa alone.<sup>4</sup>

For the growing numbers of the over 60s in the poorest countries the impacts are already catastrophic. We have also seen that older people in affluent countries such as the USA, UK and France are being disproportionately affected by climate-related emergencies such as Hurricane Katrina, floods in Cumbria and heat waves. Given that the number of people aged over 60 will outnumber children aged 14 and under by 2050, with the fastest growth in this age group occurring in the poorest countries of the developing world, weather-related insecurity for older people will increase.<sup>5</sup>

Notwithstanding what the future holds, HelpAge’s initial consultations with older people in nine countries<sup>6</sup> have shown that the changing climate is affecting already precarious livelihoods now. Older people described how they are coping with ever-depleting resources and increased vulnerability to hazard through drought, flood, loss of land, income and livestock.

They also told us that they have something to say within climate change debates and negotiations. They want to play a role in adaptation and mitigation to climate change and would like their views and experiences to be known and acted on.

Maxim Ahmer/HelpAge International



**Anastasia Leancă Satal Nou, 67, works to heat her home in Moldova.**





Jeff Williams/HelpAge International

**Teso, 64, makes a daily trip to collect water in Ethiopia.**

## Older people's experience

HelpAge International conducted detailed interviews in 2009 with individuals and groups of older women and men in Bangladesh, Bolivia, Ethiopia, India, Kenya, Kyrgyzstan, Mozambique, Tanzania and Zimbabwe to find out their experiences and observations of climate-related changes and what they are doing about it. Older women and men have described changes to rainfall patterns, seasons, water sources, rivers, the land and agriculture.

In all these countries older people described harsher climates that are bringing less predictable rainfall, more frequent and longer droughts, more floods, more frequent and stronger storms and more extremes in weather including heat waves and colder spells. The frequency and intensity of disasters have increased, covering wider areas and leading to the deaths of more people.

Seasons have changed. It is no longer possible to separate the hot from the cold months; the wet from the dry months. Rainfall patterns have changed with either too little or too much rain being received at unexpected times. In Mozambique an older woman explained: "The weather has changed a lot. In our time there was the cultivating season, the rainy season, time for sowing and harvesting, but now it can rain, we sow our seeds we get so far then the rain stops and everything dries."

In Bangladesh, seasons have reduced from five to three, with an unpredictable duration, making cultivation difficult and leading to overuse of scarce resources, including fish and paddy. Interviewees in Kenya, Mozambique and Tanzania described the changes in seasons and unpredictable weather. Older farmers in Bolivia spoke of changing and unpredictable rainfall and droughts, ascribing recurrent floods and crop failure to climate-related shifts of farming seasons. They explained how prolonged or shortened rainy seasons adversely affect their farming outputs.

### Intensifying drought in Ethiopia

**Wako Jaldesa is 96 years old. He lives in Miyo Woreda, Melbana Kebele, Ethiopia. He has lived with droughts all his life but he is acutely aware of how the climate has been changing over recent times. He said:** "The droughts have been intensifying over the last 20 years, and the climate is changing. When it doesn't rain our animals die, and we cannot grow crops."

**Wako said that his family used to have cattle but they died in one of the previous droughts. In years gone by, Wako would cultivate a plot of land and grow maize, sorghum and haricot beans. "When the rains were good and predictable we could sell what we didn't need and use the money for essential items. Now, however, our yields have decreased and we can only harvest once a year if we are lucky. The amount of teff [local grain, essential ingredient in traditional food] we produce is very small and there is no surplus. Twenty years ago the pasture was much better and greener, but now as it gets drier the vegetation has changed to thorny bushes and less grazing land."**

**He thought the causes were less rain and an increase in population. "Now there are too many people and it is hard to take your animals to new pasture as the land is already lived on. We used to move yearly but now we stay in one place." Wako fears the next drought will kill his animals, again.**

*"The weather has changed completely. There used to be a lot more rain previously but now it is dry. The weather started changing about 30 years ago."*

*Abdulla Alli, 99 years old, Bubluk, Ethiopia*

Older women and men described changes to lifestyles and the way people use the land in both urban and rural areas. They explained that in some cases land is no longer productive, leading to a shortage of food. In Kenya, which is experiencing its worst drought in living memory, with over 10 million people facing food shortages, land tenure and land use was described as becoming disorganised, with people cultivating everywhere, leading to severe land degradation.

An older man said: “People have become so desperate that they are cultivating in river banks, in water catchment areas, on slopes without terraces and on land traditionally respected and protected.” Rivers and other water sources have dried up and there is a general shortage of water. There has been an onset of diseases that people cannot explain, such as the Rift Valley Fever in Kenya and diseases that are killing the Masai cattle.

In some places social patterns are affected. In Mozambique, older people described problems in fulfilling their social responsibilities, which have implications for community solidarity. For example, when a funeral takes place on a day of rare rainfall they have no choice but to go to the farm instead of to the funeral.

## Older people’s awareness of climate change

Older people in the studies were eloquent about how they have been affected by new and unpredictable weather-related shocks. Although they may not have a specific concept of “climate change” nor use “climate change” language they are keenly aware that their natural environment, and the climate is changing.

Older people told HelpAge that they were no longer able to predict weather patterns using traditional knowledge. Signs that older people remember looking out for in order to predict the weather – such as the movement and position of the sun and moon, the behaviour of trees, birds, animals, and insects – are no longer indicative.

Some communities explain phenomena relating to climate change in terms of religion and witchcraft. In some cases, older people themselves have been accused by their communities of being “witches” and have been blamed for unexplained changes in weather patterns.

Older people in Bangladesh, Kenya and the Thar Desert in India said they were afraid that the climate was changing as a punishment, because younger generations no longer respect traditional values, have erratic lifestyles and do not practise sustainable use of natural resources. In Mozambique an older man said: “Young people don’t want to respect our experience, they say we are out of date, they are the ones who are destroying the environment through uncontrolled burning of fields... When we invite them to do the ceremonies asking God to bring the rain, they refuse.”

In Kenya it was observed that population pressure on arable land was encouraging unsustainable land tenure systems and undesirable land use – there are greater numbers of people in search of decreasing cultivable land. In Bangladesh and Bolivia older people were frustrated by not having the scientific knowledge to understand why the climate was changing and what this might entail for future generations.

In all the consultations older people spoke of feeling sidelined from the community work, debates and trainings on climate change adaptation. A better understanding of climate change by communities might help dispel myths and ease pressure at difficult times. All the consultations revealed that older people would like to learn more, and also share skills and insights they have with the younger generation and with policy makers.

## How is climate change affecting older people?

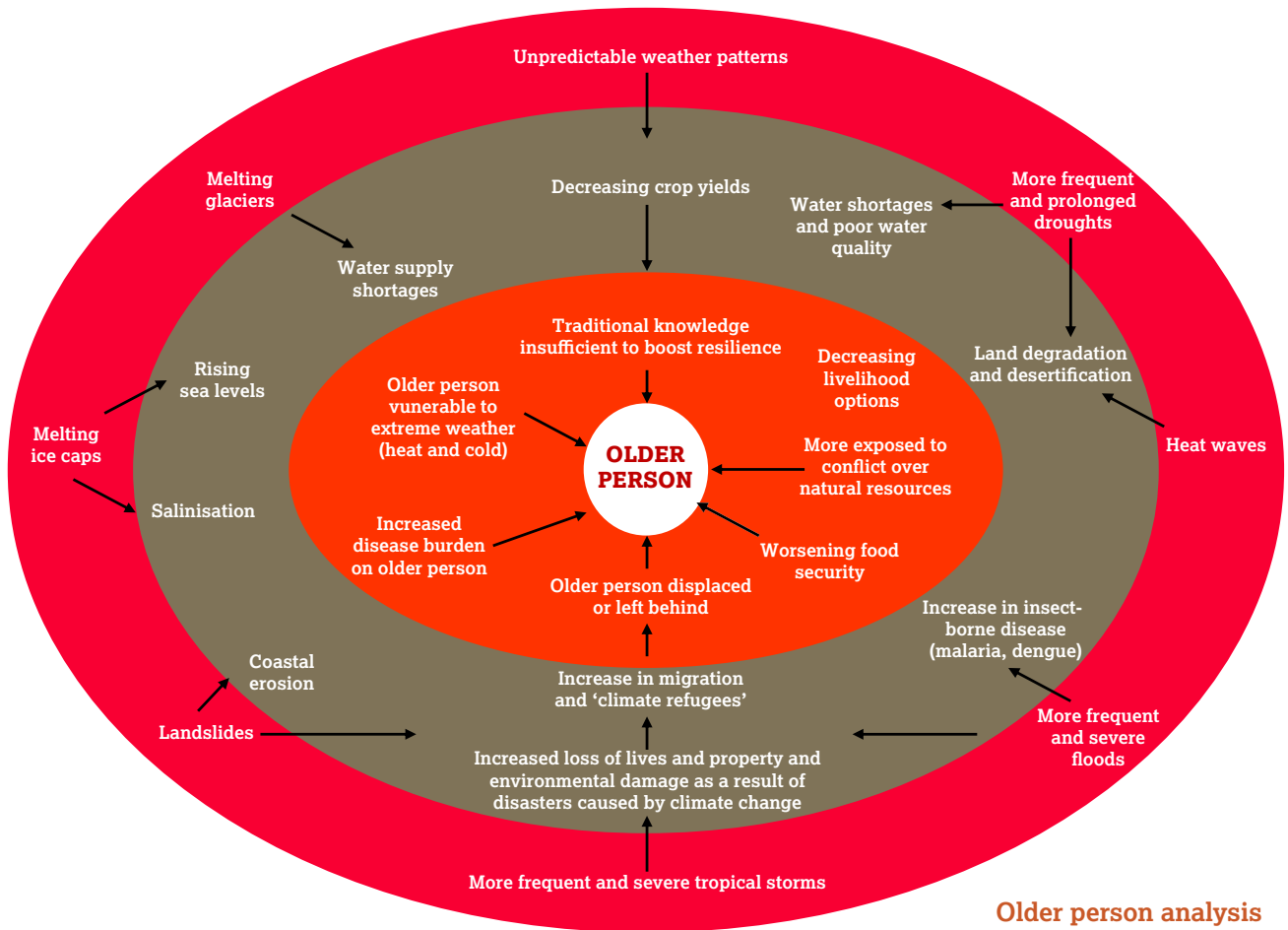
Rises in temperature and changes in weather patterns may not only result in large-scale disasters. They may bring small-scale disruptions that nevertheless have a significant impact on individual households.

In Ethiopia, for instance, some older people said they were going hungry as there was less food due to declining crop yields, loss of pasture and the rising cost of food. Some lost assets and status in the community when their animals died as a result of a longer than usual drought. Older people face life-threatening health risks during increasingly common heat waves, and are at greater risk of malaria, and water-borne diseases. For some older people in Kyrgyzstan, energy price rises have meant having to make choices between food and heating.

Other impacts of climate-related shocks affecting older people on a day-to-day basis include loss of land through sale and land-grabbing, out-migration of the middle generation in search of income, and older people taking responsibility for grandchildren with ever-decreasing support from the extended family.



**Ha Thi Van, 82, receives aid after Typhoon Ketsana caused severe flooding in Vietnam.**



**Older person analysis of climate change**

Source: Costanza de Toma

## Are older people particularly vulnerable to climate change?

### Water for life

In Mozambique, older people spoke of unpredictable rainfall and the problems of water supply. They have built wells to improve access to water for irrigation; in Mulotana District, older people have planted drought-resistant plants such as cassava and sweet potato. But the scarcity of water means that older women are walking up to eight kilometres to fetch water and having to pay the equivalent of US\$0.30 per month for it – a cost they can ill afford.

In Ethiopia 55-year-old Alke Dida told us: “Since the pasture is so bad our animals and two sons are a six-hour walk away from here. There is some water in the village but our animals need pasture and water isn’t enough. With our cattle and camels such a long way away it is very difficult for us. The water is very expensive at [the equivalent of] US\$0.10 per jerry can. The water is also sometimes salty.”

Age-related factors such as physical weakness and declining income can make older people more vulnerable to the impacts of a harsher climate and resulting environmental degradation. Understanding how to increase older people’s resilience to these impacts will be helpful to support communities to adapt to and mitigate the effects of climate change.

The diagram presents an “older person-centred” analysis of the many ways that climate change impacts on older people. The outer circle illustrates some of the current manifestations of climate change, including melting glaciers and ice caps, more frequent and prolonged droughts, more frequent and severe floods and tropical storms, landslides, heat waves, and generally more unpredictable weather patterns.

The middle circle shows the potential impacts of these manifestations on the natural environment and on poor people’s livelihoods. These include salinisation, coastal erosion, rising sea levels, water supply shortages and poor water quality, decreasing crop yields, increasing land degradation and desertification, an increase in insect-borne diseases (such as malaria and dengue) and an increase in migration and “climate refugees”.

The inner circle shows how these impacts can have direct implications for older people’s health and livelihoods. Although some of these implications are common to all “vulnerable groups”, others, such as increased vulnerability to extreme weather (both hot and cold), increased disease and greater numbers being either displaced or ‘staying behind’ are specific to older people.



## Older people and health

*The Lancet*<sup>7</sup> has called climate change “the biggest health threat of the 21st century”. It has identified a series of direct and indirect threats to health including changing patterns of disease, water and food insecurity, extreme climatic events and population growth and migration. All these factors will have a direct impact on older people in developing countries, where two-thirds of the world’s over-60s live, and where increasing numbers of people are ageing in poverty and ill-health. Their daily reality is to live with discomfort or disability, often from common age-related conditions that could be prevented or treated.

With global temperatures expected to rise by 2°C over the next 50-100 years, *The Lancet* has singled out heat waves as particularly life-threatening for older people, especially those with cardiovascular conditions. Increasing prevalence of malaria and dengue will particularly affect frail older people not protected by bednets. Similarly, increasing food and water shortages are likely to worsen older people’s already precarious nutritional and health status, making their weakened immune systems even less able to fight off infections and disease.

*The Lancet* warns that already weak and underfunded primary health care systems in the poorer countries will buckle under the added pressure brought on by the health implications of climate change. This will contribute to making life for millions of older people even harder.

Migration of younger generations in search of employment opportunities elsewhere can result in older people staying behind to look after the land and their grandchildren. In many of the countries where interviews were carried out older family members are caring for children affected by HIV and AIDS. Households with older people and children are vulnerable to the impacts of climate change.

Recent research<sup>8</sup> in poor communities populated by older people in Kyrgyzstan has shown that their vulnerability is determined by migration, seasons (with cold months characterised by restricted heating), fluctuating fuel and food prices, poor nutrition and debt.

The research shows that most of the older people who stay behind are also the primary carers of grandchildren. They struggle to provide food, heating, care and economic support to young dependants, often dealing with their own ill health, and reduced ability to work the land or generate an income. They rely on paltry and insecure remittances with occasional inadequate pensions.

## Coping with the cold in Kyrgyzstan

Kyrgyzstan has traditionally been a “water country”, using its generous water supply to generate hydroelectric power to export to neighbouring countries. The glaciers that feed Kyrgyzstan’s water supplies are now melting at an alarming rate. It is expected that this will lead to serious water shortages over the next decades, affecting agriculture and the price of energy.

Younger people are migrating in search of work, and older people are staying in their villages to look after the children. In the winter months, older people and their young dependants are already spending ever-increasing amounts of their unpredictable income on electricity, gas and coal.

In the rural areas, older people use cow dung and wood cut from their gardens. Winters last for several months, and the temperatures routinely fall below -15°C. Energy shortages make it hard for older people to heat their homes. Older people and small children are especially at risk of illness during the cold months, due to weaker immune systems. During these months, older people often stay in bed, only leaving their homes when they absolutely have to.

Altyn Musakova talking with her grandchildren in Kyrgyzstan.



## Bridging knowledge and research gaps

*“Climate change is a problem area with its own scientific language and dominant wisdoms that have in the past acted as a barrier to understanding and involvement of the public, development and disaster communities.”<sup>9</sup>*

The interviews with older people illustrated the gap between traditional and scientific knowledge and related practice. Older people voiced their frustration at not having scientific knowledge, as they feel it limits their understanding of what is happening, what may happen in the future, what the causes of weather changes are and what they can offer in terms of insight and practical action to adapt.

The study also highlighted the importance of collecting evidence and doing research with older people in a range of climate-affected countries and communities, both to explore appropriate adaptive measures and to understand the nature of enhanced risk faced due to weather and climate-related changes.

In some cases, older people are trying to inform research on climate change at the local level. In the absence of historical scientific data, their observations contribute uniquely to understanding how the natural environment and climate have changed over the decades, and what the toll of this change has been on their communities. Recovering traditional practices for the sustainable management of natural resources, in conjunction with tracking changes in animal and plant behaviours<sup>10</sup> based on traditional knowledge, to measure climatic changes, may also provide a key to successful community-based adaptation.

Some researchers are saying that the experiences of older people who have stayed on the land and can compare past and present can be combined with scientific research to develop a “grounded” opinion on whether it is climate change per se that is changing environments. This would support recommendations to support poor older people to build resilience to weather-related changes on the grounds of real evidence.

Tom Weller/HelpAge International



**Reynaldo Ajhuacho,**  
a farmer  
in Bolivia.

### Recovering knowledge of traditional practices in Bolivia

**Older people have a good deal of knowledge of environmental changes and means of adaptation. Together with Oxfam and Save the Children, HelpAge International’s partner Fundacion para el Desarrollo Participativo Comunitario (FUNDEPCO) is working with the Chimani ethnic group in the Bolivian lowlands to recollect local knowledge on adaptive strategies. They are placing a special emphasis on traditional “bio-indicators”<sup>11</sup> such as birds’ nest-building sites which can indicate whether there is dry or wet weather ahead.**

**Knowledge is transferred and validated through family and community gatherings and through community leaders. As the tradition of oral culture declines in the Chimani area it is becoming clear that the younger generation is not familiar with traditional adaptive measures. Older people themselves are worried that they are beginning to lose knowledge; it is harder to read climate patterns.**

**The experience is showing that the process of safeguarding indigenous knowledge of these communities, along with sharing information of how these communities have adapted to changes in their environment over time, is fast becoming a valuable resource in the design of adaptation plans or interventions that will inevitably involve indigenous and traditional communities as key partners.**

Source: HelpAge International Latin America Regional Development Centre, Bolivia





**Kanchan Khan, 70, lost his home when Cyclone Sidr hit Bangladesh.**

## Bringing older people to the policy table

The HelpAge study has shown that older people are among those especially excluded from the debates and forums on climate change, from the grassroots up to the international level. Even when there is willingness to include older people, they are not conversant with the language and concepts of “climate change”.

Alongside the challenge of language and concepts, national climate change messages and programmes tend to be aimed at younger age groups. Even national civil society platforms on climate change are unlikely to have older people’s representatives in them. Because of this, older people can often be by-passed by education and awareness-raising interventions, and are more likely to hear about climate change indirectly from their children and grandchildren than by being personally addressed and consulted. This means that they lack knowledge and capacity to actively engage in dialogues, programmes and decision-making processes.

### Intergenerational challenges

**Participants in focus groups in Bangladesh said that as the younger generation had more education than the older generation, as well as greater mobility and access to information, they were in a better position to find out ways to cope with the changing climate. Others were of the view that older people still had a lot to offer to the young generation; they wanted to share their experience, which would be fruitful for everyone.**

**There was agreement that there were difficulties as older people tended not to be included in development activities or social gatherings. Older people said they were being replaced by the younger generation. Frustration was visible when this information was shared.**

Source: HelpAge International South Asia Regional Development Centre, Bangladesh

Nevertheless, older people also said they had many ideas and examples of adaptive strategies to share, and expressed willingness to learn from others.

Educating older people on climate change would help them make sense of what they are experiencing, give them a language to express themselves, and help address their exclusion. Supporting older people’s groups to participate in national forums and debates would help to make their voices heard, enriching and informing national decision-making processes on climate change in the process.

### Losing the way of the land in Kenya

**Older people in Kenya are only too aware of how their livelihoods have been affected by changing climatic conditions. They say that traditional practices that conserved the environment and “kept them in touch with God” are being abandoned by the younger generations, leading to widespread environmental degradation.**

**At the same time they are aware that a growing population of young people is leading to competition for scarce resources, including land, and that the youth need to make a living, even if this is destroying the environment. They observe that areas that they know should not be used for agriculture, such as water catchment areas and river banks, are being used, and that trees that are not traditionally cut as they conserve water are being cleared for crop use.**

**Older people feel that they have a lot to contribute if only they were brought into discussions and listened to. Traditional ways of conservation, as well as forecasting weather patterns using the sun and moon and by observing trees, could be salvaged and inform community-based climate change adaptation interventions.**

Source: Costanza de Toma, Discussion paper for HelpAge International, 2009



## What HelpAge recommends

1. UN Member States should include older people in the definition of “vulnerable groups” both in the successor agreement to the Kyoto Protocol and in the guidelines for the Adaptation Fund, the main instrument providing funding for adaptation interventions at the national level.
2. Financing for climate change adaptation must be additional to existing pledges for development aid.
3. All climate change programmes, including National Adaptation Programmes of Action (NAPAs) and any global facility emerging from the negotiations, should be designed to build up older people’s resilience. Attention must be given to:
  - consulting with older people on programme design and finance
  - strengthening health systems to respond to the health requirements of ageing populations, whose health needs will be exacerbated by harsher climatic and environmental conditions
  - putting in place and extending existing social protection programmes that reach older people and their dependants
  - supporting older farmers in crop diversification, livestock, land retention and land use.
4. Funding mechanisms linked to the implementation of NAPAs should be transparent and clear on how older people can access funding and be supported as a vulnerable group.
5. All data and priorities for adaptation strategies and vulnerability assessments should be broken down by age and sex.
6. Governments and civil society coalitions should invite older people’s groups to take on an equal and active role in relevant national forums, financing bodies and decision-making processes on climate change.
7. Older people should be included as key stakeholders in disaster risk reduction and climate change adaptation and capacity-building programmes.
8. Multidisciplinary research should be undertaken on:
  - the interrelation between climate and other external drivers – such as food or energy availability and the impact on older people and other vulnerable groups
  - the health implications – and related policy implications – of a changing climate for an increasingly ageing population in the poorest countries
  - the impact of climate change on older people’s livelihoods.



Kate Holt/HelpAge International

A farmer with his maize crop in Zimbabwe.

### Endnotes

1. Cross N and Barker R, *At the desert’s edge – oral histories from the Sahel*, Panos/SOS Sahel, 1992
2. Intergovernmental Panel on Climate Change (IPCC), *Climate change 2007: impacts adaptation and vulnerability*, contribution of Working Group 11 to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Parry M L et al (eds), Cambridge University Press, 2007
3. Renton A, *Suffering the science, climate change people and poverty*, Oxford, Oxfam International Briefing Paper, July 2009
4. Moriniere L et al, *Climate change and its humanitarian impacts*, Oxford Feinstein International Centre/ Stockholm Environmental Institute, November 2009, p.33
5. Moriniere L et al
6. De Toma C, *Climate change and ageing: a scoping study for HelpAge International*, discussion paper prepared for HelpAge International October 2009, forthcoming; Nhongo T M, *Older people and climate change in Africa; a scoping study*, discussion paper prepared for HelpAge International, August 2009
7. The Lancet and University College London Institute for Global Health Commission, “Managing the health effects of climate change”, London, *The Lancet*, vol. 373, May 2009
8. Ipraliev K and Mikkonen-Jeanneret E, *Constant crisis; perceptions of vulnerability and social protection in the Kyrgyz Republic*, Bishkek/London, HelpAge International/ DFID, October 2009
9. Schipper L and Pelling M, *Disaster risk, climate change and international development: scope for, and challenges to, integration*, Oxford Disasters, 30:1, p.19-38, 2006
10. Also known as ‘bio indicators’; defined as an organism and/or biological process whose change in numbers, structure or function points to changes in the integrity or quality of the environment, [www.seagrant.umn.edu/pubs/ggl.b.html](http://www.seagrant.umn.edu/pubs/ggl.b.html) (3 Dec 2009)
11. As endnote 9

Read more: [www.helpage.org/climatechange](http://www.helpage.org/climatechange)

**HelpAge International helps older people claim their rights, challenge discrimination and overcome poverty, so that they can lead dignified, secure, active and healthy lives.**

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