

**CHAPTER 4**

**THE OLD ARE THE FUTURE**

**Impacts of an aging world population on the future  
of disaster response**

*“No man loves life like him that’s growing old.”*

—Sophocles, *Acrisius*



*“Fully 64 percent of deceased victims whose remains were received at the Saint Gabriel morgue established by FEMA’s Disaster Mortuary Operational Response Team (DMORT) were over 65 years old in a population in which that age group represented only about 15 percent of the existing population. Mortality rates for those over 75 were even higher. The elderly mostly lived alone and in isolation, perhaps little aware of the dangers they faced and with no ability to seek safety even if they did. Many elderly people died in their homes or in nursing homes, unwilling or unable to leave if they lived alone or fearing the consequences of leaving. Death among elderly whites exceeded those of elderly African Americans because there were a greater number of elderly whites; their life expectancies considerably exceeding those of blacks.”*

—John C. Mutter, Kye Mesa Barnard on mortality after Hurricane Katrina, USA<sup>388</sup>

When natural disasters strike, older persons are often disproportionately affected, which is why they are considered to be a vulnerable group by humanitarian actors in need of special attention. But even though this is common knowledge, too often the specific needs of older people are not taken into account when preparing for disasters, responding to them when they do occur or when dealing with the medium and longer-term effects of disasters.

This is especially worrisome given that aging is one of the mega-trends which will affect human societies across the globe in the next half-century. The 2009 UN report on population aging qualifies the current trend of aging as “unprecedented, a process without parallel in the history of humanity.”<sup>389</sup> Predictions show that while aging has certainly occurred earlier and at a faster rate in developed societies (and the topic is therefore in line with the cover story of this *Review*), there are strong indications that many developing countries will also see the rapid aging of their populations in the coming decades.

In this chapter, we will begin with a review of demographic trends about aging, and then examine some of the reasons why elderly persons may be particularly vulnerable in situations of natural disasters. We will then look at some of the factors that make it difficult for disaster responders to deal with these vulnerabilities.

While it is important to recognize the vulnerabilities of the elderly, there is often a tendency to discount the many positive contributions that older people make in our societies today, and which they may make in the future. As the title of this article indicates, the old are the future. If utilized, the experiences and faculties of elderly persons are and will be assets in preventing, preparing for and responding to sudden-onset natural disasters and longer-term challenges such as climate change.

<sup>388</sup> John C. Mutter and Kyle Mesa Bernard, “Climate Change, Evolution of Disasters and Inequality,” in *Human Rights and Climate Change*, ed. Stephen Humphreys, International Council of Human Rights, 2010, p. 281.

<sup>389</sup> United Nations Department of Economic and Social Affairs, Population Division, *World Population Aging 2009*, ESA/P/WP/212, December 2009, p. viii.

## Section 1

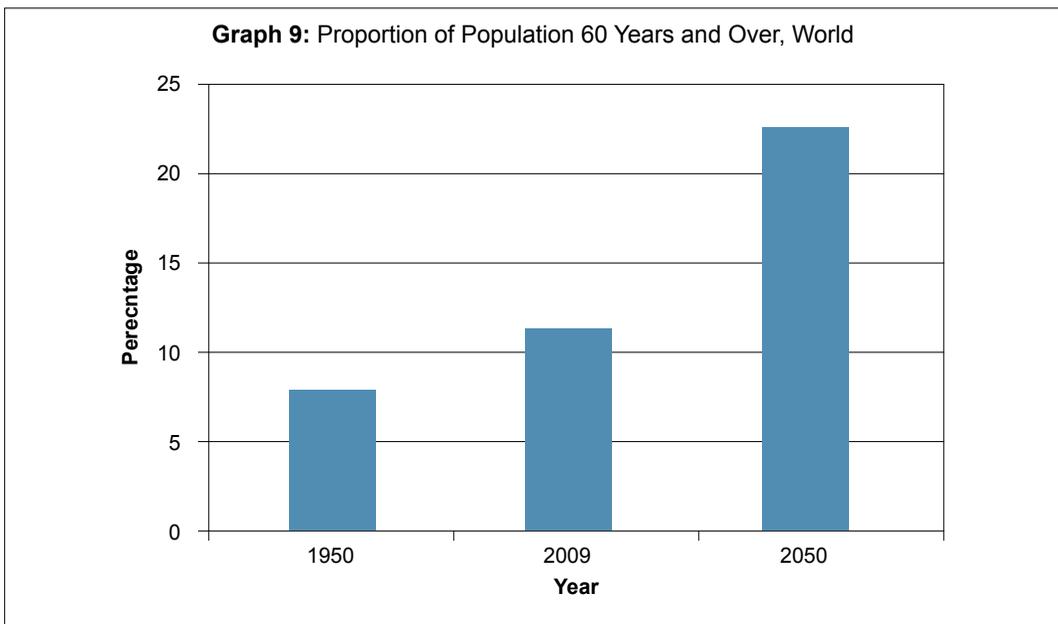
### An Aging World<sup>390</sup>

*“Population aging is unprecedented, a process without parallel in the history of humanity.”*

—UN, World Population Aging 2009

This section sets the stage for considering the relationship between aging and disasters by looking at some of the data on the unprecedented aging of the global population. Throughout this chapter, we will follow the UN’s categorization of older people being 60 years or above, while persons 80 years and above will be classified as the “oldest-old.”

Since 1950, the proportion of older persons has steadily risen from eight percent of the human population in 1950 to eleven percent in 2009. This number is expected to reach 22 percent in 2050 (see Graph 9).<sup>391</sup>



In 2009, the world median age was 28 years (half the world’s population were below and the other half above that age). In the same year, the country with the lowest median age was Niger (15 years) and the country with the highest median age was Japan (44 years).

<sup>390</sup> If not otherwise indicated, data in this section is taken from: United Nations, Department of Economic and Social Affairs, Population Division, *World Population Aging 2009*, 2009.

<sup>391</sup> UN, *World Population Aging 2009*, *op. cit.*, p. 11.

Prognoses are that the global median age will rise to about 38 years by 2050.<sup>392</sup>

The main causes for the aging of the world population are major reductions in fertility and longer lifespans due to a reduction in mortality rates. Fertility has declined significantly in the last half century. Globally, fertility has been reduced by almost half since the 1950s, from 4.9 children per woman in 1950-1955 to 2.6 children per woman in 2005-2010. Fertility decline has been more pronounced in the developed world, where in many countries, for example Japan, Italy and Germany, fertility has declined below replacement levels (2.1 children per woman) and therefore without sufficient in-migration, those countries are or will be shrinking in population size.

The second main reason for the aging of the world's population is a general trend of higher life expectancy. Since the 1950s, life expectancy has increased by 21 years to 67.6 years in 2005-2010. On average, less developed regions realized higher gains in life expectancy over that period than developed countries. However, there is still a life expectancy gap between more and less developed regions. For example, a person born in the developed part of the world has a life expectancy approximately eleven years longer than someone from a developing country.<sup>393</sup> In spite of overall trends of increasing longevity, the fact remains that a person born in Japan has a life expectancy of over 82 years, while a person born in Angola can expect to live 38 years.<sup>394</sup> In the next four decades, average global life expectancy is projected to increase by about eight years, with the difference between the developed and developing world shrinking to eight years in life expectancy as compared with the present eleven year difference as developing countries on average are projected to achieve higher life expectancy gains than developed countries.<sup>395</sup>

There are also significant differences between female and male life expectancy, with women currently living on average 3.5 years longer than men. Thus the majority of older persons in the world are women, with the phenomenon being especially pronounced in the more developed regions of the world, where women outlive men by an average of 6.9 years.<sup>396</sup>

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<sup>392</sup> *Ibid.*, p. 6.

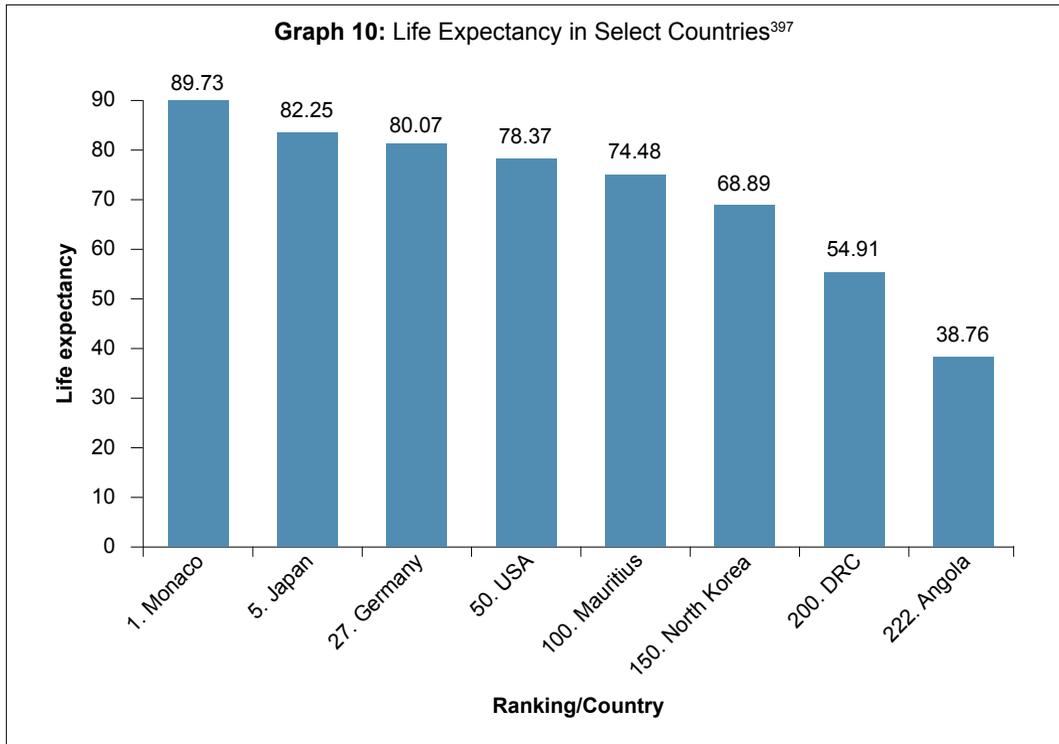
<sup>393</sup> UN, *World Population Aging 2009*, *op. cit.*, p. 6.

<sup>394</sup> CIA World Factbook, "Country Comparison: Life expectancy at birth, 2011 est.," <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html>

<sup>395</sup> UN, *World Population Aging 2009*, *op. cit.*, p. 7.

<sup>396</sup> *Ibid.*, p. 9.

## SECTION 1: AN AGING WORLD



## The scale of aging

The number of people aged 60 and over has been constantly increasing since the 1950s, but that growth has been accompanied by an overall robust growth in of the world's population. In 1950 around eight percent of the world population was aged 60 or over while projections for 2050 are that this number will rise to 22 percent (see Table 26). While the world's population will have grown by around 3.6 times from 1950 to 2050, the number of older people will have grown almost tenfold within that time span. Indeed the UN projects that 58 percent of the world's population growth will come from increases in the number of people over 60 while only six percent will come from people under 30.<sup>398</sup>

<sup>397</sup> CIA World Fact Book, "Life expectancy at birth," 2011 estimates, accessed 5 February 2012, <https://www.cia.gov/library/publications/the-world-factbook/>

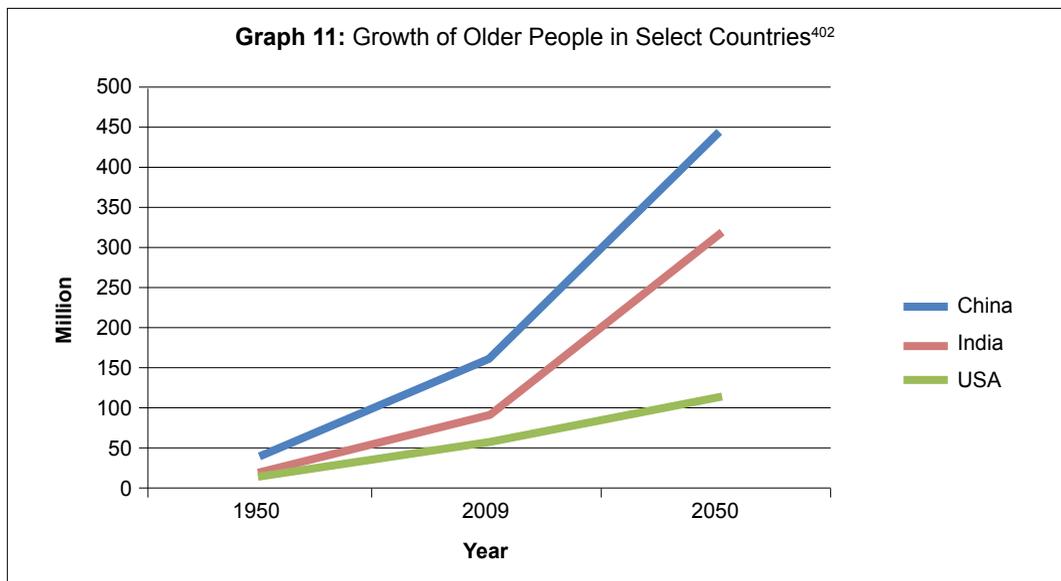
<sup>398</sup> Philip Longman, "The world will be more crowded – with old people," *Foreign Policy*, September-October 2011, p. 87.

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**Table 26** Global Population Growth and Growth of Population over 60<sup>399</sup>

Year	World population	Population over 60	Percentage of pop.
1950	2529	205	8
2009	6829	737	11
2050 <sup>400</sup>	9150	2000	22

While the global percentage of older people in 2009 stood at eight percent, there are vast differences between how many older people live in specific countries. For example, Japan and several European countries lead the field with almost 30 percent of the population over 60 years old, while Qatar is on the tail end with only 1.9 percent of people aged over 60. India and China occupy midfield positions in this category (see Graph 12).<sup>401</sup> Projections show that nearly 35 percent of the European population will be categorized as older people in 2050 while only eleven percent of Africans will fall into that category.



Still, while Europe, Japan and other developed countries will have higher percentages of older people, developing countries are catching up fast and the WHO estimates that already more than half of all older people live in developing countries today.<sup>403</sup> Middle-level countries such as Iran and Mexico will have a larger percentage of their populations over

<sup>399</sup> UN, *World Population Aging 2009, op. cit.*, p. 10.; population numbers from: UN, *World Population Prospects, The 2008 Revisions, Highlights, 2008*, p. 21.

<sup>400</sup> UN Projections.

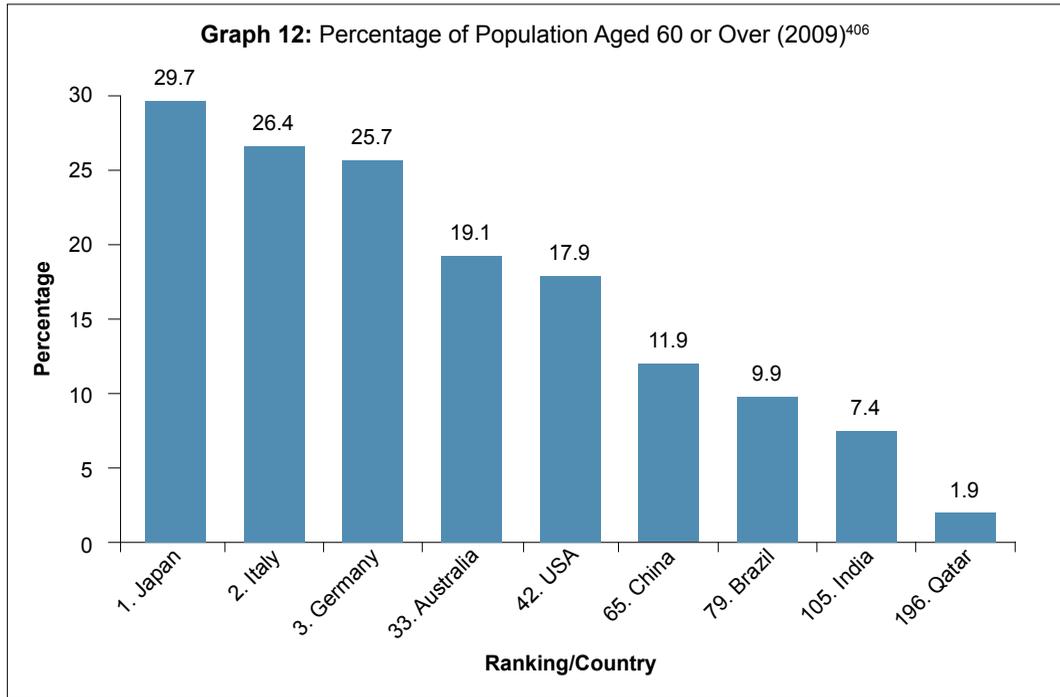
<sup>401</sup> UN, *World Population Aging 2009, op. cit.*, p. 65.

<sup>402</sup> *Ibid.*

<sup>403</sup> Help Age International and UNHCR, *Older people in disasters and humanitarian crises: Guidelines for best practice*, 1999, p. 10.

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the age of 60 than France does today.<sup>404</sup> Graph 11 shows the rapid growth of older people in both China and India projected for 2050. Brazil and Indonesia will also each have more than 50 million older people by 2050.<sup>405</sup>



Another fact that brings into focus the scale and scope of population aging is that the older population is the fastest growing segment in nearly all regions of the world. Moreover, the fastest-growing age group in the world is the “oldest-old,” those aged 80 and over, who by 2050 will account for four percent of the world’s population, up from one percent today.<sup>407</sup>

The statistics discussed so far show an aging process of the world’s population that has no precedent in human history and it is thus difficult to make predictions about the implications of this process, especially as many countries that have the highest percentage of older people today only experienced this aging once their economies and social security systems were well developed. For many developing countries, population aging will occur in the context of far lower levels of economic development and therefore different policies and approaches might be needed. The current financial problems that many of the aging developed societies show in regards to paying for rising pension and health care costs

<sup>404</sup> Longman, *op. cit.*, p. 87.

<sup>405</sup> UN, *World Population Aging 2009*, *op. cit.*, p. 10.

<sup>406</sup> UN, *World Population Aging 2009*, *op. cit.*

<sup>407</sup> Jo Wells, *Protecting and assisting older people in emergencies*, Humanitarian Practice Network at the Overseas Development Institute, Network Paper Number 53, December 2005.

are an indication that many of the issues related to an aging population have not yet been resolved.

Population aging will also shift the relative proportions of generations within societies and could lead to inter-generational conflicts related to the distribution of wealth and income. As older persons make up an increasing part of the electorate, they may have more political clout than younger generations and will be able to better participate in and have greater influence on decision-making processes. Population aging will go hand in hand with several other mega-trends such as urbanization and climate change and the interlinking of those issues will pose a variety of new challenges. Rural areas, for example, may face specific challenges. Many countries have particularly high percentages of older people and children in rural areas, because young adults are migrating to urban areas at a high percentage, leaving the younger and older generations behind.<sup>408</sup> Should this trend continue or accelerate, there will be important social and economic consequences and it will impact humanitarian and development policies targeting rural areas. Keeping in mind the enormous social transformations that population aging will bring, the next section of this chapter takes a closer look at the vulnerabilities of older people when disasters strike and the implications of these vulnerabilities for preparing for and responding to disasters.

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<sup>408</sup> *Ibid.*



An elderly Southern Sudanese, part of a group of recently returned from Darfur, shortly after disembarking the group's bus, near Aweil, Northern Bahr el Ghazal State. Photo: UN Photo/Paul Banks

## Section 2

### Older Persons as a Vulnerable Group, Implications for Disaster Planning and Response

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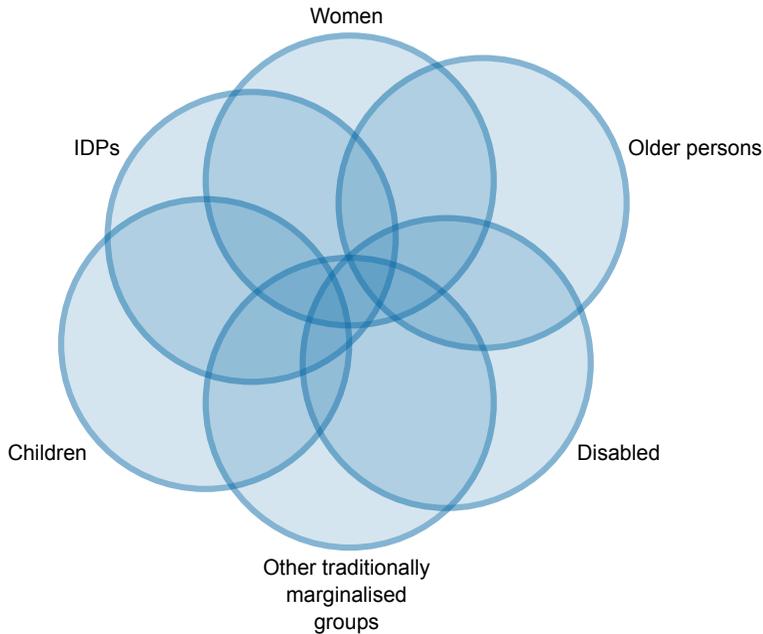
Humanitarian actors classify older people as a vulnerable group, meaning that older people in many cases have specific assistance needs which are related to the process of aging. Mobility issues might make it more difficult for an older person to evacuate an area that is in danger of being affected by a natural hazard. Greater physical frailty might cause higher fatalities among older people. Lack of medication for chronic illnesses might lead to complications after a disaster has struck. Reconstruction might bring more challenges for older people who live on their own with only meager pensions or income. Still, classifying older people as a vulnerable group should not lead us to assume every single older person is vulnerable. Especially in developed countries, many people are active and healthy up until old age, and around the world older people may make important contributions in disaster situations rather than simply needing special attention and assistance.

Natural disasters cause a shock to the normal functioning of a society. As discussed in the Introduction to this *Review*, natural disasters are defined as events that overpower some of the coping capacities of individuals and societies, and often pose specific challenges to older people. In this section we therefore want to highlight some of the specific issues that are encountered by older persons in situations of natural disasters, by looking at some of the evidence encountered in previous disaster situations and at specific vulnerabilities of older persons (keeping in mind that this group's vulnerabilities often intersect with vulnerabilities linked to factors such as gender, race, economic status, employment, and displacement (see Graph 13).

One of the observations in disaster situations is that older people typically have higher fatality rates than other population groups. Even though comprehensive data regarding the age breakdown of fatalities is rarely available in natural disaster situations, there is strong evidence that in many disasters most fatalities occur among persons over the age of 60. In many cases the death rate of older people is as high as 70 percent. The following examples underline the increased vulnerability older people often encounter in disaster situations:

- Data from the Tohoku earthquake and tsunami in Japan in March 2011 show that the death toll of elderly people from the tsunami was much higher than the percentage of that age group in the total population, reflecting the fact that many older people did not manage to escape the destructive waves. In the most severely hit prefectures of Iwate, Miyagi and Fukushima, more than 90 percent of people killed by the tsunami died from drowning, with 65 percent of the casualties aged 60 or older (around 30 percent of the Japanese population are over 60 years old).

**Graph 13:** Intersections of Potentially Vulnerable Populations in Situations of Natural Disasters<sup>409</sup>



Among 11,108 victims of the disaster whose ages were identified, those aged 60 or older accounted for 65.2 percent of fatalities. Among that group, 19.1 percent of the casualties were in their 60s; 24.0 percent were in their 70s; and 22.1 percent were aged 80 or older, showing that the disaster took an especially high toll among the oldest-old.<sup>410</sup> This is an even more dramatic indication than death rates of older people in the Kobe earthquake, where 53 percent of fatalities were over 60 years old.<sup>411</sup>

- A mortality survey among tsunami-displaced persons in Aceh, Indonesia after the 2004 Indian Ocean tsunami also found that the highest death rate was among elderly persons over 70 years of which 28.1 percent of the age group was killed by the tsunami). The second highest fatality rate was for persons aged 60-69 (22.6 percent of the age group killed).<sup>412</sup>

<sup>409</sup> Brookings-LSE Project on Internal Displacement, "Training Modules on Protection in Situations of Natural Disasters," 2011, [www.brookings.edu/idp](http://www.brookings.edu/idp)

<sup>410</sup> Japan Times, "90 percent of disaster casualties drowned," 21 April 2011, <http://www.japantimes.co.jp/text/nn20110421a5.html>

<sup>411</sup> David Hutton, *Older People in Emergencies: Considerations for Action and Policy Development*, World Health Organization, 2008, p. 1.

<sup>412</sup> Shannon Doocy et al., *Tsunami Mortality in Aceh Province, Indonesia*, Bulletin of the World Health Organization, 2007, Vol. 85, No. 4, p. 273-8.

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- The 2003 heat wave in France had an even higher death toll among elderly persons. Of the 14,800 people who died, 70 percent were over 75 years old.
- During Hurricane Katrina, most of the 1,300 fatalities were older persons. In Louisiana, 71 percent of those who died were older than 60 years; 47 percent of this group were over 77 years old.<sup>413</sup>

These are stark numbers. While our observations are not based on a representative sample, it appears that in many disasters 50 to 75 percent of fatalities are persons aged 60 years or older, with people above 75 or 80 being particularly likely to die when a sudden-onset disaster strikes. Scattered data from slow-onset disasters show that in droughts and famines infants and children bear the brunt of the crisis; however, older persons are also among the groups who are especially hard hit.<sup>414</sup>

Humanitarian experience shows that certain groups of older people are especially vulnerable in situations of natural disasters:

### Frail older people

Frailty indicates an inability to cope with environmental stressors (such as disasters). When a person's physical and mental capacities become sufficiently low that relatively small stressors overwhelm the individual's capacity to cope, that person is considered to be frail.<sup>415</sup> Frailty usually increases with age, so while many people in their 60s and 70s are not considered frail, virtually all persons above 85 are physically frail. In situations of disasters, authorities and humanitarian organizations need to plan and prepare for those older people who are in need of constant care, such as hospitalized persons, persons with limited mobility or who are cognitively impaired, such as those with Alzheimer's disease. In the US, for example, it is estimated that fifteen percent of men and eleven percent of women aged 65 and older have either moderate or severe memory impairment, a percentage likely to rise as life expectancy increases.<sup>416</sup> Rest-home residents are especially vulnerable as many of them are frail and so relocation is often physically dangerous and emotionally taxing. A fifth of rest-home residents evacuated from Christchurch, New Zealand after the February earthquake died within six months of the disaster.<sup>417</sup>

<sup>413</sup> Hutton, *op. cit.*, p. 1.

<sup>414</sup> See: Cormac O Grada, *Famine: A Short History*, 2009, p. 98ff.; see also: Peter Salama et al., *Malnutrition, Measles, Mortality, and the Humanitarian Response During a Famine in Ethiopia*, JAMA, Vol. 286, No. 5, 1 August 2001.

<sup>415</sup> John A. Tone et al., *Geriatric Mental Health Disaster and Emergency Preparedness*, 2010, p. 33.

<sup>416</sup> Hutton, *op. cit.*, p. 6.

<sup>417</sup> The Press, "One in five quake-evacuated elderly die," 14 September 2011, <http://www.stuff.co.nz/the-press/news/christchurch-earthquake-2011/5619376/One-in-five-quake-evacuated-elderly-die>. It is difficult to put these figures into perspective without knowing either the age of nursing home residents or the 'normal' death rates of these ages, but nonetheless the figures seem high.

Another group of older people requiring special assistance during emergency situations are persons with disabilities. By 2050, the prevalence of disability in some developing countries is projected to rise by 400 percent as the population ages. Presently in developed countries over one third of the population aged 80 and over cannot walk outside their homes without assistance.<sup>418</sup> Older people with disabilities need special attention and assistance when it comes to evacuations and require special facilities and assistance in the post-disaster phase. People with disabilities also risk losing assistance devices such as wheelchairs or hearing aids during the often chaotic phase when the disaster strikes.

An even larger group that might not be especially frail in the early stages of a disaster but might be at higher risk in the post-disaster phase are people with chronic illnesses. As the population ages, the number of people with chronic diseases such as diabetes, hypertension and heart disease also increases. If not properly treated, chronic conditions can become acute and lead to a large number of fatalities in post disaster situations. Studies in developed countries indicate that up to 40 percent of persons over 65 suffer from a chronic illness or disability that limits their daily activities. Of those 75 and over, less than one third experience good health.<sup>419</sup> 90 percent of the people who died of the Kobe earthquake's secondary effects within six months were over 60, an indication that disasters can have severe medium-term health consequences for older people.<sup>420</sup> Authorities and humanitarian responders are well advised to make provisions for assistance to those with chronic illness in planning for evacuations and disaster response.

## Older people living alone

Frailty and other age-related challenges are especially pronounced in a disaster situation when older persons live on their own, especially if they don't receive any family support. The rise of the nuclear family, low birth-rates and high divorce rates have, especially in the developed world, led to large numbers of older people living alone. Projections from England for example show that most of the increase in single person households until 2031 will come from older person households (42 percent), with 18 percent of the population projected to be living on their own by 2031 (compared to 13 percent in 2006).<sup>421</sup> While more older people are living on their own in developed countries, they are usually better protected as most countries have health care, social services and pension schemes for older persons. In the US for example, the poverty rate among older people has fallen from more than 35 percent in the late 1950s to 8.9 percent in 2009. While in the 1950s older people were by far the most likely to be poor, in 2009 the poverty rate of persons aged 65 and older was lower than the

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<sup>418</sup> Hutton, *op. cit.*, p. 2ff.

<sup>419</sup> *Ibid.*, p. 5.

<sup>420</sup> *Ibid.*, p. 1.

<sup>421</sup> Department for Communities and Local Government, "Household Projections to 2031," England, 2009.

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poverty rate for both adults (12.9 percent) and children (20.7 percent).<sup>422</sup> Meanwhile, studies show that up to 80 percent of older people in developing countries have no regular income. In Malaysia, for example, older people make up 5.6 percent of the population, but 37 percent of the poor.<sup>423</sup> Economic development usually goes hand in hand with smaller family sizes and a breakdown of traditional family and community support mechanisms, so the number and percentage of older people living on their own or without family support can be expected to increase in developing as well as developed countries. There is also a gender dimension as women live longer than men and remarry less often. A large percentage of one-person households will therefore be older women. In many cases, living alone increases social isolation, which heightens vulnerability and invisibility when a disaster strikes.

## Displaced older people

Displacement is especially hard on older people. Being displaced is stressful whether it results from conflict or a natural disaster. Fleeing to safety might be physically strenuous and the adjustment to living in an evacuation center, a camp or with a host family is often challenging. Older people often find it more difficult to adjust to new environments as daily routines change and care and medical services might be disrupted. UNHCR estimates that worldwide older persons make up to 8.5 percent of the refugee population. In 2005, approximately 2.7 million people over the age of 60 were living as refugees or IDPs.<sup>424</sup> Evaluations show that older people's needs are given too little consideration in camp settings; this "invisibility" of older people leads to a lack of assistance specific to their needs, including appropriate nutrition, medical care, and psychosocial care.<sup>425</sup> While there is in many cases a lack of attention to older people in camp situations, it is also often more difficult for older people to return home after the emergency is over. Research by HelpAge in Uganda and Pakistan showed that a large number of those left behind when camps close are people who cannot return because of age-related reasons.<sup>426</sup> Research on the return of IDPs in Northern Uganda notes that "the situation for older people is characterised by social uncertainty and a lack of active participation in determining and implementing their own durable solution," with those returning having strong "family and community/clan support enabling their return," while those remaining in camps are "people with special needs, in particular older people and people with disabilities."<sup>427</sup>

<sup>422</sup> Laura Norén, "Poverty in America | US Census Bureau graphics, 1959 – 2009," Graphic Sociology, 16 September 2010, <http://thesocietypages.org/graphicsociology/2010/09/16/poverty-in-america-us-census-bureau-graphics-1959-2009/>

<sup>423</sup> Hutton, *op. cit.*, p. 11.

<sup>424</sup> *Ibid.*, p. 1.

<sup>425</sup> HelpAge International and IASC, *Strong and Fragile: Learning from older people in emergencies*, November 2007, p. 9.

<sup>426</sup> *Ibid.*, p. 9.

<sup>427</sup> Susan Erb, *The Protection of Older People in Northern Uganda: Needs, Contributions, and Barriers to Return*, June 2008.

On the other end of the spectrum, older people often also stay or are left behind when families flee. During the 2011 drought and famine crisis in the Horn of Africa, 12 million people were affected in Ethiopia, Kenya and Somalia. While an estimated 4.3 percent of Somalia's population is over 60, UNHCR statistics for refugee camps in Kenya and Ethiopia show the proportion of older people is significantly lower, at 3.4 percent in Kenya and just 0.85 percent in Ethiopia, suggesting that many older people did not make the journey to the refugee camps or succumbed along the way.<sup>428</sup>

## Older people who lack certain skills or face cultural/religious restrictions

A lack of certain skills might make it more difficult for older people to be resilient in emergency situations. For example, in many countries, the rate of illiteracy is much higher among older populations than among younger ones. Older people, especially older women, may also lack life-saving skills such as the ability to drive or swim. Cultural or religious traditions observed more often by older populations might put additional strain on elderly people in disaster situations. Numbers show that in many emergencies, especially in societies with low gender-equality, for every one adult male who drowns in a flood, there are three to four women who die.<sup>429</sup>

## Older people who are care givers

While many older people need to receive care, large numbers of older people also serve as care givers and face particular challenges in disaster situations. Particularly in countries with a high prevalence of HIV/AIDS, grandparents are usually the ones caring for AIDS orphans. A 2003 study from HelpAge, for example, shows that at that time in South Africa and Uganda, 40 percent of children were living with their grandparents, while in Zimbabwe over half of all children stayed with their grandparents.<sup>430</sup> In many developing countries, poverty is more prevalent among older people, with those older people who care for dependents under additional strain. Post-disaster, they are at risk of being cut off from livelihood opportunities and therefore concerted efforts need to be made to ensure they are included in assistance schemes.

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<sup>428</sup> HelpAge International, "Drought in East Africa," *Aging and Development*, Issue 30, September 2011.

<sup>429</sup> Ferris, *When Disaster Strikes: Women's Particular Vulnerabilities and Amazing Strengths*, *op. cit.*, p. 2.

<sup>430</sup> HelpAge International and the International HIV/AIDS Alliance, *Forgotten families: Older people as carers of orphans and vulnerable children*, 2003.

## Section 3

### Humanitarian Challenges in Assisting Older Persons

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Given older people's vulnerabilities in the face of natural disasters, humanitarian actors need to pay special attention to their needs and vulnerabilities. Although older persons are specified as a vulnerable group by humanitarian actors, many agencies do not develop specific programs and tools for assisting older persons, and there are few organizations that deal specifically with assisting older people in emergencies. In this section we will look at some of the possible reasons for this shortcoming, and assumptions that undermine effective assistance for older people in situations of natural disasters.

#### Social Darwinism

Emergencies, especially when resources are scarce, can lead, consciously or unconsciously, to social Darwinist cost/benefit calculations in terms of whom to save and whom not. When resources are scarce and the needs are widespread, older people might be perceived as less important than other segments of the population. Older people may play into this perception by altruistically "deselecting" themselves from assistance programs in favor of younger people.<sup>431</sup>

#### On the wrong end of the curve

Many humanitarian emergencies take place in countries that are still in the early stages of population aging, where median ages are still low, children are plentiful, and older people are relatively rare. In such situations, elderly people inevitably make up a relatively small proportion of the humanitarian caseload. Given the data analyzed in this chapter, it is clear that this pattern is changing, with many of the most disaster-prone countries aging at a fast pace. The sooner humanitarian agencies pay specific attention to older persons' needs and vulnerabilities, the better we will be able to deal with the dramatic demographic shifts arising in the next few decades.

#### No agencies: no agency

The lack of a designated agency for older people (there is for example no UN agency that deals specifically with older persons) translates into a lack of action and advocacy in respect to older people's needs in emergencies. While there are many experts and agencies which focus on children, for example, who provide both expertise and advocacy, the

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<sup>431</sup> Wells, *op. cit.*, p. 21.

number of organizations offering equivalent expertise and advocacy for the elderly are few indeed. Without a specialized agency, there is often a lack of experts on older persons' needs in emergencies which can lead to discrimination. This lack of advocacy can also explain why there are fewer references to older people in international law than to other vulnerable groups such as children, women, minorities and people with disabilities.

## The “invisible” elderly

In research and evaluations on older people in emergencies, the word “invisible” frequently comes up. There are a number of reasons why older people might be less visible in emergencies:

- **Lack of data:**  
Governments might lack detailed demographic data and data about persons who need special assistance in case of an emergency, so when a disaster strikes that information is simply not available to emergency responders. This problem can be compounded when data on older people is not collected during emergency assessments. If data are not disaggregated by sex and age, it is difficult to identify the vulnerable groups within the affected population.
- **Frailty:**  
As mentioned previously, frail older people may be hidden from public view as they are unable to leave their residences or temporary shelters in camps or evacuation centers. As with all persons with disabilities, data assessments and aid distribution systems need to account for frail older people.
- **Exclusion:**  
Older people might not be included in consultation and/or decision making processes, which in turn easily leads to under-representation of their needs. On the one hand, they may lack awareness of societal biases and discrimination against older persons. On the other hand, they may lack knowledge of the skills and capacities of older people which can contribute to the disaster response. Moreover, there is almost always a generation gap between aid workers and older beneficiaries, which can inhibit communication. Research shows, for example that when it comes to early recovery and reconstitution of livelihoods, older people are often excluded from income-generating activities on the assumption that they will either be taken care of by the state or by family members. This assumption is especially problematic for older persons who are caregivers or who have dependents.<sup>432</sup>

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<sup>432</sup> HelpAge International and IASC, *Strong and Fragile*, *op. cit.*, p. 13.

### SECTION 3: HUMANITARIAN CHALLENGES IN ASSISTING OLDER PERSONS

Delivery systems may also be unconsciously biased against older people. For example, if people have to queue for hours to receive food, water or other goods, it will be difficult for older people with impaired mobility and without family support to access these goods. As mentioned above, older people might also decide to exclude themselves for the benefit of younger persons.

## Money, money, money

There is little specific funding for projects that target older people. A HelpAge study analyzing humanitarian aid explicitly directed at older people through the UN Consolidated Appeals Process and Flash Appeals looked at 12 humanitarian crises since 2007, covering a total of 1,912 projects and found that only 4.9 percent of all projects made any explicit reference to older people as a vulnerable group (compared to 32 percent for women and children). Only 0.94 percent of the projects included activities that targeted older people and in total only five projects (0.2 percent) that included activities for older people were funded.<sup>433</sup> Given UNHCR estimates that worldwide 8.5 percent of the global refugee population was 60 years old or above, this shows the meager amount of attention given specifically to the needs of older persons.<sup>434</sup> In some post-conflict settings, the number of elderly IDPs is as high as 14 or 15 percent (Azerbaijan and Armenia, respectively).<sup>435</sup>

A lack of focus on older persons in all phases, from planning to emergency management to post-disaster reconstruction, can lead to a range of negative consequences. These include higher fatalities among older people, long-term chronic health issues, psychosocial trauma, and isolation. Treating older people simply as “normal” disaster victims denies the specific vulnerabilities that many older people face.

The issue of institutional responses within the humanitarian system for the elderly merits further discussion. Should issues of aging be mainstreamed into the work of all humanitarian agencies? Or is the establishment of a specialized agency for older people needed? Such an agency could at the minimum improve training and increase the number of specialists that deal with older persons in post-disaster responses. In recent years there have been some important developments in this respect, particularly due to the efforts of HelpAge International which has consistently advocated for the elderly. In 2007 HelpAge carried out an inter-agency review of the inclusion of older people in humanitarian action on behalf of the Inter-Agency Standing Committee (IASC). The IASC tasked the WHO and HelpAge to disseminate good practices and lessons learned to humanitarian actors with the IASC Working Group reviewing progress 18 months later. The review showed that there was “no indication to date that the needs of older people are now systematically

<sup>433</sup> HelpAge International, *A Study of Humanitarian Funding for Older People*, November 2010.

<sup>434</sup> Hutton, *op. cit.*, p. 1.

<sup>435</sup> IDMC and Refugees International, *Protracted internal displacement in Europe, Current Trends and Ways Forward*, May 2009, p. 11.

identified or acted upon within mainstream humanitarian response or coordination.”<sup>436</sup> In response the Working Group requested cluster lead agencies to integrate the humanitarian needs of older persons into the work of clusters and asked that multi-sector assessments include reference to all vulnerable groups, including the needs and capacities of older persons. Also in 2010, the UN General Assembly decided to set up a working group to consider how to strengthen the protection of older people’s rights by looking at the adequacy of the existing international human rights framework, identifying any gaps and considering the possibilities of new human rights instruments.<sup>437</sup> Whether these efforts will succeed in closing protection gaps for older persons in humanitarian emergencies remains to be seen.

<sup>436</sup> IASC Standing Committee, “Older Persons and Humanitarian Action,” 78<sup>th</sup> IASC Working Group Meeting, WO/1010/3595, 10-12 November 2010.

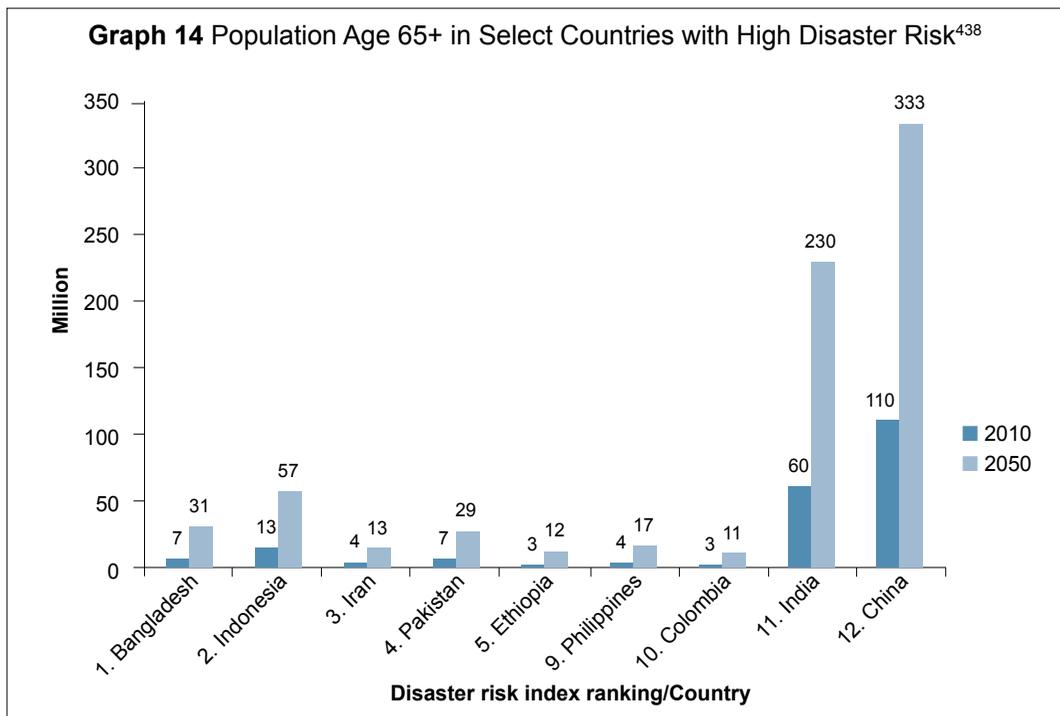
<sup>437</sup> HelpAge International, “UN adopts landmark resolution on older people’s rights,” 22 November 2010.



## Section 4

### The Old are the Future: The Mega-Trend of Population Aging and an Active Role for Older People When Dealing With Disasters

Two of the mega-trends expected to influence future life on this planet are climate change and the aging of the world's population. Although there is uncertainty about how quickly temperatures will rise, most experts predict an increase in the ferocity and frequency of sudden-onset natural disasters. The aging of the world's population is already well underway (discounting unforeseen major pandemics or other crises) as those who will constitute the older people of 2050 have already been born. The intersection of these two trends – heightened disaster risk and an aging population – is presented in Graph 14, which provides projections of the number of older people in some of the countries ranking at the top of the 2010 disaster risk index.



<sup>438</sup> The countries ranking 6<sup>th</sup> to 8<sup>th</sup> (Sudan, Mozambique, Haiti) in the disaster risk statistics have been left out due to secession (Sudan) or small population size (Mozambique, Haiti). Population Data (approximations from chart): United Nations Department of Economic and Social Affairs, Population Division, Population Estimates and Projections Section, "Probabilistic Projections: Population age 65 and over (thousands)," 31 October 2011, [http://esa.un.org/unpd/wpp/P-WPP/hm/PWPP\\_Population-Age\\_65Plus.htm](http://esa.un.org/unpd/wpp/P-WPP/hm/PWPP_Population-Age_65Plus.htm); Risk Ranking Data from: Maplecroft, "Natural Disaster Risk Index 2010," [www.maplecroft.com](http://www.maplecroft.com)

While in the previous sections we have focused on some of the vulnerabilities of older people and some of the issues that impede a better humanitarian response for this age group, in this section we will focus on more positive aspects and resources which older people bring to disaster prevention, relief and recovery efforts.

Traditionally, in many societies, the elders in a community were respected for their wisdom and life experience. Elders often continue to play important leadership roles within their communities, their countries and the world, as evidenced by such revered leaders as Nelson Mandela and the Dalai Lama. In Pacific Island societies, community elders are seen as reservoirs of indigenous knowledge about tsunamis and other natural hazards; communicating this knowledge can save lives in their communities. For example, elderly residents of Tapurai village on Simbo Island (Solomon Islands) in the South Pacific who had experienced a smaller tremor and tsunami in 1959, warned younger residents to run for higher ground when tremors began. In April 2007 this advice saved many lives after an 8.1 magnitude quake occurred and caused a tsunami, killing only seven of the community's 241 residents, while other communities had much higher casualty figures.<sup>439</sup>

In terms of future trends, older people in many societies are becoming much more active than in previous decades. With increasing life expectancy due to healthier lifestyles and better health care, many older people are able to stay active and independent through a much later stage in their life. And perceptions of age are changing. Particularly in developed countries, people in their 60s are often no longer considered elderly. And while the debate over increasing retirement ages has largely focused on the financial costs of pensions and health care for older people, the fact is that the age of retirement is already increasing. Several countries have already increased retirement ages to 65 or 67 and it is likely that with rising life expectancies retirement ages will further increase in the near future. A higher percentage of older people in the work force will certainly refocus public perceptions about the abilities of older people, and might reshape understandings and perceptions about aging. More than half of the global population over 60 is economically active, with a third of those over 70 and about a fifth of those over 75 still working.<sup>440</sup>

The steady and assured incomes that older people have in developed countries through pensions can also be a strong asset in disaster recovery. In Japan, the areas affected by the tsunami were inhabited by large numbers of older people, most of whom want to return. Their pension incomes will make it easier for them to return, and will be a positive contribution to the reconstruction of local economies.<sup>441</sup> Even if it takes a while for factories

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<sup>439</sup> Sid Perkins, "Heed your elders, survive a tsunami," *Science News*, 16 February 2008; see also for more examples: Shaw et al., *Indigenous Knowledge and Disaster Risk Reduction: From Practice to Policy*, 2009.

<sup>440</sup> IFRC, *World Disaster Report 2007: Focus on Discrimination*, 2007, p. 80, <http://www.ifrc.org/Global/Publications/disasters/WDR/WDR2007-English.pdf>

<sup>441</sup> John Creighton Campbell, Presentation at USJI Week Panel Discussion on "Reconstruction after the Great East Japan Earthquake," Washington DC, 9 September 2011.

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to be rebuilt and new jobs to be created, the fact that pensioners have a stable income will stimulate local economies.

Almost all around the world the older people of tomorrow will be more highly skilled and better educated than the generations before them, allowing them to be actively involved in their societies. As we have seen, many of them are caregivers in the lives of their grandchildren or great-grandchildren. Already, one fifth of orphaned children in 22 of 28 countries in Africa and Latin America are living with their grandparents.<sup>442</sup> Other studies from Africa show the positive correlation between the presence of a grandmother in the household and the reduction of infant mortality and improvements in nutritional status and child development.<sup>443</sup>

The key to ending discrimination against older people in post-disaster situations is inclusion and participation. A necessary first step is to collect data about the needs of older persons as well as to include them directly, wherever possible, in needs assessments. Older people should at least be able to determine representatives that are involved in the distribution of aid and in decision making processes that concern older people. Because they are often knowledgeable about and respected in their communities, they also can provide leadership and reassurance when communities are traumatized. There are scores of examples of post-disaster situations where the involvement of older people in camp management as well as in disaster recovery planning and activities has brought about very positive outcomes. In Bangladesh, during Cyclone Sidr, for example, older persons' committees played very important roles from disseminating early warning information, to compiling beneficiaries' lists and assisting with the distribution of relief goods.<sup>444</sup> Once older people (and other potentially vulnerable groups) are not seen as passive aid recipients but as actors with specific skills who can play important parts in disaster response, ways can be found to use their experience in responding to natural hazards. In fact, some governments, humanitarian agencies and NGOs have already done very valuable work in incorporating the specific needs of older people into humanitarian responses, lessons that need to be collected, studied and disseminated. More work is also needed to lift up positive examples of the contributions which older people can make in both disaster risk reduction and disaster response.

In an aging world with a changing climate, it is imperative for our societies to make use of the experience and energy of older people. If we don't, we may fail to create a sustainable future for all of humanity.

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<sup>442</sup> Hutton, *op. cit.*, p. 1.

<sup>443</sup> Well, *op. cit.*, p. 17.

<sup>444</sup> IASC, *Humanitarian Action and Older Persons: An Essential Brief for Humanitarian Actors*, 2008.

This year's *Review of Natural Disasters* has focused on the disasters that affected the rich world with a corresponding emphasis on both the economic costs of disasters and the particular impact of disasters on the elderly. But population statistics indicate that the elderly are making up a growing percentage of the population of the developing world as well. Responding to the particular needs of the elderly and using their potential contributions more effectively are thus issues of global concern. As discussed in the chapter on Somalia, the disproportionately small percentage of elderly Somali refugees suggests that we need to better understand the particular displacement dynamics associated with aging.

While developed countries are generally better-prepared to respond to the effects of natural hazards than developing countries, this *Review* has also highlighted some of the common challenges facing all countries in preparing for and responding to the effects of natural hazards. While Japan is the world leader in developing earthquake-resistant technologies, it was unprepared for the scale of the tsunami waves which struck its northeastern coast with deadly force. Nor was it prepared for the nuclear accident which followed. This should be a warning sign to both developed and developing countries – and to humanitarian actors – that better planning is needed for the worst-case scenarios. In a very different context, the fact that highly-developed early warning systems were able to predict impending famine in Somalia but were not followed by effective action to prevent that famine, suggests the need for better early response mechanisms but even more pressing is the need to end the decades-long conflicts in Somalia.

The *Review* has also identified areas where further clarity is needed, particularly around the methodologies of defining populations which are affected by disasters and the methodologies used to estimate the economic costs of disasters, particularly the indirect costs and secondary impacts. These costs are likely to increase in the future as a consequence of population growth, rising urbanization, and continuing globalization.

We hope that this *Review* has added to our understanding of natural disasters in 2011 and beyond. But we are acutely conscious that much, much more work is needed.