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INTRODUCTION

Natural and human-made disasters have been experienced throughout history. In the last three decades, however, both the frequency of their occurrence and the losses associated with them have increased. The incidence and magnitude of disasters today is widely recognised as posing a serious threat to the survival, dignity and livelihoods of countless individuals, particularly the poor. Hard-won development gains are also under threat, especially in the least developed countries (LDCs).

Disaster risk is a global concern; occurrence of a disaster in one region will have implications in others. Demographic, technological and socio-economic changes, especially increased urbanization, have resulted in settlement in high-risk zones. This effect is compounded by disease epidemics, such as HIV/AIDS, and increasing climatic variability, exposing the world's economies and peoples to increased threat of disasters.

Disasters and LDCs

Although the number and seriousness of disasters are increasing everywhere, the low human development countries of Africa, Asia and the Caribbean suffer most and account for more than half of recorded disaster-related deaths. Drought-induced famines, floods, windstorms and earthquakes cause the most deaths. Floods appear to have affected more people in the last decade than any other natural hazard, but the impacts of drought-induced famine are thought to have been significantly under-reported. While the incidence of disasters is rising, they have killed fewer people during the last two decades due to more effective international disaster response efforts. But the number of disasters and people affected and the scale of property losses have all risen dramatically each decade since records began in the 1960s. The recorded data should be treated with caution, however; they are incomplete and only give an indication of trends. Between 1993 and 2002, a global annual average of 540 separate disasters triggered by natural and technological hazards was recorded: on average 62,000 people were killed and a quarter of a billion people were affected each year.

Disaster impact by hazard types, 1993-2002

Hazard type	Deaths (thousands)	% of total	Affected (millions)	% of total
Drought	276	44	734	29
Floods	94	15	1,401	56
Windstorms	61	10	313	13
Earthquakes	75	12	35	1
All 'natural' hazards	531	85	2,496	100
Technological hazards	93	15	1	0

Source: IFRC

Economic losses attributed to natural disasters are massive. The World Bank estimates annual losses due to natural disasters at US\$ 55 billion. Although the value of property losses are higher in high human development countries (due to high monetary values of their physical assets), disasters have more far-reaching consequences in low human development countries. Disaster-related losses constitute a significant proportion of Gross Domestic Product (GDP) in poor countries and drain their potential for development. In both rich and poor countries, marginalized social groups and the poor suffer most from the consequences of disaster.

The disaster problem in Africa

In Africa, the occurrence of disasters triggered by natural and human-made hazards, the number of people affected and the associated economic losses are all rising. Africa's share of total reported world disasters has increased over the past decade. Most disasters affecting Africa are caused by 'hydro-meteorological' hazard (droughts, floods, windstorms) and human factors like war, conflict and bad governance, although disease epidemics often follow in their wake. Climate change is likely to increase the occurrence of hydro-meteorological disasters in the future. Meanwhile, HIV/AIDS, malaria and tuberculosis are impacting seriously on households and communities and threatening sustainable development throughout sub-Saharan Africa. Conflict in many parts of Africa has led to complex emergencies. Other less common causes of disasters include pest infestations, earthquakes, landslides, wildfires and volcanic eruptions.

Poor record keeping makes it difficult to quantify economic losses caused by disasters in Africa. According to the African Union (AU), in 2000-2001 alone about 35 million people - 13 per cent of the total population of the continent - were affected. The 1992 drought reduced Zimbabwe's and Zambia's GDPs by about 9 per cent. In 2000, the GDP of Mozambique dropped by 12 per cent as a result of floods. Disasters can wipe out many years' development achievements within hours or even less. When an earthquake hits areas where the buildings and infrastructures have not been built to resist it, they can be reduced to ruins in seconds. Frequent disasters also wear down resources and undermine resilience of nations and communities, pushing already poor people even deeper into poverty.

At national level, disasters cause extensive damage to infrastructure and human resources. This erodes gains made in social development through disruption of services and limitation of economic activities that generate income. Floods which destroy roads and bridges can affect access to market and lead to massive losses for farmers. Destruction of power lines disrupts manufacturing activity and causes loss of income for workers and businesses.

In addition to large, discrete and high-impact disasters, recurrent localized hazards erode local capacity for development, destroy livelihoods of the poor and weaken their coping and survival capacities.

Overview of disasters in Ethiopia

Ethiopia is vulnerable to disasters caused by drought, earthquake, flood, war and conflict, human and livestock diseases, pests, wildfire and landslide, amongst others. These different hazards occur with varying frequency and severity. Some result in nationwide disasters, while the impacts of others are more localized.

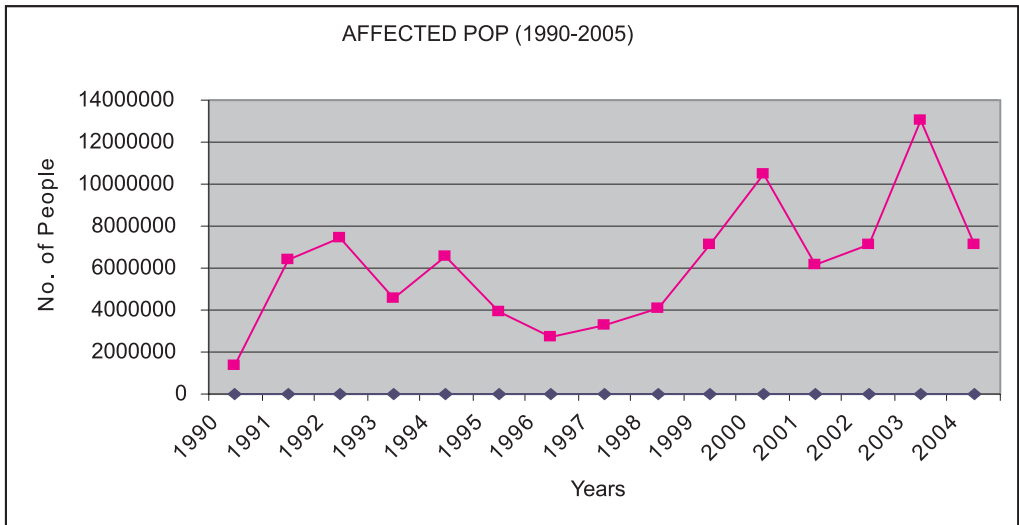
Drought

Hydro-meteorological hazards, particularly drought, are the leading cause of disaster and human suffering in Ethiopia in terms of frequency, area covered and the number of people affected. Although drought is not necessarily a disaster by itself (rather a natural phenomenon or hazard) it becomes a disaster when it meets a vulnerable condition. Ethiopia is one of the world's poorest countries and especially vulnerable to shocks: in the Ethiopian context, drought hazard is more or less synonymous with disaster. Minor climatic variations or other adverse factors can trigger acute food insecurity, which can easily escalate to full-scale disaster.

The recorded history of drought in Ethiopia goes back to the year 250 BC. There have been many national and localized droughts in the past and communities managed most of them through their own coping mechanisms. Between the 9th century and the Great Ethiopian Famine of 1888-1892, thirteen drought years were recorded. Between the Great Famine and the 1970s there have been many national and localized droughts and at least 20 major drought years were noted affecting most parts of the country, particularly Tigray and Wollo. The magnitude, frequency and the effects of droughts have increased since the mid-1970s. According to a United States Agency for International Development (USAID) study (*Planning for the Next Drought: Ethiopia Case Study, USAID, March 2003*), the frequency of nationwide droughts causing severe food shortage increased from once every 10 years in the 1970s and 1980s, to every three years now. Between 1970 and 1996, drought and the resultant food shortages have affected millions. The effects of drought are often combined with other hazards. Migratory pest infestation (locusts) has been a serious problem in some parts of the country and the prevalence of some crop diseases increase when climatic conditions are favourable.

The increasing trend of drought-induced disaster, associated with other hazards, is reflected in the increasing number of people needing food assistance in Ethiopia. Between 1990 and 2005, on average each year 6.3 million people required food assistance amounting to over 654,000 tonnes annually. The number of people affected is especially significant in Tigray where an annual average of more than 1.2 million people is affected. The proportion of the population affected is also high in Amhara and Somali regional states.

Number of people affected by drought in Ethiopia, 1990 - 2005



Source: DPPA

War and civil strife

Like drought, war and conflict in Ethiopia goes back to its ancient history. Wars have been fought at different times against foreign aggressors and between different communities in Ethiopia. The struggle for political power and control of resources has been the major cause of conflict and tension among the peoples of Ethiopia and the country has lost the most productive segment of its population to war and internal strife. The Battle of Adwa in 1896, the climactic battle of the first Italo-Abyssian War, is but one example: an estimated 5,000 Ethiopians were killed and a further 8,000 injured.

In the country's more recent history, the war against Somalia in the 1970s and the protracted armed struggles of liberation in Eritrea, Tigray, Oromiya, Somalia (Ogaden) and elsewhere have cost the country dearly in terms of human life, financial resources and economic development. The bloody Ethio-Eritrea War, fought between 1998 and 2000, claimed the lives of tens of thousands and displaced over 350,000 people. Apart from these, there have been various on-going ethnic clashes and fighting in various parts of the country. Major causes of such violent conflict include political differences, territorial claims, resource control, resettlement programmes and other cultural and identity issues.

Epidemics

Epidemics, both human and livestock, have also caused serious famine in the country. The Great Famine of Ethiopia (1888-1892) was probably caused by an epidemic of a livestock disease, rinderpest. Though most were not documented, human epidemics have been recorded from as early as 831 AD.

Malaria is endemic in more than 70 per cent of the country and often reaches the scale of an emergency during and immediately after the rainy seasons. HIV/AIDS is a more recent threat that rapidly reached the level of a major epidemic.

History shows that health hazards often occur in association with other disasters, such as flood or drought: epidemics of measles and cholera occur during periods of food shortages and meningitis claims lives, particularly along the Tekeze River basin.

Flood

Flooding caused by rivers overflowing their banks has regularly affected people and their property, especially in the low-lying areas of Somali, Afar, Gambella, Oromiya and Amhara regional states. Flash floods affect all regions. Some floods, such as those in 1996 and 2006, triggered disasters which claimed the lives of hundreds of people, displaced hundred of thousands and destroyed physical, natural and economic assets.

Ethiopia is mountainous with rugged topography and steep slopes: the highlands are extensively deforested; rains are sometimes heavy and torrential; water converges in river basins and causes swelling of rivers. The watersheds of the major rivers are highly degraded with negligible vegetation cover, reducing infiltration into the ground and increasing runoff.

Seismic activities

Ethiopia is prone to seismic activity (earthquakes) with the most recent example being in Afar region. Though the frequency of occurrence is low, earthquakes can cause catastrophic situations, destroying property and causing loss of life, especially along the Rift Valley. In the 1960s an earthquake destroyed the entire town of Kara Korie and several nearby villages. Landslides have also claimed the lives and property of many people, particularly in the Southern Nations, Nationalities and Peoples (SNNPR) and Amhara regions. In recent years, landslides along the Nile Gorge have displaced many people.

Ethiopian response to disasters

Prior to the famines of 1973/74, responses to disasters were largely spontaneous and uncoordinated. Following these famines, the Relief and Rehabilitation Commission (RRC), now the Disaster Prevention and Preparedness Agency (DPPA), was established to coordinate responses. Responses were relief-oriented until the 1984/85 famine, when questions were asked regarding the appropriateness of the emergency response. After a long process of consultation, the *National Policy on Disaster Prevention and Management* (NPDPM) was finally ratified in 1993. The NPDPM describes the link between preparedness and prevention; indicates sectoral integration; spells out how early warning

information triggers declaration of a disaster; explains the development of a relief plan; proposes various preparedness measures and specifies their roles. This policy now serves as a framework for addressing all disasters in Ethiopia, though it is most suited to drought-induced disaster.

Global initiatives and disaster risk reduction

Due to increasing concern about the impact of disasters, the United Nations (UN) declared the 1990s *The International Decade of Natural Disaster Reduction*. This served to raise awareness at all levels and focused on governments drawing up national disaster management plans. In 1994, the *Yokohama Strategy for a Safer World* provided guidance on reducing the impacts of disasters. However, approaches were mainly emergency response-focused and did not look at long-term development-oriented actions as a way of dealing with risks. The *UN International Strategy for Disaster Reduction* (UNISDR) was set up to build on the gaps and challenges identified in the *Yokohama Strategy*. It sought to coordinate approaches at local, national and international level with the aim of building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development.

In the year 2000, the Millennium Summit brought together leaders of 189 states, focusing the world’s attention on its most pressing challenges. The summit was an opportunity for states to join efforts to fight poverty and improve human wellbeing. The outcome of the summit came to be known as the Millennium Development Goals (MDGs), a set of eight inter-connected development goals with time-bound targets to the year 2015.

Challenges posed by disasters to attainment of MDGs in Ethiopia

MDGs and target	Challenges posed by disasters to target attainment in Ethiopia
<p>1. Eradicate extreme poverty and hunger Target: Halve the proportion of people living on less than a dollar a day and those who suffer from hunger</p>	<p>Drought , flood and violent conflict lead to loss of livestock, crop failure and reduce sustainability of livelihoods</p> <p>HIV/AIDS and malaria epidemics kill productive labour force, increasing burden on surviving relatives</p> <p>Destruction of roads and bridges caused by floods affects peasants access to markets, reducing prices for produce, and can lead to post-harvest losses</p>
<p>2. Achieve universal primary education Target: Ensure that all boys and girls complete primary school</p>	<p>Drought increases burden on women, forcing them to take girls out of school to help with increased chores</p> <p>Conflict leads to closure of schools in affected areas and decrease in enrolment and retention of children in primary schools</p> <p>Destruction of school buildings by flood disrupts learning</p>

MDGs and target	Challenges posed by disasters to target attainment in Ethiopia
<p>3. Promote gender equality and empower women Target: Eliminate gender disparity in primary and secondary education preferably by 2005 and at all levels by 2015</p>	<p>Pastoralists plunged into poverty by disasters may marry-off their girls as a coping mechanism to rebuild herds from dowry</p> <p>Increased work load on women may lead to withdrawal of girl child from schools to help on house hold chores</p>
<p>4. Reduce child mortality Target: Reduce by two third the mortality rate among under- fives</p>	<p>In flash floods and droughts, children are most affected. All disasters cause food insecurity: this affects nutrition of under-fives and makes them more susceptible to illnesses</p> <p>Floods and conflict disrupts delivery of health services (treatment and immunization) in affected areas and lead to increased mortality</p> <p>In pastoralist areas, migration away from health facilities to cope with drought disrupts immunization and treatment of under-fives</p>
<p>5. Improve maternal health Target: Reduce by three quarters the maternal mortality rate</p>	<p>Disasters increase burden on women and weakens immunity of lactating and pregnant mothers</p> <p>Migration to cope with impact of disasters affects women's access to quality maternal health care and hence increases risk</p> <p>In conflicts, women are exposed to violations such as rape, which compromises their health</p>
<p>6. Combat HIV/AIDS, malaria and other diseases Target: Halt and begun to reverse the spread of HIV/AIDS, malaria and other diseases</p>	<p>In disasters, young women struggling to survive may resort to behaviour that predisposes them to HIV infections</p> <p>During conflicts women and girls are sometimes raped and in the process contract sexually transmitted infections, including HIV/AIDS</p> <p>After disasters young men may migrate to urban centres to look for manual jobs. In the process they may engage in casual sex that promotes spread of HIV/AIDS</p> <p>Poor nutrition due to destruction of productive assets may lead to faster progression of HIV to AIDS</p> <p>Destruction of health facilities by floods or disruption of services by conflict may affect treatment of malaria and lead to increased death in endemic areas</p>
<p>7. Ensure environmental sustainability Targets: 7.1: Integrate principles of sustainable development into country policies and programmes, reverse loss of environmental resources 7.2: Reduce by half the proportion of people without sustainable access to safe drinking water. 7.3: Achieve significant improvement in lives of at least 100 million slum dwellers by 2020</p>	<p>Disasters in rural areas force more people to migrate to urban centres in search of alternative source of livelihood, increasing population of urban slums</p> <p>Floods destroy water and sewerage systems and undermine provision of clean potable water</p>
<p>8. Develop global partnership for development Targets: a. Fair trade b. Debt relief for least developed countries c. Increased official development assistance for LDCs d. Make debt sustainable for developing countries</p>	<p>Ethiopian economy is heavily dependent on agriculture. Disasters affect productivity and undermine gains that would be made from fair trade practices</p> <p>Debt relief may not translate into increased resources allocation for poverty reduction if disasters are frequent</p> <p>Multilateral and bilateral donors have more propensity to fund emergency response as opposed to risk reduction projects</p>

The Government of Ethiopia and the UN Country Team embarked on a process of translating the MDGs into the local context. An MDG Task Force comprising different ministerial offices and UN agencies was established to follow up and oversee the process. The conceptualisation process included examining the implications of the MDGs for the country from the perspective of context, past trends, prospects and resource requirements for their realization, and harmonization with existing policies, strategies and programmes and past performances.

Given the potential impact of disasters to derail attainment of MDGs, there have been concerted efforts to integrate disaster risk reduction in development planning and policies. Currently the *Hyogo Framework of Action 2005-2015* provides guidelines for actors at all levels to achieve this. The Framework was adopted at a world conference on disaster risk held in January 2005 in Hyogo, Japan. The theme of the *Hyogo Framework* is 'Building the Resilience of Nations and Communities to Disasters'.

The Framework was formulated on the basis of lessons learnt from a review of the *Yokohama Strategy* aimed at addressing its limitations or challenges.

Gaps in the *Yokohama Strategy* were identified in the following key areas:

- governance: organizational, legal and policy frameworks
- risk identification, assessment, monitoring and early warning
- knowledge management and education
- reducing underlying risk factors
- preparedness for effective response and recovery.

The Hyogo Framework addressed these key areas and made the following *Priorities for Action*:

- ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation
- identify, assess and monitor disaster risks and enhance early warning
- use knowledge, innovation and education to build a culture of safety and resilience at all levels
- reduce the underlying risk factors
- strengthen disaster preparedness for effective response at all levels.

Every disaster risk reduction issue or framework needs to refer their implementation strategy and viability to their possible linkage to the MDGs. It has been established by various studies that disaster reduction is a must for attainment of sustainable development. Positive correlation between disaster characteristics and human development variables always suggest that there should be a community-centred and proactive implementation mechanism to ensure development is sustained.

African Union / NEPAD initiatives

The Secretariat of the New Partnership for Africa's Development (NEPAD) and UNISDR organized the first *African Union Ministerial Conference on Disaster Risk Reduction* in Addis Ababa, Ethiopia, in December 2005. Over 150 participants from 40 countries, including Ethiopia, attended the conference, which aimed to promote greater political awareness on disaster risk reduction in Africa.

The conference concluded with the adoption of a *Program of Action* for the implementation of the *Africa Regional Strategy for Disaster Risk Reduction*. In the light of all the concerns in the continent, its aim is "to contribute to the attainment of sustainable development and poverty eradication by facilitating the integration of disaster risk reduction into development."

The Africa Regional Strategy for Disaster Risk Reduction objectives:

1. Increase political commitment to disaster risk reduction
2. Improve identification and assessment of disaster risks
3. Enhance knowledge management for disaster risk reduction
4. Increase public awareness of disaster risk reduction
5. Improve governance of disaster risk reduction institutes
6. Integration of disaster risk reduction in emergency response management.

Institutions that can play roles in the implementation and monitoring of the Strategy include AU/NEPAD, Regional Economic Communities (RECs), the Africa Working Group on Disaster Risk Reduction, national governments, civil society bodies, the private sector and international development partners.

Initiatives of the Government of Ethiopia

The Government of Ethiopia has developed a number of initiatives based on international and global movements to reduce extreme poverty. These include the *Poverty Reduction Strategy Program* (PRSP), which was replaced in 2001 by the *Sustainable Development and Poverty Reduction Program* (SDPRP; 2001-2004).

The biggest thrust toward considering the Hyogo Framework is the *Program for Accelerated and Sustainable Development to End Poverty* (PASDEP). PASDEP is a newly formulated plan for the period 2006 to 2010, replacing the earlier PRSP and SDPRP. The revised mandate of the Food Security Coordination Bureau (FSCB) was also intended to mainstream disaster risk reduction activities into national development programmes.

PASDEP is a policy plan which places more emphasis on growth through commercialised agriculture and non-farm private sector involvement. The agriculture sector suffers from recurrent drought, crop failures and livestock

losses. PASDEP is an attempt to reduce dependence on rain-fed agriculture by investing more in irrigation and export diversification and promotion, as well as strengthening livestock development. This five-year development plan aims to address the food needs of up to 15 million people and make them food secure by 2011.

