

Emerging trends in disaster management and the Ethiopian experience: genesis, reform and transformation

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Abstract

This paper aims to serve as a springboard for research in areas of disaster management in Ethiopia. While there have been critical issues that merit intellectual attention and resources, very little has so far been done in the area. This paper delved into the trajectories that Ethiopian disaster management has gone through. It reviews the checkered history of Ethiopian Disaster Management system (EDM) from circa mid-1970s. Having thrown some light on the lessons of experiences from other countries, it indicates the pitfalls EDM has recently faced, and suggests policy and institutional scenarios to overcome them.

Key words: disaster management, drought, pre-disaster action, post-disaster action, hazards, disaster, Ethiopian disaster management system, Ethiopia.

Introduction

Ethiopia is amongst the developing countries most vulnerable to natural and man-made disasters. Among others, drought induced famine, flood, landslide, crop-pests, infrequent earthquake and wars are the major triggering events that, over the past many years, have been causing suffering to communities and millions of dollar worth of property destructions. Drought induced famine has for many years been the worst disaster event from which millions of Ethiopians, mostly rural residents, experienced immense anguish and it still remains a national policy agenda and problem. Over the last three decades, Ethiopia learned the hardest way to transform its disaster management from a mere apparatus of response and recovery to preparedness, mitigation and development. Resources and technical (technological) capacities aside, Ethiopia now possesses a wealth of (drought) disaster management experiences.

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This paper consists of six sections. This section introduces the issues that this paper will discuss throughout, and briefly outlines the methods as well as the problems to be examined. The next section shades light on the major functions in the emerging field of disaster management (DM) thereby setting a stage for a more proactive and vibrant DM system. Intertwined with the great famine of 1973/74 and the establishment of the disaster management agency, Relief and Rehabilitation Commission (RRC), the third section explores the genesis of Ethiopian disaster management and its checkered history. The fourth section discusses the two momentous events that unfolded in the early 1990s, namely, the pronouncements of a national disaster prevention and preparedness strategy (1990) and a policy (1993), which heralded the reformation of the DM system in Ethiopian, of course, after a relatively long period of stagnation. The fifth section discusses the remarkable transformation that Ethiopian Disaster Management (EDM) system has achieved since the mid-1990s. It shades light on confluence of strong organizational establishments; relatively better policy and legal framework, international cooperation and carefully planned early warning system (EWS) that elevated it to a proactive stance. The last section encapsulates the major developments and trajectories of EDM system, and suggests scenarios for a more vibrant DM system in Ethiopia.

Method and objectives

Having drawn from historical and archival documents and the extant literature, the objective of this paper is to examine and reflect on the tortuous path that Ethiopia has gone through to transform its system of disaster management, chiefly its drought disaster management, since the mid-1970s. This article also aims to suggest policy and institutional mechanisms of reckoning with the prevailing problems of disaster management in Ethiopia.

The problems

For many years, a great deal of efforts and resources were wasted on post-disaster response, recovery and rehabilitation rather than

on pre-disaster preparedness and prevention measures. This has invariably caused immense loss of lives and human dislocation. Although the system of disaster management in Ethiopia seems to benefit from a paradigm shift in the field and lessons learned from several decades of experience, and there are still salient problems that EDM has to reckon with. Active partnership and collaborative relationship among actors in disaster management community appears to be lacking.

Moreover, almost all actors in the disaster management community have invariably been preoccupied with and investing heavily in drought disaster. In other words, actors in the realm of disaster management in Ethiopia pay little or no attention to other hazards (namely, crop pests, flood, disease epidemics, war, civil conflicts and traffic accidents) to which citizens are vulnerable. More generally, there has been little research, and even probably less has been written, on the problematic of the disaster management system in Ethiopia. This paper attempts to fill this gap.

Emerging trends in disaster management: a review of the literature

Disasters hit every part of the globe (developing and developed), causing deaths and destructions. Hurricanes, fire, earthquake, tsunami, flood, drought, volcanic eruptions, landslides, cyclones, wars, oil spills, acts of terrorism, just to name a few, are the natural and man-made disaster events that resulted in untold suffering to the millions of people worldwide. Apparently, most of the developing countries bear the brunt of natural disaster losses. Because of the considerably low coping capacity, physical, social and economic vulnerability developing countries are suffering more from disasters than developed ones. Globally, disaster losses have shown an increasing trend over the past decade. In 2007, for instance, natural disasters caused nearly 10, 000 deaths and over \$54 billion worth of losses worldwide².

² <http://www.unisdr.org>, United Nations/International Strategy for Disaster Reduction (UNISDR).

Global disaster statistics for 2000-2006 revealed staggering economic costs estimated at \$235 billion and 130000 lives lost (op cit). Drought and flood were the major disaster events that severely affected Africa accounting for 2.2 % of the global share of people killed by natural disasters (ibid). Currently, Asia is the world's most disaster-prone region, involving over 78 % of the total affected populations, 40 % of the deaths, and 48 % of the total economic losses (ibid).

Hence, acknowledging the fact that disasters pose threats to society and the economy, DM has increasingly been occupying center stage in public administration studies since the 1990s. Thus due mainly to the magnitude of losses caused by disaster, the threats could find substantive solutions through public policies. This gives disaster risk management prominence in public policy and administration. Furthermore, the private sector and non-governmental organizations, bilateral and multilateral organizations also played very important part in DM.

However, public administration neglected in considering DM within the mainstream of its activities (Kim and Lee, 1998). In fact, historically, DM was regarded as the responsibility of fire brigades and/or departments, law enforcement agencies with some support from NGOs, donor organizations and health care institutions. Historical accounts demonstrate that not only did most developing countries stay unprepared for calamitous losses, but also disaster management was perceived as a short-term relief undertaking that would only last till some time after a disaster situation (Indira Gandhi National Open University (IGNOU), 2006, Kim and Lee, 1998). Concerted measures undertaken by all concerned parties, government and non-government, in the pre and post-disaster phases of disaster management in mitigating the impact of disasters, tackling long-term vulnerabilities and coping with losses in the aftermath of a disaster were not included in the mainstream public administration activities.

It has now become clear that disasters inflict enormous human and property losses resulting in extraordinary burdens upon citizens experiencing them. It should therefore be the avowed purpose of government and its public administrative apparatus to protect life and property in circumstances of disaster. In charge of

protecting its citizens, not only it is necessary for a government to engage itself in disaster management actions, but it is also important to articulate national policy objectives to be able to integrate pre-disaster mitigation planning with post-disaster response and recovery.

Recent times have witnessed a growing body of literature and a relatively new as well as systematic approach to DM. There are a number of key concepts that should warrant attention. Disaster, hazard, vulnerability, disaster management, mitigation, preparedness, response and recovery, *inter-alia*, are basic concepts that quite frequently appear in this article.

Many scholars (Abrahams, 2001, McEntire et al, 2002, Australian Emergency Manual, 2004, Christoplos et al, 2001, IGNOU, 2006) in the field consider a *disaster* as the real time event that causes a serious disruption of normalcy resulting severe damage to life and property to an extent that the existing social and economic protection mechanisms may be inadequate to cope. Thus, not only does disaster signify features of threat, urgency and uncertainty, but it also presupposes special mobilization and organization of resources other than those legally mandated institutions (Abrahams, 2001, Australian Emergency Manual, 2004).

Hazards (natural or man-made) are potentially damaging/destructive events with a potential to cause loss of life and/or injury to human beings as well as damage or destruction to property. The definition attests to the fact that a hazard can turn to disaster only when communities and property are susceptible/vulnerable to losses due mainly to administrative and structural fallacies. For instance, the terrible recent earthquake that occurred in Sichuan province in China (2008) and the subsequent building collapses said to have stemmed from poor building structures, thereby resulting immense agony to the people. The 1973/74 and 1983/84 famines in Ethiopia that left millions of deaths, suffering and dislocation to the poor farmers in the country was mainly attributed to deficiencies in the systems of government administration that failed to put an early warning system in place. More generally, administrative malaise such as poor building structures in seismic zones, archaic land use and

relentless afforestation in drought and flood prone areas and low risk perception and/or absence of alert, informed and resilient public will lead to inherent hazards to disasters (IGNOU, 2006).

The aforementioned discussion brings *vulnerability* into light. Vulnerability is therefore the extent to which a community, structure, service or region is likely to be damaged or destroyed by impact of a particular disaster (ibid). There are many factors, physical and socioeconomic in nature, that determine the susceptibility of community to threats of disasters. Physical vulnerability arises from location vis-à-vis the hazard under consideration. Community living near flood plains or areas in that surrounding is as much vulnerable to flood disaster as people in drought regions (such as Ethiopia) are to famine. The same holds true to communities in Iran, Japan, Los Angeles, Turkey and some part of China who live in and around earthquake prone zones. The largest part of coastal areas of the US, the Caribbean and South Asia are also vulnerable to hurricanes and cyclones respectively.

Socio-economic vulnerability may even accentuate the suffering of the communities living in disaster prone areas. Obviously, developed countries possess more technological, resource and technical capacities to be able to cope with disasters than developed ones. For lack of viable alternatives most poor people in Africa, the Caribbean and South Asia live in disaster prone areas, and the communities that inhabit these regions suffer most when disasters strike. The experiences of some of the developing countries nevertheless showed that empowered, disaster-resilient and informed community coupled with determined political leadership preventing the full impacts of disasters. The Cuban (hurricane) disaster management system, for instance, time and again has demonstrated its competence in preventing and mitigating the casualties emanating from hurricane by effectively carrying out a system of popular mobilization and education (Sims and Vogelmann, 2002).

Disaster management is a public policy issue involving administrative decisions, programs and strategies oriented towards curtailing the impact of hazards and/or preventing their

occurrences by controlling vulnerability, ensuring the readiness of a community to take precautionary measures and establish an administrative apparatus that can effectively react to disasters as they occur with the required speed of response. Different nations used different style of institutional setup and organizations geared to their needs for the management of disasters. In some countries such as South Africa, India and Australia power is vested in local government institutions to pattern administrative structures and mobilize resources to be able deal with the functions of disaster management (Viljoen and Booysen, 2006; IGNOU, 2006). In others (such as Cuba, South Korea, Ethiopia) one finds meticulously organized structures from the center to small village level with some degree of autonomy and leverage in decision accorded to each level in the hierarchy (Sims and Vogelmann, 2002, Kim and Lee, 1998).

Different scholars and corporate authors discussed the four major functions of disaster management, namely, pre-disaster mitigation/prevention, pre-disaster preparedness, post-disaster response and post-disaster recovery (Zimmerman, 1985; Australian Emergency Manual Series, 2004; Abrahams, 2001; Sims and Vogelmann, 2002; Kim and Lee, 1998; IGNOU, 2006). The following discussion shall be based on the scholarly contributions of the above authors.

Pre-disaster measures:

- a. *Mitigation/prevention*: policy/regulatory and physical measures to preempt disasters aiming at ensuring that they are prevented and/or their effects are mitigated. Not only do prevention/mitigation measures reduce the impact of hazards, but also do they reduce the susceptibility and increase the resilience of the community vulnerable to hazards. For example, land use planning, agro-forestry, water-harvesting and food security programs in a drought prone country like Ethiopia could forestall potential famine. Dams and embankments in a potentially flood zones can prevent losses from floods. Apparently, precautionary engineering safety measures such as building design and building codes precautionary retrofitting
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measures in seismic zones prevent or mitigate losses in the event of earthquake.

- b. *Preparedness* assumes that community and property are vulnerable to hazards, and that preparedness will always be necessary to address the occurrences of hazardous events. It thus entails measures such as establishing emergency relief center, formulation of emergency plans in advance of disasters, training persons and vulnerable communities to be able to undertake rescue and recovery as and when disasters eventuate. Therefore, managerial and technical steps taken to minimize losses just before, during and after a disaster come within the envelope of preparedness.

Post-disaster actions:

- c. *Response* is preparedness in action, whereby actions are taken during and immediately after the impact of disaster that ensure the affected communities are evacuated from disaster zone, and are provided with emergency medical assistance, food, shelter, clothing. Search and rescue operations, concerted and coordinated actions taken to alleviate the suffering of the victims and speed of responses along the lines expected are indeed the acid tests of the administrative machinery put in place during and immediately after disaster.
- d. *Recovery* spans from activities pertaining to damage assessment and debris clearance to actions undertaken to support victims to get back to normal life and reintegrating them to regular community functions. Attempts to restore normalcy also includes provision of temporary employment and regaining of lost livelihoods, psychosocial rehabilitation of traumatized community, replacement of buildings and infrastructure and lifeline facilities.

A genesis of a system of disaster management: 1974-1989

Of all the hazardous events, drought has over many centuries triggered famines that caused human losses of catastrophic proportions in Ethiopia. Although the country experienced its first

drought-induced famine in the second half of the 9th Century, recorded history confirmed that recurrent famine coupled with disease epidemics claimed many lives and caused internal displacements unabated since the 13th century (Pankhurst, 1983, Relief and Rehabilitation Commission [RRC], 1984). In 1973/74, Ethiopia experienced one of its worst famines that claimed more than a quarter of a million lives and affected more than three and half million people in almost ten administrative provinces of the country (RRC, 1984). Pastoralists also lost 80 % of their herds (ibid). Not only did it make headlines in the international media for several months, but also did it become the most salient immediate cause of the downfall of Haleselassie's government in 1975. On a positive note, the international media contributed immensely in attracting humanitarian relief supplies for the millions of affected people.

The genesis of EDM system should therefore be associated with the 19973/74 famine and the establishment of Relief and Rehabilitation Commission (RRC). On August 29, the defunct Emperor issued Order No. 93/1974 to establish a government agency (RRC) whose immediate responsibilities included mobilizing relief resources from domestic and international sources and providing the same to areas affected by drought. Apparently, RRC accorded Wollo and Tigary, the northern administrative provinces most affected by the 1973/74 famine, top priority for its emergency operations. Although the legislation conferred RRC enormous responsibilities of dealing with all natural disasters (flood, fire, whirlwind, drought, earthquake) (Order No. 1973/74), meeting the challenges of 1973/1974 happened to be intractable for the new agency. Lacking advance preparedness and experience, RRC was overwhelmed with the huge task of relief operation and reaching out affected people by the famine, let alone undertaking long-term prevention and rehabilitation as stipulated in the legislation. Mobilizing domestic relief resources, organizing humanitarian supplies from abroad and undertaking relief and rehabilitation measures disproportionately took time and resources.

Exactly ten years after the first great famine in recent history, another drought-induced famine struck in 1983/84. Not only did

it affect eight million people in the entire country, but also it left an estimated million people starved to death. More particularly, famine took its heavy toll on highland farmers and lowland nomadic population. Lacking in advance preparedness and contingency plans, RRC found itself still groping in the dark. With the exception of some early warning that would alert the UN agencies and donor community, RRC did not succeed in putting in place a preparedness plan (People's Democratic Republic of Ethiopia [PDRE], 1989). Absence of coordinated and integrated prevention, preparedness and response effort between central government and local government institutions on the one hand, and RRC and line ministries on the other were the major predicaments facing the EDM system (PDRE, 1989). Lack of organized information system and planned logistical support undermined the post-disaster response and recovery efforts of the agency (ibid), let alone thinking strategically towards mitigation and preparedness measures. This trend continued till 1989. During the period from 1974 to 1989, therefore, the disaster management machinery in Ethiopia heavily invested in response and recovery rather than in preparedness and prevention.

There are two major reasons suggesting why a lot more effort was put into response and recovery than into prevention/mitigation and preparedness. Primarily, disaster management has since 1990 been evolving as a systematic body of knowledge. As integral part of the multidisciplinary field of public policy and management, disaster management is no longer a piecemeal strategy, but has turned out to be an integrated process and approach that seeks to develop strategic partnership among domestic and international actors (IGNOU, 2006; Abrahams, 2001). It is also a comprehensive approach embracing strategies in prevention/mitigation, preparedness, response and recovery. The developments over the previous decade and half thus attested to the fact that disaster management achieved a paradigmatic shift laying more emphasis on pro-active approach to mitigate losses, if not eliminating the chances of destruction. In other words, it was towards the last decade of the last century that the knowledge and experiences accumulated pertaining to disaster management achieved a paradigm shift. Nevertheless, given the time period

under consideration, this had little of an impact on the EDM system.

Second, the 1973/74 famine precipitated the establishment of the machinery of disaster management, namely, RRC. The latter was hastily set up to organize and coordinate government's relief and rehabilitation measures for the millions of people affected by the famine. The awkward manner in which RRC was created, the magnitude of tasks (reaching out millions of victims, inexperienced and unprepared staff, archaic government bureaucracy with little skills in sheltering victims, warehousing, stockpiling and emergency operations), the rampant corruption inherent in the administrative system and absence of a clear policy and/or legal framework had all operated to undermine disaster management efforts. A tumultuous social and political milieu coupled with a series of disaster situations never allowed sufficient breathing space to look towards a coherent, integrated and comprehensive DM system. The arrival of another famine in 1983/84 made the work of the agency (RRC) all the more intractable.

Ethiopia might have established the machinery of disaster management probably much earlier than some disaster prone regions in South Asia. However, partly because the field of disaster management had yet been in its formative stage, and partly also because the inauspicious context in which the disaster management agency (RRC) operated made the system substantially reactive from 1974 to 1989. However, this period witnessed the genesis of the system of Ethiopian disaster management, *albeit* it stagnated for more than ten years with the learning curve declining steadily.

Period of reformation: 1990-1994

The period from 1990 to 1994 marked a breakthrough in the history of EDM. One was in 1990 and another in 1993 both of which epitomized the beginning of the transformation of EDM. Prior to that, the then government of Ethiopia (People's Democratic republic of Ethiopia-PDRE) called a national conference in 1988 that drew its participants from major national

decision makers, national and international experts and distinguished researchers. The eventual outcome of the conference was solid and prolific recommendations for a national disaster prevention and preparedness strategy that culminated in a comprehensive National Prevention and Preparedness Strategy in March 1990. The latter articulated strategies and plans geared towards avoiding, preventing, providing effective response and recovery plans to deal with drought and other disasters that Ethiopia has been experiencing frequently.

The document acknowledged the multidimensional deficiencies inherent in the system of DM in Ethiopia in the previous fifteen years, underscored the need to re-orient line ministries towards integrated actions, detailed the mandates and responsibilities of RRC ranging from planning for sufficient food reserves to putting strong logistics in place to be able to make effective response in the event of disaster to collating and disseminating information useful for national early warning system (NEWS). The latter included establishment of a network of relationships with regional entities, international organizations and relevant UN agencies. Taking other bold measures to prevent/mitigate disaster losses were also amongst the responsibilities outlined in the strategy document. It also laid a stress to the importance of dovetailing disaster prevention, preparedness, response and recovery plans with long-term development policies and programs of the country (PDRE, 1990: 1-2). At any rate, the national disaster prevention and preparedness strategy was indeed a departure from past disaster management policies and practices, although the regime that sponsored it was toppled over in May 1991, i.e., nearly a year after it was officially proclaimed.

These developments nevertheless marked the end of the beginning of the obsolete/archaic disaster administrative system that committed resources to post-disaster response and rehabilitation.

In October 1993, the Transitional Government of Ethiopia enacted a Disaster Prevention and Management policy thereby marking a second phenomenal event in the reformation of EDM towards mitigation/prevention and preparedness. The policy

underscored the importance of integrated actions to mitigate and/or prevent the root causes of drought disaster to which Ethiopians have repeatedly been vulnerable (Transitional Government of Ethiopia, 1993). After having recognized the ineffectiveness of past DM system in factoring disaster prevention and preparedness into long term development effort, the policy set out objectives that emphasized prevention and preparedness plans, mapped out actions that should be taken in mobilizing resources in times of normalcy and underscored efforts that would enhance community capabilities and resilience when disasters eventuate (ibid, 3-4). Not only did it provide principles and policy directions for disaster prevention and preparedness, it also established National Disaster Prevention and Preparedness Committee (NDPPC) having the ministers of key line ministries and leaders of regional governments as its members. The establishment of NDPPC and its composition would certainly demonstrate the priority that government accorded to disaster prevention and preparedness, and its commitment to systematizing disaster management. A national program for disaster prevention/mitigation and preparedness that established institutional and resource base for the execution of the policy was also issued in November 1993. Both the Program and the Emergency Code, which was enacted in the same year, contributed towards streamlining implementation schemes and structures down to *kebele*³ levels.

Thus, early 1990s witnessed institutional and legal reformations heralding the awakening of EDM system. The latter has, nevertheless, not gone much beyond reactive remedial actions and limited preparedness measures to meet the plight of communities suffering from drought, war and civil conflicts. In other words, a lot more would still remain to be done to transform the EDM towards proactive, integrated and coordinated preparedness and prevention institutional apparatus.

Period of transformation: 1995-2008

The policy framework

Ethiopian constitution requires government to take long-term preventive measures to avert natural and man-made disasters, and

³ *Kebele* is the smallest unit of local government in Ethiopia.

effective response measures to alleviate the suffering of communities affected by disasters (Federal Democratic Republic of Ethiopia [FDRE], 1995). Relief and Rehabilitation Commission (RRC) was renamed Disaster Prevention and Preparedness Commission (DPPC) by Proclamation No. 10/1995. The latter lays the legal framework for modern disaster management that places premium on formulating strategies towards prevention and risk reduction measures; while at the same time laying stress on a coordinated and concreted effort towards relief and recovery (ibid). In brief, the legislation seeks:-

1. to prevent disasters (particularly, drought induced famines) by targeting the basic causes which ensue them
2. to build resource, managerial and institutional capacity well in advance of disasters, so much so that the magnitude of destruction that disasters are likely to result can be mitigated
3. to put the necessary logistics (for response as well as recovery) in place to be able to alleviate suffering during and immediately after disasters

Drawing from ministers of key government ministries (Agriculture, Finance, Health, Defense, Economic development and Cooperation, Public and Urban Development and the Commissioner of DPPC) the legislation also established a National Disaster Prevention and Preparedness Committee (NDPPC). Among others, Proclamation 10/ 1995 empowers the latter to ensure that disaster prevention programs are integrated into the country's long term development policies, to authorize expenditures for disaster prevention, preparedness, response and recovery as situations demanding them arise, and to declare a state of emergency in the event of disaster. The organizational establishments created at the national level were also paralleled by similar entities at regional and local levels in the entire country. The policy and legal framework coupled with the institutional mechanisms created at all levels in the country, with a lot more investment in prevention and preparedness than ever before, attest to the fact that remarkable transformation has indeed

been introduced into the system of disaster management in Ethiopia.

Drought disaster management

With 85 % of the life of the population rooted in agriculture, the predominantly rural Ethiopian society has often been experiencing famine due to periodic crop failures in the highlands and losses of livestock in lowlands. Accounting for 85 % of the country's export revenue and half of the gross domestic product, agriculture is the mainstay of the economy (FDRE, 2006). Poignantly, Ethiopia has been hit by drought almost every year for well over half a century affecting millions of people. Not only has drought debilitated the economy, but it also made Ethiopia one of the most food insecure countries in the world.

Since the mid-1970s, there has rarely been any year in which drought has not revisited Ethiopia. In fact, some of the drought-induced famines were even severely affecting millions of people so much so that famine is automatically associated with Ethiopia. However, the DM system appeared to have been transformed more towards prevention and preparedness than it used be. The experiences accumulated over several decades seem to propel disaster management to a much higher level than before. Primarily, the policy framework and institutional establishments set the stage taking disaster management in Ethiopia to a greater height. Second, the commitments to integrate disaster prevention and preparedness plans with long-term development policies have added different and higher dimensions to disaster management system in Ethiopia. The policies and institutions worked towards vulnerability reduction in drought prone areas through early warning system, food security programs and related measures that target the root causes of drought. Among others, the following are some of the bold and remarkable measures that have been taken since 1995 thereby marking the transformation of disaster management.

Organizational/institutional structures for coordinated and concreted actions stretched from national level to local levels. The decentralized system of government administration put in place

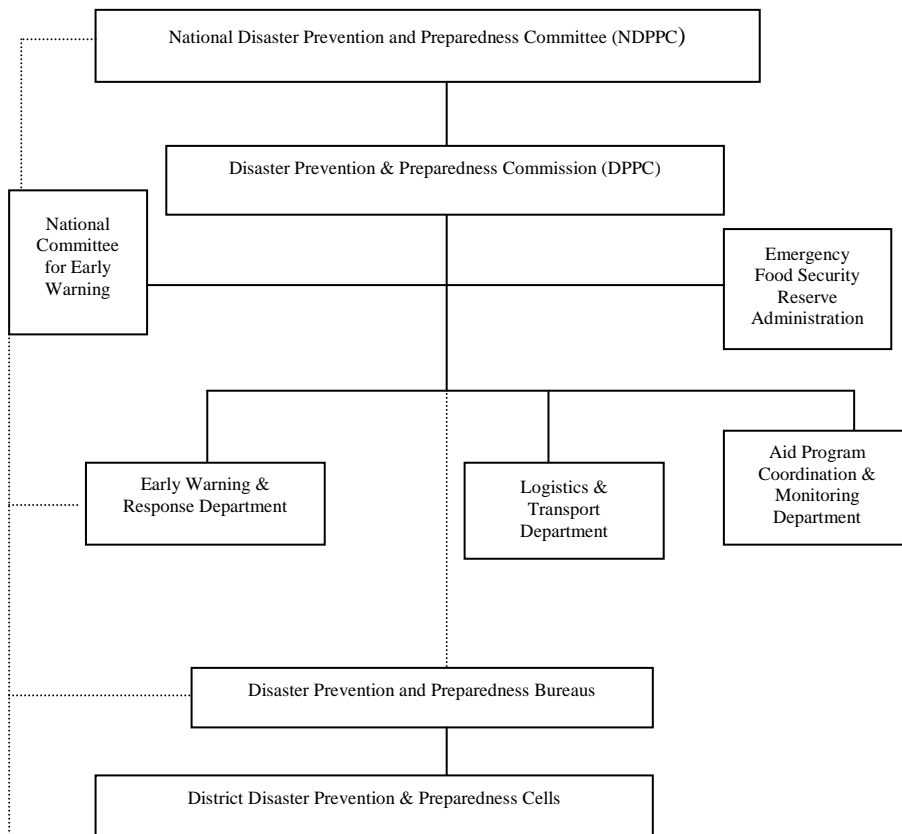
sine early 1990s offers opportunities for regional and local governments to attend to local needs in terms of food security monitoring; early warning and emergency need assessment (DPPC, 1998). The National Disaster Prevention and Preparedness Committee (NDPPC) is on top of the national disaster management structure overseeing disaster prevention, preparedness and response (DPPR) plans and operations, declares a state of emergency as and when the situation calls for and provides policy guidelines for program of actions pertaining to DPPR (see Figure 1.).

The steering wheel of the national disaster management system in Ethiopia is DPPC. It coordinates government, donor and NGOs work on DPPR; mobilizes resources from both domestic and international sources; manages national food reserves; proposes policy and program of actions to be deliberated as well as sanctioned by NDPPC; and provides logistics (for response and recovery), as well as advisory and technical support to disaster prevention and preparedness bureaus (DPPBs) operating at regional level. The latter also carry out similar activities in respective regions, while reporting progresses, deficits and achievements to the DPPC. The leaders and experts of DPPC ensure that coordinated and concerted actions are taken with DPPBs through intensive information exchange and quarterly meetings with the heads of the latter. The DPPBs organize, collate and disseminate early warning information, and closely work with NGOs working in the area, monitor and evaluate their projects and follow-up the execution of disaster prevention, preparedness and response (DPPR) plans, programs and policies (ibid). At the lowest level, Woreda Disaster Relief Cells (WDRC) have been instituted to streamline administrative measures that ensure the implementation of DPPR policies and plans. At this level, community participation is also called for, although a lot more still remains to be done to take the initiative forward towards community-based disaster management.

The organizational establishments and their structures have generated favorable ground for coordinated post disaster response and recovery actions among different actors (government, NGOs and donors).

The preparedness measures such as the early warning system, the Emergency Food Security Reserve Administration (EFSRA), the National Prevention and Preparedness Fund (NPPF) and the logistics system whereby medical and food aid are stockpiled and distributed could probably be one of the best in Africa.

Early warning system is a very critical component of post-disaster preparedness. Not only does DPPC have a separate department devoted to EWS, but also it serves as a secretariat of National Committee for Early Warning (NCEW). Operating under the auspices of the national disaster management agency (DPPC), NCEW is a multi-agency establishment whose members include Ministry of Health, Ministry of Agriculture, Central Statistical Authority, Ethiopian Mapping Authority, National Meteorological Services Agency, Ethiopian Nutrition Institute. The Ethiopian early warning system is one of the oldest in Africa (Teshome, 2005) that was set up following the 1973/74 famine, although early warning information and indicators are entirely geared to drought hazard. In other words, organized primarily to address the problems stemming from climatic abnormalities that have direct influence on food production, food availability and pastures for livestock grazing, the principal purpose of EWS in Ethiopia has often been geared towards predicting food situation in the country and offers predictions about the likelihood of emergency situation.

Figure 1: The National Disaster Management System (1995-2008)

Source: Charted by the author based on the archival documents of DPPC (now Disaster Management and Food Security Sector)

In any case, most of the early warning indicators pertaining to drought in use in the other parts of the world where similar hazards are endemic have originally been developed and tested in Ethiopia (Teshome, 2005: 10). Lautze wrote:

The DPPC has developed a fairly credible EW system for crop producing areas and has predicted, on a number of occasions, disaster well advance (e.g., 1984/85, 1992, 1994/95, 1999/2000, and 2002/2003). In recent years, ... its information has induced government, donor, UN and NGO humanitarian responses on an adequate scale to prevent the mass migration of vulnerable people to famine shelters, thereby avoiding the worst of the famine images that were once synonymous with Ethiopia (2003: 14).

Early warning committees for collating, organizing and disseminating early warning data/information have also been established in all regions down to *woreda*⁴ and *kebele* levels. The establishments at all levels have been very effective in terms of generating up-to-date pre-harvest and post-harvest data, information in the pastoral lowland regions and predicting impending drought induced famine disasters.

Additionally, following the recommendation of FAO in 1990, a food reserve of 205,000 tons intending to provide food, in case of emergency, for an estimated drought vulnerable population of 4.2 million for nearly four months has since 1992 been established (DPPC, 1993, 1998). As integral part of post-disaster preparedness scheme, the EFSRA managed to stockpile food reserve to the level of 307, 000 metric tones (MT) in 1998 that appeared to have arrested what would become a major human catastrophe in 1999/2000. Administered by government appointed national board and drawn from earnings of government, NGO and donor fund sources, NPPF chiefly offers a reservoir of financial outlay for both pre-disaster prevention and post-disaster emergency and response measures. Furthermore, DPPC operates a fleet of transport tracks that are able to provide relief cargo from port of origin to main warehouses and from the latter to different distribution sites. NGO and UN transport fleets have also been supplementing transport deficits that occur between ports, warehouses and distribution centers (DPPC, 1998: 8). All in all, warehouses, transport, procurement, inventory, information networks and related logistical facilities are put in place, although these are often found to be insufficient compared to an estimated 4.5 to 5 million people facing the risk of drought disaster annually in Ethiopia (FDRE, 2006).

Over the past half a century, there have been legions of factors that contribute to recurrent drought disaster in Ethiopia. Deficit rainfall, prolonged high temperatures, strong winds, high rates of evaporation and relatively low humidity characterize drought (Workeneh, 1989: 39). Drought can also be explained in terms of phenomena/events that might characterize it; namely,

⁴ *Woreda* is the most basic unit local government institution above the *Kebele*.

hydrological or agricultural drought. While the former demonstrates phenomena where a prolonged absence of rainfall results in the lowering of stream flow, depleting soil moisture and fall in ground water that disrupts water supply, agricultural drought stems from seasonal rain failure and thus unable to furnish the soil with moisture causing substantial reduction in crop yields or total loss (Melaku et al, 1997: 2). Ethiopia has for many years suffered from both. Increasing population pressure on land, coupled with associated overgrazing, soil erosion and removal of vegetation cover and other forms of poor land use have caused the vulnerabilities of Ethiopian communities to drought hazard.

The pre-disaster prevention and/or mitigation policies and measures should therefore address aforementioned problems. Studies suggested that only with a conservation-based long term development programs, incorporating family planning, environmental protection, agricultural and livestock development and sound land use management will Ethiopia avoid becoming a country of enduring drought disaster (Mesfin, 1989: 12; McCann, 1989: 38; Teshome, 2005: 10).

Since the mid-1990s, most of government's major development policies and programs seriously considered drought and provided policy scenarios to come out of the vicious cycle of drought hazard. Among others, Ethiopia's two major development policies, Sustainable Development and Poverty Reduction Program (SDPRP) and its sequel a Plan for Accelerated and Sustained Development to End Poverty (PASDEP) have squarely concentrated on from medium to long-term prevention measures. Launched in 2002 and 2006 respectively, each has articulated sound development objectives that link disaster management to the country's macro development programs. To help reduce community's vulnerability to drought hazard in mainly drought prone areas where intermittent or inadequate rainfall has for many years been common, government, NGOs and donors have relentlessly been working towards improving water resource development and utilization, natural resource protection and agricultural technology (FDRE, 2002: 56; FDRE, 2006: 6-7). Issued in 1996 and revised in 2002, Ethiopia's Food Security

Strategy (FSS) is also a critical element of pre-drought disaster prevention program. It seeks to attain food security for an estimated population of five to ten million people who are either chronically food insecure or who would be affected by food shortages in case of drought (FDRE, 2006: 6). Additionally, Productive Safety Net Program that targets communities in drought prone regions in terms of grants to the regions to be used for enhanced agricultural production packages (seeds and extension), small-scale irrigation and water harvesting, and voluntary resettlement out of food insecure areas appeared to have benefited millions of people over the past five years.

In all, having learned from past predicaments of DM, the government wasted little time in reorganizing the agency (which included renaming it as DPPC/A that corroborates with the momentous actions), designed new programs and projects to implement the national policy on Disaster Prevention and Preparedness. Not only did it fit the DM plans and strategies with the country's major development policies and programs, an early warning system that particularly aimed at averting drought and/or mitigating the magnitude of losses should one occur has since 1995 been put in place. Government's actions and measures on both organizational and policy fronts demonstrate its commitments never to make the grave errors that its predecessors committed. From 1995 onwards policy, strong and coordinated organizational establishment that benefited from international cooperation and carefully planned early warning system (EWS) were brought into powerful confluence in the realm of Ethiopian Disaster Management system.

Concluding remarks: towards a more vibrant disaster management system in Ethiopia

This paper, in preliminary way, examines the trajectories that EDM has passed through over the past many years. Apparently, 1974 to 1989 a disproportionate share of disaster management efforts was exerted on response, recovery and rehabilitation (reactive stance). In other words, DM system in Ethiopia had for well over a decade hibernated in its traditional form of relief and rehabilitation. The prevailing volatile situation in the country

coupled with the series of famines the country was experiencing did not permit the slightest breathing space to think strategically. In addition, the developments in field of DM was yet in its rudimentary stage to be able to make integrated, comprehensive and effective administrative and policy responses that aimed at integrating pre-disaster strategies (mitigation/prevention and preparedness) with post-disaster response and recovery actions.

The period from 1990 to 1994 was a defining moment in the history of disaster management in Ethiopia. Capitalizing on a relatively well organized national conference that drew its participants from major national policymakers, national and international experts in disaster management and distinguished scholars, the *Dergue's* regime that was renamed People's Democratic of Ethiopia came up with a national prevention and preparedness strategy in March 1990, although it did not live to see the implementation of the strategy it had sponsored.

No sooner than it was in the mantle of power, the Transitional Government of Ethiopia issued a national Policy on Disaster Prevention and Management. Ostensibly, the latter was the second phenomenal event that marked the reformation of DM system in Ethiopia in this period. The period also marked

Table 1: Milestones in the disaster management system in Ethiopia, 1974-2008

Activities	Year
Order No. 73/1974 established the disaster management agency, RRC	1974
Early Warning System (EWS) get underway	1976
Proclamation No. 173/1979 empowers RRC expanding its mandates to include resettling vulnerable people out of drought prone areas	1979
A big national conference deliberated on national disaster prevention and preparedness strategy	1988 and 1989
Government launched National Disaster Prevention and Preparedness Strategy	1990
Transitional Government of Ethiopia (TGE) issued Disaster Prevention and Management Policy, Emergency Code for Ethiopia and National Program for Prevention and Preparedness generating favorable milieu for a series of reforms in the system of DM	1993
Policy/legal framework put in place setting a stage for a transformed disaster management system (the 1995 Constitution and Proclamation No. 10/1995)	1995
Government launched a series of development programs that concentrate more on disaster prevention and vulnerability reduction.	2002 (SDPRP) 2006 (PASDEP)
DPPC lost its 'autonomy' and brought under the Ministry of Agriculture and Rural Development, and re-named Disaster Management and Food Security Sector	2008

Source: Compiled from the archival sources of DPPC

the end of the beginning of the obsolete disaster management system that wasted resources into post-disaster response and rehabilitation.

Finally, informed by emerging trends and the paradigm shift in the field of disaster management and lessons learned from several decades of experience, government actions and policy measures

have since 1995 demonstrated that drought disaster management in Ethiopia has remarkably been raised to a much higher level. The relatively favorable policy framework, institutional establishments and the commitments to integrate disaster prevention and preparedness plans with long-term development policies have substantially transformed disaster management system in Ethiopia from reactive to proactive stance. 1995-2008 witnessed a transformation of EDM system from traditional relief and rehabilitation to a new focus on mitigation/prevention and preparedness.

However, over the previous three and half decades, drought disaster has monopolized government and donor attention in Ethiopia. Government, NGOs and donors have therefore been preoccupied with and investing more heavily in drought disaster than any other disaster in history. Given the magnitude of people being affected by drought (i.e., estimated 4.5 to 5.5 million people) annually, one would probably not be surprised to see such extraordinary attention and priority accorded to drought hazard. Hence, the manner in which institutional establishments are patterned and structured, early warning data are collated and systematized are absolutely geared to drought disaster. The major development policies and programs are entirely oriented to none other than drought disaster as well.

It is needless to say that the manner and contexts in which institutions are set up, techniques such as early warning system is put in place and personnel are trained and community are alerted abundantly showed that Ethiopian disaster management is invariably unresponsive to other hazards other than drought. This has become a cause of concern among disaster management community for many years now (Melaku et al, 1997: 11; RRC, 1994: 29-32; DPPC, 1998: 24). Crop pests, flood, infrequent earthquake, volcanic eruptions, landslides, disease epidemics (such cholera, HIV/AIDS), war, civil conflicts and traffic accidents are the commonest natural and man-made hazards that Ethiopian disaster management has to reckon with.

In fact, the community's vulnerability to such hazards as crop pests, flood, disease epidemics, war, civil conflicts and traffic

accidents are so enormous that the disaster management system should be reconfigured to build a single set of managerial and institutional capacity on **all hazards approach** basis to be able to deal with natural and man-made hazards and/or disasters. Furthermore, prevention/mitigation planning, sufficient preparedness, and efficiency in terms of speed of response in the event of disaster hinges on ensuring all relevant actors-government, donors, NGOs, citizens-are brought on board as prepared disaster community. In Ethiopia, much has been done along this line over the past decade, yet a lot remains to be achieved. As it stands now, the long standing uneasy relations between government and the NGOs has still continued. This has also long been the cause of concern among disaster management community in Ethiopia. It is, therefore, worthwhile to seek integrated and coordinated actions that comprehensively target at all disaster management functions (prevention/mitigation, preparedness, response and recovery) so much so that active partnerships among actors in the disaster management community can bear fruit.

Furthermore, the disaster management agency in Ethiopia-DPPC-which operated as an autonomous entity for well over three decades has lately come under the Ministry of Agriculture and Rural Development; a ministry that has assumed enormous responsibilities of executing a plethora of rural development policies and programs. The thrust of this recent government action has also become a source of grave concern, for years of experience have shown that the disaster management system in this country merits very special attention with a separate establishment in place.

The way forward shall thus be building a more vibrant and *autonomous* disaster management system, that should be established upon the active partnership of all relevant actors (*integrated approach*), a system that should persevere in embracing strategies in prevention (mitigation), preparedness, response and recovery (*a comprehensive approach*), and a system of DM holistically devoted to both drought and non-drought hazards (*all hazards approach*) that have potentially been threats to the community and its assets in Ethiopia.

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