



INDIRA GANDHI NATIONAL OPEN UNIVERSITY
(IGNOU)

SCHOOL OF CONTINUING EDUCATION

Thesis

on

The contribution of NGOs in Building Disaster Resilient Community
through Community Managed Disaster Risk Reduction (CMDRR) *The
case of Rayitu Woreda, in Bale Zone of Oromia Region*

By: Birhanu Yimam Amedie

May, 2015

Addis Abeba-Ethiopia

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For the Partial Fulfillment of:

Master of Arts degree in Rural Development (MARD)

By: Birhanu Yimam Amedie

May, 2015

Addis Abeba-Ethiopia

DECLARATION

I hereby declare that the dissertation entitled THE CONTRIBUTION OF NGOs IN BUILDING DISASTER RISK REDUCTION THROUGH COMMUNITY MANAGED DISASTER RISK REDUCTION (CMDRR), THE CASE OF RAYITU WOREDA IN BALE ZONE OF OROMIA REGION submitted by me for the partial fulfillment of the M.A in Rural Development to Indira Gandhi National Open University, (IGNOU) New Delhi is my own original work and has not been submitted earlier either to IGNOU or to any other institution for the fulfillment for any course of study. I also declare that no chapter of this manuscript in whole or in part is lifted and incorporated in this report from any earlier work done by me or others.

Place: Addis Abeba-Ethiopia

Signature: _____

Date: May, 2015

Enrolment No.: 089132670

Name: Birhanu Yimam Amedie

Address: Tel. 0911314898

Addis Abeba-Ethiopia

CERTIFICATE

This is to certify that Mr. Birhnau Yimam Amedie student of M.A (RD) from Indira Gandhi National Open University, New Delhi was working under my supervision and guidance for his Project Work for the course MRDP-001. His Project Work entitled THE CONTRIBUTION OF NGOs IN BUILDING DISASTER RISK REDUCTION THROUGH COMMUNITY MANAGED DISASTER RISK REDUCTION (CMDRR), THE CASE OF RAYITU WOREDA IN BALE ZONE OF OROMIA REGION which he is submitting, is his genuine and original work.

Place: Addis Abeba-Ethiopia

Signature: _____

Date: May, 2015

Name: Dr Milkessa Wakjira

Address: Addis Abeba-Ethiopia

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ACRONYMS

AU	African Union
BPR	Business Process Reengineering
CMDRR	Community Managed Disaster Risk Reduction
DCA	Dan Church Aid
DFID	Department for International Development
DG-ECHO	Directorate General-European Commission Humanitarian Aid and Civil Protection Office
DRM	Disaster Risk Management
DRM-FSS	Disaster Risk Management- Food Security Sector
DRR	Disaster Risk Reduction
EPRDF	Ethiopian People Revolutionary Democratic Front
EW	Early Warning
FEWSNET	Famine Early Warning Systems Network
FSNWG	Food Security Nutrition Working Group
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GTP	Growth and Transformation Plan
HFA	Hyogo Framework for Action
HH	Household

HoA	Horn of Africa
IIRR	International Institute for Rural Reconstruction
MFI	Micro-Finance Institutions
MoFED	Minister of Finance and Economic Development
NGO	Non-Governmental Organization
OECD	Organization for Economic and Cooperation Development
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PDRA	Participatory Disaster Risk Assessment
PMEL	Participatory Monitoring, Evaluation and Learning
PRA	Participatory Rural Appraisal
SDPRP	Sustainable Development and Poverty Reduction Program
UNDP	United Nations Development Program
UN-ISDR	United Nations International Strategy for Disaster Reduction
USAID	United State Agency for International Development
USD	United State Dollar

ABSTRACT

This study was conducted to identify how Community Managed Disaster Risk Reduction (CMDRR) project implemented by NGO contributed on Building Drought Resilient Community. The study was done in Rayitu Woreda of Bale Zone, Oromia Region. Single Case (embedded) Unit Design was used whereby the study case was the CMDRR project in drought prone community context having the implementing organization, local stakeholders and project beneficiary community as the embedded unit of analysis. Theoretical proposition strategy with pattern matching and rival explanation analysis techniques were employed for data analysis and interpretation.

The studied community has gone through five different stages of the task achievement dimensions of the CMDRR process starting from PDRA till PMEL. Before going through these five main steps community organization, CMDRR Committee, responsible to lead the CMDRR process was established in each of the three studied Kebeles. With the leadership of this CMDRR committee drought risk reduction measures were planned and implemented with the financial support of the project. Among others, Improved DRR capacity of the community through construction of water resources, rehabilitation of grazing land, behavioral change towards efficient utilization of available natural resources (*water, rangeland and livestock*) and engagement on adaptive measures including cultivation of cash crops were the main output of the CMDRR project. The CMDRR project implemented by DCA has contributed immensely in revitalizing the community's existing capacity.

Key words: Disaster Risk Reduction, Community Managed Disaster Risk Reduction, Participatory Disaster Risk Assessment, Single Case (embedded) Unit Design

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1. INTRODUCTION

1.1 Background of the Study

Disaster loss is on the rise with grave consequences for the survival, dignity and livelihood of individuals, particularly the poor, and hard-won development gains. Disaster risk is increasingly of global concern and its impact and actions in one region can have an impact on risks in another, and vice versa. (*UN-ISDR, 2012*) This, compounded by increasing vulnerabilities related to changing demographics, technological and socio-economic conditions, unplanned urbanization, development within high-risk zones, under-development, environmental degradation, climate variability, climate change, geological hazards, competition for scarce resources, and the impact of epidemics such as HIV/AIDS, points to a future where disasters could increasingly threaten the world's economy, and its population and the sustainable development of developing countries. In the past two decades on average more than 200 million people have been affected every year by disasters. (*UN-ISDR, 2005*)

Ethiopia after the replacement of the Derg regime by EPRDF in 1991 has made tremendous efforts and success in terms of promoting the country in tackling the country's major enemy, deep poverty. This was achieved through different successive planned development policies namely Sustainable Development and Poverty Reduction Program (SDPRP) which covered 2002/3-2004/5, Plan for Accelerated and Sustained Development to End Poverty (PASDEP) which covered 2005/6-2009/10 and currently through five year Growth and Transformation Plan (GTP) starting from 2010. According to the Government of Ethiopian (GoE) official report, a remarkable achievement on economic growth, social development and good governance had been done during this development planning periods. The economy grew at a real annual average rate of 11% between 2005-10, poverty levels declined sharply, from 38.6% in 2004/05 to 29.2% in 2010 (*MoFED, 2010*).

Yet this development process has been and is still challenged by different natural and manmade hazards whereby drought is taking the highest percent of the contribution, more than 90% (*UNISDR, 2012*). Moreover, the frequency of drought has shortened from every ten years before decades to 2-3 years recently.

According to the UNISDR recent report, economic losses due to disaster will continue to increase. Since 1981, economic loss from disasters is growing faster than GDP per capita in the OECD (Organization for Economic and Co-operation Development) countries. This means that the risk of losing wealth in weather-related disasters is now exceeding the rate at which the wealth itself is being created (*UNISDR, 2011*). It has been estimated that for every 1 USD spent on disaster risk reduction saves 3 USD in terms of the reduced impact of disasters. (*Benn, 2006*)

In Ethiopia an increase in frequency and level of natural disasters caused by the unfavorable effects of climate change and more recently, the steady rise in staple food and fuel prices - as a result of the international economic crisis have added to the wide range of humanitarian challenges faced by the country. Farmers and pastoralists in many drought-prone areas have become dependent on humanitarian relief and food aid.

The approach of GoE in handling disaster was a conventional one and kind of an ad-hoc emergency response before 4-5 years ago. In 2008 the Ministry of Agriculture and Rural Development was inspired by the Hyogo Framework for Action (HFA) to undertake a Business Process Reengineering (BPR) which changed the focus from reactive crises management to a comprehensive and proactive Disaster Risk Management approach. A new institutional structure called Disaster Risk Management and Food Security Sector (DRM-FSS) within the Ministry was established to implement the new approach. DRM-FSS adopted the full cycle of disaster risk management (DRM), consisting of prevention, mitigation, preparedness, response, recovery and rehabilitation, to guide the undertaken program with a redirected focus on DRM.

To this end the GoE considers the involvement of humanitarian agencies as a vital role in reaching communities which are frequently challenged by both natural and manmade hazards in the country. Accordingly as one of the NGOs working and supporting the people Ethiopia, Dan Church AID (DCA) has been supporting drought prone people of the study area since 2012. DCA's Disaster Risk Reduction (DRR) program has been implemented in three Woredas of Bale Zone, Oromia Region as one of its flag ship program, DRR, in the country.

1.2 Statement of the Problem

It is well agreed that there have been a number of efforts both by the government and non-government actors to address recurrent natural hazards in the study area. These efforts were huge in terms of finance and time spent. Despite the different efforts done so far by these actors, people in the area are still vulnerable and obliged to seek external support almost frequently. This challenge is exacerbated because of the World wide climate change and lack of adaptive capacity coupled with frequent exposure to drought situation.

DCA as humanitarian organization had an approach towards building a resilient community through its different internationally and nationally acknowledged programs like DRR and emergency responses linking with other development projects. These approaches have played a vital role in saving lives and also contributed to some extent in resisting similar shocks. However, DCA's applied approach contribution in building the resilience of the community needs to be analyzed.

One of the shortcoming of most resilience analysis of researchers lay on their attempt to analyze resilience from various shock/hazards (both idiosyncratic and covariate) context rather resilience of a community or household (HH) should be analyzed from a single shock or hazard context. (*Tim Frankenberger, et.al, November 2012*) Accordingly , this study focus was on analyzing the contribution of the ongoing DCA's project in terms of building community capacity to withstand the impact of recurrent Drought. Thus, DCA's ongoing Community Managed Disaster Risk Reduction (CMDRR) project good practices and lesson learnt so far was analyzed.

1.3 Objectives and Research Questions

1.3.1 General Objective

The general objective of the study is to document the best experience of CMDRR approach and point out topics worth further study/inquiry in similar fields.

1.3.2 Specific Objectives

The specific objectives of the study are:

- 1) To assess CMDRR approach role/contribution in building drought resilient community members and institutions;
- 2) To assess whether CMDRR approach open an opportunity for the community members and their institution in invigorating and build up capacities to address the long term trend/stress (underlying causes & dynamic pressure) and take proactive measures on recurrent drought hazard;
- 3) To assess the contribution of CMDRR approach in enabling the community voice to be heard/linked/recognized by external actors (government and humanitarian stakeholders) in terms of their immediate DRR and long term development plans;
- 4) To draw best experience and lesson learned for both scale up and future deep research on contribution of CMDRR approach in resilience building of a community.

1.3.3 Research Questions

This study was conducted to answer the following specific research questions under the general framework of CMDRR approach and its real life implementation in the study area:

1. How the application/use of CMDRR approach contributed on invigorating/building the capacity of community and their institutions? In terms of analyzing their situations, planning and implementing relevant activities as well as leading the whole action?

2. How Participatory Disaster Risk Assessment (PDRA) and Analysis tool able to ensure inclusion/active involvement of vulnerable segment of the community?
3. How the approach enables to identify long term trend/stresses (Underlying causes & dynamic pressures *including gradual climate change and price inflation*) and include adaptive capacities as part of the community action/development plan (CAP)?
4. How the CMDRR approach empowers the community to be the primary actor on their cause? (*In terms of influencing relevant government and external actors to make their needs and priorities known and supported accordingly*) and
5. How is the linkage/synchronization of this approach with existing community institutions and local governance structures?

1.4 Significance of the Study

DCA as humanitarian organization need to learn, scale up and document the good achievement done so far at grass root level and identify the gaps in its endeavor on contributing to build drought resilient community in the study area. Any strive on building community resilience against disaster is not one stop shopping as well as not something to be dealt with a single organization as a separate effort. Thus, the findings of this study will enable both DCA, its implementing partners and other stakeholders, involved on disaster risk reduction and development sector, to get a practically and professional insight about the practical contribution, challenges, and gaps of CMDRR approach implementation at community level with respect to building drought resilient community in studied area and other similar areas of Ethiopia. Moreover, the study findings contributed in exposing different issues which need further deep research on the application CMDRR approach in building drought resilient community.

1.5 Scope and Limitation of the Study

Conducting a case study needs spending a lot of time with the case of interest at all unit of analysis, looking for and going through a lot of information as far as the required data are saturated enough to make analytic generalization. The study has got its own limitation on this regard considering less time input to collect and analyze all type of data, both secondary and primary, at All level of analysis (*data from the CMDRR program implementing organization, government stakeholders at Woreda and Kebele level and the program targeted community*). Thus, time constraint during both data collection and analysis was the major limitation that is worth mentioning.

Despite of these limitations, I have made my best to make the output of this study valuable using my previous knowledge of the study area, close knowledge of the program implementing organization, and prior preparation on protocol of the data collection narrowing the mentioned limitation of the study. Thus, the findings of the study will be useful in improving future implementation of CMDRR approach in similar drought prone communities support interventions by NGOs. Moreover, specific topics are also pointed out for future studies which can direct researchers to enrich the practical knowledge on contribution and challenges of employing CMDRR approach in the DRM sector at community level.

2. REVIEW OF LITERATURE

2.1 Theoretical Review

2.1.1 The Evolution and Concept of Disaster Risk Reduction (DRR) approach

Disaster risk reduction (DRR) is a relatively new concept. There are different definitions of the term in the technical literature but it is generally understood to mean the broad development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout society. (*Twigg, 2009*) Nowadays, the concept and application DRR approach is evolving to be diversified and believed to be seen by scholars as a trans-disciplinary subject which needs to be dealt with the involvement of multi-sector disciplines. Below is brief review on the major development and school of thought on the overall disaster risk concepts as well as approaches used up to date with special emphasis on the development and humanitarian sector.

School of Thoughts on Disaster Risk

The focus on disaster and risk came about through various initiatives and events after the Second World War. The scientific study of disaster and risk is one such event. A focus on the development of disaster risk reduction and management would therefore be incomplete without a discussion of the roots of disaster studies and research both within the social as well as the natural sciences. Some of the earliest recorded ideas on disaster and risk within the social sciences were expressed by Carr (1932) and Sorokin (1942) who questioned the influence of catastrophe on social patterns. Some of the first systematic work in disaster studies and research occurred in the 1950s and 1960s with a noticeable heightened interest in the 1970s (*Niekerk, 2011*). These earlier theorists approached the concept of disaster from a social science as well as a natural/physical science perspective. Gilbert (1998) indicates that the social science perspective approached the study of disaster from three different paradigms: that is content research, chronological development, and lastly cleavages. In the first instance (content research) disaster was viewed as a duplication of war - an external agent can be identified which requires communities to react globally against the “aggression”. The second (chronological development) views disaster as an expression of social vulnerability – disaster

is therefore the result of underlying community logic or social processes. Thirdly, disaster is an entrance to a state of uncertainty – disaster is the impossibility of identifying and defining (real or perceived) dangers. It is therefore an attack on our perception and known reality. Cardona (2003) and Kreps (1998) are of the opinion that the above early paradigms within social science on issues of risk, or mitigating the risk of physical harm and social disruption before an event occurred.

The modern day study on disaster risk gives much emphasis on the understanding and investigation of disaster proactively, both within a social and natural/physical science perspective. Cardona (2003), Kelman (2003) as well as Smith (2002) identified two schools of thought that have developed in terms of disaster risk since the 1980s. Cardona refers to these as the *constructivist* and *objectivist/realist* schools of thought. Smith's interpretation is that of *behavioral* and *structural* paradigms. Kelman simply refers to the *social scientist* and *physical scientist's* focus on risk. After assessing the work of the three authors it became clear that for all means and purposes the constructivist school of Cardona, the behavioral paradigm of Smith and the social scientist focus by Kelman refer to the same approach in the investigation of disaster, so too the objectivist, structural and physical scientist paradigms. (Niekerk, 2011)

Constructivist thinking relates to social sciences where risk is viewed as a social construct (risk is created in social systems). This approach requires an understanding of social representations and perceptions, and the interaction between different social actors and phenomena. A consciousness level developed and rooted on conditions of risk and the attitudes to risk in societies that lead to disasters or vice versa.

The objectivist or realist school finds itself more within the natural and physical sciences. The natural and physical science perspective to disaster risk emphasized the hazard component in terms of hydro-meteorological, geodynamic and technological phenomena such as earthquakes, volcanoes, cyclones, tsunamis, industrial accidents and nuclear fallout etc to mention a few. Within this school of thought it is believed that risk can be quantified and objectively judged. So the accent within the natural and physical sciences remained on the quantification of risk focusing on the nature, scale and intensity of different hazards and their

possible impacts on economic assets, human, ecosystems and other entities in question. This estimation of risk also translated into the economic and actuarial sciences that believe that risk can be determined through mathematical formulae. (*Niekerk, 2011*)

Hewitt (1998), acknowledges that the social understanding of disaster is much more crucial to the contemporary disaster risk scene. It would be unjust to assume that both of the mentioned schools of thought or paradigms enjoyed equal status within the international arena. Hewitt says that the pure focus on the social construct of disaster risk by the constructivists ignores the hazard or “agent-specific” approach. This approach remained the most common visualization of disasters, even in the work of social scientists within the 1980s. The truth of this statement is evident in the objectives of the International Decade for Natural Disaster Reduction (1990-1999). Both of these schools of thought have made the paradigm shift from a pure disaster oriented focus to that of disaster risk. The contemporary understanding of risk has greatly increased to the extent that various scholars from a variety of different disciplines (e.g. sociology, anthropology, geography, architecture, agriculture, meteorology, engineering, law, and public administration and development studies) are jointly researching issues of disaster risk (*Comfort et al., 1999*). Below table¹ summarizes the disaster risk point of view by different disciplines against their basic assumptions, community considerations, focus, and overall objective.

¹ *Extract from IIRR CMDRR training manual*

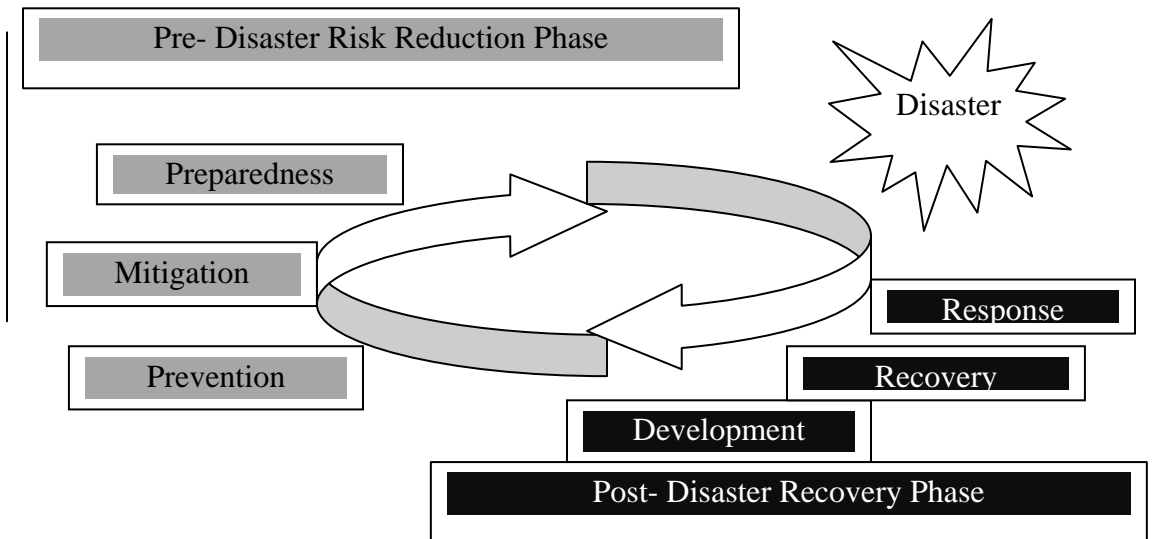
Understanding Disaster and the opposing view				
Point of view	Conventional/Dominant		Alternatives/Progressives	
Assumptions	Act of God		Act of Man	
	Disaster is natural		Disaster is not natural	
	Inevitable occurrence we have no control		Eitable occurrence –we have control	
Communities are	Victims and beneficiaries of assistance by outside experts		Central players	
Considered	Objects		Subjects	
Approaches	Natural science	Applied science	Social science	Holistic
Equates disasters with	Hazards such as earthquake, floods etc.	Magnitude of loss and damage associated with hazard events	Differential effects of hazard not only on physical structures but also on people, their economic activities and social relationships	Not only hazard but also the political, economic and social environment or context because of the way it structures the lives of different groups of people.
Deals with	Geophysical, geological and hydro-meteorological processes	Exposure and resistance of physical structures to mitigate damage and loss	How hazards are socially perceived and conceived	Causes of disasters are closely associated with unsustainable development patterns, which increase the risk faced by large sectors of society
Focus	Emergency management	Identification of hazard prone locations and the patterns of physical vulnerability	Causal factors and process of vulnerability	Understanding the complexity of disaster risk by analyzing the underlying conditions of risk generated by people their normal existence in a situation of unsustainable development
Objective	Mitigate loss, damage, disruptions when disaster occurs and to facilitate a quick recovery		Enhancing and strengthening capacities of household, community and society to absorb losses and recover from disasters	To increase capacities to manage and reduce risk and hence, the occurrence of disasters.
Shifts	From relief and mitigation paradigm in managing disaster		To development Paradigm	To Emergence of Disaster Risk Reduction Paradigm
Intervention	Centered around service delivery and Relief and Recovery		It tackles unresolved issues in development and centered around	

2.1.2 Disaster Management versus Disaster Risk Management

Globally, there has been a shift from the old school of thought that disaster is “an act of God” to the school of thought that disaster is “an act of man”. Thus, this is the advent of a new understanding of disaster and disaster risk. Herewith, there has been a tremendous progressive shift from reactive way of managing disaster (after happening) to a proactive way of disaster risk reduction and management. In development and humanitarian sector there were different disaster management and disaster risk management models which shift from relief response and recovery actions (reactive approach) to hazard events to proactive approach (*by doing disaster risk reduction through hazard prevention and mitigation, vulnerability reduction and building individual and community capacity as support system for community members to successfully survive and bounce back to normal life*). The following different models show how disaster management developed to disaster risk reduction and disaster risk management approach worldwide.

Disaster Management Continuum (DM-Model): The Disaster management can be viewed in a number of ways. The more traditional approach has been to regard disaster management as a number of phased sequences of action - or a continuum. The Disaster Management Continuum shows the chronological order of interventions intended to control disaster events. While the activities indeed go in a circle, as the following graphical illustration shows, it also implies that they always return to the same state. In actual practice though, some improvements occur.

Figure 1: Disaster Management Continuum/Traditional Model-Sequence of Actions



In this traditional model shown above, disaster management occurs in stages which follow each other in a sequence. That is to say, mitigation and preparedness precede a disaster. While this may well be the case, it is also often observed that the sequences of action occur simultaneously - as you can see in the illustration of the expand-contract model below.

Contract and Expand model:- The Contract-Expand Model is the name given to the Disaster Management model used by the communities in South Africa (Kotze & Holloway, 1996). It is called the Contract Expand Model because it assumes that prevention, mitigation; response and recovery can be carried out at all times in a disaster-prone community. However, the relative weighting of each component “contracts” or “expands” depending on the relationship between the hazard and the vulnerability of the community across time.

In this alternative view of disaster management - the expand-contract model - disaster management is seen as a continuous process. Disasters are managed in a parallel series of activities rather than in a sequence of actions. The different strands of activities or actions continue side by side, expanding or contracting as needed.

For example, immediately after a disaster event - such as a flood - the "relief and response" strand will expand to cope with the immediate effects of the disaster. But as time passes, the "recovery and rehabilitation" strand - including prevention to mitigate against possible future disasters - will expand to address the rehabilitation needs of the affected community. The relative weighting of the different strands will also vary depending on the relationship between the hazard event and the vulnerability of the community involved. This approach acknowledges that disaster management usually includes a number of interventions and actions that may be occurring simultaneously (at the same time) and not always in phased succession (one after the other). In the case of droughts, for example, drought relief, recovery and mitigation may often occur at the same time.

Pre-During-Post Model:- The Pre-During-Post Model is an alternative framework to the Cycle by the Citizens Disaster Response Network in the Philippines. The network has been promoting citizen-based development-oriented disaster management since 1984. It assumes a simplistic linear approach and serves as an alternative model to the disaster management continuum/cycle model. It classifies interventions as pre, during and post disaster interventions, which are done within the overall framework of development.

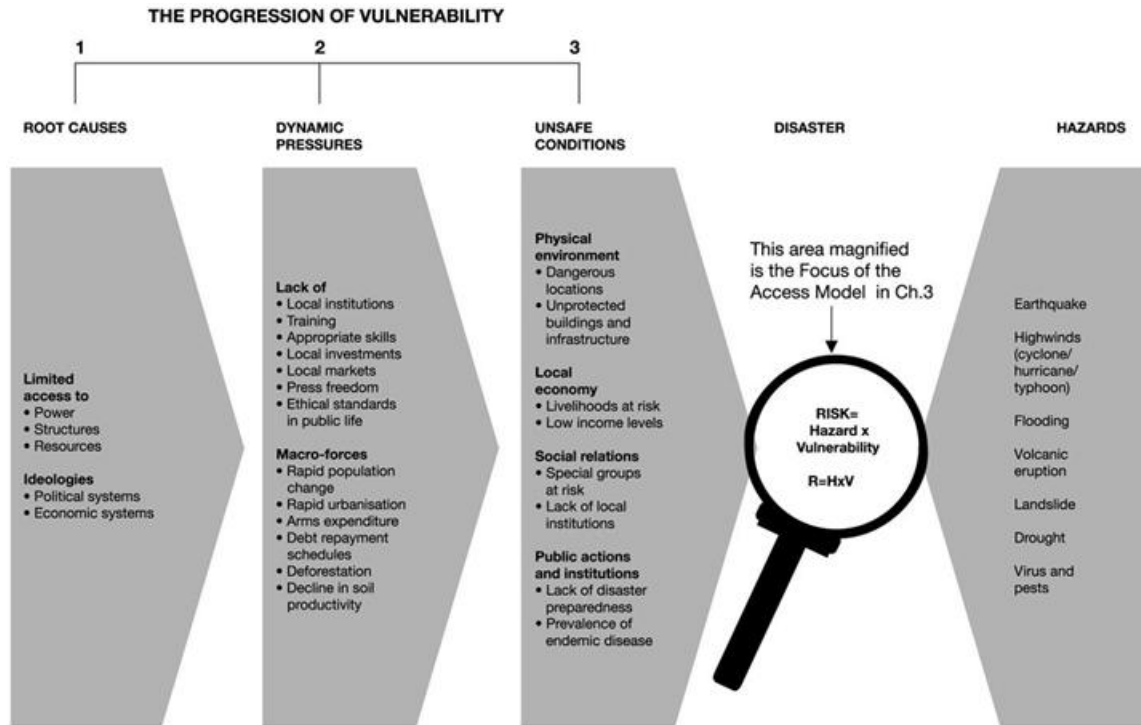
PRE	DURING	POST
Prevention	Emergency response	Recovery/Rehabilitation
Mitigation		Mitigation
Preparedness		

Disaster Pressure and Release (PAR/Crunch) Model:- The disaster pressure and release model was first developed by Blaikie, Wisner et al, in 1994. The model analyzes disaster by taking hazard (trigger event) and vulnerability (unsafe condition) as the elements that interact for possible disaster situation. It states that a disaster could happen only when a hazard affects vulnerable people. A disaster happens when these two elements come together. A natural phenomenon by itself is not a disaster; similarly, a population maybe vulnerable for many years, yet without the “trigger event”, there is no disaster. We can therefore see that

vulnerability - a pressure that is rooted in socio-economic and political processes - is built up and has to be addressed, or released, to reduce the risk of a disaster. These processes may include poverty, age-related discrimination, exclusion or exploitation based on gender, ethnic or religious factors. The outcome will be “safe” as opposed to “unsafe conditions”, “resilient or capable communities” as opposed to “vulnerable communities” and “sustainable livelihoods” as opposed to “unsustainable livelihoods”. The “progression of vulnerability”, provides an explanation for the interrelationships between different elements that cause vulnerability. This model was the first attempt to bring the “human factor” into the disaster management picture. Disaster risk management practitioners have used the model since then to examine the causes of vulnerability during disaster risk assessment.

“In evaluating disaster risk, the social production of vulnerability needs to be considered with at least the same degree of importance that is devoted to understanding and addressing natural hazards. Expressed schematically, our view is that the risk faced by people must be seen as a cross-cutting combination of vulnerability and hazard. Disasters are a result of the interaction of both; there cannot be a disaster if there are hazards but vulnerability is (theoretically) nil, or if there is a vulnerable population but no hazard event. What we are arguing is that the risk of disaster is a compound function of the natural hazard and the number of people, characterized by their varying degrees of vulnerability to that specific hazard, who occupy the space and time of exposure to the hazard event. There are three elements here: risk (disaster), vulnerability, and hazard, whose relations we find it convenient to schematize in a pseudo-equation: Risk (R) = Hazard (H) x Vulnerability (V)” (Wisner, Blaikie et al, 2003)

Figure 2: Disaster Pressures and Release (PAR/Crunch) Model



Disaster risk formula:-This is a qualitative framework that is used to assess disaster risk levels and guide risk reduction planning measures. It shows that the risk of suffering consequences of a disaster is determined by the presence of the hazard event and vulnerability conditions in the absence of coping capacity. Thus, the formula that guides disaster risk reduction is as follow:-

Disaster risk (DR) = Hazard (H) x Vulnerability (V)

Capacity (C)

Disaster risk can be reduced by working on prevention, mitigation, and preparedness measures against the above three key areas which include but not limited to:

➤ **Prevention of hazards:-**This is to avoid possible occurrence of a potential hazard, e.g. conflict prevention measures or eradication of contagious diseases. (*In the case of natural hazards this is not always possible*)

➤ **Mitigation of hazards:-**This is related to work on measures that reduce/moderate the intensity and severity of the impact of hazards before they arise. e.g. flood walls, erosion control and measures to reduce run off.

➤ **Reduction of vulnerabilities to hazards:-**This is related to measures that build/enhance individual survivability or increasing capacities of individuals that help to survive during hazard event and bounce back after the event. e.g. Livelihood diversification, swimming skills for flood event, etc.

➤ **Reduction of system/society vulnerability:-** This is measures that build coping capacity a system or a society through strengthening community organizations (systems and structures) that help individuals to survive during hazard event and able to effectively bounce back after the hazard. e.g building effective EW system, search and rescue system, credit and savings, market information etc.

2.1.3 Community based Disaster Risk Reduction versus Community Managed Disaster Risk Reduction

Community based disaster risk reduction (CBDRR): It is a process of mobilizing a group of people in a systematic way towards achieving a common risk reduction objective in a geographically defined area (or mobilizing a sector or group not necessary living together in one location). The relation is functional (subject-object relation), people form groups to meet pre-determined objectives and are dependent on outsiders' decisions. Whereby, external professionals provide the directions, including what the community should know and how, they are in charge of building the community.

Community managed disaster risk reduction (CMDRR): It is an approach whereby disaster risk reduction programs are managed by members of the community themselves. Represents the capacity that enables communities to plan, implement, monitor and evaluate their disaster

risk reduction measures according to their needs. The entire process is centered on self-management at the community level and there is a strong sense of ownership of the activities. The relation between partner agency and the people is interactive whereby people are expected to be involved in the analysis, need assessment and planning and partner agency is also equally involved in decision making (no subject-object relation).

On this approach community and external professionals are co-learners. There are many ways of learning and in the process of learning and doing, they “co-construct” each other. And the final end product is expected to be community organizations are capable of implementing a disaster risk reduction process in their community. They are not dependent on the external actor.

2.1.4 The Hyogo Framework for Action (HFA)

The Hyogo Framework for Action (HFA): *Building the resilience of Nations and communities for disasters*, adopted in 2005 in Kobe, Hyogo, Japan, provides a global strategic roadmap to disaster risk reduction. The HFA is a global blue print or disaster risk reduction with the goal to substantially reduce disaster losses in lives, and in the social, economic, and environmental assets of communities and countries by 2015. The framework offers guiding principles, priorities for action, and practical means for achieving disaster resilience for vulnerable communities. Under this framework the following five major actions were prioritized in line with three strategic objectives:

HFA 1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;

HFA 2: Identify, assess and monitor disaster risks and enhance early warning;

HFA 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels;

HFA 4: Reduce the underlying risk factors;

HFA 5: Strengthen disaster preparedness for effective response at all levels.

With this internationally recognized and supported priority actions nations, donor communities and international humanitarian organizations have been involved on building

disaster resilient nations and communities in their context at different level for the last eight/nine years and still strengthened efforts are ongoing and need to continue as well.

In the horn of Africa hydro meteorological caused disasters mainly drought and flood are the major disasters affecting the people in the region. Accordingly different appreciable efforts and best practices have been drawn in the last 5 years in this regards including establishment of regional coordination plate forms, early warning (EW) systems and a radical shift at national level from disaster crisis to disaster risk management including Ethiopia in terms of establishing a system. However, disaster risks are still affecting huge number of population in the region. Only in the recent 2010/2011 around 13 million people in the horn of Africa were highly affected by drought, *a slow on set disaster which give enough time for preparedness and mitigation*, and yet early response and mitigation measures were very late in spite of a very good early warning information released by different EW networks like Famine Early Warning Systems Network (FEWSNET) and East and Central Africa Food Security and Nutrition Working Group (FSNWG) reports which were graded as ‘very good’ to ‘excellent’ in terms of their accuracy in predicting the severity and onset of the crisis. (UNISDR, 2012)

Under the IGAD regional initiative East and horn Africa countries had a meeting in Nairobi on September, 2011 to design a regional strategy to end drought emergency. And this strategy recognized the following stress worthy issues for future endeavor in establishing drought resilient nations and communities in the region: (UNISDR, 2012.)

- Accelerate investment in the foundations of development: This includes pro-poor infrastructure and human capital, secondary roads, water, energy, education and health;
- Strengthen adaptive capacity and livelihood choices: This includes environmental protection, integrated resource and water management; rangeland management, fodder and crop production, reforestation, small business support, social protection, and assistance to pastoralists to help reconstitute their livestock and start a sedentary life;
- Promote integrated land and water management including both ground and surface water development for irrigation, livestock and human use;
- Facilitate formal trade and promote efficient flow of commodities in the region;

- Support pastoralism as provided for by the African Union Pastoralist Policy Framework. Support includes protecting property rights and livestock assets, providing market, veterinary health and financial services, and supporting livestock mobility;
- Fast track climate change adaptation initiatives so that drought risk reduction and climate change adaptation are integrated into development planning and resource allocation frameworks;
- Ensure that more effective institutional frameworks are in place to promote development of arid and semi-arid lands and manage droughts in more sustainable ways, for example the National Drought Management Authority (NDMA); and
- The strategy also recognizes the need for Governments to work closely given that arid climatic conditions cut across boundaries.

Generally, the HFA as adopted by United Nations International Strategy for Disaster Reduction (UNISDR) and Global Facility for Disaster Reduction and Recovery (GFDRR) laid the foundation of DRR concept and its cascaded application in different regions, nations and community level. All the current moves on establishment of regional DRR platform, national DRR dedicated institutions as well as community based DRR pilot project implementations are the result of the global initiation, commitment and the enactment of HFA in 2005.

In Ethiopia, the current DRM/FSS under Ministry of Agriculture/Early Warning and Response Directorate has overseen a large shift in attitude and practice, moving towards an increasingly multi-hazard and multi-sectoral approach, and is overseeing the drafting of a new National Policy and Strategy on Disaster Risk Management (NPSDRM) that contains a greater emphasis on the delegation of powers to the regional and local levels, as well as community involvement. The NPSDRM is organized according to Hyogo Framework for Action (HFA) priority areas, which have informed a policy shift by the DRM/FSS toward proactive disaster risk management. However, Ethiopia is not yet a signatory to HFA, and has not yet established a national platform on DRR. (*IFRC, 2013*)

2.2 Empirical Review

2.2.1 Preview on Implementation of CMDRR Approach in Ethiopia Context

Hazards could be of hydro-meteorological nature, like drought, and flood which are common in East Africa or geological nature like Tsunami which is common in Far East or Conflict, or Epidemics, etc. What these hazards do have in common, however, is that they can be managed, prevented or mitigated, from turning into disasters. This means that the impact they have on people and their livelihoods can be avoided or diminished. In other words, hazards can be something unavoidable but disasters can be avoided or disaster risk and impact of disaster can be reduced through prevention, mitigation and preparedness measures.

With this basic international, regional and national consensus towards disaster management there are different regional and national efforts by different humanitarian actors. And the government of Ethiopia is also putting its maximum effort in terms of increasing political commitment to DRR, improving identification and assessment of disaster risk, enhancing knowledge management, increasing public awareness, improving governance of DRR institutions, and integrating DRR in to emergency response management which are the basic strategic objectives established by AU under Regional strategies for DRR.

Apart from highly appreciable efforts done so far in terms of the whole idea of DRM at national level, most of the government effort hardly focused on empowering the people at community level. Nevertheless, there are credible efforts and achievements made by INGOs as well as local NGOs in taking this new disaster management approach to community level.

2.2.2 Overview of DCA's involvement in DRR Project in Ethiopia

Dan Church Aid (DCA) is a Danish faith-based humanitarian and development organization established in 1922. It supports long-term development and emergency interventions to poor and marginalized people in Europe, Asia, Africa, and Latin America. DCA is a partnership organization committed to working with faith based organizations, nonreligious local civil society actors and community based organizations globally.

DCA's activities in Ethiopia began by supporting relief projects in the mid 1970s following the Northern Ethiopia famine through local churches and faith-based development actors. Following the organizational decisions to decentralize operations closer to partners and beneficiaries, in 2004, DCA opened a regional office in Ethiopia. Currently, it is a legally registered international non-profit funding NGO.

DCA-Ethiopia has three programme types: Livelihood Security, Gender and Capacity Building and HIV/AIDS. Livelihood Security is the flagship programme with more partners and projects compared to the other two programmes. Most humanitarian response and Disaster Risk Reduction (DRR) interventions are also under this programme type. DCA's programmes are implemented in Borena and Bale zones of Oromiya Region, Oromo peoples' Zone in Amhara and South Wollo, North Wollo, as well as Wag Himra Zones of Amhara Region. There are also projects at national level through partnership with networks and consortia. (*DCA 2012*)

Under the Livelihood Security Programme, DCA and its partners have been implementing a project funded by DG-ECHO and co-financed by DCA entitled "Building Resilient Communities to Drought Risks in Ethiopia" – from 01 July 2010 - 31 December, 2011 with an overall objective of mitigating the effects of drought in the country's agro-pastoral and pastoral areas. The project aimed to strengthen the current strategies in line with the humanitarian approaches followed by all actors. It is specifically intended to increase resilience of communities to recurrent drought risks by enhancing capacity of community local actors to plan and implement Community Managed Disaster Management Plan (CMDMP).

And currently, DCA is implementing DG-ECHO financed project entitled "*Enhancing Resilience in Drought Prone Areas of Bale Ethiopia*". The project foresees to contribute to increased resilience and reduced vulnerability to drought risks in Guradamole, Rayitu and Dawe Kachen Woredas of Bale Zone, Oromia Regional State in Ethiopia. But the approach practicability, its positive contribution in building drought resilient community, its main challenges and the way forward in scaling up this approach by DCA and other similar

stakeholders is not researched by any professional apart from an external project evaluation done by a consultant.

2.2.3 The Recent Discussion/Think Thank on Resilience Building Approaches

Currently the concept of building resilience is once again gaining prominent attention and under discussion across donor, implementing agencies and government bodies putting as a central idea of development, climate change adaptation, and humanitarian aid.

Technical working groups from USAID, DFID, AU, and other stakeholder released recently a discussion paper entitled “*Enhancing resilience to food security shocks in Africa*”. The technical working groups argue that within constantly changing natural, social and economic environments a conceptual framework for resilience building should consider how shocks, stresses and long-term trends (e.g., institutional, economic, socio-political or environmental factors) affect livelihoods security. So that, the framework can ultimately help to determine whether households, communities and larger populations are on a trajectory toward greater vulnerability or greater resilience. The conceptual framework for resilience suggested by this working group integrates **livelihoods approach**, **disaster risk reduction (DRR) approach**, and elements of **climate change approach** to address the underlying causes of vulnerability. The livelihoods approach emphasizes the importance of access to productive assets, institutional structures and processes, and the livelihood strategies pursued by households. Alternatively, the DRR approach focuses on preparedness, prevention, response and recovery activities formulated in response to potential disasters. Finally, the climate change adaptation (CCA) approach is similar to that of DRR, but focuses specifically on actions to be taken in response to, and preparation for ongoing changes in climate. It goes beyond the DRR approach in giving careful consideration to potential threats caused by the loss of biodiversity and a decrease in ecosystem services. Moreover, they strongly view resilience building as process rather than a static state considering the continually changing social, economic and natural environments in most developing countries. And, a resilience assessment as well as resilience building interventions must be comprehensive enough in identifying the causal factors and integrated multi-sector programming to address resilience properly. (*Tim Frankenberger, et.al, November 2012*).

Under the HFA it is clearly stated that the general motto on putting the five prioritized actions is for building resilience of nations as well as communities for disaster. The five pillars of HFA are the focus activities in building resilience both at nation and local level. At community level the CMDRR approach is mentioned to be the best experience achieved so far in implementation of HFA at community level especially in our country context and others in East and Horn of Africa. Thus, under this study it is intended to look in to the contribution or role of CMDRR approach towards building drought resilient community and document the best practice and lesson learned within the specific natural hazard, drought.

3. METHODOLOGY

3.1 Description of the Study Area

Bale zone is one of the largest zones of Oromia region found in the south west part of the country. The zone has 20 Woredas (2 urban & 18 rural) of which 9 of them are found in the lowland area. The Somali Regional State borders Bale Zone in the South. The Zone is divided into three major altitudinal zones. These are *badda* (highland), *badda dare* (intermediate) and *Gammojji* (lowland). The *Gammojji* zone which is conducive for pastoral and agro-pastoral activity includes Rayitu Woreda. My study sites are located in three Kebeles of Rayitu Woreda namely: Hara Adi, Adela and Tedecha ferda Kebeles.

Rayitu is one of the pastoral Woreda in Bale Zone of Oromiya region in Ethiopia. It is Located at about 600 km to south of Addis Ababa. The capital of the district called Tedechela. There are 19 Kebele in the Woreda. Arid and semi arid environment characterizes the agro ecology of the Woreda. It has a bimodal rainfall pattern in which main rainfall is received in April-May and the small rains received in September-November. Land degradation including soil erosion and bush encroachment, range land shrinkage are common environmental problems in the district. According to the national central statistics agency (CSA) in 2014 population projection, the total population of the Woreda was estimated to be 40,137 (20,363 male and 19,774 female). Almost all the people who are residing in the area are Oromo ethnic group, but insignificant number of Somali ethnic groups (IDPs) also inhabit pocket area as of the Woreda. Livestock rearing like; Camel, Cattle, Goats, poultry, equines are the main livelihood of the people and also an opportunistic cultivation of crops are widely practiced by all wealth groups in the areas where the soil moisture stays high for longer time around bottom of valleys. Rayitu is among the drought prone Woreda in Bale Zone and it is vulnerable to natural (drought, livestock diseases etc) and man-made (conflict) disasters that led to loss of livelihoods to many households.

Drought situation and its impact on study area

In the last three decades or so, recurrent droughts have intensified in the Horn of Africa (HoA), including Ethiopia, resulting in deep-rooted food insecurity, livelihood deterioration and weakening of the capacities/mechanisms of traditional community institutions to withstand further shocks. Geographically, Bale is one of the Zones of Oromia Regional State in southeast of the country (located within the HoA) dominated by livestock production (pastoralism and agro-pastoralism), as around 9 of its 18 Woredas heavily rely on this mode of production.

Apparently, the Zone has been experiencing drought hazard in the last decades where by the number of drought affected people tripled within six consecutive years, 2003 till 2008, from 134,350 to 407,562, respectively. (*OBOFED, 2008*) Moreover, according to the Humanitarian Requirement Document (HRD) released by DRMFSS and UN-OCHA on January 2012, Bale Zone lowlands were one of the highly affected areas by the recurrent drought whereby humanitarian support in terms of water, food, health, and education were appealed.

Besides the vagaries of recurrent drought, the problems of these pastoralist communities have been compounded by other opportunistic shocks of natural and manmade origin such as sporadic outbreaks of livestock and human diseases and local conflicts triggered by the ever-dwindling natural resource base essential for the pastoral livelihood- livestock production. Low production and productivity of livestock, which is principally caused by limited and declining availability of pasture and water as well as by lack of a well-functioning veterinary service, is the other important challenge that the communities are struggling with. Moreover, in the face of apparent decline in the performance of the pastoral way of life, lack of access to micro-finance (saving and credit) services in these areas has denied the diversification of alternative livelihood or economic options and, hence, inhibited the coping capacity and resilience of the pastoralists. Eventually, all these adversaries have exposed the herders to deep-seated food insecurity and forced them to remain under continual relief assistance for survival.

As a result, a large number of people in study Woreda have been exposed to chronic food shortages triggered by recurrent droughts and, therefore, lived under relief and safety net assistance programs for several years.

3.2 Study Design

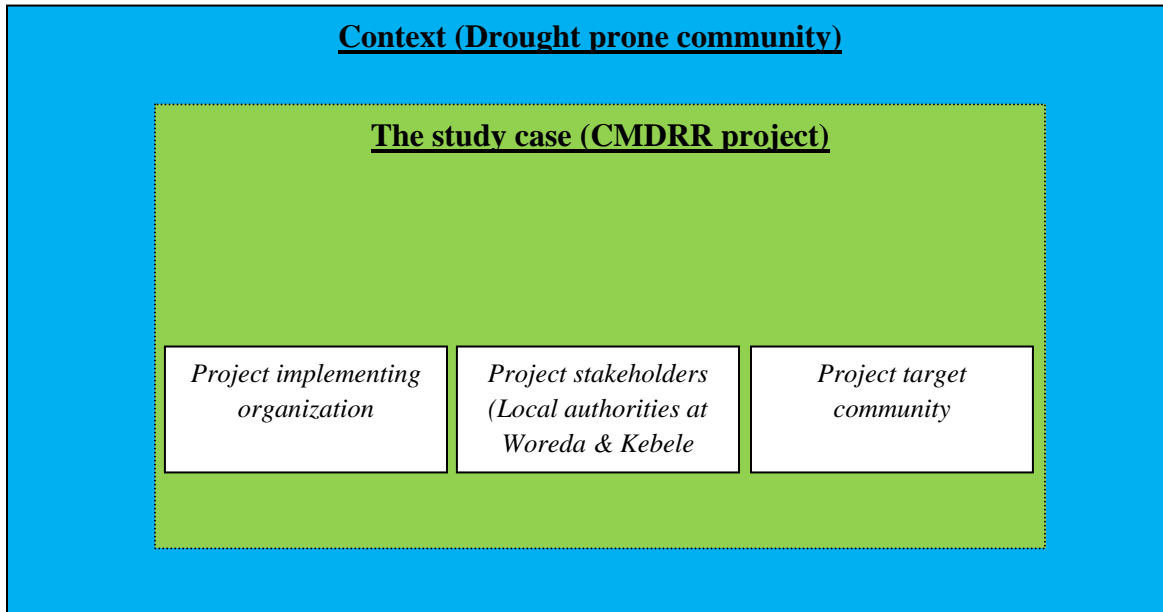
The objective of this study is to investigate the role and contribution of CMDRR approach in building drought resilient community through analyzing the implementation process from different involved stakeholder perspective and identifying the achieved result at beneficiary level. Thus, the research has followed a descriptive case study research design. Case study research methodology was preferred because of its nature of investigating contemporary phenomena in their real context using multiple sources of evidence.

“Case study is defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. It also copes with the technical distinctive situation in which there will be many more variables of interest than data points (if compared with experiment). One result of case study relies on multiple courses of evidence where collected data needs to converge in a triangulating fashion and another result benefits from the prior development of theoretical proposition to guide data collection and analysis” (Yin, 2009).

There are four distinctive types of case study research designs (Yin, 2009) namely single case (holistic) design, single case (embedded) design, multiple case (holistic) design and multiple case (embedded) design. For purpose of this study single case (embedded) design was followed. Single case with embedded unit of analysis focuses on a single case, the CMDRR project in this case, with embedded sub unit of analysis (*the project implementing organization, local authority and beneficiary communities*) as it is portrayed below on figure 3. The Case is referred to the object of the study (*CMDRR project*) and it contains three units of analysis (*Project implementing organization, Project stakeholders and Project target community*) in drought prone community context.

Different sort of data acquired through secondary and primary sources from the subjects of the study which are the sub units of analysis in the study design.

Figure 3: Single (embedded) Case Design of the Study



This study design was selected since it is well suited to answer the research questions which intend to describe how the use/application of CMDRR approach contributed for building of drought resilient community in the real-life situation it has occurred.

3.3 Sampling and Sample Size

In this case studies, the case and the unit of analysis was selected intentionally. This is in contrast to surveys and experiments, where subjects are sampled from a population to which the results are intended to be generalized. On the contrary, a case study links many different kinds of evidence, figures, statements and documents to support a strong and relevant conclusion. Hence, a case study will never provide conclusion with statistical significance and draw generalization rather employs analytical generalization following rigorous logic of analysis.

The rationale for selecting a case for a study could be its typical or representative, critical, unique, revelatory or longitudinal nature in some aspect and it should be selected accordingly. In this study the CMDRR project implemented in Rayitu Woreda was selected as the study case within a drought prone community context. Thus, the CMDRR project implemented by DCA was selected as the study case understanding/considering its typicality or representativeness of CMDRR projects implemented or under implementation in drought prone community area of the country. And, findings/lesson learned from this selected study case could be assumed to be informative about the experience of similar projects in a similar drought prone community context. Thus, this study was undertaken to portray CMDRR approach role and contribution at community level in the case of DCA implemented CMDRR project in Rayitu Woreda of Bale Zone, Oromia Regional State.

Collection of data was undertaken from the three unit of data collection (*Project implementing organization, Project stakeholders and Project target community*) employing multiple source of evidence. Thus, the required data was obtained from respondents in these three units of analysis.

Therefore, respondents from the project implementing organization (*5 experts/program officers*) coordination & field office, project stakeholders at Woreda & Kebele level (*12 persons*) and project target community in three Kebele (*45 people*) was selected purposefully. Generally, the following data planning matrix/case study protocol was used as a guideline for collecting the required data and link to the theoretical proposition/hypothesis.

Table 1: Data Planning Matrix

Data planning matrix						
No	What do I need to know? (research question)	Why do I need to know this? (objective)	What kind of data will answer the question?	Where can I get the data?	Whom do I contact for access?	Timelines for acquisition
1	How the application/use of CMDRR approach contributed on invigorating/building the capacity of community and their institutions? In terms of analyzing their situations, planning and implementing relevant activities as well as leading the whole action?	To assess the impact of strengthening capacity of community members and institutions on drought risk analysis, vulnerability assessment, capacity assessment, CP/CAP planning and its management to build drought resilient community	CMDRR committee members interview on their knowledge assessment of hazard, vulnerability, capacity, CP/CAP planning and its management	From the project implementor organization, CMDRR committees in study Woreda	Project implementor organization and directly CMDRR committee members	One week period
2	How Participatory Disaster Risk Assessment (PDRA) and Analysis tool able to ensure inclusion/active involvement of vulnerable segment of the community?	To assess whether CMDRR approach open an opportunity for the vulnerable community segments/members be active participant of the whole community managed disaster risk reduction process	Process of consisting CMDRR committee, Vulnerability assessment, capacity assessment, CP/CAP document, and FGD data on vulnerable segment of community members.	From the project implementor organization, CMDRR committees, and vulnerable segment of community members in study Woreda	Project implementor organization, CMDRR committee, and Kebele administration	One week period
3	How CMDRR approach enables to identify long term trend/stresses (Underlying causes & dynamic pressures including gradual climate change and price inflation) and include adaptive capacities as part of the community action/development plan (CAP)?	To assess whether CMDRR approach open an opportunity for the community members and their institutions in invigorating and build up their capacity, so that , they are aware on the long term trend and take proactive measures on recurrent drought hazard	CMDRR committee members Hazard, Vulnerability, Capacity assessment document, and evidence on livelihood diversification. (For instance, using or investing their available resource efficiently in line with climate changes?)	CMDRR committee and Community members	Project implementor organization, CMDRR committee, and Kebele administration	Four days
4	How the CMDRR approach empowers the community to be the primary actor on their cause? (In terms of influencing relevant government and other external actors to make their needs and priorities known and supported accordingly)	To assess the contribution of CMDRR approach in enabling the community voice to be heard/incorporated/recognized by external actors (government and humanitarian stakeholders) in terms of their DRR and long term development plans	Interview with CMDRR committee, government bodies, Other actors in study Woreda	Woreda, NGOs, and Community	Woreda, NGOs, and Community	Four days
5	How is the linkage/synchronization of this approach with other existing community institutions and local governance structures?	To assess whether government and other stakeholders involved on development as well as DRR actions in the area buy in/used/synchronized the CMDRR approach I their work	Government and other actors project activity	Government line department and NGOs working in the area	Woreda and NGOs working in the area	Three days
6	What is the contribution of CMDRR projects implemeted so far in building drought resilient community in the study area?	To assess the best experience and lesson learned so far in building the capacity of the community to be drought resilient	Existing software and hardware capacities of the community as well as community's felt gaps in achieving drought resilience	Government line departments, CMDRR committee and community representatives	Woreda, CMDRR committee and radomly selected members	Three days

Thus, a total of one month duration was dedicated for data collection at field level and prior desk review was done at Addis Abeba level before conducting the field level primary data collection.

3.4 Tools for Data Collection

The tools for data collection for this research was multiple source of evidence including secondary documents, interview, FGD, structured questionnaires and physical artifact observation. These data sources were collected from members/staffs of the project implementing organization both at coordination and project office level (5 experts/program officers), the project stakeholders at Woreda and Kebele levels (12 person), and the project targeted community (45).

The research was conducted in three different phases:

- Desk works i.e. reviewing of literatures and project documents, case and sub unit of analysis determination, development of tools of data collection including case study protocol and database, and testing of field instrument to fit for logic of analysis;
- Field work i.e. data collection (using interview checklist, structured questionnaires, and focus group discussions); and
- Data analysis, verification of results and report writing (Technically data collection and analysis was done simultaneously).

Initially review of project implementation documents (project document, implementation reports, project evaluation, studies, community action plans, etc...) were done as desk work. Both open-ended and close-ended questionnaires was used to collect information from project signatory government stakeholders and implementer organization level respondents. Interview checklist was prepared to collect data from the Kebele and CMDRR community level respondents. The interview checklist have got both open- ended and close-ended questions.

Focus group discussions was arranged with beneficiary community in order to gather information about their opinion on the approach and its role as well as for triangulation of data collected at different level and build case stories.

Community based institutions, vulnerable segment of the study community including women, elders, youngster, etc was purposefully involved on the discussion sessions at community level so that the real ground level perception on the achievement of the project reflected.

The questions for both the interview checklist and the questionnaire was prepared in a way that they are short, easy to understand and sometimes modified also in the ground as far as the essential data were acquired from the respondents.

3.5 Data Processing and Analysis

In this case study prior analysis strategies was set which is very much crucial even before deciding what type of analysis techniques to employ. The prior setting of analysis strategy allowed for identifying operational measures (*construct validity*) and defining the domain to which the study's finding can be generalized (*external validity*).

According to Robert Yin, there are four analysis strategies (*Theoretical proposition, descriptive framework, use of quantitative and qualitative data and rival explanation*) and five analysis techniques (*pattern matching, explanation building, time series analysis, logic models, and cross case synthesis*) in case study research method (Yin, 2009). For the purpose of this study which has employed a Descriptive Single Case Embedded Design ***theoretical proposition*** and ***rival explanation*** strategies supported by ***pattern matching*** techniques was employed as the main data analysis methodology of the study.

The theoretical proposition used to frame the data collection, analysis and its interpretation of this study was: Application/use of CMDRR approach, in drought disaster prone pastoral community, contributed on reinvigorating/building of the community's capacity (*community institutions and individuals including vulnerable segment of the community*) and empower them to be primary actors on their cause. Thus, all sort of data collection effort was to get sufficient evidence which converges to this theoretical proposition and cross checked through any rival explanation collected at all level of data collection. Before doing the analysis using theoretical proposition and rival explanation strategy supported by patterning matching techniques three tools namely categorizing, connecting, memo and display tools were used so as to shape the raw data collected and easy the analysis and interpretation.

4. PRESENTATION OF FINDINGS

This study was conducted with a basic aim of identifying and documenting the contribution of CMDRR approach in building drought resilient community as implemented by NGO. This case study was done on DCA's CMDRR program which has been implemented since 2012/2013 in Rayitu Woreda of Oromia Regional State, Ethiopia. The program was initiated in line with the regional initiatives on drought disaster risk reduction strategy and program financed by DG-ECHO. DCA has implemented two consecutive projects in the study area through the CMDRR approach.

Thus, the study data collection and analysis effort focused on collection of all possible relevant source of evidence (primary and secondary) at three unit of analysis namely the organization which is implementing CMDRR program, stakeholders at Woreda level and the program beneficiary communities. The collection of evidences and its analysis were guided by the theoretical proposition set ahead of the data collection. On the theoretical proposition it was stated that employing CMDRR approach on DRR program has contributed on building drought resilient community. Thus, all sort of data at the three unit of analysis were collected so as to get sufficient evidence for this theoretical proposition checking with any rival explanation using pattern matching techniques of case study analysis to maintain the validity of collected evidences.

These findings are discussed under six main sections of this chapter outlined as per the research questions of the study. The presentation of the findings follows both narration of the evidences collected from secondary data, interview and physical artifact observation in the field as well as their analysis and interpretation combined.

4.1 CMDRR in Building the Capacity of Community and their Institutions

In principle when applying CMDRR approach for disaster risk reduction and management programs, anyone should follow and be guided by three major dimensions of the CMDRR process (IIRR, 2006). These three dimension of the CMDRR process include process facilitation², solidarity development³ and task accomplishment⁴. All these three dimensions go hand in hand in the whole process so as to realize the expected final output of building drought resilient community with a viable people organization for DRR. From this aspect the studied communities have achieved a remarkable level of progress througih establishing drought risk reduction committees at Kebele level together with three sub-committees which are supportive and responsible for different tasks of the main CMDRR committees in each Kebele. Initially the program was launched at Woreda level through awareness creation on the approach and selection of 9 Kebeles out of 19 Kebebles in the Woreda. The selection and prioritization of Kebeles was done based on recurrent drought severity, level of access to public services and financial resource allocated by the implementing organization.

Up on getting the prioritized Kebeles at the Woreda level, implementation of this approach started at Kebele level with identification of key community leaders and representatives. Key community leaders/representatives who has got high level of acceptance and leadership skill including elders, religious leads or elites are identified in each of the program targeted Kebeles.

² *The process facilitation focuses on nurturing the process of development. It is concerned with a sustainable working relationship that enables the community to develop group solidarity while accomplishing its task of risk reduction. Through phase-over, it aims to bring into fruition a gradual emergence of a viable people's organization that commits itself to creative disaster risk reduction and to a shift of communities from becoming disaster-victims into development victors*

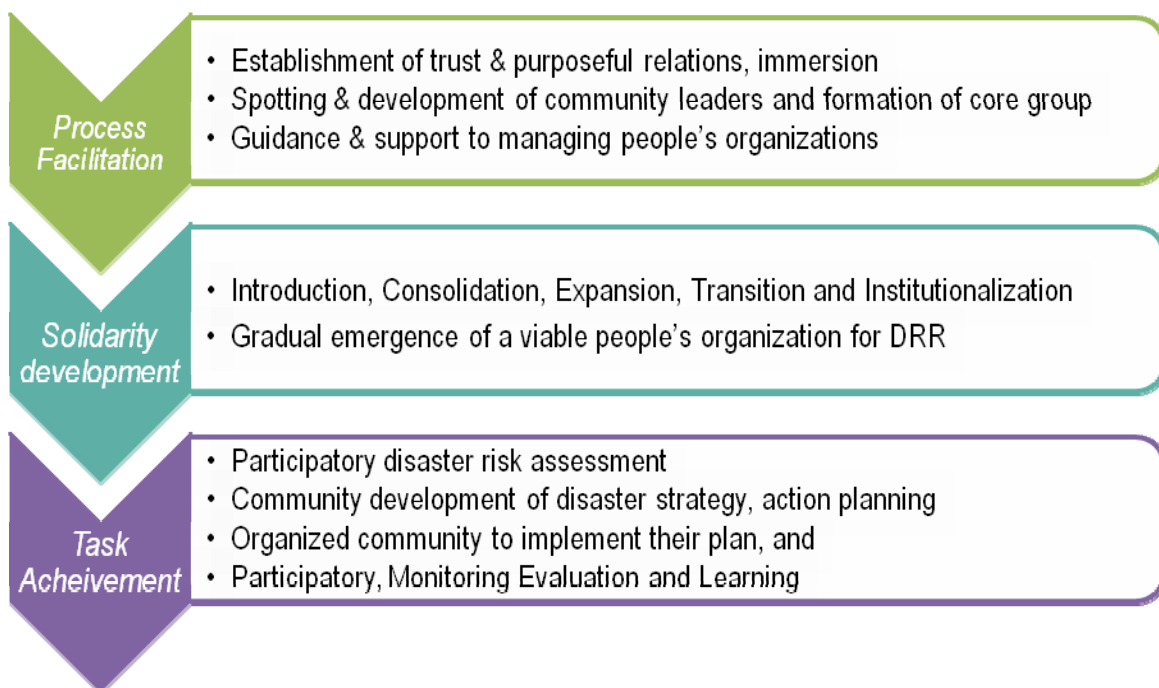
³ *The solidarity development focuses on the 'community managed' aspect of CMDRR – on enhancing the quality of interactions between and among the different stakeholders of development in the community. It is concerned with nurturing life energies that equalize power relations, bind the group together cohesively in the process of making decisions, dealing with conflicts, resolving issues, and maintaining individual and collective self respect while addressing or bouncing back from hazard events. It aims to enable the people to manage its group growth or organizational development through a purposeful individual, group and community experiences.*

⁴ *The solidarity development focuses on the 'community managed' aspect of CMDRR – on enhancing the quality of interactions between and among the different stakeholders of development in the community. It is concerned with nurturing life energies that equalize power relations, bind the group together cohesively in the process of making decisions, dealing with conflicts, resolving issues, and maintaining individual and collective self respect while addressing or bouncing back from hazard events. It aims to enable the people to manage its group growth or organizational development through a purposeful individual, group and community experiences.*

After the identification of these key community leaders they have been called for program launching workshop organized at Woreda level. In the workshop the selected community leaders have been familiarized on the basic purpose of the CMDRR program starting from its objective up to the expected outputs and intended impacts. These community representatives mostly Kebele chairmen and elders are entrusted to sensitize the whole community on the basic intention of the CMDRR approach so as to initiate the formal community institution establishment. Thus, these community key leaders have led the process of immersion and purposeful entry in to the target community in collaboration and facilitation of the program implementation organization community development facilitator (CDF).

Thus, revitalization of the existing community leadership or institution started from this initial step and continues through the whole three major phases of implementation of the CMDRR approach (*Process Facilitation, Solidarity Development, and Task Accomplishment*)

Figure 4: Three Dimensions of CMDRR Process



Using these community core groups (*who have participated during the launching workshop*) as the key facilitators from the community side CMDRR committee establishment, was done calling whole community assembling meeting. And, the Kebele CMDRR committee are established composed of seven members (*three women and four men*) representing different villages in the Kebele. In line with establishment of the main CMDRR committees different sub-committees, *at least three sub-committees*, were also constituted which handle different tasks of the CMDRR overall task. These sub-committees include water, rangeland, and health and are composed of seven members each. Among others, the following three major steps were followed during the program implementation as springboard towards establishing community/people organization for DRR:-

I) Awareness creation on community managed disaster risk reduction (CMDRR):

The concept of community managed disaster risk reduction is the first of its kind in the target kebele. For this reason, the project implementing partner of DCA (*LWF- Rayitu field office*) introduced and familiarized the communities and Woreda line offices with concepts and objectives of the CMDRR approach;

II) Selection of Community Managed Disaster Risk Reduction Committee: In order to bridge the gaps in linkages between different institutions (*both external and internal actors*) involved in disaster risk management, establishment of strong community organization or structure is one of the key task under CMDRR process. Accordingly, the community managed disaster risk reduction committee (CMDRRC) established in each of the program targeted 9 Kebeles. Throughout the CMDRR process, these selected committee members were in charge of leading their respective communities; and

III) Capacity building training for the established Community managed disaster risk reduction committee: The selected CMDRRC members were given a thorough training on the concept and practice of community managed disaster risk reduction process. The training topics were hazard assessment and characterization, vulnerability assessment and analysis, capacity assessment and analysis, disaster risk analysis and measures recommendation, community managed disaster management plan preparation and indicators development for participatory monitoring, evaluation and learning.

After get the training on CMDRR process each of CMDRR committee moved to next CMDRR process which is the task accomplishment together with their community. Among the three dimensions of CMDRR process task accomplishment has been the major entrusted activity at the ground level. All the program targeted communities have gone through the five major categories of task accomplishment. These have been observed and traced at all the three level of data collection namely DCA program coordination in Addis Abeba, program implementation stakeholders in Rayitu Woreda and target communities in Tedecha federda, Hara Adi and Adela Kebele through triangulation of secondary data, interview and physical artifacts observation.

All the three communities involved on this study have gone through participatory disaster risk assessment (PDRA), disaster risk reduction (DRR) strategy development, community action planning (CAP), community action plan implementation and participatory monitoring, evaluation and learning (PMEL) components of the task accomplishment dimension of the CMDRR process. The summarized findings of all these process will be detailed on the coming subsequent section of this chapter and generally is evident that going through these different participatory tasks have enhanced the skill and motivation of the communities to start moving for their own benefit. Of course the level of details and status is still far from the ideal expected status which is not surprising considering the short period of implementation the program and necessity of CMDRR process for continuous and rigorous engagement on a longer period.

Getting the target community to go through these five major components of the task accomplishment dimension has been found to be the main way of building community's own capacity for their own cause. This was observed from the fact that all of the three studied community has shown a remarkable behavioral change which is not common in most of similar communities where frequent humanitarian support is there. Looking for external support for each scramble humanitarian hands/dependency syndrome is not observed and hopefully will not be there anymore in these communities which have gone through the CMDRR process.

This was observed and reflected during a monitoring mission with the donor partners in the Woreda whereby those Kebeles supported through the CMDRR program gave the priority to those Kebeles which didn't get the support as it has been cited the program manager during an exclusive interview. And this was also repeated in Hara Adi Kebele when I had conducted an interview with CMDRR members:

“We and the Kebele in front us are not the same ...we are better because we have got different skills, we know what to do ahead of drought situation, we have constructed ...we don't need your support now, please support our neighbor Kebeles which didn't get the support we got from the program...”

Such kind of self actualization and avoiding dependency syndrome was not common especially in communities whereby frequent drought occurs and related emergency response (*mostly characterized as free humanitarian support*) is delivered through different external stakeholders including government and NGOs.

4.1.1 Strong CMDRR Process Facilitation as Key Dimension for Successful Capacity Building

As is has been mentioned above the first task of DCA, *as the first organization implementing CMDRR approach in the study area*, was to start through introduction of the CMDRR approach to the different program implementation stakeholders. This was done by organizing a launching workshop at Woreda level involving representatives from Woreda Administration office, Disaster Prevention and Preparedness office, Pastoral Development office, Water office, Women affair office, Health office, Education offices and key community representatives including Kebele chairman, clan leaders, elders, mothers and fathers. The objective of the launching workshop was to introduce the CMDRR approach in general and create understanding as well as consensus among the different stakeholders who will be involved in the course of the program implementation. Before the launching workshop all the program targeted 9 Kebeles key community representatives/core groups who should be invited for the workshop have been identified. The identification of these core groups were

done through a purposeful pre-assessment and consultation of key informants in each targeted Kebeles.

This purposeful selection core group of people from each target community was done to ensure proper sensitization and awareness creation through these core groups a head of starting the CMDRR process involving the whole community.

During the workshop basic intention of CMDRR approach and its process basic three dimensions were discussed to acquaint Woreda officials and community core groups. Moreover, this workshop was taken as an eye opening session whereby the expected collaboration, during the whole CMDRR process, between the different stakeholders was communicated as kick off session. After the launching work shop the community representatives disseminated what they have got during the launching workshop and arranged community general assembly meeting in each of the target Kebeles separately.

Community general assembly meeting was conducted in each of the nine targeted Kebeles and participant from Woreda line office, experts from the program implementing organization (DCA & LWF) and the Kebele community have participated. During this community general assembly a similar sensitization on the purpose of CMDRR, its' process as well as the expected output was delivered by community development facilitators and others program staffs (*the program implementing organization community development facilitators have got prior detail training on CMDRR process facilitation*).

Despite, the sensitization of the whole community attending this general assembly; the basic purpose of calling this community meeting was to select the main CMDRR committee which will lead the whole process of CMDRR in that specific Kebele. Thus, in each of the nine Kebeles CMDRR committee composed of 7 members (3 women and 4 men) were selected during this community general assembly meeting. The committee members were nominated by the community after they have been briefed on selection criterion which includes representation of each Gerri/villages in the Kebele, people who knows the Kebele problem, commitment of the individual, and their educational background (*usually Kebele DA are included to facilitate the paper work*). Below is the extract of an interview transcript with one

of the community development facilitator who has been engaged in the whole process of CMDRR program implementation:

“...Capacitating of the community and their institution starts during the launching workshop whereby the sensitization on CMDRR approach was done involving communities key representatives and leaders and participant appreciate the fact that community will lead the whole process of the CMDRR program implementation. They go back to the community with their first assignment to make ready the whole community for the general assembly meeting...”

After selection and establishment of CMDRR committee in each of the program targeted Kebeles detail training on their role and responsibilities as well as on skills to conduct PDRA, prepare DRM strategy, prepare community action plans and their implementation has been organized and delivered for five to seven days. This training, which was more of theoretical nature, was a springboard to commence the real practical task achievement of each CMDRR committee at the ground with their community through the facilitation of the community development facilitator. Accordingly, a well trained CMDRR facilitator from the implementing organization continues to conduct each process of the CMDRR in target Kebele through the leadership of the established and trained CMDRR committees.

Here going through the above process facilitation was to bring peoples' owned organization using the community's trusted way of representing themselves. Thus, at this stage community existing capacity (*entrusted people selected to be member of the CMDRR committee*) invigorating exercises have started in this way for the whole CMDRR process.

“The CMDRR committee was established in 2013 and the members were composed of 4 men and 3 women nominated from the three sub-kebeles using a set criterion by the community...The Kebele CMDRR committee was established with aim of identifying our problem and challenges especially to solve the community central problem, water” (Hara Adi CMDRR chairperson)

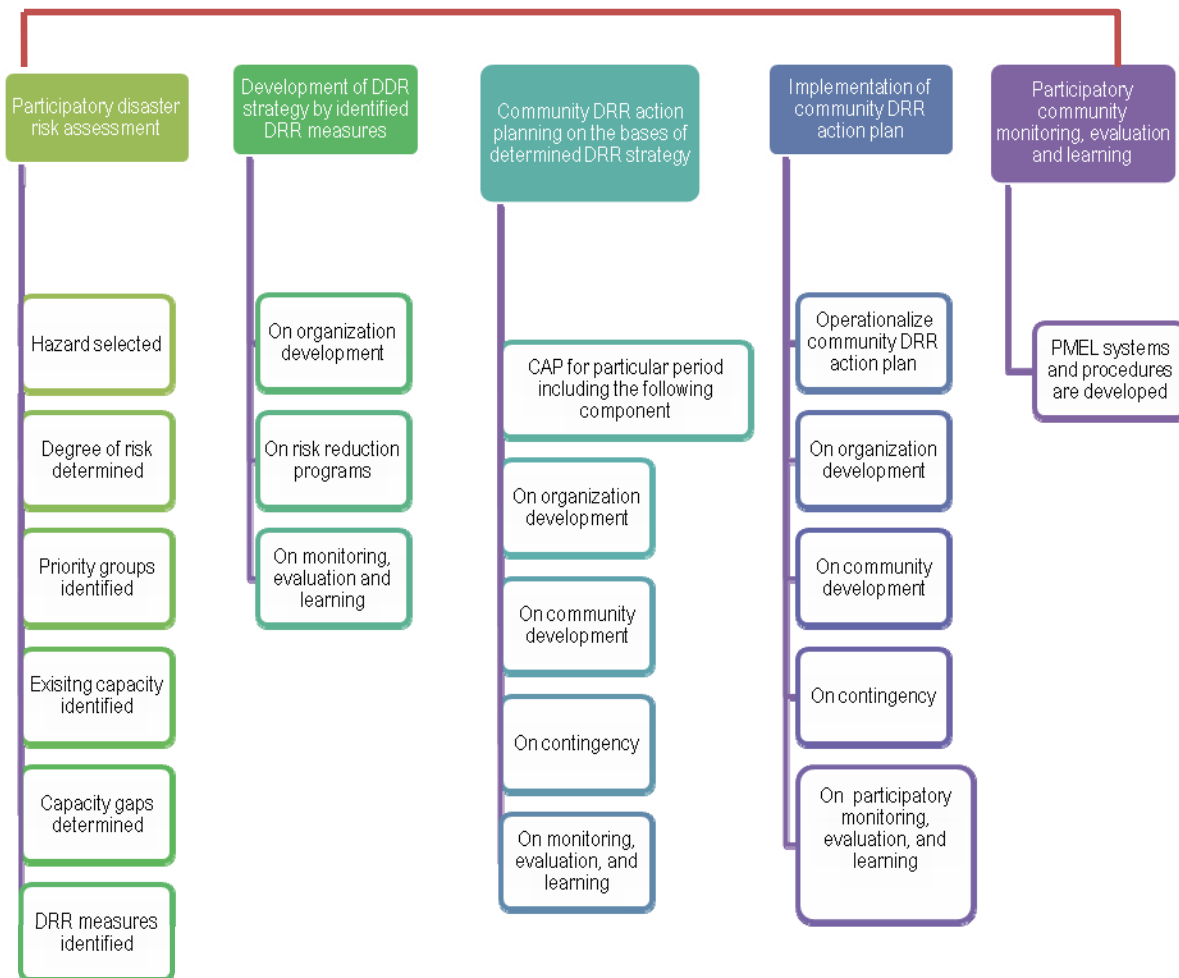
“In each Kebele this established CMDRR committee was composed of seven members constituted from each gerri/sub-kebeles, 3 women, and lead by the Kebele chairman. Even though, having the Kebele chairman as member of the CMDRR committee was not set as mandatory criteria in all of the nine Kebeles the leader/chair person of the CMDRR committee was the Kebele chairman. Moreover, in most of the cases DA’s were also members to take the advantage of their educational background for the paper work of the committee. These committees are the entrusted people organization established to be the community’s viable organization and accomplish all tasks related to drought risk reduction representing their community. Thus, nurturing of these established committee started by training and awareness creation on CMDRR process before they start conducting the participatory disaster risk assessment (PDRA). All members of these committee got five days training and the main objectives of the training were to familiarize concept of DRR, to capacitate the process of CMDRR, to strengthen partnership, to ensure ownership & sustainability, and to identify roles and responsibilities of CMDRRCs & other stakeholders in implementing the project activities.” (LWF, 2014 Terminal Report)

Then after, each of the Kebele CMDRR committee was given responsibility to lead and go through the task accomplishment dimension of the CMDRR process starting with conduction of PDRA, development of DRM strategy, community action planning, CAP implementation and participatory monitoring, evaluation and learning tasks. Below are the different steps gone through the task accomplishment dimension of CMDRR process. And for this purpose more than eight formats were adopted and translated in to local language (*Oromifa*) to conduct and summarize their findings.

Before conducting these task accomplishment phases of the CMDRR process the program implementing organization experts were given proper training on the overall CMDRR approach and different facilitation skills at the outset of the program. The success of CMDRR program highly depends on excellent facilitation skill of the program implementer organization and its expertise at all level.

Having the fact that this approach is newly adopted approach on disaster risk reduction in general and new also to the program target community; it was very crucial to train project staff. After the launching workshop the first task was establishing of each target Kebele CMDRR committees through the general assembly meeting organized by the help of those core groups selected from the community. The Kebele CMDRR committee was selected using preset and agreed criteria through community vote having seven members out of which three are women.

Figure 5: Steps of CMDRR Process Conducted by each Community



As we have seen above the exercises on revitalizing existing capacity of the community and their institutions started during the selection and establishment steps/process for building people organization for DRR.

Then, more robust capacity building activities comes later when the whole community lead by the established CMDRR committee go through and achieve the above five major CMDRR task achievement processes.

4.1.2 PDRA: as Tool of Engaging Individuals and Community into a Real Participation

Training of the established CMDRR committees is one of the key nurturing steps whereby community organization acquire theoretical skills and open the door to appreciate the benefit of the approach. Having trained on the basic theoretical aspect, each of CMDRR committee leading their respective community started to conduct participatory disaster risk assessment which includes hazard, vulnerability, and capacity (HVC) assessments. Here, even though it is expected that the CMDRRC should lead the whole process, the facilitation role of the program implementing organization community development facilitator (CDF) has got a paramount importance. Conducting proper PDRA is one of the key CDMRR processes whereby people organization and individuals assess the hazard, vulnerability (both community and individual) as well as existing and required capacity against drought hazard. (IIRR, 2006)

Different PRA tools including resource mapping, time or seasonal analysis (*historic time line, seasonal calendar, daily schedules*, etc), storytelling, transect walk, and ranking and scoring (*wealth ranking, pair wise ranking, proportional pilling*, etc) were employed during the HVC assessment and their analysis. Each analysis was supported using a template translated in to the local language for documenting the findings of each assessment and their analysis. Different segment of the community (elders, women, youngster and men) forming a group assessed each components and discussion was held to agree, merge and reach on consensus before heading to the next step.

The assessment was started by identifying list of hazards, ranking and characterization of the first prioritized hazard. In all the three studied community the first prioritized hazard was drought followed by livestock disease, pest infestation and human disease.

Then drought hazard was characterized against its force, warning signs and signals, forewarning, speed of onset, frequency, period of occurrence, duration and its effect. Below is the summarized table for Drought hazard characterization exercise conducted in Hara Adi Kebele.

Table 2: Hazard/Drought Characterization Exercise in Hara Adi Kebele

Name of the Hazard: **Drought**, Community Name: **Hara Adi**

Nature	Elements	Underlying causes	Immediate causes	Analytical description of hazard	Exposures variables	
					How will it affect individual	How will affect community
Force	Thirsty and Hunger	Deforestation for farm land expansion and for other purposes, change of weather condition	Shortage of rain fall, unseasonal rain	Drought is common hazard in Hara Adi Kebele. It occurs because of shortage of rain fall and which comes once within two year and lasting for at least 6-8 months.	Livestock death Human death .	The community forced to migrate for searching water, food and pasture. Conflict will be created during sharing limited resources such as water and fodder.
Warning signs and signals	Rainfall shortage, wind, unseasonal rain, migration, removal of green leaves from trees, declining of water sources			Its force are thirsty and hunger	Migration, school dropout.	Transmissions of animal and human diseases are in place.
Forewarning	Around 2 month			Speed of onset of drought is gradually.	Susceptible to disease	School drop out
Speed of onset	Gradually					
Frequency	Within two years					
Period of occurrence	May/Sebtember					
Duration	6-8 months					
Effects	Human and livestock death, school dropout, migration, environmental degradation,					

The main essence of employing CMDRR approach lay on its principle taking community as survivor rather than victims of any potential hazard. When we say community is survivor it is to refer to their capability and capacity to withstand and revive from devastating impact of a disaster as long as there is a pro-active effort in reducing their vulnerability and prevention/mitigation capacity for a hazard.

The other basic principle of CMDRR believes that communities have got accumulated knowledge of the system they are living with. That is, to conduct a successful HVC assessment community development facilitator should properly plan ahead of time how efficiently he can facilitate the process to utilize the community knowledge. In line with this, during HVC assessment with the leadership of establish CMDRR committee elders, religious leader, women, men and youngsters were involved in assessing the potential hazards, their vulnerability and capacity against the selected/prioritized hazard (drought). Elders who knows very well the historical trend of drought situation for a number of decades helped to easily visualized the historic time line, its frequency, the community coping strategies, the deterioration of positive coping mechanism, current inclination towards negative coping mechanism and tight situation to withstand recurrent drought. In addition, elders and adults easily recall the livelihood deterioration in historic time line through storytelling tool. One of the elders during an interview in Hara Adi Kebele put the livelihood deterioration because of recurrent and prolonged dry seasons as follow:

“During the normal year people get satisfied because of the increase in the number of livestock head from 3 to 6 or 8 getting new offspring then Bona season will come to reduce back again to 3 or less ...and the frequency of loss of livestock increased on recent times so most people are getting poor and poor...”

During the identification and characterization of hazard the community innate knowledge is channeled through the involvement of the different segment the community and using different PRA tools (historic time line, storytelling, transect walk with key informant, etc).

This analysis is also augmented from women and youngster groups from the other dimension especially in clearly depicting the effect of the identified hazard/drought towards the community and among members of a household.

The hazard assessment conducted in each of the three studied Kebeles (*Tedecha ferda, Hara Adi and Adela Kebeles*) has identified drought as the first prioritized hazard. And its characterization was summarized as follow:

“Drought occurs because of shortage of rain fall and which comes once within two years and lasting for at least 6-8 months. Its forces are thirsty and hunger and speed of onset is gradual/slow.” (Hazard assessment summaries in study Kebele)

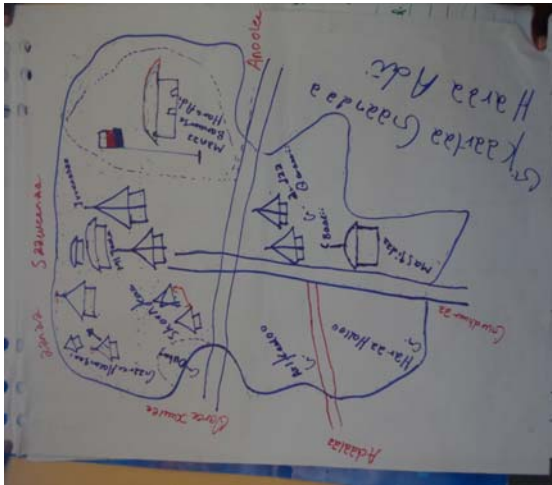
Having the prioritized hazard/drought and its characterization, the next step of the PDRA was to go for vulnerability assessment. Vulnerability assessment is one of the key step and crucial which enable to clearly see the position of the community and different elements at risk including human being (women, children, elders, disables, etc), livelihood assets and natural resources against hazard/drought (*Blaikie, etal 2003*).

Seasonal calendar, migration route, dry and wet season grazing corridors, natural resource mapping etc were employed as a PRA tools to conduct the vulnerability assessment in the three studied community. Considering each element at risk the progression of vulnerability (*unsafe conditions⁵, dynamic pressures⁶, and underlying causes⁷*) was assessed including ranking among the different elements at risk using proportional pilling to determine their level/degree of vulnerability.

⁵ *Root causes which are an interrelated set of widespread and general processes within a society and the world economy. They are “distant” in one, two or all of the following senses: spatially distant (arising in a distant center of economic or political power), temporally distant (in past history), and finally, distant in the sense of being so profoundly bound up with cultural assumptions, ideology, beliefs and social relations in the actual lived existence of the people concerned that they are “invisible” and “taken for granted”*

⁶ *Dynamic pressures are processes and activities that “translate” the effects of root causes both temporally and spatially into unsafe conditions*

⁷ *Unsafe conditions are the specific forms in which the vulnerability of a population is expressed in time and space in conjunction with a hazard. Examples include people having to live in hazardous location, being unable to afford food/safe buildings, lacking effective protection by the state, having to engage in dangerous livelihoods or having minimal food entitlements or entitlements that are prone to rapid and severe disruption.*



Participatory community hazard and resource mapping in Hara Adi Kebele

The basic aim of passing through the practical assessment and analysis of vulnerability putting the human element at risk (*children, women, elders, youngster etc..*) at the center and the community as a whole is to pave the way for creating the situation to plan and act on a realist prevention, mitigation, and preparedness pro-active actions. That is, a community action plan that reflects the capacity gap and level of vulnerability both at individual and community level against the recurrent drought impact. When analyzing root causes, dynamic pressures and unsafe conditions as the progression of people and community's vulnerability it will be easy to identify the different dimension of their vulnerability (*social, economic, environmental, political and behavioral aspects*). And, this insight empowers them to plan/act based on knowledge and informed/in sighted situation analysis against the hazard/drought. Summarized vulnerability assessment findings in one of the studied Kebele (Hara Adi) is presented below.

Table 3: Summarized Findings Vulnerability Assessment Exercise in Hara Adi Kebele

Name of the Hazard: **Drought**, Community Name: **Hara Adi**

Hazard Profile	Element at Risk	Unsafe conditions	Dynamic pressures (Pushing factors)	Root causes	Degree		
					High	Medium	Low
Drought is common hazard in Hara Adi Kebele. It occurs because of shortage of rain fall and which comes once within two year and lasting for at least 6-8 months. Its forces are thirsty and hunger and speed of onset is gradual/slow.	Human beings						
	Women	Long distance walk to fetch water, breast feeding	Large family members, Pregnancy, heavy duties/tasks	Shortage of food, Less awareness about family planning	High		
	Children	Carrying out the tasks beyond their capacity, Dependency	Lack of access to nutritional food at required time	Food insecurity	High		
	Disabled people	Dependency	Lack of attention	Lack of physical capacity to work		Medium	
	Elders	High family members	Low working capacity, lack of care	Old aged		Medium	
	Youth	Long distance travel to serve family, lack of awareness	Early marriage,	Large family number		Medium	
	Livestock						
	Cattle	Long distance movement to search water and pasture	Lack of water and pasture at required time	Lack of adequate water and pasture	High		
	Shoats	Lack of browsing resources	Lack of feed, disease out break	Lack of adequate water and feed resources	High		
	Equines	Heavy transportation and long distance movement, disease out break	Long distance movement to search water and feed,	Sortage water and feed, inadequate vaccination and treatment		Medium	
Camel	Heavy transportation. long distance travel	Leaf feeder, long distance travel to search water and feed	Lack of water and feed			Low	
	Environment	Clearing of forest and soil exposed to wind and sun light, farm land expansion, population pressure, use of similar sources for both human and livestock consumption resulted in depletion and contamination of water resources, over grazing and pest infestation	Shortage of rain, disperse vegetation cover, soil erosion by wind and runoff, lack of proper management poor awareness to substitute by replanting	Lack of proper soil and water conservation activities, lack of awareness, shortage of rain and lack of awareness about rangeland management	High		

Summary of the assessment

According to assessment conducted, drought can strongly affect human beings, livestock's, and natural environment. Women, children, elders, and disabled people are more vulnerable to drought than other people. Among livestock's, cattle are the most vulnerable to drought because of long distance movement to search water and feed. Intensity of lactation to more milk also increases the vulnerability of caws. On other hand, natural environment is vulnerable because deforestation, soil erosion, water sources and grazing land depletion.

Following a thorough vulnerability assessment, the CMDRR committee continued to conduct capacity assessment and its analysis. The capacity assessment and analysis exercise allowed to visualize individual/community existing capacity against drought. Knowing the element most at risk and the level of vulnerability insighted family member's focus in identifying their innate individual and communal capacities, which were ignored or not considered as an existing capacity by the community.

For instance, in appropriate household chores sharing among men and women, inefficient utilization of available natural resource, lack of saving habit/culture (*which could be easily improved simply through behavioral change and awareness creation*) during normal/good season etc were few of individual and community existing capacities revitalized through this CMDRR program implementation and contributed a lot in mitigating drought impact.

“Before 5-10 years our problem was mainly shortage of water, food, pasture...Women and children were traveling long distance and small children (under breast feeding) were on hunger since lactating mothers were supposed to travel long distance to fetch water and contact time with their children were too short. ...In addition, there were also school dropouts every dry/bona season. Previously it was only possible to attend only three months out of the annual learning period (8-9 months) in schools most of the children dropout mainly because of water shortage...Now we have got a number of ponds which is serving us throughout the dry period and currently we are relieved from our previous problem of water scarcity and now we are looking forward to get improved water schemes like pipeline extension for human consumption.Moreover, have got also different livelihood skills like developed habit/culture of efficient utilization of the available resource including a scheduled use of available water sources along the year as well as reduced wastage through the community dialogue session and different training delivered by the project.”

Moreover, natural resource mapping exercises was also used to capture existing capacity of the community indirectly supported by institution and stakeholder mapping using vein diagram as a PRA tool.

Capacity assessment was done on three major steps. First capacity to drought hazard prevention mitigation is assessed considering both existing and required capacities. Then capacities of both individual's survivability and community readiness across time element i.e during and before drought occurrence is assessed for each of the element at risk. Finally, the two capacity assessments were merged to have the compressive capacity assessment findings. Accordingly, the following were their major findings in terms of existing capacity and gaps to withstand drought impact.

Table 4: Summary of Capacity Assessment in all Three Studied Kebele

Existing capacities	Identified capacity gap
<ul style="list-style-type: none"> ➤ Migration & cultural sharing of food & livestock assets; ➤ Long distance movement to search food, water and feed; ➤ High lactating intensity of cows to get more milk. ➤ Limited awareness on conservation of natural environment; ➤ Un equal labor sharing among men and women; ➤ Dependency of elders, children, and disabled people on others; ➤ Migration & cultural sharing of food & livestock assets; ➤ Shortage of grazing land, water and food; and ➤ We have 2 communal & 5 private ponds, 2 roof catchments, 50 ha rangeland, one elementary school, & one health post. ➤ Population pressure 	<ul style="list-style-type: none"> ➤ Awareness on EW system and pro-active actions including destocking and changing livestock asset in to cash, and reserving rangeland & water; ➤ Sharing of labor among men and women; ➤ Support and special attention to elders, children and disabled people during drought; ➤ Avoiding negative coping mechanism on the natural resources; ➤ Construction of 4 communal ponds, 30 private ponds, 2 roof catchments, 4 additional classroom for school, one additional health post and 1 deep well; ➤ Preparation of community contingency plan and its pro-active actions; ➤ Awareness creation for communities on range land development, and conservation of natural environment; and ➤ Awareness on family planning

Table 5: Capacity Assessment Findings in Tedecha Ferda Kebele

Capacity required to address Hazard and Vulnerability				
Element at Risk	Time element	Capacities		
		Existing	Required	Gap
Individual Survivability: Considering atleast age and gender	During drought/hazard time	Long distance movement to search food, water and feed; High lactating intensity of cows to get more milk.	preparedness and emergency response measures	Lack of preparedness and emergency response measures
	Before drought/hazard time	Limited awareness of the community to conserve natural environment; Food insecurity; Un equal labor sharing among men and women; Dependency of elders, children, and disabled people on others;	Awareness on contingency plan, EW system and pro-active actions including destocking and changing livestock asset in to cash, reserving rangeland & water; Equal labor sharing among men and women; Support to elders, children and disabled people during drought; Proper management of lactating caws and natural environment	Lack of awareness on contingency plan, EW system and pro-active actions including destocking and changing livestock asset in to cash, reserving rangeland & water; There is no equal sharing of labor among men and women; There is no special attention to elders, children and disabled people during drought; The people need more milk rather than saving milking cows; Destruction natural environment
Community Readiness	During drought/hazard time	Migration & cultural sharing of food & livestock assets; Shortage of grazing land, water and food	preparedness and emergency response measures	Lack of preparedness and emergency response plan and actions
	Before drought/hazard time	We have 2 communal ponds & 5 private ponds, 2 roof catchments, 50 ha rangeland, one elementary school, & one health post; Population pressure	Six communal ponds, 35 private ponds, 4 roof catchments, 1,200 ha of rehabilitated, area enclosed & reserved rangeland, two health posts, and one deep well; Preparation of community contingency plan and its pro-active actions ; Proper family planning	4 communal ponds, 30 private ponds, 2 roof catchments, 4 additional classroom for school, one additional health post and 1 deep well; Preparation of community contingency plan and its pro-active actions; Awareness creation for communities on range land development, and conservation of natural environment; Awareness on family planning
How to prevent the drought/hazard event	No capacity to prevent drought occurrence			
How to mitigate the drought/hazard event	Construction of 4 communal ponds, 30 private ponds, 2 roof catchments, 4 additional classroom for school, one additional health post and 1 deep well; Preparation of community contingency plan and its pro-active actions.			

Thus, the participatory HVC assessment findings were compiled altogether and analyzed to generate the community DRR measures recommendation. All these steps of conducting the PDRA was done in all of the three studied Kebele as it was clearly observed from the respective CMDRR committee secondary documents as well as the interview conducted with members of CMDRRC.

The output of hazard, vulnerability, and capacity assessment and their analysis have been used as a spring board and input to the next step of the CMDRR process. In all the three studied community DRR strategy development and community action planning was done based on the findings of participatory disaster risk assessment and analysis (PDRA). Below is the summary of the PDRA in Hara Adi Kebele (*translated in to English from Oromifa*) which is similar to the other studied community.

Table 6: Participatory Disaster Risk Assessment and Analysis in Hara Adi Kebele

Participatory Disaster Risk Assessment and Analysis (PDRA)				
Elements at risk	Drought	Vulnerability		Degree of risk(High, Medium and Low)
	Mitigation capacity gaps	Elimination capacity gaps	Preparedness capacity gaps	
Human beings	Shortage of adequate food and water, Shortage of school	Awareness creation on Shortage of adequate water and	Lack of awareness, lack of capacity	High
Livestock	Lack of adequate water and feed,	Lack of adequate water and feed, Limited veterinary services	Lack of awareness on drought cycle management, Illiteracy, Migration as a result of resources incompatibility (availability of feed in absence of water)	High
Environment	Lack of awareness on soil and water conservation, Lack of awareness on forest conservation, lack of awareness on proper utilization of grazing land and water	Poor saving culture of resources, Lack of saving and credit institutions, improper environmental conservation	Limited awareness about the environmental protection	High

Summary of findings
<ul style="list-style-type: none"> . Human beings affected by drought because of water reserves depletion and food shortage. In addition, limited income diversification activities and lack of awareness & capacity on what they are implementing affects the livelihoods of the human being; . Livestock affected by drought because of shortage of water and pasture and limited vet services; . Limited awareness to environmental protection by the community and improper utilization natural resources contributed to be affected by drought in high degree.

The summarized PDRA exercise findings table clearly indicated prevention and mitigation capacity gaps as well as preparedness capacity gaps whenever drought is expected to happen. The capacity gaps are identified for all elements at risk starting from human element and other crucial pastoral livelihood pillars (livestock and natural resource/environment).

The following were the main preceding exercises which are used as input to reach on the summarized PDRA findings:

- i. Hazard identification, prioritization and characterization;
- ii. Vulnerability assessment across element at risk versus root causes, dynamic pressures and unsafe conditions against the selected hazard which is drought in all the three studied communities; and
- iii. Capacity assessment on existing, required and gap for preventing (if possible), mitigating drought and be prepared to drought situation so as to survive and recover back to status quo.

After having the summarized PDRA and its analysis the next step was development of DRR strategy and community action planning. Before heading directly to the DRR strategy development and the community action planning the CMDRR committee have presented the PDRA summarize findings to the community and acquired their blessing (*quest for consensus*). Upon getting the consensus on the summarized PDRA findings, it is used as the base for crafting DRR strategy and community action planning tasks of the CMDRR committee and its sub-committees.

Generally, shortage of adequate water and depletion of existing water reserves, shortage of adequate food, limited income diversification activities, lack of adequate water and feed, limited veterinary services, poor saving culture of resources, lack of saving and credit institutions, improper environmental conservation were identified as preventive and mitigation capacity gaps of vulnerability for human, livestock and environment elements. Lack of awareness on drought cycle management, illiteracy, migration as a result of resources incompatibility (availability of feed in absence of water), and limited awareness about the environmental protection were found to be vulnerability reduction capacity gaps.

Based on this analysis the degree of drought risk is found to be high for human, livestock and as well as environment elements. And, the following were the major DRR measures recommended based on the estimated probability of drought disaster risk in each of the three studied Kebeles.

Measures recommended for disaster risk reduction

- Improvement of availability and access to water resources at closer center and related awareness on its proper utilization;
- Community organization development for DRR;
- Rangeland expansion and management;
- Enhancing early warning system (EWs);
- Income diversification;
- Establishing of MFIs and awareness creation (improve saving culture);
- Emergency food, water and cash assistance (contingency);
- Gender equal labor sharing;
- Storing crop residues for bad season;
- Reforestation and awareness creation
- Capacity building on Drought cycle management, Early Warning System, CMDRR approach, Cross Cutting issue ...
- Expansion of health services for Human and Livestock; and
- Introduction of drought resistant crops.

This was how the CMDRR process enabled the community to be engaged, contribute and decide on the process of disaster risk reduction. Up to this level the community situation in terms of drought characterization, vulnerability assessment and identifying existing and required capacity was done involving the whole community through the leadership of newly established DRR committee and facilitation the program implementing organization. Thus, there is now an active community organization from the community already on motion/engaged and leading the whole process of PRDA.

If we pause a lit bit and try to visualize how and where these communities, under this study, are heading to/ have gone through we can say that already something is there moving towards one end even though still on the middle of the way before reaching the intended output of building drought resilient community. This was what has been said by one member of Tedecha ferda CMDRR committee when he was asked what a single point he can mention about the merit of employing CMDRR approach in the pursuit of building drought resilient community in their community:

“Working with one person and working with more people as the CMDRR committee is different especially in terms of materializing the required community participation... Since the support done by LWF is prioritized and selected by the community participation achieving the required community contribution was easier”

4.1.3 DRR Strategy Development Process based on PDRA Outputs

So far we have seen the process on how the community conducted PDRA and determined the DDR measures taking drought as their first priority hazard. Then, the before having the comprehensive community action plans one crucial step remains the community should conduct and that is the development of the community DRR strategy. A strategy is the best possible way of utilizing limited community resource (money, materials, time and labor) to realize the identified DRR measures (*IIRR, 2006*). According to IIRR/CORDAID CMDRR training manual, program implementing facilitator should have the following three major considerations/questions in mind when facilitating DRR strategy development process:

- What is the organizational strategy (including type of organization that may be already existing or still has to be formed)?
- What is the program strategy for accomplishing determined DRR measures?
 - ❖ Development; and
 - ❖ Contingency
- What are the selected ways of doing participatory monitoring, evaluation and learning (PMEL)?

It is on these three major questions DRR strategy development exercise should revolve. Accordingly, the three communities (*Adela, Hara Adi and Tededecha ferda*) have gone through this process and identified strategies for three major components. The three DRR strategy components were:

- i. Organizational development, which will be in charge of implementing CMDRR Process in the community;
- ii. DRR program strategy (*community development and contingency*); and
- iii. Participatory Monitoring and Evaluation and Learning (PMEL) components.

All the three communities have gone through this exercise using their PRDA findings and DRR measures identified as input. Having drought as the first prioritized hazard and similar overall situation (*geographic and socio-economic situation*) of the three communities most outputs of the PDRA exercise were the same. During the data collection at community level I have observed the three studied community secondary documents and also triangulated through interview with the respective CMDRRC members. The level of achievement was more or less the same and it was found out that DRR strategy development gave more attention to the second component (*DRR program strategy*) of among the three. The following DRR strategy development summary table displays and represents the output of DRR strategy development practice done in the three studied community.

Here one thing worth mentioning is the literacy level of the CMDRRC versus the real utilization of all this formal compilation of findings of the different CMDRR process. It well noted that all the materials including the PRDA, DRR strategy and community action plan documents are keep well in each of the Kebele center, the community CMDRRC use the office of the Kebele administration, but how many of them really benefit from such kind of written documents is a question. And in line with this basic educational skills including numeric capacity building support should be included on any future support as component of organizational development component of the DRR strategy which not there currently in all the three communities studied.

Table 7: Summary of DRR Strategy Development in Tedecha Ferda Kebele

DRR Strategy Development				
1. Organization in charge to implement CMDRR Process in the community/village.				
1.1. What should be the appropriate form of organization? A village disaster risk reduction committee (VDDRC) in participation of peoples organizations, institutions, local government, with 50% representation coming from marginalized male and female.				
1.2. Does that organization exist? Yes established.				
2. Program strategy				
Identified DRR Measures	Various ways to accomplish the measures	Strengths and opportunity to employ the strategy(High, Medium, Low)		Selected strategy
		Our capacity to employ the strategy	External opportunities to employ the strategy	
2.A. Community Development				
Water schemes development	Ponds construction	High	Medium	Selected
	Pond maintenance	High	low	Selected
	Shallow water well development	High	Low	Selected
	Deep water development	Low	High	Selected
Increasing the income of marginalized people	Awareness creation of different income sources	Medium	Medium	selected
	Saving and credit schemes	Medium	Medium	Selected
	Awareness creation of saving culture	Medium	Medium	Selected
Enclosure of grazing land	Demarcation of grazing land	High	Low	Selected
	Selective bush clearing	High	Low	Selected
	Runoff diversion to grazing land	High	Low	Selected
	Enclosure of grazing land	high	low	Selected
Construction of additional class	Site selection	high	Low	Selected
	Construction of class	high	high	Selected
	Hiring of teachers	Low	high	Selected
	Quality of education	Medium	high	Selected
Proper Utilization of technologies	Awerness creation	Medium	High	Selected
	Supply of improved seeds	Low	High	Selected
	Supply of fertilizers and herbicides, pesticide	Medium	High	Selected
Natural Resources Management	Awareness creation	Medium	High	
	Controlling forest destruction	High	Low	Selected
	Seedlings plantation	Medium	Low	Selected
2.B. Contingency				
Life saving	Emergency food, water and feed supply	Low	High	Selected
	Human and Livestock health services	Low	High	Selected
3. Participatory Monitoring and Evaluation and Learning(PMEL):				
The CMDRRC is responsible to conduct PMEL to achieve the developed strategy through involvement-concerned bodies.				
Summary of selected strategy:				
· Organizational: The established CMDRRC moved in to action to implement the approach.				
· Community Development: Construction water schemes, maximizing income of poor families, enclosure of grazing land, Natural Resources Management are the selected strategies.				
· Contingency: Life saving				
· Participatory Monitoring and Evaluation and Learning (PMEL): The selected strategies should be monitored and evaluated by CMDRRC.				

This exercise helped a lot in identifying the community's innate capability which were not utilized and considered as capacity to with stand drought hazard. Most of the barriers in reaching the aspired situation of the community fall on behavioral changes of individuals and the community as whole on their day to day livelihood engagement including:

- Awareness creation to the community on the need for pro-active drought risk reduction measures by themselves through their own organization ,CMDRRC, leadership;
- Improve the level of awareness on drought risk to the wider community members through CMDRR exercise and community dialogue sessions;
- Awareness creation and training on different skill required to manage drought risk reduction measures;
- Sensitization and build on potential and community initiated livelihood diversification options;
- Improving saving culture;
- Proper utilization of available natural resources; etc

Working simply on soft activities like improving the mindset of the community towards higher level of understanding the drought risk and making them prepared ahead of time contribute a lot in terms of reducing their vulnerability towards drought impact. The CMDRR approach has brought a positive change on this regard as it has been observed in all the three community where this study has been conducted.

Table 8: Summary of Need Selection from the DRR Strategy Developed in Tedecha Ferda Kebele

Type of Hazard: Drought Name of Kebele: Tedecha ferda				
Need selection from the developed DRR Strategies				
Selected strategy	Aspired situation	Present situation	Barriers to reach aspired situation	How to eliminate identified barriers (Need)
1. Organizational				
Strengthen the implementation capacity of CMDRRC	The concerned organization should capacitate the CMDDRC through mind set up and required materials The CMDRRC should be self sustained without external support	The CMDDRC established, however, this committee is not practicing the approach as required.	Limited awareness (mind set up)	Awareness creation and mobilizing the community to implement the approach
2 A. Community Development				
Poor families income maximization through income sources diversification	100 % of the village community should get awareness of how to maximize their income	30% of the community is practicing income diversification	Lack of awareness, long lasting of drought	The CMDRRC should provide awareness for the larger community on income diversification
Water resource development	All community should have access to water(100%)	The kebele have low access to water(20%)	Lack of awareness and long lasting of drought	CMDRRC should be capacitated and mobilize the community to work hard
Awareness creation on saving culture	100% of the community should practice saving	32.5% of the community is practicing saving	Lack of awareness, migration	The CMDRRC should provide awareness for the larger community on saving culture
Enclosure of grazing land	There should be adequate grazing land for livestock	Shortage of adequate grazing land	Poor awareness on grazing land	Awareness creation (Mind set up) by CMDRRC
Selected bush clearing	Appropriate clearing of bush to obtain adequate grazing land	15 % of planned grazing land cleared from bush	Migration and lack of awareness	The CMDRRC should be model or exemplary
Human being and livestock Vaccine	100 % of human being and livestock should get vaccination	50% of human and livestock got vaccination	Lack of skilled health technician and vaccine and lack of awareness	The CMDRRC should provide awareness for the larger community
Diversion of run-off to enclosed grazing land	All of the community should familiarize with the importance of run- off diversion to grazing land	32 % of the community familiarized with the importance of run-off diversion to grazing land	Limited awareness	All community members should participate on run off diversion to grazing land
Natural Resources Management	Awareness creation on Natural Resources Management activities	The implementation of Natural Resources Management activities is achieved as required	Limited awareness to implementation of activities and wise utilization of Natural resources	All community should get awareness and implement NRM activities
2.B. Contingency				
Awareness creation(Mind set up) on proper utilization of emergency food and water	Adequate Emergency food , water and feed Proper utilization of Emergency food, water and feed	Limited Emergency food , water and feed Proper utilization of Emergency food, water and feed	Limited Emergency food , water and feed	There should be Adequate Emergency food , water and feed and proper utilization
3. PMEL				
Implementation of PMEL by CMDRRC and experience sharing	Strong implementation capacity of CMDRRC	Limited internalization capacity of PMEL by Committee	CMDRRC limited awareness and follow up	Enhancing the awareness of CMDRRC and encoring them to work hard

This DRR strategy development exercise was followed by need selection from the developed DRR strategy and their prioritization. The need selection, based on identified strategies, was done analyzing the community aspired situation, present situation, barriers to reach aspired situation and on how to eliminate barriers indentified (need).

Then prioritization exercise was done taking the importance of the selected needs, community capacity to address needs and external opportunities as criteria. Generally, among the three major components of DRR strategy development the disaster risk reduction component specifically the community development strategy seems getting prominent focus compared to the contingency and the other two major components (Organization development & PMEL).

4.1.4 Community DRR Action Planning on the basis of determined DRR Strategy

The DRR measures recommended at the end of the PDRA exercise were used to develop the DRR strategy and prioritization of the identified overall strategy of the community to with stand drought hazard. The community action planning exercise was to craft time bound and responsibility lined out community action plan based on existing capacities and resources within the community's immediate reach. The important point in doing community action planning was to translate the overall objectives, strategies in to operational plans and activities and kick off the risk reduction tasks. Here the people, organizations, timetable, resources within and outside the community needed to turn the intent of the plan into reality were identified.

At the planning stage, agreements/MoU with each Kebele CMDRRC, program implementing organization and government body was formalized regarding the respective supports and responsibilities in the risk reduction plan implementation and expectations/requirements of resources, which they commit to mobilize. According to the MoU signed document between the program stakeholders, the program implementing organization was expected to assist the community in the following areas:

- Community capability building through training and education activities and materials;
- Resource mobilization and allocation to supplement the community's efforts to generate resources to materialize the risk reduction plan;
- Facilitate linkages with concerned government agencies and other development actors including NGOs to access resources, information, etc.

The community action plan has been prepared for three major components in line with the DRR strategy developed, namely community organization development, drought risk reduction community development/contingency and PMEL actions, clearly stating the implementation period and responsibilities among stakeholders.

Table 9: Tedecha Ferda Kebele Community Action Plan (CAP)

Community Action Plan for the period of one and half year (2012-2013)						
Type of Hazard Drought, Name Kebele: Tedecha ferda						
Description of activities	Unit	Plan	Implementation period	Responsibility		
				Community	LWF	Government
1. Organizational						
Conducting meeting on CMDRR approach	Session	1	Weekly	Yes	Yes	Yes
CMDRR committee selection	Committee	1	Up to November 2012	Yes	Yes	Yes
Enhancing the capacity of CMDRR	Committee	1	Up to January 2013	Yes	Yes	Yes
2 A. Community Development						
Water ponds construction	Number	3	February – November 2013	Yes	Yes	Yes
Existing ponds maintenance	Number	2	March & August 2013	Yes	Yes	Yes
Maintenance of inlate	KM	2	January & June 2013	Yes	-	-
Access road to pond site construction	m	80	Feb-13	Yes	Yes	Yes
Deep well construction	no	1	May-13	Yes		Yes
Human and livestock vaccine	session	2	September-November 2013	Yes	Yes	
Rangeland development	ha	500	Apr-13	Yes	Yes	Yes
Seedlings plantation	Number	5020	Apr-13	Yes	Yes	Yes
Bush clearing	hek	500	Jul-13	Yes	-	-
Awareness creation on Soil and water conservation activities	HHS	356	January & June 2013	Yes	Yes	Yes
Enclosure of grazing land	ha	400	March & September 2013	Yes	Yes	Yes
Livestock health post fencing	m	350	Jun-13	Yes	-	Yes
Construction of soil bund	km	15	Apr-13	Yes	Yes	Yes
Construction of check dam	M ³	13	May-13	Yes	Yes	Yes
2 B. Contingency						
Emergency food, water and feed assistance	HHS	356/14225	Jan-march 2013	Yes	Yes	Yes
Human and vet. Health service	HHS/Livestock	456/14225	Jan-march 2013	Yes	Yes	Yes
3. PMEL						
Enhancing the awareness of CMDRR on PMEL and experience shering	Committee	1	Throughout year	Yes	Yes	Yes
Conducting PMEL	Committee	1	Throughout year	Yes	Yes	Yes

The community action planning exercise conducted by three communities under the study has been observed contributing positively in enhancing the community's capacity for disaster management. For instance, the planning exercise which done at the Kebele level was presented for the Woreda CMDRR committee and prioritization was done to decide the actions that should be financed by the program implementing organization and the government. This is how each Kebele community action plan linked with government annual plan using the Woreda CMDRR committee plate form established through this CDMRR program. The Woreda CMDRR committee was established out of the nine Kebele the whole CMDRR program is under implementation and five Woreda sector offices.

It is chaired by the Woreda vice administrator (pastoral development office head) and meet every month on a market day. The selection of market day as the monthly meeting day was done purposefully to easy responsibility burden of the CMDRR members. And, on this Woreda level each CMDRR committee is represented by their respective chair person. The Woreda CMDRR works well if it is seen from the point of achieving the ongoing CDMRR program implementation by DCA but still it doesn't yet grow up to serve all the 19 Kebeles of the Woreda as a drought risk reduction committee.

It seems that this committee is meant only for the purpose of the program implemented by DCA and indeed future works should focus on solving this weak connection and coordination at Woreda level. The revisiting of the community action plan is said to be held annually but practically it seems that the community action plan revisiting exercise without the facilitation and involvement of DCA is not yet materialized. In all the three Kebeles DCA has been implementing this CMDRR program for two consecutive projects starting from 2012 and revision of the community action plan was done only once when DCA come with the second phase project.

4.1.5 Implementation of Community DRR Action Plan

Achievement on organization development component: As it is clearly stated in the DRR strategy and community action plan, the main task planned to support the development of a vibrant community organization for DRR was awareness creation. Accordingly different effort and support including training and continuous follow up has been made to the established CMDRRC in each of the studied communities. More importantly, the organization development is delivered through the active engagement of the CMDRRC, their sub-committees and the whole community on the whole process of implementing CMDRR program in their community. To that end the Kebele CMDRR committees have done remarkable work even though it is observed a weak link and delegation of the sub-committee (in active involvement). Generally, in terms of establishing a viable community organization which acts independently and in pro-active way at the face drought, the program has contributed positively if not reach to the level of establishing the required vibrant community DRR organization.

Achievement on DRR measures (community development & contingency) component: This component of the community action plan implementation is the most robust and main focused in all the three studied Kebeles. The DRR measures recommended for community development were exhaustive and very much indeed contributed on enhancing both the community capacity and individual survivability against the risk of recurrent drought. Especially the activities foreseen and implemented under community development sub-component were very much appreciated at all level of the analysis. Here the weak sub-component was the contingency part which lack details starting from the planning up to lack evidence on its implementation at all level of the analysis. There was no an activity to strengthen EW system at community level which could have helped in forewarning the community and the CMDRRC so as to be in alert/alarm before the onset of drought situation. And we could truce also any scenario based contingency planning and its implementation by any the studied CMDRRC. This should be the focus on future support of strengthening all CMDRRC supported by the program.

Achievement on participatory monitoring, evaluation and learning component:

In CMDRR, community-managed refers to management of the disaster reduction process by the community. CMDRR thus requires active community participation throughout the process, including in monitoring, evaluation and learning aspects of the CMDRR process. It revolves around a systematic process of continuous action and reflection at the heart of CMDRR process with a focus on the learning and empowerment issues.

The development of suitable PMEL tool (*either a framework or non-framework approach*⁸) and mentoring of the CMDRR committee and facilitation of its application are the key tasks expected from the CMDRR facilitator. On this aspect it was observed, both at implementing organization and community level, an ongoing exercise using non-framework approach, which is suitable for the community under study considering their academic level. The CMDRR committee developed their PMEL tool based on the community action plan developed earlier. The program implementing organization facilitator continuously mentored them on the basic monitoring and evaluation skill. Moreover, the program supported CMDRR committees have got also an experience sharing mission to other neighboring Woredas. (LWF, 2014)

Looking for evidence at community level on the PMEL exercise and the level of materializing, it was find out that each committee knows very well what has been planned and achieved so far through the financial support of LWF (*an example of monitoring exercise*). And they clearly mentioned the result of the activities mentioned towards the overall objective of their action plan in a non-framework approach. Below is the extract of one of the CMDRR member “say” on this regard in Tedech ferda Kebele:

⁸ *Neither the framework nor non-framework approach of PMEL is good or bad. Its effectiveness depends on their applicability in the community. In places where most people are literate and can manage the time and rigor of PMEL, then no doubt the framework approach can be applied. However, in communities where a significant portion of population is unschooled, and they need every minute of their time to work to meet their basic needs, the people are often not comfortable with the framework approach. In this kind of community, the non-framework approach may work better than the framework approach of PMEL. There is no difference between the objectives of the two approaches; the difference is in the methodology required by each.*

“Previously the community used to migrate to oda/ginnir and there was a related high school dropout. Now there is no migration, school dropout reduced, and the kebele community is now following a permanent settlement way of life after the construction different communal and private ponds... Even those who had moved to Ginnir because of recurrent drought from this Kebele has started coming back and resettling again in the Kebele”

In addition to the day to day and ad hoc exercises, the PMEL is done every month during the community dialogue session and the Woreda CMDRR coordination meetings whereby progress of planned activities and challenges are one of the main topics of discussion. However, like to the other component of the community action implementation again the PMEL component also focused on the activities planned under community development which are financed by LWF as part the CDMRR program implementation and could go beyond that.

Achievement on resource mobilization (internal and external):

The preparation of DRR strategy comprises exhaustive list of activity to solve both capacity and vulnerability gaps of the community as well as individuals to drought risk which cannot be solved with sole financial support of the project under implementation. Accordingly existing individuals as well as community capacities are identified first and gaps required to meet the needs are prioritized in line with the available project resource/budget. And some activities were also planned to be supported by government support and other needs requested whenever other external supporting stakeholders (NGOs) come to the community.

In terms of internal resource mobilization, mobilizing the community available capacity in all the studied CMDRR communities were very much successful which is exemplified on the following facts as identified through the interview and observation made during the study:

- Effective mobilization of the community members to provide free labour (catchment excavation/treatment, fencing and fodder grass/tree plantation along the embankment) and provide locally available construction materials during pond construction and rangeland rehabilitation;

- Mobilization and awareness creation on individuals existing capacity to utilize efficiently including reserving of fodder, pasture land, scheduled water utilization, changing of livestock assets in cash ahead of severe drought situation, improving saving culture, etc

In terms of external resource mobilization all the studied CMDRR committees are not yet moving forward. Apart from the resource which was allocated by the program implementing organization and the government there was no any further effort and even specific plan in trapping other external resources. Considering the fact that these CMDRR communities are young and further continuous engagement is expected to improve this component of the task accomplishment dimension of the expected CMDRR process. Generally, the resource mobilization component of the community action plan implementation task can be taken as promising in terms of internal resource mobilization and weak in terms of external resource mobilization and needs focus for improvement.

Generally, each Kebele CMDRRC has been leading the whole implementation process of the community action plan as it has been explained above including the planning process. Despite, the implementation of the community action plan was a little bit inclined to the program supported actions. And tasks of the CMDRRC towards linking of the activities which were planned/expected to be supported by other external stakeholders could be taken as weak. However, still there were appreciable starts like targeting of poor and very poor households (*dropouts & ex-pastoralist*) for restocking program of the government through the financial support of UNDP. Working/implementing the contingency component of the disaster risk reduction program was weak. No strong EW, scenarios based alert/alarm indicators to initiate contingency actions, contingency funding mechanism managed by the community were not observed at all unit of data collection. When it comes to the management of the financial resource, even though there was a clear communication of the allocated budget for each activity by organization, it was at the hand of the program implementing organization. The CMDRRC financial management skill could have been strengthened if they were allowed to manage the resource with the facilitation of the organization as it is done for the other CMDRR process discussed so far.

Among the major successes of the CMDRR process, regarding the implementation of community action plans the following are the best examples to mention:

- Mobilization of the whole community during pond rehabilitation, maintenance, and construction through elders motivation at the work place was most efficient;
- Securing of the expected community in kind contribution (e.g stone and sand) on time was effective;
- Ownership of the community enhanced and the real life example is the way the keep the different ponds constructed through the financial support of the program;
- Community started implementation part of the action plans by their own initiatives including maintenance of communal ponds a head of rainy season, private pond construction as well as private area enclosure and rangeland reserve; etc

4.1.6 Participatory Monitoring Evaluation and Learning

Participatory monitoring, evaluation and learning (PMEL) is a process of building a system for member of the community, where learning is drawn in terms of keeping track of their disaster risk reduction measures and the development of their organization. It is also a system for identifying their strengths and weaknesses, the external threats and opportunities and measuring their overall achievement towards building themselves to be drought resilient community. It involves setting measurable indicators for each actions planned under organization development and DRR measures (community development and contingency), monitoring the progresses made and evaluate the works done against overall objective of the community action plan. It also celebrates successes and embraces errors, and draws lessons to guide future disaster risk reduction development and contingency plans. It aims to capacitate the community organization to effectively manage the community action plan through transfer of skill on participatory monitoring, evaluation and learning exercises and ensure continuous growth and sustainability of the community organization. (*IIRR, 2006*)

Evaluation is concerned with the effects of the risk reduction measures in terms of reducing the vulnerability situation of the community. If vulnerability has not been significantly

reduced, the reasons for this are analyzed. The significance of building on existing capacities and those, which have been actually increased, are also analyzed.

It is concerned with the difference the results of the risk reduction measures have made to the community situation and its overall quality of life. Lessons are drawn and best practices are shared with other groups and communities to promote the CMDRR approach. (*IIRR, 2006*)

Thus, the establishment of strong community disaster management machinery is mandatory to realize the proper implementation of the risk reduction plan developed by the community. This PMEL exercise is one of the means to impart management skill to the community through trainings, experience sharing and engaging the main as well as sub-committees on participatory M & E activities during the program implementation.

On this regard in all the three CMDRR committees constituted PMEL core groups constituted from the main, sub-committee and the community for this specific task of participatory monitoring, evaluation and learning. This core group besides monitoring the progress of the community action plan implementation, they motivated the community through translation of plan objectives and targets into disaster reduction activities. This core group also provided input from their PME exercise findings which was used to amend targets and plans to keep on course the set objectives in reducing vulnerabilities and increasing community capacities against the prepared community action plan.

In general, the evidence collected on the practice of this task was not found to be beyond a theoretical understanding of the process by the program implementing organization staff. And it was not possible to get evidence at community level on this major expected task of the studied Kebeles.

4.2 The Need for Magnifying Lens on Specific Needs of Vulnerable Segment of the Community

Vulnerability as the condition of the element at risk is defined as “a set of prevailing or consequential conditions, which adversely affect the community’s ability to prevent, mitigate, prepare for or respond to hazard events” (*Anderson and Woodrow, 1989*). The International

Strategy for Disaster Reduction (ISDR), which uses this definition, states that these conditions are determined by physical, social, economic and environmental factors or process, which increase the susceptibility of a community to the impact of a hazard.

Vulnerability based on unsafe location refers to the “*degree to which an area, people, physical structures or economic assets are exposed to loss, injury or damage caused by the impact of a hazard.*”

The studied CMDRR program assessed vulnerability from the angle of unsafe condition rather than unsafe location. Seeing vulnerability from the angle of unsafe condition (*which could be physical, economic, social, behavioral and environmental*) allows scrutinizing different level of vulnerability within the same level of vulnerability (*if analyzed /seen from the angle of unsafe location*). A community living in drought prone areas are all equally vulnerable because of their location, however the level of vulnerability still differs from people to people if we consider unsafe conditionality in terms of other factors including their socio-economic status.

Among the five major steps/components of CMDRR process task accomplishment dimension, conducting a proper PDRA exercise has got crucial role in surfacing people and community vulnerability on drought hazard. And, as it has been discussed above during the assessment and analysis of vulnerability through the CMDRR approach as exercised by the studied community identified appreciable level vulnerability both at community level as well as individual levels. Among these series of actions the traceable evidence on identifying vulnerability segment of the community with its level and inclusion of their needs to be part of the community DRR action plan can be captured on the vulnerability assessment matrix table. As it has been previously discussed on 4.1.1 section this assessment was done by the community forming different similar groups including elders, women, youngsters and men from the community and each group’s finding triangulated through community discussion before it was taken to be the finale vulnerability assessment and analysis result of the Kebele.

The summary of vulnerability assessment table in one the three study community was described as follow:

“According to assessment conducted, drought can strongly affect human beings, livestock’s, and natural environment. Women, children, and disabled people are more vulnerable to drought than other people. Among livestock’s, cattle and sheep are the most vulnerable to drought because of long distance movement to search water and feed. Intensity of lactation to more milk also increases the vulnerability of caws. On other hand, natural environment is vulnerable because deforestation, soil erosion, water sources and grazing land depletion” (Tedecha ferda Kebele vulnerability assessment summary table)

Under the vulnerability assessment exercise the first thing to be identified is element at risk that is it human, livestock and natural resource elements. These are the main pillar of pastoral community livelihood that should be inspected whenever disaster issue is dealt for any pastoral community. After listing down the main elements at risk then further dissection of each the element has been done. If we take the human element elder, women, children and disable people etc was taken to be the most vulnerable segment of the community and then their level of vulnerability determined considering their position against the unsafe conditions, dynamic pressure, and root causes.

Here the question is to what extent this vulnerability assessment and analysis exercise has surfaced the specific vulnerable individuals and their needs apart from identifying vulnerable groups seen from the general community vulnerability angle. I believe this issue needs further insight. As it was found also on the studied CMDRR program, employing further effort as a complementary exercise enhanced the specific needs identification exercise for vulnerable segment of the community. Discussing the vulnerability assessment table in one of the studied Kebele first, I will try to describe the other activities done by the program implementing organization as means of magnifying lens for better identification of the specific need of vulnerable individual later.

Table 10: Vulnerability Assessment and Analysis Summarized Findings in Tedecha Ferda Kebele

Name of the Hazard: **Drought**, Community Name: **Tedecha Ferda**

Hazard Profile	Element at Risk	Unsafe conditions	Dynamic pressures (Pushing factors)	Root causes	Degree		
					High	Medium	Low
Drought is common hazard in Tedecha Frda kebele which occurs once in the year and its warning signs and signals are :unseasonal rain, windy weather , long dry season and high temperature . Thirsty, hunger and heat is the most forces affect community in drought and also Drought occurs in march and last for six months having slow on set	Human beings						
	Women	Long distance walk to fetch water , indoors and out door work load	Pregnancy, heavy duties/tasks, Milking children	Large family members Shortage of food, inappropriate responsibility sharing,	High		
	Children	Long distance walk to fetch water , indoors and out door work load of their mothers	Lack of access to nutritional food at required time	Heavy labor work	High		
			Lack of balanced diet	Poor care		Food insecurity	
				Shortage of water			
	Elders	Aged , poor care	Insufficient food, and water	Lack of attention for care	Low		
	Disabled people	Dependency , lack of care	Lack of attention, unable to work	Lack of physical capacity to work	Medium		
	Livestock	Deficiency of water and pasture ,Migration	Lack of water and pasture at required time,	Lack of adequate water and pasture	High		
	Cattle						
	Sheep	Lack of sufficient feed	Disease out break	Lack of adequate water and feed resources	High		
	Equines	Heavy transportation and long distance movement,	Poor care	Shortage of water and feed, inadequate vaccination and treatment	Medium		
			Disease out break				
	Environment	Clearing of forest and soil exposed to wind and sun	Shortage of rain, sparse vegetation cover, soil	Lack of proper soil and water conservation	High		
	Soil						
	Forest	Lack of rain fall	Population pressure	Lack of awareness about environment	High		
Water sources	Deforestation						
Grazing land	Wind erosion						
Air							

As we can clearly see it from the above table vulnerability was analyzed in a matrix which allows capturing the specific element at risk against the progression of vulnerability. The assessment allowed to surface vulnerability step by step from the immediate unsafe conditions to dynamic pressures then to the root cause using problem tree analysis techniques. From the human element women, children, elders and disabled people were identified to be the most vulnerable people in almost all the three Kebeles

The program has identified different vulnerable groups special needs and tried to address partially through the program financial support. To augment the identified specific need though the vulnerability assessment exercise the program has conducted a separate professional studies. This includes study on gender vulnerability in disaster and livelihood diversification options for pastoral drop out or ex-pastoralist. These studies have enabled in identification of a more detailed vulnerability issues through a professional study. The basic aim of conducting these studies was to have more detailed insight on the extent and severity vulnerability towards the human element at risk as identified from the vulnerability assessment exercise. After conducting the studies their findings were used as in put to enrich the community action planning and include activities which could contribute better in reducing individual vulnerability.

In addition to serving as in put for the community DRR action planning exercise the study findings were disseminated to the community and other stakeholder including government officials through a workshop organized at Zonal level. On this dissemination workshop thorough discussion held between community key leaders including religious leader, husbands, wives and youngsters. Moreover, community dialogue session also used as means of sensitization to the wider community member. Especially, the gender vulnerability issues were one of the main topic of discussion (*gender in balance is one of the key social vulnerability issue in community which put women/mother to be more vulnerable to drought*).

The result of such efforts were visible at the ground level. In one of the community it was clearly mentioned that currently the behavior of husbands towards making consultative decision at household level is changing. One of the participant and member of the CMDRR committee in Hara Adi put this issue saying:

“men cannot sell livestock and crop produced without consulting his wife and children, before such kind of practice were not there men can sell anytime without consulting member of the family”

Considering long time engagement and rigorous analysis nature of CMDRR process coupled with the need for a well trained professional facilitation and input, vulnerability analysis towards specific elements at risk should be supported through such kind of a separate and topic specific studies. Under the studied CMDRR program specific professional studies assessments, like gender vulnerability and livelihood diversification options, were conducted and used to enrich the community PDRA exercise and DRR strategy development on the second phase of their program.

Such kind of studies were found to be very much supportive in identifying specific needs of vulnerable segment (*women and children*) of the community in depth apart from capturing their need under the PDRA exercise. Below is the extract on main findings of gender vulnerability assessment report conducted by DCA.

“The findings indicated that children, women specifically pregnant women and lactating mothers, youth specifically girls, pastoralist drop-outs and elders are the most vulnerable groups to shocks of drought. The vulnerability of children arise from the deteriorating capacity of families to withstand drought and their inability to provide proper support in care giving, health care, water and sanitation services. Female headed households are among the vulnerable groups who are the outcome of widowhood, divorce or single parenthood. Although elderly women are venerable, elderly woman with an adult son are better off. In a household where there is adult son, he takes over headship of the household. Childless women, especially widows have mainly a use right than ownership of property. Cultural practices and expectation of women to ‘feed the men first’ first

for all meals followed by children and lastly by women, especially in Bale area severely affects women....In addition to existential imbalance, droughts drastically diminish command of women over resources. Evidences indicate that drought and concomitant chronic malnutrition affects women and children disproportionately. Pregnant and lactating mothers without therapeutic feeding programme are highly vulnerable to diseases related to droughts”

The other observed result of such efforts is the establishment of health sub-committees under each CMDRR committee, which not common in drought risk reduction program elsewhere. This sub-committee was established on the second phase of the program informed through the specific need studies and it is found to be very much relevant and evidence based DRR activity. The gender vulnerability study conducted in the studied community has found out that malnutrition among pregnant and lactating women as well as children is a common impact of recurrent drought.

Moreover, during the study time DCA was on the process of starting a continuation of the previous two projects support in the study area. On this new project they were planning to support specific vulnerable segment of the community through livelihood diversification activities and targeting of beneficiaries will be malnutrition status. Below is how study report put women and children vulnerability to drought and its related impact:-

“...women bear a large number of children due to replacement effect. Malnutrition resulted from drought has been the major cause of neonatal and child mortality. Women always remain a fear of ‘loss of their children’ due to the drought. This situation, coupled with religious belief adversely affects their willingness to accept family planning, especially women in Bale. As per the community perceptions, livestock diseases have caused loss of livestock, reduced milk and meat production, loss of their asset value and hence their income, dependency on food aid and remittance, and destitution. The hazard is reported to have caused negative terms of trade, increased vulnerability to disaster risks, poverty and increased tension among the community members.

The loss of livestock severely affects women and children, especially by shrinking their access to food”

Generally, it was understood also in addressing these major challenges of women and children the CMDRR program has done a significant contribution in enhancing capacities which include the following progress of changes:

- During the establishment of the CMDRR committee inclusion of at least three women as a member is taken a mandatory criteria so as to improve women’s empowerment on decision making;
- Awareness and sensitization has been given on the traditional gender in balance and its pronounced negative impact at the face of drought situation through consultative workshop and community dialogue held every month by each of the CMDRR committee;
- Improved access to water source through the construction of a number of ponds which easy women and children burden as availing the household water need is, culturally, their entitled household chore;
- The establishment of the health committee, as of the sub-committees of CMDRRC, facilitate proper targeting of women and children and its improved implementation for nutritional supports done through the government and NGOs;
- Emergence of support tailored on improving ownership and decision making of women like area enclosure owned and managed by women start generating additional income; As found out during livelihood diversification options study conducted by DCA
“...One of exemplary activity mentioned at this point in time is work of Zeineba Garo, 50, which can be considered as good practice and lessons to others. She create closure area and grown her own fodder to feed her livestock by properly managing the rangeland (kallo) and sell for others and earned income more than 1500 ETB (on-top of feeding her own)”
- Provision of fuel saving stove was identified as one DRR measures to reduce women and children firewood collection time as well as the health risk in addition to its contribution on protection of the environment;

- Establishment of small shops nearby the community's villages through the saving and credit component of the program targeting women has been mentioned to contribute in availing household food and non-food items as well as source of additional income; etc

Considering the high level of household chores responsibility which is around 80% by women and girls (*DCA , 2013*) and persistent traditional orientation on gender in balance the vulnerability assessment and analysis , under the PDRA process, without the input of facilitator informed by a professional evidences cannot be expected to surface specific vulnerabilities including women and children.

4.3 Identification of long term trends/stresses and inclusion of adaptive measures

In these studied community wealth status is mainly characterized using the number and type of livestock owned by each household. There are four layers of wealth status as agreed by the community won classification and accordingly very poor (no cattle, 2 shoats, no camel), poor (3 cattle, 7 shoats, no camel), medium (11 cattle, 23 shoats, 9 camel, 1 donkey) and better off (10 cattle, 33 shoats, 21 camel, 3 donkey) (DCA, 2013). If we consider pastoralism to be an effective livelihood option by its own at the face of recurrent drought those households which fall under poor and medium wealth status (*around 60-70 % of the whole population*) could not continue as pure pastoralist and sustain their living unless they are involved on other livelihood diversification activity.

Thus, the need to work on livelihood diversification in line with the immediate drought mitigation and preparedness has got a paramount importance. This was identified primarily through the PDRA exercises which are well explained on section 4.1 above. Both vulnerability and capacity assessment and their analysis process were the means to surface the current position of the community compared to 2-3 decades before. When conducting vulnerability assessment, the progression of vulnerability was analyzed in three progressive ways through a problem tress analysis method. These were identification of unsafe conditions which are the description of the existing situation of the community at the face of recurrent drought, identification of the dynamic pressures which translate root causes in to unsafe conditions and finally the root causes. On this regard, the studied communities were able to visualize the looming drought situation and its negative effect deteriorating their overall well being when they conduct hazard assessment and analysis. On the other hand the capacity assessment and analysis exercise gave them the chance to see what existing capacity of the community and individuals could be revitalized and enhanced to be resilient at the face of drought situation which an voidable potential hazard. Below was what has been said by one of the CMDRR committee members during interview to express the looming drought trend and its negative effect on their livelihood.

(“During the normal year people get satisfied because of the increase in the number of livestock head from 3 to 6 or 8 getting new offspring then Bona season will come to reduce back again to 3 or less since there was not good preparedness...”) Hara Adi Kebele

The practical exercise done in the studied community on this regard was not robust enough especially in proposing DRR measures which could solve the community's wonder to get out the looming vulnerability issues which are exacerbated by the frequent drought impact on their livelihood, low level of social service, and low productive of their main livelihood assets (livestock). These long term trends and stress on the community could not “in actual sense” be solved in one night, with single actor, and with a kind of doctor prescribed solution. Rather it needs concerted effort from each angle and actor including improving the enabling environment (governance), improving the social service, education, as well as strengthening the ongoing pro-active way of managing drought risk. In line with this the CMDRR program has contributed a lot by initiated a professional study on livelihood diversification option and its dissemination to different stakeholders, sensitization of the target community through the community dialogue sessions as well as direct support through its saving and credit activities as part of the CAP implementation.

According to a recent study conducted by DCA on identification livelihood diversification options it was found out that the percentage of very poor and poor wealth status within the last ten year has increased by 10 percent.

“...10 years ago the proportion of poor and very poor/destitute households were about 44% while currently this figure raise to 54% indicating the trend in lower wealth class continually increasing... the wealth ranking exercise reveals that it is the poor and very poor/destitute which forms the largest proportion in these pastoral communities. Since the livestock are the major indicator of wealth, agro-pastoralists who involved in farming are relatively poorer than the pure pastoralists...”

Capacities in the context of disaster risk reduction are analyzed as the interaction of forces of resources and the access to these resources by the different groups at risk and the overarching systems and structures in society that decrease or increase capacities to face hazards. (Anderson, 1989) Because the behavior of a hazard and degree of vulnerability determine the capacity needed to reduce disaster risk, capacities should be analyzed in relation to the hazard and vulnerability.

Improved availability and access to resources including water and rangeland is a very crucial capacity to a pastoral community. On this ground the CMDRR program has contributed a lot in all of the three communities studied in terms of enhancing the capacity of the community to reduce the risk of drought. The studied community, after going through the preceding stages of task accomplishment dimension of the CMDRR process (PRDA, DRR strategy development and action planning) the project supported the implementation of the community action plans both financially and technically. Among others, construction water points (*10-15 thousand m³ ponds*) and rangeland rehabilitation activities ranging in hundreds of hectares per Kebele were the crucial activities that enhanced the community capacity to withstand the severe impact of drought. Moreover, as a trickledown effect of passing through CDMRR process a number of individuals who are early adopters to construct private ponds and area enclosure (Kello) as reserve for dry seasons and drought situation.

4.4 Building a viable DRR community organization a long term prospect

Going through the CMDRR processes has shown a significant contribution towards building a community with a culture/habit of pro-active mentality of the community as whole and individuals to withstand drought risk. The PRDA exercise as well as implementation of the DRR measures has brought a paramount changes attitude of the community that drought can be managed as long as they take actions which are informed through PRDA process and joint community efforts are in place to materialize the recommended DRR measures. All the three studied communities are very well aware on the level of drought risk, what capacities do exist both at community and individual level, have identified DRR measures to enhance community/individuals capacity to reduce their vulnerability. Moreover, unlike to other communities which didn't get the chance of going through the CMDRR process these communities were seen to request external supports which are beyond their capacity through the Woreda CMDRR committee plate form. Apart from the organizational structure both at Kebele and Woreda level the disaster risk reduction and management skill of the program supported community is by far improved compared to other community. This fact was exemplified by the Woreda pastoral office head during an exclusive interview I had in Rayitu Woreda:

“ ...Currently the government is implementing a pipeline extension from the Woreda center Tedecha bela to Arda negeya passing through Tedecha ferda , one of the CMDRR program supported Kebele, and when we compare the level of achievement on community contribution asked by the government to excavate the pipeline trench free of charge ...Tedech ferda Kebele achievement was tremendous which didn't even take us to do frequent mobilization compared to the other Kebele which still we are having problem to make the expected contribution accomplished on time...this is the positive impact of the CMDRR process which brought to Tedecha ferda community to stand first by themselves for their own cause...”

Even though we have seen a very appreciable progresses in establishing a community DRR organization having one vision, viable and independent it is imperative to mention also it is hardly possible to say the established CDMRR committee in all of the three studied Kebeles have reached to a standalone and viable community organization. Of course a lot of progress has been achieved but still a long way remains to see an independent viable community DRR organization. Among other issues lack of clearly mandated government body at Woreda level to make sure that each of the established community DRR organization continue their function and have connection with the higher government structure (Woreda) is no there currently. This is especially in creating a clear connection and coordination between Woreda responsible government body and the established CMDRR committees at Kebele level. Without having a clear mandate and endorsement of the works done so far and capacity building at Woreda level it will be hard to expect the full fledged impact of the CMDRR approach. The implementing organization together with its donor partner is doing a lot of promotion works and the government of Ethiopia has also prepared the national DRM policy which is in line with this program. Thus, future support should give due attention at least on addressing the connection and coordination issue between Kebele and Woreda level if not at higher level.

4.5 Synchronization of Kebele CMDRR committee with local government structure

One of the good achievements found in this CMDRR program implemented by DCA was the linking of the established CMDRR committees with the existing government structures. Each of the CDMRR committee established Kebele chairman and development agent (DA) of the Kebele were selected to be member of the CMDRR committee. And in almost all of the nine Kebeles where this program implemented, the Kebele chairman was the chair person of the CMDRR committee. Moreover, most of the other members of CMDRR committee have role on the government governance structure. Thus one way or another the CMDRR committee as well as the sub-committees are active community representatives which serves the community on the local government structure. This has got a double advantage on both sides. On one side, the capacity built through the CMDRR process helps the government program success in that community. And on the other side, the CMDRR program success also benefited from the fact that the CMDRR leaders are the Kebele chairman in terms of ease to link and synchronize the community action plans as well as government program and their proper implementation.

Some of the benefit of this synchronization mentioned at the community level was the effectiveness of controlling task achievement of each of the CMDRR chairpersons. Since the chair person of each CMDRR committee were the Kebele Chairman it was hardly possible to neglect his responsibility assigned as CMDRR committee chairperson. Because the CMDRR task were taken seriously as part of the government work and progress control was exercised during each monthly meeting through the Woreda CMDRR plate form as well as the routine government controlling mechanism. For instance, one of the CMDRR committee chair person was removed from his position of Kebele administration since he could play well the responsibility given as CMDRR chairperson.

4.6 Physical artifacts of the CMDRR program as observed on the ground

The CMDRR program implemented by DCA, among the three major dimensions of the CMDRR approach, it has been find out that the support on **DRR task achievement** to be very strong and artifact evidences as well as supported community witnessed this fact. Both the physical structures (*water resources constructed and rangeland rehabilitated*) and the different capacity building trainings have made the community to be in a better position in the face drought situation compared to their situation 5 to 10 years. Generally, there is a progress towards realizing drought resilient community through improving the community capacity and reducing vulnerability. Among others the following aspect are worth to mention as the positive contribution of the overall program towards building drought resilient community:

- Improving the community drought risk reduction capacity through construction of water resources, rehabilitation of grazing land;
- Behavioral change of the community towards efficient utilization available natural resources (water, rangeland and livestock) which are key pillars of pastoral livelihood;
- Development of preparedness culture which include preparation of reserve rangeland (area enclosure), changing their livestock asset in to money ahead of prolonged drought situation;
- Improved capacity on drought risk management including informed decision making;
- High level of awareness among the community on drought risk and related increased preparedness;
- Engagement on adaptive measures including cultivation of cash crops (banana, papaya, chat), drought resistance crops (Amaranths) through opportunistic farming;
- Creation a community which is very well aware on the level of drought risk and working towards building pro-active community to reduce and withstand the impact of drought risk;



One of the best pond constructed in Hara Adi Kebele through the support of the CMDRR program



Hara Adi pond which is a physical artifact observed during data collection at community level.

5. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study has been conducted in four consecutive months starting from January 2015 excluding the preparation and appraisal of the research proposal document. After getting the appraisal of the research proposal at the end of February, 2015 desk work on reviewing secondary data for both review literature and data on the case study have been done for first two months. On April data collection continued at Addis level and then on middle April field data collection conducted. Analysis of the finding was done simultaneously along the data collection task. Finally the report write up task was done on May 2015.

This study was conducted on DCA's CMDRR program which has been implemented since 2012 in Rayitu Woreda of Bale Zone, Oromia Regional State, Ethiopia. For the purpose of this case study different source of evidence has been consulted from secondary data, primary data collected and physical observation also made at all unity of analysis. DCA coordination staff at Addis Abeba, DCA's implementing partner staffs at Bale, Rayitu Woreda government stakeholder and three best CMDRR communities in Tedecha ferda, Hara Adi and Adela Kebele were the focus of data collection and the case study embedded unit of analysis. The following are the main conclusion of this study which could play vital role for future improved implementation of similar program in drought prone pastoral community.

- CMDRR program implemented by DCA has contributed immensely in revitalizing of the community existing capacity through its practical and real individual as well as community participation (*contribution, consent or involvement and decision making*) exercise. Claiming merely participation without proper self insight of the individual or community on root causes, dynamic pressure and unsafe conditions which are the progression of vulnerability against any hazard cannot be considered participatory. In this regard the studied community has benefited a lot from the CMDRR process they have exercised;

- As the basic objectives of employing CMDRR approach in disaster risk reductions program was revitalizing the existing capacity of the community in concern, this CMDRR program played a vital role in terms of creating understanding, sensitizing and disseminating the nature of drought, vulnerabilities and capacities through the hazard, capacity & vulnerability assessment and built a safety culture;
- Having the requirement for rigorous analysis and long term engagement nature of CMDRR process coupled with the need for properly trained experts facilitation and input. The task achievement dimension of the CMDRR process should be supported through a separate and topic specific studies so as to magnify the specific need of vulnerable segment of the community complementing to vulnerability assessment and analysis. On this regard, the studied CMDRR program specific professional assessments including gender vulnerability and livelihood diversification were used to enrich the community PDRA exercise and DRR strategy development on the second phase of the program. Such kind of specific need assessment improved the proper inclusion of the needs of vulnerability segment of the community;
- Ideally, community DRR organizations are expected to be a viable community change agents/vectors towards development beyond reducing disaster risk and that is how we could say CMDRR process built a resilient community. Thus, to that end we can say the studied community CMDRR committees have started their journey but there is still a lot to be done in terms of sustaining their work and get recognition of their role. Ideally, they should reach to the level where they could be taken as entry point for any disaster risk reduction as well as development activities to be done in these communities;
- Both the horizontal (*within the community including their sub-committees*) and vertical linkage (*including higher government administrative structure*) of these CMDRR committees was found to be weak. That is, even though an extended benefit was expected from the established community DRR organizations and the transferred DRM skill to the target community beyond the implemented project. DCA's implemented

CMDRR project benefit was found to be suspended/bounded only to the purpose of implementing the ongoing program which poses a concern on its sustainability issue;

- There was a sensible progress in creating community DRR organization (*through the established CMDRRC*) which is responsible to voice the community need towards drought risk reduction both within themselves as well as to external actors including the government at higher level. But success on realization the full merit of CMDRR approach can be achieved solely if and only if there is a continuous and rigorous engagement and facilitation of such program with the community as a long-term program. It should also be supported through different adult & illiterate educational/skill transfer tools as well as extension approach like pastoral field school (PFS) in line with the PRA tools used on the program; and

- The link between community CMDRR committee and Woreda CMDRR committee was weak in a sense that the established Woreda CMDRR committee functions only for the purpose of the studied project. CMDRR approach even though crafted to be employed at community level (*which needs future study to defined its volume/extent*) is still a complex process to be fully exercised by a community at Kebele level with a population range of only 2000-5000 and where literacy level is poor. However, still it was observed that going through the CMDRR exercise have contributed a lot on building community's capacity and reducing vulnerabilities. It has got also immense potential in building resilient community as far as future works plan to include the exercise of CMDRR process at Woreda level (*which is poor or not there currently*) to create connection and coordination with the established CMDRRC at Kebele level.

5.2 Recommendations

- Phase out strategy should include proper transition of the endorsement and scale up of the CMDRR approach at Woreda level (*by government responsible line office like Disaster prevention office*);
- CMDRR approach should be delivered to both Kebele and Woreda level and it should be tailored in a way that it fit the need, capacity and expected level of the role and responsibilities. Some of the issues dealt at CMDRR process could have been fruitful at Woreda level rather than at Kebele level and vice versa;
- If properly lead and directed having a policy and strategic framework from the government side, different experts assigned at Kebele level could be community's capacity in terms of transferring skills on the process of imparting CMDRR approach at community level; and
- For effective translation of the expected impact of CMDRR approach towards building a drought resilient community it really needs longer term engagement, rigorous facilitation through experts trained specifically on DRR and cumulative effort from different stakeholders.

Suggested Future Works

As part of the objective of this study the following topics related to this research topic and which are believed to be worth for future similar studies are identified below:

- a) What could be the benefit and drawback of implementing CMDRR approach through the existing government structure?
- b) Which level of the community governance structure (*it could be either conventional or modern*) could suit in crafting effective community DRR organization? and
- c) Which dimension of the CMDRR process could be effective at Kebele, Woreda or Zone level?

REFERENCES

- Anderson, M.B. et.al (1989). A Framework for Analyzing Capacities and Vulnerabilities in Rising from the Ashes; Development Strategies in Times of Disasters. West view Press
- Benn, H. (2006) 'We Need an Emergency Service' *Developments Magazine*, May 2006, DFID <http://www.developments.org.uk/articles/hilary-benn-we-need-an-emergency-service/>.
- Blaikie et.al 2003. At Risk: Natural hazards, peoples vulnerability and disasters (second edition).
- Bogdan R.C and Biklen S.K 2006 Qualitative research for education: An introduction to theory and methods (5th ed.) Boston: Allyn & Bacon.
- Cardona O.D. 2003. Indicators for risk measurement: Fundamentals for a methodological approach.
- Coffey & Atkinson, 1996 Making sense of qualitative data: Complementary research strategies. London Sage.
- Comfront et al 1999 Reframing disaster policy: the global evolution of vulnerable communities.
- DFID, 2011, Defining Disaster Resilience; *A DFID Approach Paper*.
- DCA, 2012, Dan Church Aid-Ethiopia Annual Report 2012.
- DCA, May 2013 Assessment report on new areas of livelihood diversification in livestock based economy of pastoral area of Oromia, Ethiopia. (*Unpublished*)
- Erickson F. 1992, Ethnographic microanalysis of interaction. In M.D LeCompte, W.L. Millroy & J. Preissle (eds). The handbook of qualitative research in education (PP 201-225), SanDiego, CA: Academic Press.
- GFDRR, November 2010, Report on the status of Disaster Risk Reduction in Sub-Saharan Africa.
- Gillbert C. 1998 Studying disaster: Change in the main conceptual tools. (In Quarantelli, E.L., ed. What is a disaster? Perspectives on the question).
- Hewitt K. 1998 Excluded perspective in the social construction of disaster. (In Quarantelli, E.L., ed. What is a disaster? Perspectives on the question).
- IFRC, April 2013, Ethiopia Country case report "How Law and Regulation supports Disaster Risk Reduction".

IIRR, 2006. CMDRR training manual (Unpublished)

John Cosgrave, February 2010, Programme Evaluation of Disaster Risk Reduction Commissioned by Cordaid (*Evaluation of Cordaid DRR programme*).

Katherine Pasteur, 2011, From Vulnerability to Resilience: *A framework for analysis and action to build community resilience*.

Kelman I. 2003. Defining risk. Flood RiskNet newsletter.

Kotze & Holloway 1996 Reducing risk: Participatory learning activities for disaster mitigation in Southern Africa.

Kreps, G.A 1998 Disaster as a systemic event and social catalyst. (In Quarantelli, E.L., ed. What is a disaster? Perspectives on the question).

LWF, 2014. Project Terminal report (*unpublished*)

Miles M.B & Huberman 1994 Qualitative data analysis: An expanded source-book (2nd ed). Thousand Oaks, CA: Sage.

MoFED, November 2010, Growth and Transformation Plan (GTP) 2010/11-2014/15 (*Federal Democratic Republic of Ethiopia*).

Niekerk D.V., 2011 Introduction to disaster risk reduction.

Patton M.Q 1990 Qualitative evaluation and research methods (2nd ed) Newbury park, CA:Sage.

Robert K. Yin 2009 Case study research design and methods (fifth edition) SAGE

Smith K. 2002 Environmental hazards: Assessing risk and reducing disaster. 3rd ed. London Routledge.

Tim Frankenberger, et.al, November 2012, Enhancing Resilience to Food Security Shocks in Africa (*Discussion Paper published by TANGO International*).

Twigg, J. (2007) 'Characteristics of a Disaster-resilient Community', a guidance note to the DFID DRR Interagency Coordination Group.

UNISDR 2012 Disaster reduction in Africa; UNISDR INFORMS, Special issue on drought risk reduction.

UN-ISDR, 2005, Hyogo Framework for Action 2005-2015: Building the resilience of Nations and Communities to Disasters; *Extract from the final report of the World Conference on Disaster Reduction (A/CONF.206/6)*.

UNISDR, 2011, Revealing Risk, Redefining Development (*Global Assessment Report*).

UNISDR, 2012, Special issue on drought risk reduction 2012 (*Africa UNISDR Informs; Regional office for Africa*).

UNISDR, 2012, UNISDR Terminology on disaster risk reduction.

ANNEXURE I: Interview checklist

I) General questions and interview checklist for Project Owner Organization, its Implementing Partner(s), and Government line Bureaus

A) General Question

1. Name of interviewee: _____
2. Agency working for: _____
3. Department/office assigned: _____
4. Position/role in department/office: _____
5. How long stayed in the Agency/Organization: _____
6. Role during the implementation of the CMDRR project:
7. How was the CMDRR project initiated, formulated, appraised, implemented and managed generally?
8. Who has been involved on the project formulation, implementation and management?
(Implementing partners, government signatory bureaus/offices, community representatives, other stakeholders, etc..)
9. How long DCA's CMDRR or DRR program implemented in Ethiopia and specifically in the research targeted area?
10. What is the general impression of DCA, as promoter of CMDRR approach to build drought resilient community, on the performance of your program?
11. What major achievements acquired and lesson learned by DCA through employing CMDRR approach in building drought resilient community?
12. What DCA is currently doing in terms of promoting this CMDRR approach to be scaled up by other actors (Government, NGOs, Community and other similar actors in general)?

B) Specific interview checklist for individuals involved on project implementation

1. How is local/community disaster risk (hazard, capacity, vulnerability) assessed in the project?
Is there any community institution/organization strengthened/established/involved during the assessment?
2. What was the main purpose of establishing/strengthening existing community organization in light of implementing CMDRR approach/program?
3. How is the community institution/organization established? How is it structured?
4. Does the community organization have sub committees? What are these sub committees?
5. What is the role and responsibility of community organization sub committees? Does every member knows their role and responsibility and act accordingly?
6. Do these sub committees sufficiently trained and able to carry out specific tasks? How do they feed/deliver their work out to the overall work of the community and their institution?
7. Do the community institution/organization have a contingency and development plan in place which is regularly updated based on scenarios? Do they get regular capacity building/training on this issue?
8. Is there any defined and agreed co-ordination and decision-making mechanisms between community organizations and external technical experts, local authorities, NGOs, etc?
9. Is there any defined and agreed co-ordination and decision-making mechanisms with neighboring communities/localities and their organizations? Like agreed mechanisms to resolve conflict arising from utilization/sharing scarce resources during drought situation.
10. How disaster risk assessment including the assessment of climate change risks, conducted in the project community, contributed to and changed people's perception of risk and their preparedness?
11. How the process of participatory disaster risk assessment improved people's knowledge and are they able to address the underlying risk factors?

12. Does PDRA capture collective knowledge and experience of management of previous crises?
To what extent? What kind of activities, factors, actions, etc., foster or hinder this?
13. Do the established community EW system and its communication channels reach all segment of the community or leave some vulnerable people isolated? Do capacity and vulnerability assessment and its analysis help to solve this isolation?
14. How the process of participatory disaster risk assessment and analysis improved people's roles and responsibilities on drought mitigation, preparedness, response measures as well as addressing the underlying risk factors?
15. How was the involvement of various local actors including government and does the process had any impact on the relationship between the community and government representatives, and subsequent access to public services?
16. Does application of CMDRR approach brought a community with a shared vision to be aware of drought disaster risks, prepared, and drought resilient community?
17. Does application of CMDRR approach brought the community to be in a better position to increase its influence on governance at local level?
18. What other factors and aspects of an enabling Environment are required for communities to be able to engage effectively with governments and other stakeholders?

II) General questions and interview checklist for Kebele officials and Community Supported by the CMDRR Project

A. General questions

1. Name of Woreda: _____
2. Name of Kebele: _____
3. Name of interviewee: _____
4. Position/responsibility in the Kebele: _____

5. How many community/CMDRR committees supported by DCA/its implementing partners in this kebele:
6. How was the CMDRR project initiated, formulated, appraised, implemented and managed generally?
7. How was your/Kebele administration involvement/role/responsibility on the project implementation and management?
8. How long DCA's or its implementing partner's CMDRR or DRR program implemented in this Kebele/community?
9. What is your general impression on the performance of CMDRR approach to build drought resilient community?
10. What major achievements acquired and lesson learned by the Kebele/community through employing CMDRR approach in building drought resilient community?
11. What the Kebele/community is currently doing in terms of promoting this CMDRR approach to be scaled up?

B. Specific interview checklist for individuals involved on project implementation and community CMDRR committee members

a. At Kebele level

1. How was the process of community potential hazard, capacity and vulnerability assessment and analysis?
2. How it was started, which segment of the community participated?
3. How was the mobilization/selection/engagement of the community representative on this process?
4. What assessment tools employed to conduct community disaster risk assessment and analysis (hazard, capacity and vulnerability)?

5. How was the community hazard, capacity, and vulnerability assessment finding reached in to agreement (discussed, understood & reach consensus)?
6. How it was shared and communicated to the wider community and other stakeholders?
7. How was the finding of community disaster risk assessment and its analysis used to develop community contingency and development plan?
8. How these community DRR plans were supported by DCA project?
9. Did these community's DRR plans taken into other actors (government, NGOs and other community organization) in the area?
10. What are the best experience of employing CMDRR approach in improving the community drought risk reduction and management?
 - i. In terms of establishing/strengthening functional community institute/organization?
 - ii. In terms of the community drought risk reduction measures in place (plan, implementation, awareness, etc) compared to before and after employing the CMDRR approach?
 - iii. What challenges or lesson learnt for future improvement of similar action?

b. At community level

1. How was the process of community potential hazard, capacity and vulnerability assessment and analysis?
2. How it was started, which segment of the community participated?
3. How was the mobilization/selection/engagement of the community representative on this process?
4. What assessment tools employed to conduct community disaster risk assessment and analysis (hazard, capacity and vulnerability)?
5. How was the community hazard, capacity, and vulnerability assessment finding reached in to agreement (discussed, understood & reach consensus)?

6. How it was shared and communicated to the wider community and other stakeholders?
7. How was the finding of community disaster risk assessment and its analysis used to develop community contingency and development plan?
8. How these community DRR plans were supported by DCA project?
9. Did these community's DRR plans taken into other actors (government, NGOs and other community organization) in the area?
10. What are the best experience of employing CMDRR approach in improving the community drought risk reduction and management?
 - i. In terms of establishing/strengthening functional community institute/organization?
 - ii. In terms of the community drought risk reduction measures in place (plan, implementation, awareness, etc) compared to before and after employing the CMDRR approach?
 - iii. What challenges or lesson learnt for future improvement of similar action?
11. How is the community disaster risk (hazard, capacity, vulnerability) assessed during the project implementation? Is there any community institution/organization strengthened/established/involved during the assessment?
12. What was the main purpose of establishing/strengthening existing community organization in light of implementing CMDRR approach/program?
13. How is the community institution/organization established? How is it structured?
14. Does the community organization have sub committees? What are these sub committees?
15. What is the role and responsibility of community organization sub committees? Does every member knows their role and responsibility and act accordingly?
16. Do these sub committees sufficiently trained and able to carry out specific tasks? How do they feed/deliver their work output to the overall work of the community and their institution?

17. Do the community institution/organization have a contingency and development plan in place which is regularly updated based on scenarios? Do they get regular capacity building/training on this issue?
18. Is there any defined and agreed co-ordination and decision-making mechanisms between community organizations and external technical experts, local authorities, NGOs, etc?
19. Is there any defined and agreed co-ordination and decision-making mechanisms with neighboring communities/localities and their organizations? Like agreed mechanisms to resolve conflict arising from utilization/sharing scarce resources during drought situation.
20. How disaster risk assessment including the assessment of climate change risks, conducted in the project community, contributed to and changed people's perception of risk and their preparedness?
21. How the process of participatory disaster risk assessment improved people's knowledge and are they able to address the underlying risk factors?
22. How the process of participatory disaster risk assessment and analysis improved people's roles and responsibilities on drought mitigation, preparedness, response measures as well as addressing the underlying risk factors?
23. Does PDRA capture collective knowledge and experience of management of previous crises? To what extent? What kind of activities, factors, actions, etc., foster or hinder this?
24. Do the established community EW system and its communication channels reach all segment of the community or leave some vulnerable people isolated? Do capacity and vulnerability assessment and its analysis help to solve this isolation?
25. How was the involvement of various local actors including government and does the process had any impact on the relationship between the community and government representatives, and subsequent access to public services?
26. Does application of CMDRR approach brought a community with a shared vision to be aware of drought disaster risks, prepared, and drought resilient community?

27. Does application of CMDRR approach brought the community to be in a better position to increase active involvement on governance at local level?
28. What other factors and aspects of an enabling environment are required for communities to be able to engage effectively with governments and other stakeholders?

ANNEXURE II: Research Proposal

INDIRA GANDHI NATIONAL OPEN UNIVERSITY (IGNOU)

A Research Proposal on

The contribution of NGOs in Building Disaster Resilient Community through Community
Managed Disaster Risk Reduction (CMDRR) *The case of Rayitu Woreda*

For the Partial Fulfillment of:

Master of Arts degree in Rural Development (MARD)

Submitted by

Name: Birhanu Yimam Amedie

Enrollment number: 089132670

Phone number: +2510911314898

e-mail: birhanu.ya@gmail.com

January, 2015

PROFORMA FOR SUBMISSION OF M.A (RD) PROPOSAL FOR APPROVAL

Signature:

Name & Address of Guide:

.....
.....
.....
.....
.....

Name & Address of Student: Birhanu Yimam Amedie

Addis Abeba, Ethiopia

e-mail- wrbirhanu@yahoo.com

Telephone no.: +251-911314898

Enrollment Number: 089132670

Date of Submission:

Name of Study Center: Saint Marry University College, Addis Abeba, Ethiopia

Name of Guide:

Title of the Project: The contribution of NGOs in Building Disaster Resilient Community through Community Managed Disaster Risk Reduction (CMDRR) The case of Rayitu Woreda, in Bale Zone of Oromia Region

Signature of the Student:

Approved/Not Approved:

Date:.....

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1. INTRODUCTION

1.1 Background of the Study

Disaster loss is on the rise with grave consequences for the survival, dignity and livelihood of individuals, particularly the poor, and hard-won development gains. Disaster risk is increasingly of global concern and its impact and actions in one region can have an impact on risks in another, and vice versa. This, compounded by increasing vulnerabilities related to changing demographics, technological and socio-economic conditions, unplanned urbanization, development within high-risk zones, under-development, environmental degradation, climate variability, climate change, geological hazards, competition for scarce resources, and the impact of epidemics such as HIV/AIDS, points to a future where disasters could increasingly threaten the world's economy, and its population and the sustainable development of developing countries. In the past two decades on average more than 200 million people have been affected every year by disasters. (*UN-ISDR HFA, 2005*)

Ethiopia after the replacement of the Derg regime by EPDRF in 1991 there has been tremendous efforts and success in terms of promoting the country in tackling the country's major enemy, deep poverty. This was achieved through different successive planned development policies namely Sustainable Development and Poverty Reduction Program (SDPRP) which covered 2002/3-2004/5, Plan for Accelerated and Sustained Development to End Poverty (PASDEP) which covered 2005/6-2009/10 and currently a five year Growth and Transformation Plan (GTP) starting from 2010. According to the Government of Ethiopian (herein after GoE) official report, a remarkable achievement on economic growth, social development and good governance had been done during this development planning periods. The economy grew at a real annual average rate of 11% between 2005-10, poverty levels declined sharply, from 38.6% in 2004/05 to 29.2% in 2010 (*MoFED, 2010*).

Yet this development process has been and is still challenged by different natural and manmade hazards whereby drought is taking the highest percent of the contribution, more than 90% (*UNISDR, 2012*). Moreover, the frequency of drought has shortened from every ten years before decades to 2-3 years recently.

According to the UNISDR recent report, economic losses due to disaster will continue to increase. Since 1981, economic loss from disasters is growing faster than GDP per capita in the OECD (Organization for Economic and Co-operation Development) countries. This means that the risk of losing wealth in weather-related disasters is now exceeding the rate at which the wealth itself is being created (*UNISDR, 2011*). It has been estimated that for every 1 USD spent on disaster risk reduction saves 3 USD in terms of the reduced impact of disasters. (*Benn, 2006*) In Ethiopia an increase in frequency and level of natural disasters caused by the unfavorable effects of climate change and more recently, the steady rise in staple food and fuel prices - as a result of the international economic crisis have added to the wide range of humanitarian challenges faced by the country. Farmers and pastoralists in many drought-prone areas have become dependent on humanitarian relief and food aid.

The approach of GoE in handling disaster was a conventional one and kind of an ad-hoc emergency response before 4-5 years ago. In 2008 the Ministry of Agriculture and Rural Development was inspired by the Hyogo Framework for Action (HFA) to undertake a Business Process Reengineering (BPR) which changed the focus from reactive crises management to a comprehensive and proactive Disaster Risk Management approach. A new institutional structure called Disaster Risk Management and Food Security Sector (DRM-FSS) within the Ministry was established to implement the new approach. DRM-FSS adopted the full cycle of disaster risk management (DRM), consisting of prevention, mitigation, preparedness, response, recovery and rehabilitation, to guide the undertaken program with a redirected focus on DRM. To this end the GoE considers the involvement of humanitarian agencies as a vital role in reaching communities which are frequently challenged by both natural and manmade hazards in the country.

1.2 Statement of the Problem

It is well agreed that there have been a number of efforts both by the government and non-government actors to address recurrent natural hazards in the study area. These efforts were huge in terms of finance and time spent. Despite the different efforts done so far by these actors, people in the area are still vulnerable and obliged to seek external support almost frequently. This challenge is exacerbated because of the World wide climate change and lack of adaptive capacity coupled years long exposure to drought situation.

DCA as humanitarian organization had an approach towards building a resilient community through its different internationally and nationally acknowledged programs like DRR and emergency responses linking with other development projects. These approaches have played a vital role in saving lives and also contributed to some extent in resisting similar shocks. But DCA's approach so far in building a sustainable capacity, resilience, of the community for future likely increasing similar natural hazards in a holistic manner needs to be analyzed.

One of the shortcoming of most resilience/vulnerability analysis of researchers lay on their attempt to analyze resilience from various shock/hazards (both idiosyncratic and covariate) context rather resilience of a community or HH should be analyzed from a single shock or hazard context. (*Tim Frankenberger, et.al, November 2012*) Thus, this study will focus on analyzing the ongoing DCA's project implementation approach in terms of the extent of contribution in building drought resilient community.

Moreover, DRR approach is generally a recent approach under advocacy and practiced by different international and national humanitarian actors as well as government bodies. The effort done so far by any actor need to be analyzed and good practices as well as lesson learnt should be described against the international HFA in the country specific context. Thus, DCA as humanitarian organization working for building drought resilient community in line with the international DRR frame work in the study area needs to analyze and good practices and lesson learnt so far in implementing community managed disaster risk reduction approach for the last 4-5 years will be identified.

Generally, there is no any research done so far on the role of NGOs in using CMDRR approach as one way of addressing DRR issues focusing in drought prone pastoral area. Thus this research will be one its kind on the topic and believed to contribute a lot in documenting the best experience, identifying the gap, point out topics which require further inquiry/research and put recommendations for future better performance of related action.

1.3 Objectives

In general, the main objective of the study is to document the best experience, identify gap, point out topics worth further study/inquiry and put recommendations on better performance of CMDRR approach in addressing disaster risk reduction and management.

The specific objectives of the study are:

1. To assess CMDRR approach role/contribution in building drought resilient community members and institutions;
2. To assess whether CMDRR approach open an opportunity for the community members and their institution in invigorating and build up capacities to address the long term trend/stress (underlying causes & dynamic pressure) and take proactive measures on recurrent drought hazard;
3. To assess the contribution of CMDRR approach in enabling the community voice to be heard/linked/recognized by external actors (government and humanitarian stakeholders) in terms of their immediate DRR and long term development plans;
4. To draw best experience and lesson learned for both scale up and future deep research on contribution of CMDRR approach in resilience building of a community.

1.4 Theoretical Proposition/Hypothesis

Application/use of CMDRR approach, in drought disaster prone pastoral community, contributed on reinvigorating/building of the community's capacity (community institutions and individuals including vulnerable segment of the community) and empower them to be primary actors on their cause.

1.5 Research Questions

6. How the application/use of CMDRR approach contributed on invigorating/building the capacity of community and their institutions? In terms of analyzing their situations, planning and implementing relevant activities as well as leading the whole action?
7. How Participatory Disaster Risk Assessment (PDRA) and Analysis tool able to ensure inclusion/active involvement of vulnerable segment of the community?
8. How the approach enables to identify long term trend/stresses (Underlying causes & dynamic pressures *including gradual climate change and price inflation*) and include adaptive capacities as part of the community action/development plan (CAP)?
9. How the CMDRR approach empowers the community to be the primary actor on their cause? (*In terms of influencing relevant government and external actors to make their needs and priorities known and supported accordingly*)
10. How is the linkage/synchronization of this approach with existing community institutions and local governance structures?

11. What is the contribution of CMDRR projects implemented so far in building drought resilient community in the study area?

1.6 Significance of the Study

DCA as humanitarian organization need to learn, scale up and document the good achievement done so far at grass root level and identify the gaps in its endeavor on contributing to build drought resilient community in the study area. Any strive on building community resilience against disaster is not one stop shopping as well as not something to be dealt with a single organization as a separate effort, thus resources should be utilized efficiently trying to build the most vulnerable groups. Thus, this study will enable both DCA, its implementing partners and other stakeholders, involved on disaster risk reduction and development sector, to get a practically and professional insight about the practical contribution, challenges, and gaps of CMDRR approach implementation at community level with respect to building drought resilient community in drought prone pastoral areas of Ethiopia. Moreover, the study will contribute in exposing different issues which need further deep research on the broad resilience building issues in general.

2. METHODOLOGY OF THE STUDY

2.1 Study Design

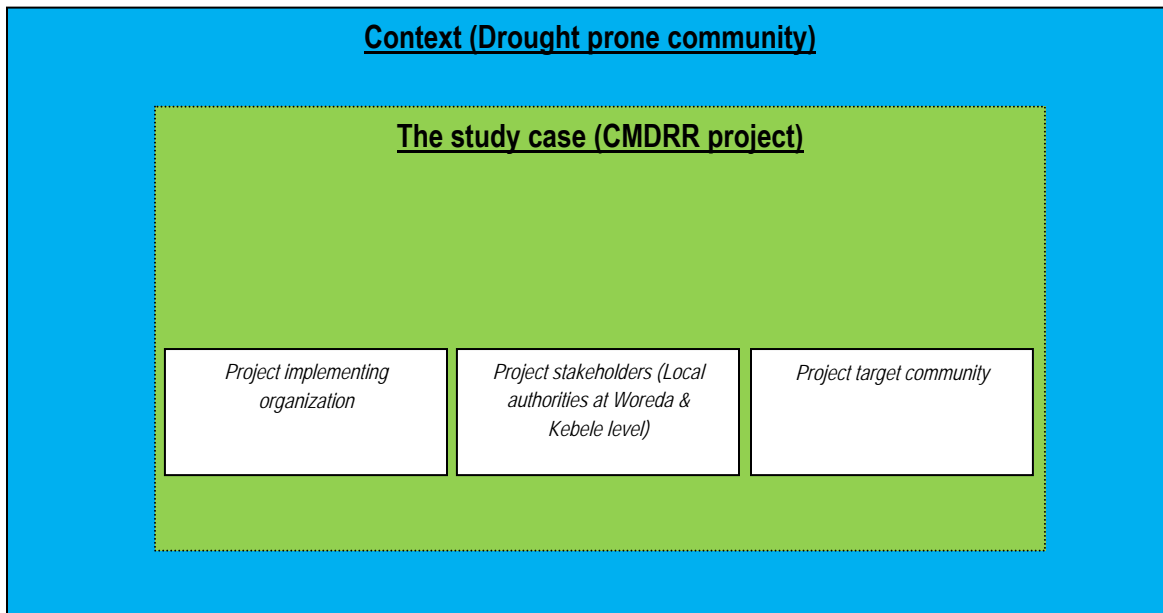
The objective of this study is to investigate the role and contribution of CMDRR approach in building drought resilient community through analyzing the implementation process from different involved stakeholder perspective and identifying the achieved result at beneficiary level. Thus, the research will follow a descriptive case study research design. Case study research methodology is preferred for its nature of investigating contemporary phenomena in their real context using multiple sources of evidence.

Case study is defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. It also copes with the technical distinctive situation in which there will be many more variables of interest than data points (if compared with experiment). One result of case study relies on multiple courses of evidence where collected data needs to converge in a

triangulating fashion and another result benefits from the prior development of theoretical proposition to guide data collection and analysis (Yin, 2013).

There are four distinctive types of case study research designs (Yin, 2003) namely single case (holistic) design, single case (embedded) design, multiple case (holistic) design and multiple case (embedded) design. This study will follow single case (embedded) design which focuses on a single case (CMDRR project) with embedded sub unit of analysis (organization, local authority and beneficiary communities) as portrayed below on diagram 1. The **case** is referred to the object of the study (*CMDRR project*) and it contains three units of analysis (*Project implementing organization, Project stakeholders and Project target community*) in drought prone community context. Data will be collected from the subjects of the study which are the sub units of analysis in the study design.

Diagram 1: Single (embedded) case design of the study



This study design is selected since it is well suited to answer the research questions which intend to describe how the use/application of CMDRR approach contributed for building of drought resilient community in the real-life situation it has occurred.

2.2 Sampling and Sample Size

In case studies, the case and the unit of analysis should be selected intentionally. This is in contrast to surveys and experiments, where subjects are sampled from a population to which the results are intended to be generalized. On the contrary, a case study links many different kinds of evidence, figures, statements and documents to support a strong and relevant conclusion. Hence, a case study will never provide conclusion with statistical significance and generalization rather employs analytical generalization following rigorous logic of analysis. The rationale for selecting a case for a study could be its typical or representative, critical, unique, revelatory or longitudinal nature in some respect and it should be selected accordingly.

For this study CMDRR project implemented in Rayitu Woreda is selected as the study case in drought prone community context. This study case is selected considering its typicality or representativeness of CMDRR projects in drought prone community and findings/lesson learned can be assumed to be informative about the experience of similar projects in a similar drought prone community context. Thus, this study will be undertaken to portray CMDRR approach role and contribution at community level in the case of DCA implemented CMDRR project in Oromia Regional State, Bale Zone, Rayitu Woreda.

Collection of data will be undertaken from the three unit of analysis (*Project implementing organization, Project stakeholders and Project target community*) employing multiple source of evidence. The required data is expected to be obtained from respondents in these three units of analysis.

Therefore, respondents from the project implementing organization (*5 experts/program officers*) coordination & field office, project stakeholders at Woreda & Kebele level (*12 persons*) and project target community in three Kebele (*45 people*) will be selected purposefully. Generally, the following data planning matrix/case study protocol will be used as a guideline for collecting the required data and link to the theoretical proposition/hypothesis.

Table 1. Data planning matrix

Data planning matrix						
No	What do I need to know? (research question)	Why do I need to know this? (objective)	What kind of data will answer the question?	Where can I get the data?	Whom do I contact for access?	Timelines for acquisition
1	How the application/use of CMDRR approach contributed on invigorating/building the capacity of community and their institutions? In terms of analyzing their situations, planning and implementing relevant activities as well as leading the whole action?	To assess the impact of strengthening capacity of community members and institutions on drought risk analysis, vulnerability assessment, capacity assessment, CP/CAP planning and its management to build drought resilient community.	CMDRR committee members interview on their knowledge assessment of hazard, vulnerability, capacity, CP/CAP planning and its management	From the project implementor organization, CMDRR committees in study Woreda	Project implementor organization and directly CMDRR committee members	One week period
2	How Participatory Disaster Risk Assessment (PDRA) and Analysis tool able to ensure inclusion/active involvement of vulnerable segment of the community?	To assess whether CMDRR approach open an opportunity for the vulnerable community segments/members be active participant of the whole community managed disaster risk reduction process	Process of consisting CMDRR committee, Vulnerability assessment, capacity assessment, CP/CAP document, and FGD data on vulnerable segment of community members.	From the project implementor organization, CMDRR committees, and vulnerable segment of community members in study Woreda	Project implementor organization, CMDRR committee, and Kebele administration	One week period
3	How CMDRR approach enables to identify long term trend/stresses (Underlying causes & dynamic pressures including gradual climate change and price inflation) and include adaptive capacities as part of the community action/development plan (CAP)?	To assess whether CMDRR approach open an opportunity for the community members and their institutions in invigorating and build up their capacity, so that , they are aware on the long term trend and take proactive measures on recurrent drought hazard	CMDRR committee members Hazard, Vulnerability, Capacity assessment document, and evidence on livelihood diversification. (For instance, using or investing their available resource efficiently in line with climate changes?)	CMDRR committee and Community members	Project implementor organization, CMDRR committee, and Kebele administration	Four days
4	How the CMDRR approach empowers the community to be the primary actor on their cause? (In terms of influencing relevant government and other external actors to make their needs and priorities known and supported accordingly)	To assess the contribution of CMDRR approach in enabling the community voice to be heard/incorporated/recognized by external actors (government and humanitarian stakeholders) in terms of their DRR and long term development plans	Interview with CMDRR committee, government bodies, Other actors in study Woreda	Woreda, NGOs, and Community	Woreda, NGOs, and Community	Four days
5	How is the linkage/synchronization of this approach with other existing community institutions and local governance structures?	To assess whether government and other stakeholders involved on development as well as DRR actions in the area buy in/used/synchronized the CMDRR approach I their work	Government and other actors project activity	Government line department and NGOs working in the area	Woreda and NGOs working in the area	Three days
6	What is the contribution of CMDRR projects implemented so far in building drought resilient community in the study area?	To assess the best experience and lesson learned so far in building the capacity of the community to be drought resilient	Existing software and hardware capacities of the community as well as community's felt gaps in achieving drought resilience	Government line departments, CMDRR committee and community representatives	Woreda, CMDRR committee and randomly selected members	Three days

Thus, a total of one month duration will be dedicated for data collection at field level and prior desk review will be done at Addis Abeba level before conducting the field level primary data collection.

2.3 Tools for Data Collection

The tools for data collection for this research will be multiple source of evidence including secondary documents, interview, FGD, structured questionnaires and observation will be employed. These data sources will be collected from members/staffs of the project implementing organization both at coordination and project office level (5 experts/program officers), the project stakeholders at Woreda and Kebele levels (12 person), and the project targeted community (45).

The research will be conducted in three different phases:

- Desk works i.e. reviewing of literatures and project documents, case and sub unit of analysis determination, development of tools of data collection including case study protocol and database, and testing of field instrument to fit for logic of analysis;
- Field work i.e. data collection (using interview checklist, structured questionnaires, and focus group discussions); and
- Data analysis, verification of results and report writing (Technically data collection and analysis will go simultaneously).

Initially review of project implementation documents (project document, implementation reports, project evaluation, studies, community action plans, etc...) will be done as desk work. Both open-ended and close-ended questionnaires will be used to collect information from project signatory government stakeholders and implementer organization level respondents. Interview checklist will be organized to collect data from the Kebele and CMDRR community level respondents. The interview will also have both open-ended and close-ended questions.

Focus group discussions will be arranged with beneficiary community in order to gather information about their opinion on the approach and its role as well as for triangulation of data collected at different level and build cases. Community based institutions, vulnerable segment of the study community including women, elders, disables, youngster, etc will be purposefully involved on the discussion sessions at community level so that the real ground level perception on the achievement of the project will be reflected.

The questions for both the interview checklist and the questionnaire will be prepared in a way that they are short, easy to understand and also could be modified as far as the essential data acquired from the respondents.

2.4 Data Processing and Analysis

Bogdan and Biklen define data analysis on qualitative research as “*working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others*” (Bogdan and Biklen 2006). Qualitative researchers tend to use inductive analysis of data, meaning that the critical theme emerges out of the data (Patton, 1990).

A basic principle of qualitative research is that data analysis should be conducted simultaneously with data collection (*Coffey & Atkinson, 1996*). This allows the researcher to progressively focus on his/her interview and observation and to decide how to test the emerging conclusion. Strategies for qualitative analysis fall in to three main groups: Categorizing strategies (such as coding and thematic analysis), Connecting strategies (such as narrative analysis and individual case studies), and memo and displays (*Coffey & Atkinson, 1996*).

Categorizing strategies: the main categorizing strategy in qualitative research is coding, unlike to quantitative research, not to produce count of things rather to fracture the data and re-arrange it into categories that facilitate comparison between things in the same categories and between categories. These categories may be derived from existing theory, inductively generated during the research or drawn from the categories of the people studied.

Connecting strategies: this strategy instead of fracturing the initial text into discrete elements and re-sorting it into categories, attempt to understand the data (usually, but not necessarily, an interview transcript or other textual material) in context, using various methods to identify the relationships among the different elements of the text. Such strategies include some form of case studies (*Patton, 1990*), profiles (*Seidman, 1991*) some types of narrative analysis (*Coffey & Atkinson, 1996*), and ethnographic micro-analysis (*Erickson, 1991*). What all these strategies have in common is that they look for relationships that connect statements and events within a particular context into coherent whole.

Memo and displays: is a key part of qualitative analysis in facilitating the researcher thinking about relationships in his/her data to be collected and making his/her ideas and analysis visible and retrievable. Displays (*Miles & Huberman, 1994*) which include matrices or tables, networks or concept maps, and various other forms, also serve two other purposes:- data reduction and presentation of data or analysis in a form that allows researcher to see it as a whole. Thus this research will employ the combination of these qualitative research analysis strategies. Moreover, the analysis of collected data will be supported by computer using N Vivo software. All the above techniques would be employed for processing data collected and shape for further analysis.

For any case studies prior setting of analysis strategies is very much crucial even before deciding what type of analysis techniques to employ. Prior setting of analysis strategy allows for

identifying operational measures (*construct validity*) and defining the domain to which a study's finding can be generalized (*external validity*). There are four analysis strategies (*Theoretical proposition, descriptive framework, use of quantitative and qualitative data and rival explanation*) and five analysis techniques (*pattern matching, explanation building, time series analysis, logic models, and cross case synthesis*) in case study research method (Yin, 2009). Considering this study design (*Descriptive single case embedded design*) ***theoretical proposition*** and ***rival explanation*** strategies supported by ***pattern matching*** techniques will be employed as the main data analysis methodology of this study.

3. REVIEW LITRATURE

3.1 The Evolution and Concept of DRR Approach

Disaster risk reduction (DRR) is a relatively new concept. There are different definitions of the term in the technical literature but it is generally understood to mean the broad development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout society. (*Twigg, 2009*) Nowadays, the concept and application DRR approach is evolving to be diversified and believed to be seen by scholars as a trans-disciplinary subject which needs to be dealt with the involvement of multi-sector disciplines. Below is brief review on the major development and school of thought on the overall disaster risk concepts as well as approaches used up to date with special emphasis on the development and humanitarian sector.

School of thoughts on disaster risk

The focus on disaster and risk came about through various initiatives and events after the Second World War. The scientific study of disaster and risk is one such event. A focus on the development of disaster risk reduction and management would therefore be incomplete without a discussion of the roots of disaster studies and research both within the social as well as the natural sciences. Some of the earliest recorded ideas on disaster and risk within the social sciences were expressed by Carr (1932) and Sorokin (1942) who questioned the influence of catastrophe on social patterns. Some of the first systematic work in disaster studies and research occurred in the 1950s and 1960s with a noticeable heightened interest in the 1970s (*Niekerk, 2011*). These earlier theorists approached the concept of disaster from a social science as well as a natural/physical science perspective. Gilbert (1998) indicates that the social science perspective approached the study of disaster from three different paradigms: that is content research, chronological development, and lastly cleavages. In the first instance (content research) disaster was viewed as a duplication of war - an external agent can be identified which requires communities to react globally against the “aggression”. The second (chronological development) views disaster as an expression of social vulnerability – disaster is therefore the result of underlying community logic or social processes. Thirdly, disaster is an entrance to a state of uncertainty – disaster is the impossibility of identifying and defining (real or perceived) dangers. It is therefore an attack on our perception and known reality. Cardona (2003) and Kreps (1998)

are of the opinion that the above early paradigms within social science on issues of risk, or mitigating the risk of physical harm and social disruption before an event occurred.

The modern day study on disaster risk gives much emphasis on the understanding and investigation of disaster proactively, both within a social and natural/physical science perspective. Cardona (2003), Kelman (2003) as well as Smith (2002) identified two schools of thought that have developed in terms of disaster risk since the 1980s. Cardona refers to these as the *constructivist* and *objectivist/realist* schools of thought. Smith's interpretation is that of *behavioral* and *structural* paradigms. Kelman simply refers to the *social scientist* and *physical scientist's* focus on risk. After assessing the work of the three authors it became clear that for all means and purposes the constructivist school of Cardona, the behavioral paradigm of Smith and the social scientist focus by Kelman refer to the same approach in the investigation of disaster, so too the objectivist, structural and physical scientist paradigms. (Niekerk, 2011)

Constructivist thinking relates to social sciences where risk is viewed as a social construct (risk is created in social systems). This approach requires an understanding of social representations and perceptions, and the interaction between different social actors and phenomena. A consciousness level developed and rooted on conditions of risk and the attitudes to risk in societies that lead to disasters or vice versa.

The objectivist or realist school finds itself more within the natural and physical sciences. The natural and physical science perspective to disaster risk emphasized the hazard component in terms of hydro-meteorological, geodynamic and technological phenomena such as earthquakes, volcanoes, cyclones, tsunamis, industrial accidents and nuclear fallout etc to mention a few. Within this school of thought it is believed that risk can be quantified and objectively judged. So the accent within the natural and physical sciences remained on the quantification of risk focusing on the nature, scale and intensity of different hazards and their possible impacts on economic assets, human, ecosystems and other entities in question. This estimation of risk also translated into the economic and actuarial sciences that believe that risk can be determined through mathematical formulae. (Niekerk, 2011)

Hewitt (1998), acknowledges that the social understanding of disaster is much more crucial to the contemporary disaster risk scene. It would be unjust to assume that both of the mentioned schools of thought or paradigms enjoyed equal status within the international arena. Hewitt says

that the pure focus on the social construct of disaster risk by the constructivists ignores the hazard or “agent-specific” approach. This approach remained the most common visualization of disasters, even in the work of social scientists within the 1980s. The truth of this statement is evident in the objectives of the International Decade for Natural Disaster Reduction (1990-1999). Both of these schools of thought have made the paradigm shift from a pure disaster oriented focus to that of disaster risk. The contemporary understanding of risk has greatly increased to the extent that various scholars from a variety of different disciplines (e.g. sociology, anthropology, geography, architecture, agriculture, meteorology, engineering, law, and public administration and development studies) are jointly researching issues of disaster risk (*Comfort et al., 1999*). Below table⁹ summarizes the disaster risk point of view by different disciplines against their basic assumptions, community considerations, focus, and overall objective.

Understanding Disaster and the opposing view				
Point of view	Conventional/Dominant		Alternatives/Progressives	
Assumptions	Act of God Disaster is natural Inevitable occurrence we have no control		Act of Man Disaster is not natural Evitable occurrence—we have control	
Communities are considered	Victims and beneficiaries of assistance by outside experts		Central players	
Approaches	Natural science	Applied science	Social science	Holistic
Equates disasters with	Hazards such as earthquake, floods etc.	Magnitude of loss and damage associated with hazard events	Differential effects of hazard not only on physical structures but also on people, their economic activities and social relationships	Not only hazard but also the political, economic and social environment or context because of the way it structures the lives of different groups of people.
Deals with	Geophysical, geological and hydro-meteorological processes	Exposure and resistance of physical structures to mitigate damage and loss	How hazards are socially perceived and conceived	Causes of disasters are closely associated with unsustainable development patterns, which increase the risk faced by large sectors of society
Focus	Emergency management	Identification of hazard prone locations and the patterns of physical vulnerability	Causal factors and process of vulnerability	Understanding the complexity of disaster risk by analyzing the underlying conditions of risk generated by people their normal existence in a situation of unsustainable development
Objective	Mitigate loss, damage, disruptions when disaster occurs and to facilitate a quick recovery		Enhancing and strengthening capacities of household, community and society to absorb losses and recover from disasters	To increase capacities to manage and reduce risk and hence, the occurrence of disasters.
Shifts	From relief and mitigation paradigm in managing disaster		To development Paradigm	
Intervention	Centered around service delivery and Relief and Recovery		It tackles unresolved issues in development and centered around	

3.2 Disaster Management versus Disaster Risk Management

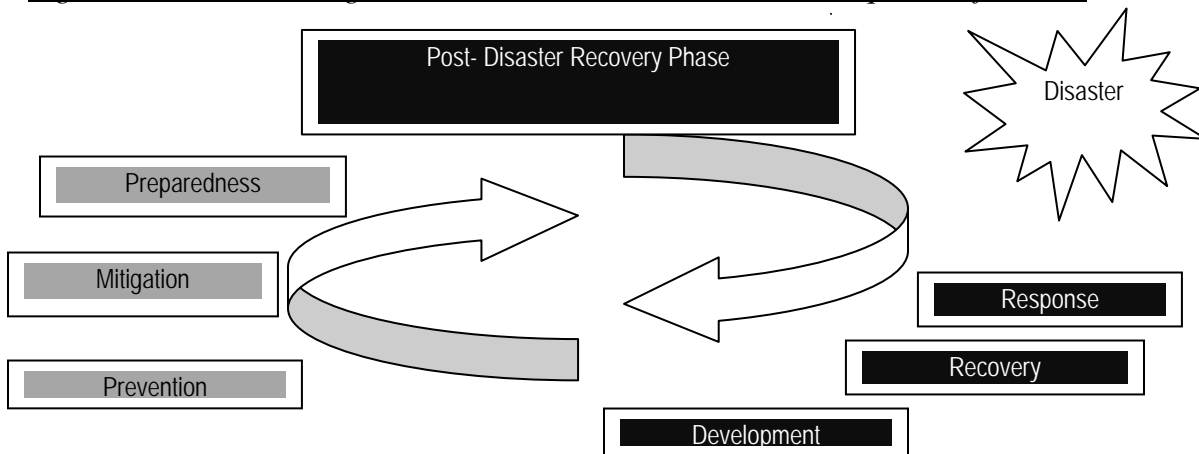
Globally, there has been a shift from the old school of thought that disaster is “an act of God” to the school of thought that disaster is “an act of man”. Thus, this is the advent of a new understanding of disaster and disaster risk. Herewith, there has been a tremendous progressive shift from reactive way of managing disaster (after happening) to a proactive way of disaster risk reduction and management. In development and humanitarian sector there were different disaster management and disaster risk management models which shift from relief response and recovery actions (reactive approach) to hazard events to proactive approach (*by doing disaster risk reduction through hazard prevention and mitigation, vulnerability reduction and building*

⁹ Extract from IIRR CMDRR Training manual

individual and community capacity as support system for community members to successfully survive and bounce back to normal life). The following different models show how disaster management developed to disaster risk reduction and disaster risk management approach worldwide.

Disaster Management Continuum (DM-Model): The Disaster management can be viewed in a number of ways. The more traditional approach has been to regard disaster management as a number of phased sequences of action - or a continuum. The Disaster Management Continuum shows the chronological order of interventions intended to control disaster events. While the activities indeed go in a circle, as the following graphical illustration shows, it also implies that they always return to the same state. In actual practice though, some improvements occur.

Figure 1: Disaster management continuum/Traditional model-Sequence of actions



In this traditional model shown above, disaster management occurs in stages which follow each other in a sequence. That is to say, mitigation and preparedness precede a disaster. While this may well be the case, it is also often observed that the sequences of action occur simultaneously - as you can see in the illustration of the expand-contract model below.

Contract and Expand model:- The Contract-Expand Model is the name given to the Disaster Management model used by the communities in South Africa (Kotze & Holloway, 1996). It is called the Contract Expand Model because it assumes that prevention, mitigation; response and

recovery can be carried out at all times in a disaster-prone community. However, the relative weighting of each component “contracts” or “expands” depending on the relationship between the hazard and the vulnerability of the community across time.

In this alternative view of disaster management - the expand-contract model - disaster management is seen as a continuous process. Disasters are managed in a parallel series of activities rather than in a sequence of actions. The different strands of activities or actions continue side by side, expanding or contracting as needed.

For example, immediately after a disaster event - such as a flood - the "relief and response" strand will expand to cope with the immediate effects of the disaster. But as time passes, the "recovery and rehabilitation" strand - including prevention to mitigate against possible future disasters - will expand to address the rehabilitation needs of the affected community. The relative weighting of the different strands will also vary depending on the relationship between the hazard event and the vulnerability of the community involved. This approach acknowledges that disaster management usually includes a number of interventions and actions that may be occurring simultaneously (at the same time) and not always in phased succession (one after the other). In the case of droughts, for example, drought relief, recovery and mitigation may often occur at the same time.

Pre-During-Post Model:- The Pre-During-Post Model is an alternative framework to the Cycle by the Citizens Disaster Response Network in the Philippines. The network has been promoting citizen-based development-oriented disaster management since 1984. It assumes a simplistic linear approach and serves as an alternative model to the disaster management continuum/cycle model. It classifies interventions as pre, during and post disaster interventions, which are done within the overall framework of development.

PRE	DURING	POST
Prevention	Emergency response	Recovery/Rehabilitation
Mitigation		Mitigation
Preparedness		

Disaster Pressure and Release (PAR/Crunch) Model:- The disaster pressure and release model was first developed by Blaikie, Wisner et al, in 1994. The model analyzes disaster by taking hazard (trigger event) and vulnerability (unsafe condition) as the elements that interact for possible disaster situation. It states that a disaster could happen only when a hazard affects vulnerable people. A disaster happens when these two elements come together. A natural phenomenon by itself is not a disaster; similarly, a population maybe vulnerable for many years, yet without the “trigger event”, there is no disaster. We can therefore see that vulnerability - a pressure that is rooted in socio-economic and political processes - is built up and has to be addressed, or released, to reduce the risk of a disaster. These processes may include poverty, age-related discrimination, exclusion or exploitation based on gender, ethnic or religious factors. The outcome will be “safe” as opposed to “unsafe conditions”, “resilient or capable communities” as opposed to “vulnerable communities” and “sustainable livelihoods” as opposed to “unsustainable livelihoods”. The “progression of vulnerability”, provides an explanation for the interrelationships between different elements that cause vulnerability. This model was the first attempt to bring the “human factor” into the disaster management picture. Disaster risk management practitioners have used the model since then to examine the causes of vulnerability during disaster risk assessment.

“In evaluating disaster risk, the social production of vulnerability needs to be considered with at least the same degree of importance that is devoted to understanding and addressing natural hazards. Expressed schematically, our view is that the risk faced by people must be seen as a cross-cutting combination of vulnerability and hazard. Disasters are a result of the interaction of both; there cannot be a disaster if there are hazards but vulnerability is (theoretically) nil, or if there is a vulnerable population but no hazard event. What we are arguing is that the risk of disaster is a compound function of the natural hazard and the number of people, characterized by their varying degrees of vulnerability to that specific hazard, who occupy the space and time of exposure to the hazard event. There are three elements here: risk (disaster), vulnerability, and hazard, whose relations we find it convenient to schematize in a pseudo-equation: Risk (R) = Hazard (H) x Vulnerability (V)” (Wisner, Blaikie et al, 2003)

Disaster risk formula:-This is a qualitative framework that is used to assess disaster risk levels and guide risk reduction planning measures. It shows that the risk of suffering consequences of a disaster is determined by the presence of the hazard event and vulnerability conditions in the absence of coping capacity. Thus, the formula that guides disaster risk reduction is as follow:-

$$\text{Disaster risk (DR)} = \frac{\text{Hazard (H)} \times \text{Vulnerability (V)}}{\text{Capacity (C)}}$$

Disaster risk can be reduced by working on prevention, mitigation, and preparedness measures against the above three key areas which include but not limited to:

- **Prevention of hazards**:-This is to avoid possible occurrence of a potential hazard, e.g. conflict prevention measures or eradication of contagious diseases. (*In the case of natural hazards this is not always possible*)
- **Mitigation of hazards**:-This is related to work on measures that reduce/moderate the intensity and severity of the impact of hazards before they arise. e.g. flood walls, erosion control and measures to reduce run off.
- **Reduction of vulnerabilities to hazards**:-This is related to measures that build/enhance individual survivability or increasing capacities of individuals that help to survive during hazard event and bounce back after the event. e.g. Livelihood diversification, swimming skills for flood event, etc.
- **Reduction of system/society vulnerability**:- This is measures that build coping capacity a system or a society through strengthening community organizations (systems and structures) that help individuals to survive during hazard event and able to effectively bounce back after the hazard. e.g building effective EW system, search and rescue system, credit and savings, market information etc.

3.3 Community Based Disaster Risk Reduction versus Community Managed Disaster Risk Reduction

Community based disaster risk reduction (CBDRR): It is a process of mobilizing a group of people in a systematic way towards achieving a common risk reduction objective in a geographically defined area (or mobilizing a sector or group not necessary living together in one

location). The relation is functional (subject-object relation), people form groups to meet pre-determined objectives and are dependent on outsiders' decisions. Whereby, external professionals provide the directions, including what the community should know and how, they are in charge of building the community.

Community managed disaster risk reduction (CMDRR): It is an approach whereby disaster risk reduction programs are managed by members of the community themselves. Represents the capacity that enables communities to plan, implement, monitor and evaluate their disaster risk reduction measures according to their needs. The entire process is centered on self-management at the community level and there is a strong sense of ownership of the activities. The relation between partner agency and the people is interactive whereby people are expected to be involved in the analysis, need assessment and planning and partner agency is also equally involved in decision making (no subject-object relation). On this approach community and external professionals are co-learners. There are many ways of learning and in the process of learning and doing, they “co-construct” each other. And the final end product is expected to be community organizations are capable of implementing a disaster risk reduction process in their community. They are not dependent on the external actor.

3.4 The Hyogo Framework for Action (HFA)

The Hyogo Framework for Action (HFA): *Building the resilience of Nations and communities for disasters*, adopted in 2005 in Kobe, Hyogo, Japan, provides a global strategic roadmap to disaster risk reduction. The HFA is a global blue print or disaster risk reduction with the goal to substantially reduce disaster losses in lives, and in the social, economic, and environmental assets of communities and countries by 2015. The framework offers guiding principles, priorities for action, and practical means for achieving disaster resilience for vulnerable communities. Under this framework the following five major actions were prioritized in line with three strategic objectives:

HFA 1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;

HFA 2: Identify, assess and monitor disaster risks and enhance early warning;

HFA 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels;

HFA 4: Reduce the underlying risk factors;

HFA 5: Strengthen disaster preparedness for effective response at all levels.

With this internationally recognized and supported priority actions nations, donor communities and international humanitarian organizations have been involved on building disaster resilient nations and communities in their context at different level for the last eight/nine years and still strengthened efforts are ongoing and need to continue as well.

In the horn of Africa hydro meteorological caused disasters mainly drought and flood are the major disasters affecting the people in the region. Accordingly different appreciable efforts and best practices have been drawn in the last 5 years in this regards including establishment of regional coordination plate forms, early warning (EW) systems and a radical shift at national level from disaster crisis to disaster risk management including Ethiopia in terms of establishing a system. However, disaster risks are still affecting huge number of population in the region. Only in the recent 2010/2011 around 13 million people in the horn of Africa were highly affected by drought, *a slow on set disaster which give enough time for preparedness and mitigation*, and yet early response and mitigation measures were very late in spite of a very good early warning information released by different EW networks like Famine Early Warning Systems Network (FEWSNET) and East and Central Africa Food Security and Nutrition Working Group (FSNWG) reports which were graded as ‘very good’ to ‘excellent’ in terms of their accuracy in predicting the severity and onset of the crisis. (UNISDR, 2012)

Under the IGAD regional initiative East and horn Africa countries had a meeting in Nairobi on September, 2011 to design a regional strategy to end drought emergency. And this strategy recognized the following stress worthy issues for future endeavor in establishing drought resilient nations and communities in the region: (UNISDR, 2012.)

1. Accelerate investment in the foundations of development: This includes pro-poor infrastructure and human capital, secondary roads, water, energy, education and health;

2. Strengthen adaptive capacity and livelihood choices: This includes environmental protection, integrated resource and water management; rangeland management, fodder and crop production, reforestation, small business support, social protection, and assistance to pastoralists to help reconstitute their livestock and start a sedentary life;
3. Promote integrated land and water management including both ground and surface water development for irrigation, livestock and human use;
4. Facilitate formal trade and promote efficient flow of commodities in the region;
5. Support pastoralism as provided for by the African Union Pastoralist Policy Framework. Support includes protecting property rights and livestock assets, providing market, veterinary health and financial services, and supporting livestock mobility;
6. Fast track climate change adaptation initiatives so that drought risk reduction and climate change adaptation are integrated into development planning and resource allocation frameworks;
7. Ensure that more effective institutional frameworks are in place to promote development of arid and semi-arid lands and manage droughts in more sustainable ways, for example the National Drought Management Authority (NDMA); and
8. The strategy also recognizes the need for Governments to work closely given that arid climatic conditions cut across boundaries.

Generally, the HFA as adopted by United Nations International Strategy for Disaster Reduction (UNISDR) and Global Facility for Disaster Reduction and Recovery (GFDRR) laid the foundation of DRR concept and its cascaded application in different regions, nations and community level. All the current moves on establishment of regional DRR platform, national DRR dedicated institutions as well as community based DRR pilot project implementations are the result of the global initiation, commitment and the enactment of HFA in 2005.

In Ethiopia, the current DRMFSS under Ministry of Agriculture/Early Warning and Response Directorate has overseen a large shift in attitude and practice, moving towards an increasingly multi-hazard and multi-sectoral approach, and is overseeing the drafting of a new National Policy and Strategy on Disaster Risk Management (NPSDRM) that contains a greater emphasis

on the delegation of powers to the regional and local levels, as well as community involvement. The NPSDRM is organized according to Hyogo Framework for Action (HFA) priority areas, which have informed a policy shift by the DRMFSS toward proactive disaster risk management. However, Ethiopia is not yet a signatory to HFA, and has not yet established a national platform on DRR. (*IFRC, 2013*)

3.5 Preview on Implementation of CMDRR Approach in Ethiopia Context

Hazards could be of hydro-meteorological nature, like drought, and flood which are common in East Africa or geological nature like Tsunami which is common in Far East or Conflict, or Epidemics, etc. What these hazards do have in common, however, is that they can be managed, prevented or mitigated, from turning into disasters. This means that the impact they have on people and their livelihoods can be avoided or diminished. In other words, hazards can be something unavoidable but disasters can be avoided or disaster risk and impact of disaster can be reduced through prevention, mitigation and preparedness measures.

With this basic international, regional and national consensus towards disaster management there are different regional and national efforts by different humanitarian actors. And the government of Ethiopia is also putting its maximum effort in terms of increasing political commitment to DRR, improving identification and assessment of disaster risk, enhancing knowledge management, increasing public awareness, improving governance of DRR institutions, and integrating DRR in to emergency response management which are the basic strategic objectives established by AU under Regional strategies for DRR.

Apart from highly appreciable efforts done so far in terms of the whole idea of DRM at national level, most of the government effort hardly focused on empowering the people at community level. Nevertheless, there are credible efforts and achievements made by INGOs as well as local NGOs in taking this new disaster management approach to community level.

3.6 Overview of DCA's involvement in DRR project in Ethiopia

Dan Church Aid (DCA) is a Danish faith-based humanitarian and development organization established in 1922. It supports long-term development and emergency interventions to poor and marginalized people in Europe, Asia, Africa, and Latin America. DCA is a partnership

organization committed to working with faith based organizations, nonreligious local civil society actors and community based organizations globally.

DCA's activities in Ethiopia began by supporting relief projects in the mid 1970s following the Northern Ethiopia famine through local churches and faith-based development actors. Following the organizational decisions to decentralize operations closer to partners and beneficiaries, in 2004, DCA opened a regional office in Ethiopia. Currently, it is a legally registered international non-profit funding NGO.

DCA-Ethiopia has three programme types: Livelihood Security, Gender and Capacity Building and HIV/AIDS. Livelihood Security is the flagship programme with more partners and projects compared to the other two programmes. Most humanitarian response and Disaster Risk Reduction (DRR) interventions are also under this programme type. DCA's programmes are implemented in Borena and Bale zones of Oromiya Region, Oromo peoples' Zone in Amhara and South Wollo, North Wollo, as well as Wag Himra Zones of Amhara Region. There are also projects at national level through partnership with networks and consortia. (*DCA 2012*)

Under the Livelihood Security Programme, DCA and its partners have been implementing a project funded by DG-ECHO and co-financed by DCA entitled "Building Resilient Communities to Drought Risks in Ethiopia" – from 01 July 2010 - 31 December, 2011 with an overall objective of mitigating the effects of drought in the country's agro-pastoral and pastoral areas. The project aimed to strengthen the current strategies in line with the humanitarian approaches followed by all actors. It specifically intended to increase resilience of communities to recurrent drought risks by enhancing capacity of community local actors to plan and implement Community Managed Disaster Management Plan (CMDMP).

And currently, DCA is implementing DG-ECHO financed project entitled "*Enhancing Resilience in Drought Prone Areas of Bale Ethiopia*". The project foresees to contribute to increased resilience and reduced vulnerability to drought risks in Guradamole, Rayitu and Dawe Kachen Woredas of Bale Zone, Oromia Regional State in Ethiopia. But the approach practicability, its positive contribution in building drought resilient community, its main challenges and the way forward in scaling up this approach by DCA and other similar

stakeholders is not researched by any professional apart from an external project evaluation done by a consultant.

3.7 The Recent Discussion/Think Thank on Resilience Building Approaches

Currently the concept of building resilience is once again gaining prominent attention and under discussion across donor, implementing agencies and government bodies putting as a central idea of development, climate change adaptation, and humanitarian aid.

Technical working groups from USAID, DFID, AU, and other stakeholder released recently a discussion paper entitled “*Enhancing resilience to food security shocks in Africa*”. The technical working groups argue that within constantly changing natural, social and economic environments a conceptual framework for resilience building should consider how shocks, stresses and long-term trends (e.g., institutional, economic, socio-political or environmental factors) affect livelihoods security. So that, the framework can ultimately helps to determine whether households, communities and larger populations are on a trajectory toward greater vulnerability or greater resilience. The conceptual framework for resilience suggested by this working group integrates **livelihoods approach**, **disaster risk reduction (DRR) approach**, and elements of **climate change approach** to address the underlying causes of vulnerability. The livelihoods approach emphasizes the importance of access to productive assets, institutional structures and processes, and the livelihood strategies pursued by households. Alternatively, the DRR approach focuses on preparedness, prevention, response and recovery activities formulated in response to potential disasters. Finally, the climate change adaptation (CCA) approach is similar to that of DRR, but focuses specifically on actions to be taken in response to, and preparation for ongoing changes in climate. It goes beyond the DRR approach in giving careful consideration to potential threats caused by the loss of biodiversity and a decrease in ecosystem services. Moreover, they strongly view resilience building as process rather than a static state considering the continually changing social, economic and natural environments in most developing countries. And, a resilience assessment as well as resilience building interventions must be comprehensive enough in identifying the causal factors and integrated multi-sector programming to address resilience properly. (*Tim Frankenberger, et.al, November 2012*).

Under the HFA it is clearly stated that the general motto on putting the five prioritized actions is for building resilience of nations as well as communities for disaster. The five pillars of HFA are the focus activities in building resilience both at nation and local level. At community level the CMDRR approach is mentioned to be the best experience achieved so far in implementation of HFA at community level especially in our country context and others in East and Horn of Africa. Thus, under this study it is intended to look in to the contribution or role of CMDRR approach towards building drought resilient community and document the best practice and lesson learned within the specific natural hazard, drought.

4. DEFINITION OF TERMS USED IN THE STUDY

Capacity: The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals (*UNISDR 2009*).

Capacity development: the process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions (*UNISDR 2009*).

Contingency Plan: is a forward planning process, in a state of uncertainty, in which scenarios and objectives are agreed, managerial and technical actions defined, and potential response systems put in place in order to prevent, or better respond to, an emergency or critical situation. It includes early warning mechanisms, capacity building, creation and maintenance of stand-by capacities, stockpiling, and others. (*DFID, 2011*)

Community: In conventional emergency management, communities are viewed in spatial terms: groups of people living in the same area or close to the same risks. This overlooks other significant dimensions of ‘community’ which are to do with common interests, values, activities and structures. Communities are complex and they are often not united. There will be differences in wealth, social status and labour activity between people living in the same area, and there may be more serious divisions within the community. Individuals can be members of different communities at the same time, linked to each by different factors such as location, occupation, economic status, gender, religion or recreational interests. Communities are dynamic: people may join together for common goals and separate again once these have been achieved. (*Twigg, 2007*)

Disaster: a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. (*UNISDR, 2009*)

Disaster risk management: the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster (*UNISDR 2009*).

Disaster risk reduction: the concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure

to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events (*UNISDR 2009*).

Disaster Resilience: is the ability of countries, communities and households to manage change, by maintaining or transforming living standards in the face of shocks or stresses - such as earthquakes, drought or violent conflict – without compromising their long-term prospects. (*DFID, 2011*)

Hazard is a dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. (*UNISDR, 2009*)

Resilience: the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions (*UNISDR 2009*).

Risk: is the combination of the probability of an event and its negative consequences (*UNISDR, 2009*).

Stresses: are smaller low impact events and seasonal factors, unemployment, price fluctuations, ill health, local conflicts or gradual change in climate conditions that undermine livelihoods (*Pasteur 2011*)

Vulnerability The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. (*UNISDR, 2009*)

5. REPORTING

The final step of the study will be writing the report. The report will be divided in to several chapters.

The **First chapter** will be an introduction to the subject-matter of this research. The chapter shall provide information concerning the issue of disaster risk reduction and management in the global, national, region and community context.

The **Second chapter** shall review different literatures about the evolution and concept of DRR approach at global level as well as its practice and experience in the country so far. This chapter will have four major parts whereby an review of the evolution, school of thoughts, concept and approach of DRR on building resilient community as the first sub chapter, a second sub chapter will discuss/review about HFA and the regional initiatives going on so far to undertake the HFA in the horn of Africa, and the third sub chapter will review/discuss explicitly CMDRR approach practical experience of different agencies (non-governmental organizations-NGOs) particularly in drought prone pastoral communities of Ethiopia and their own perceived contribution in building drought resilient community will be explained in brief and the last sub chapter will review recent literature and think thank/discussion papers on building resilient community.

The **Third chapter** will explain about the objective of the research, research questions, the methodology and tools employed to undertake the study. Here apart from discussing the objectives of the research, the methodology and tools employed will be explained in detail. The methodology part will explain in detail the strategic analysis followed as well as data analysis techniques and tools employed.

The **Fourth chapter** shall explain about the operational variables of the research in the context of CMDRR approach to build drought resilient community.

The **Fifth chapter** will present the findings of the research. This chapter will have several topics of discussion on the findings of the study at Implementing organization, Woreda, Kebele, and Community level. The information that will be collected and analyzed from the organization and community will be the core findings and will be detailed here.

The **Sixth chapter** shall be the conclusion and recommendation part of the report. Good experience, lesson learned and challenges in employing CMDRR approach to build drought resilient community will be identified and key topics/issues that need further more evidence/research will be indicated. Questionnaires, interview checklist and reference will be the last part of the report as an appendix.

6. TIME AND FINANCIAL BUDGETING

6.1 Time budget

N	Description of activities	Duration (5 Months)																			
		Jan,15				Feb, 15				Mar, 15				Apr, 15				May, 15			
		W 1	W 2	W 3	W 4	W 1	W 2	W 3	W 4	W 1	W 2	W 3	W 4	W 1	W 2	W 3	W 4	W 1	W 2	W 3	W 4
1	Preparation of draft & final proposal	■	■	■	■																
2	Desk Work (Document review)					■	■	■	■												
3	Collection of Data									■	■	■	■								
4	Data Editing														■	■					
5	Data Processing									■	■	■	■	■	■	■	■				
6	Data Analysis									■	■	■	■	■	■	■	■				
7	Report Writing (First draft)																	■	■	■	■
8	Final Report Writing & Submission																			■	■

6.2 Financial budget

No	Description	Unit	Quantity	Unit cost (ETB)	Total Cost (ETB)
A) Field Work					
1	Data collectors expenses	man-day	20	150.00	3,000.00
2	Researcher Expenses	Day	35	300.00	10,500.00
3	Flight to Robe	Trip	1	2,000.00	2,000.00
4	Vehicle renting	Day	20	1,250.00	25,000.00
5	Fuel cost	Lit	1000	20.00	20,000.00
<i>Sub total</i>					60,500.00
B) Desk Work					
1	Stationary	Ls	1	1,000.00	1,000.00
2	Software	Pcs	1	2,000.00	2,000.00
3	Report Writing & binding	Ls	1	2,000.00	2,000.00
<i>Sub total</i>					5,000.00
<i>Total</i>					65,500.00
<i>10% Contingency</i>					6,550.00
Grand total					71,050.00

REFERENCE

- Benn, H. (2006) 'We Need an Emergency Service' *Developments Magazine*, May 2006, DFID <http://www.developments.org.uk/articles/hilary-benn-we-need-an-emergency-service/>.
- Bogdan R.C and Biklen S.K 2006 *Qualitative research for education: An introduction to theory and methods* (5th ed.) Boston: Allyn & Bacon.
- Cardona O.D. 2003. *Indicators for risk measurement: Fundamentals for a methodological approach*.
- Coffey & Atkinson, 1996 *Making sense of qualitative data: Complementary research strategies*. London Sage.
- Comfront et al 1999 *Reframing disaster policy: the global evolution of vulnerable communities*. DFID, 2011, *Defining Disaster Resilience; A DFID Approach Paper*.
- DCA, 2012, *Dan Church Aid-Ethiopia Annual Report 2012*.
- Erickson F. 1992, *Ethnographic microanalysis of interaction*. In M.D LeCompte, W.L. Millroy & J. Preissle (eds). *The handbook of qualitative research in education* (PP 201-225), SanDiego, CA: Academic Press.
- GFDRR, November 2010, *Report on the status of Disaster Risk Reduction in Sub-Saharan Africa*.
- Gillbert C. 1998 *Studying disaster: Change in the main conceptual tools*. (In Quarantelli, E.L., ed. *What is a disaster? Perspectives on the question*).
- Hewitt K. 1998 *Excluded perspective in the social construction of disaster*. (In Quarantelli, E.L., ed. *What is a disaster? Perspectives on the question*).
- IFRC, April 2013, *Ethiopia Country case report "How Law and Regulation supports Disaster Risk Reduction"*.
- John Cosgrave, February 2010, *Programme Evaluation of Disaster Risk Reduction Commissioned by Cordaid (Evaluation of Cordaid DRR programme)*.
- Katherine Pasteur, 2011, *From Vulnerability to Resilience: A framework for analysis and action to build community resilience*.
- Kelman I. 2003. *Defining risk*. Flood RiskNet newsletter.
- Kotze & Holloway 1996 *Reducing risk: Participatory learning activities for disaster mitigation in Southern Africa*.

Kreps, G.A 1998 Disaster as a systemic event and social catalyst. (In Quarantelli, E.L., ed. What is a disaster? Perspectives on the question).

Miles M.B & Huberman 1994 Qualitative data analysis: An expanded source-book (2nd ed). Thousand Oaks, CA: Sage.

MoFED, November 2010, Growth and Transformation Plan (GTP) 2010/11-2014/15 (*Federal Democratic Republic of Ethiopia*).

Niekerk D.V., 2011 Introduction to disaster risk reduction.

Patton M.Q 1990 Qualitative evaluation and research methods (2nd ed) Newbury park, CA:Sage.

Robert K. Yin 2009 Case study research design and methods (fifth edition) SAGE

Smith K. 2002 Environmental hazards: Assessing risk and reducing disaster. 3rd ed. London Routledge.

Tim Frankenberger, et.al, November 2012, Enhancing Resilience to Food Security Shocks in Africa (*Discussion Paper published by TANGO International*).

Twigg, J. (2007) 'Characteristics of a Disaster-resilient Community', a guidance note to the DFID DRR Interagency Coordination Group.

UNISDR 2012 Disaster reduction in Africa; UNISDR INFORMS, Special issue on drought risk reduction.

UN-ISDR, 2005, Hyogo Framework for Action 2005-2015: Building the resilience of Nations and Communities to Disasters; *Extract from the final report of the World Conference on Disaster Reduction (A/CONF.206/6)*.

UNISDR, 2011, Revealing Risk, Redefining Development (*Global Assessment Report*).

UNISDR, 2012, Special issue on drought risk reduction 2012 (*Africa UNISDR Informs; Regional office for Africa*).

UNISDR, 2012, UNISDR Terminology on disaster risk reduction.