STRENGTHENING OF COMMUNITY SYSTEMS: A FRAMEWORK FOR PUBLIC PARTICIPATION FOR CHOLERA DISASTER RISK REDUCTION IN KADOMA: ZIMBABWE

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DECLARATION

I hereby declare that this dissertation has not been submitted, either in the same or different form, to this or any other university for any degree.

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ABSTRACT

The strengthening of community systems for disaster-affected communities or in anticipation of occurrence of a disaster remains an important part and process of any disaster risk reduction strategy or plan. Community Systems Strengthening as a vehicle of translating public participation principles into practice recognises that disaster-affected communities need to be organised and adequately resourced in order for them to play proactive roles in all efforts designed to prevent, mitigate and prepare for disaster. This is particularly critical in the context of cholera because the disease and hazard is dependent on public health management principles in situations where basic water and sanitation facilities and infrastructure are not in place or do not meet the minimum standards.

Contemporary disaster risk reduction policy and practice recognise that public participation is critical to both development planning and disaster management. In contrast, traditional development planning and reactionary disaster management approaches have been associated with the shortcomings of excluding affected and potentially at risk communities from the planning and decision-making processes.

This study is an assessment of the capacity of communities in Kadoma to respond to cholera disaster from the perspective of the potential role and impact that Community Systems Strengthening can play and have on the lives of disaster-affected communities. The study reviews key literature on public participation at international and country (Zimbabwean) levels to identify options available in the political economic environment for intervention through Community Systems Strengthening. At the level of Kadoma the research provides insight into the options for Community Systems Strengthening, and a framework for the city's scope of improving public participation for cholera-related disaster management.

KEY WORDS*: Community; Community Systems Strengthening; Community-based Disaster Management; Public Participation and Disaster Risk Reduction*

ACKNOWLEDGEMENT

DEDICATION

This work is a dedication to my family Namatai, Nyasha and Penny.

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ACRONYMS

AIDS	-	Acquired Immune Deficiency Syndrome
CBDM	-	Community-based Disaster Management
CBP	-	Community-based Planning
CDC	-	Centre for Communicable Disease Control
CDRN	-	Citizens' Disaster Response Centre
CDS	-	Community Development Society
CII	-	Co-Intelligence Institute
CC	-	Core Components
CO(s)	-	Community Organization(s)
CS	-	Civil Society
CSO(s)	-	Civil Society Organization(s)
CSS	-	Community Systems Strengthening
DFID	-	Department for International Development
DRR	-	Disaster Risk Reduction
FGD(s)	-	Focus Group Discussion(s)
GFATM	-	Global Fund to fight AIDS, Tuberculosis and Malaria
GoZ	-	Government of Zimbabwe
HIV	-	Human Immune-deficiency Virus
IAPP	-	International Association of Public Participation
IHAA	-	International HIV and AIDS Alliance
ICASO	-	International Council for AIDS Service Organizations
IHR	-	International Health Regulations
IWGCB	-	International Working Group on Capacity Building
MoHCWZ	-	Ministry of Health and Child Welfare, Zimbabwe
INGO(s)	-	International Non Governmental Organization
NFI	-	Non Food Items
NGO	-	Non Governmental Organization
ORS	-	Oral Rehydration Solution

PDMF	-	Philippine Disaster Management Forum
STERP	-	Short Term Emergency Recovery Programme
SPSS	-	Statistical Package for Social Sciences
UNISDR	-	United Nations International Strategy for Disaster Reduction
UNICEF	-	United Nations Children's Education Fund
WHO	-	World Health Organization
ZIMVAC	**-**	Zimbabwe Vulnerability Assessment Committee

CHAPTER ONE

INTRODUCTION

1.1. CONTEXT AND BACKGROUND

Cholera is common in regions of the world where there are inadequate sanitation, poor hygiene, overcrowding and lack of safe water and food (Canada Public Health Agency, 2009; World Health Organisation, 2009a). Cholera is caused by the bacterium *Vibrio Cholerae* and presents itself in the form of severe, profuse, watery diarrhoea with or without vomiting (Sphere Project, 2004). A patient experiences shock within twelve hours, and death can occur within twenty-four hours due to excessive de-hydration (*ibid*).

The disease continues to be a health threat in Africa, Asia and some parts of Central America despite the fact that the disease has gone through nine pandemics since its known occurrence in India in the year 1816 (Water Works Digest, 1999). Whilst this situation prevails, there are opportunities of managing the disaster situations through the wider and increased participation of the affected communities in disaster risk reduction measures since there are no immediate cures to the inadequate sanitation, poor hygiene, overcrowding and lack of safe water.

A critical window of opportunity to manage cholera is through the involvement of the people at risk of cholera or in the actual cholera disaster situation. It is possible through public health approach by engaging public authorities, Civil Society (CS) and Civil Society Organisations (CSOs) with the objective of increasing their participation in planning and decision-making. This is because cholera is spread easily due to poor water and sanitation conditions within the public domain. Yet most responses and strategies for disease outbreaks have remained biased towards the scientific epidemiological characteristics and reactive logistical side of disease control and eradication (World Health Organization Global Task Force on Cholera Control, 2004). The gap that exists is the wealth of resources that come from the Community Systems Strengthening (CSS) which is an intricate part of a community's Health Systems

Strengthening (HSS). The options of disaster management of cholera are explored in view of the known and proven ways of cholera control that focus on the community's role and participation (Sphere Project, 2004).

1.1.2 The Study Area

The study area is Kadoma (Figure 1) which is one of the major urban centres in Zimbabwe.

Figure 1: Location Map of Kadoma in Zimbabwe

(Source: Developed from United Kingdom Embassy, 2010).

The city is located in Mashonaland West Province, 140km south-west of Harare on the main road to Bulawayo (Figure 1). The city provides gold, copper and nickel to Zimbabwe. The population of Kadoma was 76 173 in 2002 (Zimbabwe. Central Statistic Office, 2002). The same census assumed an annual net growth rate of 3% which would give an estimated population of 99 024 for the year 2010.

Nine residential areas exist in the city. Park Town and Mushumavale (both in ward 12) and Mornington (ward 9) are the three low density residential areas; part of East View (ward 12) and West View (ward 10) are the two medium density residential areas; and Rimuka (wards 2 to 8 and 13) Chemukute (ward 15 and 16), Ngezi (ward 1 and 14) and Waverley (ward 11 and 17) are the four high density areas in Kadoma City. Forty percent (40%) of the population of Kadoma resides in Rimuka (Kadoma City Information Centre).

The mining activities in Kadoma have triggered rural to urban migration, attracting movement to and settlement in the area. The problem of burst sewer pipes and outflows of raw sewage has almost become ubiquitous in all cities. Kadoma is therefore no exception (Mangizvo, 2009). The sewer problems have been reported across various parts of Kadoma and land use zones of the city including the industrial and residential areas over the period May 2005 and March 2008 (*ibid*). This has been the major cause of cholera outbreaks in the town. The most glaring situations are found in the high density areas of Rimuka where communal water supply and ablution facilities exist.

Kadoma was identified for this study because the highest incidence of cholera cases within the region (Mashonaland West Province), 23% of all cases, was recorded in the country by June 2009 (World Health Organisation, 2009b). This research complements studies done by Ministry of Health and Child Welfare in Zimbabwe (MoHCWZ), United Nations Children's Education Fund (UNICEF) and Centre for Communicable Disease Control (CDC) in August 2009 to establish the factors contributing to high levels of community deaths.

The 2008 to 2009 cholera outbreak in Zimbabwe is rated the world's largest ever recorded (British Broadcasting Corporation, 2009). The outbreaks occurred amidst a national economic crisis (STERP, 2009) that created the conditions for the spread of the disease. Apart from the fiscal and monetary melt down, the economic crisis in Zimbabwe resulted in amongst other crises, the breakdown in service delivery systems by local authorities. Water provision, waste disposal services, and general sanitation services by local authorities and central government collapsed. The Zimbabwean health system has been in decline for more than a decade and the

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result is a systematic decrease in coverage of most basic services (Zimbabwe. Health and Child Welfare, 2010:4). In the health sector, the collapse of the economy had negative results such as the non availability and/or non affordability of drugs, high staff turn-over within the public and private sector or complete absence of personnel and the closure of some health facilities (*ibid*).

The collapse of the health service and the water and sanitation infrastructure, due to the deteriorating economic situation in Zimbabwe, are major factors. Cholera is a water-borne disease which thrives in poor sanitary conditions, so if the water system breaks down, outbreaks of cholera, which is endemic in Zimbabwe anyway, will inevitably take place. In Kadoma, the recent [2009] spike in the number of cases followed a five day period in which water supplies were cut in the town, and people were forced to get their water from wells infected with cholera.

According to The Global Fund to Fight AIDS, TB and Malaria (GFATM, 2008) and Amuyunzu-Nyamongo (2008), CSS refers to inventiveness that add and build up to the development and/or enhancement of community-based organizations in order to improve knowledge of, and access to improved health service delivery. The ingredients to the development of community-based organizations refer to the efforts that communities employ to prevent, mitigate and manage disasters. The research has also considered the same thinking of GFATM (2008) by recognising that cholera is a public health concern. Interventions designed to contain cholera problems necessarily have to rely on effective Disaster Risk Reduction (DRR) founded within communities that are well organised and resourced; highly conscious of their environment; and active in decision-making.

1.1.3 Rationale for the Research

In August 2009 the MoHCWZ, UNICEF and CDC commissioned a joint research to establish the factors contributing to high levels of community deaths in Zimbabwe. This research was based on and informed by consultations with the Director of Health and Environmental

Services for Kadoma City Council (Daniel Chirundu). Having participated in the August 2009 study was an inspiration to do further research into public participation options for addressing cholera through CSS specifically in Kadoma. This was not covered in the August 2009 research. The focus of this research is on the role of CSS in DRR strategies specific to cholera in Kadoma.

The argument pursued and opinion herein shared are that very unfavourable water supply and sanitation services existed in Kadoma, which resulted in the 2008 to 2009 cholera outbreak. Whilst there are no immediate solutions to improving the water supply and sanitation services situation, there is scope of improving the risk and disaster situation through increasing public participation through deliberate CSS as a way to prevent loss of lives due to cholera disasters. The 2008 to 2009 outbreak in Zimbabwe could have been avoided through public participation in disaster management.

1.2 PROBLEM STATEMENT

Cholera remains a public health concern in Zimbabwe. The United Nations (UN) issued an appeal for aid on 19 November 2009; months after the cholera epidemic had begun, predicting just 2 000 cholera cases (UN, 2009a). Two months later, the death toll had already reached the forecast 2 000 mark. Cumulatively, 4 000 people died between August 2008 and July 2009, and roughly 98 600 cases were reported over the same period. By 10 January 2010 there had been 98 741 reported cases and 4 293 deaths making it the deadliest African cholera outbreak in the past 15 years (British Broadcasting Corporation, 2009a). The Australian Embassy, Harare (2010:1) reported that, "cholera affected more than 95 000 people in the region in 2008-2009 and caused 4 282 deaths, making it the deadliest African cholera outbreak in 15 years".

There are disagreements as to the actual numbers of cholera cases and mortalities between two clearly opposing camps: on the one hand, Government of Zimbabwe (GoZ) figures have been

very conservatively low amidst early refusal by GoZ that the country was in a state of disaster. On the other hand, Civil Society Organisations (CSOs) represented by both local and international non-governmental organisations (NGOs) maintained higher figures. Whichever statistics and position one takes, the figures are way above the International Health Regulations (IHR) case threshold and the Zimbabwe Public Health Act provisions (Zimbabwe, 1924).

The legal and operational policy environment are well intentioned and meant to be the basis for promotion of public health by regulating various aspects as measures to preventing, suppressing and treating diseases and conditions and maintain a healthy physical environment. Yet 62% of cholera mortalities (2008 to 2009) in Zimbabwe were community deaths (MoHCWZ, 2009; WHO, 2009a; WHO, 2009b). This is a worrying statistical fact and occurrence which invokes the need for investigating the level of community preparedness to cholera disasters in an environment where there is very limited scope of immediate improvement in the provision of basic water and sanitation services by the local authorities and central government.

Cases of cholera are still evident in Kadoma. For example 130 cases and three mortalities were recorded between January and 15 March 2010 (Kadoma City Council, 2010). The country has been noted to have a good health delivery system that included response plans and mechanisms for cholera at institutional levels through local and central government management systems for communicable diseases including cholera. This is reflected in the various national and local authority policies, legislation and bye-laws governing the development of settlements, land use and development controls as enshrined in Housing Standards Control Act of 1973, Regional, Town and Country Planning Act of 1976, and Environmental Management Act of 2005.

A further reflection of the good health delivery system is that annual and isolated cases of cholera incidences have in the past been brought under control with case fatality rates kept below the recommended one percent level (Sphere Project, 2004). "Except for the large

outbreaks in 1999 and 2002, the disease has been kept under control through intensified prevention and preparedness activities" (WHOb: 1).

There are no immediate solutions to the country's problems in as far as improving the water and sanitation services provision. Urban communities continue to live under conditions of high exposure to both untreated and inadequately treated drinking (and in most cases insufficient quantities) and untreated waste water. The unwelcome sight of raw sewerage flowing on open ground is a common site in all urban areas of Zimbabwe.

It is imperative to look at the alternative and supportive community arrangements and mechanisms which could provide the scope for preventing loss of lives due to cholera. This is in recognition of the fact that communities do have untapped resources, which can be enhanced through capacity development to be self sustaining and respond to disaster especially in situations where the external support is limited or under conditions in which hazards pose a continuous threat to communities. The study identifies the available options for vulnerable communities to survive through the harsh environments from a public health perspective, and the economic environment that presents cholera as a disaster.

The WHO (January 2009:s.p.) made a major observation in line with the research problem that there was need for:

> increasing awareness, particularly at grassroots level, regarding prevention and treatment measures. Most recorded deaths have occurred at home, which means that more effective messaging directed at all communities, particularly the remotest parts of the country, are crucial for the Zimbabwean public to be best prepared to act against the epidemic.

The interest of this research is in community capacity to respond to the cholera disaster. The research explores the CSS as a window of opportunity, cognizant that enough efforts had been made through the formal structures of the response to the 2008 to 2009 cholera outbreaks. In Kadoma, the response was carried out with the combined effort of MoHCWZ, Municipality of Kadoma City Council, NGOs, CBOs, government and a variety of volunteers. In the context

of the harsh economic environment affecting Zimbabwe as a whole, CSS strengthening is viewed as an opportunity and a resource which can be used in disaster risk reduction.

1.2.1 Main Objective

The main objective of the research project is to identify the CSS options for communities in Kadoma City as potential strategies to be self-reliant to respond to cholera disasters. Three specific objectives are being pursued.

1.2.2 Specific Objectives

a. To ascertain the capacity of the community to respond to cholera disasters.
b. To ascertain the CSS options available to improve community resilience to cholera disasters
c. To develop a CSS framework for cholera disasters in Kadoma.

The recommendations and framework developed in the study are intended to support Kadoma City Council in the development of their disaster management plans.

1.2.3 Hypotheses

The research is based on three (3) hypotheses that will give the scope of key issues to be addressed and tested.

a. There are no deliberate efforts to recognize CSS to cholera DRR.
b. That DRR is not internalized within the community such that it is not part of the conscious disaster risk reduction plans of the local authority and CSO.
c. The participation of disaster affected peoples in decision-making is limited.
d. Affected communities are largely recipients of decisions of the local authority or NGOs.

1.2.4 Research Assumptions

The assumptions that will be made in this research are:

a. Knowledge, attitudes and risk perceptions of people about cholera (infection, spread, diagnosis, treatment and management) are of acceptable level for the study community. This is based on past exposure to the hazard and disaster, especially from the 2007 and the 2008 to 2009 cholera outbreaks. In addition these are aspects which have been adequately studied and documented in Kadoma City (MoHCWZ, 2009).

b. It is assumed that cholera is the major hazard of priority in the study area. For this reason no risk assessment is carried out to identify all hazards because there is no comparison for such an assessment to be used in the study. Therefore the risk assessment tool used in the research, presented in Part 7 of Appendix II and III, is limited to the cholera hazard only. The tool itself is adopted from National Disaster Management Framework of South Africa (South Africa, 2005:57) and has been used by key practitioners like Carstens (2009). The research carried out an internalized risk assessment of cholera to establish the vulnerability, capacity and manageability status of the study area within the cholera context.

1.3 DELIMITATION OF THE THESIS

The research acknowledges that there are other ways of looking at disaster risk reduction besides the focus on capacity and manageability aspects. These include interventions that focus on the hazard dimensions, scale and frequency of hazard occurrence, and are based on scientific, physical and structural means of controlling the hazard.

The subject of this research is biased towards the qualitative aspects that relate to the ways in which communities are organised to manage resources in response to disaster risk or actual disaster situations. This is the reason why the research looks at institutional and organisational

aspects relating to public participation in disaster management, and how these relate to the access and availability of resources for disaster management. The research does not go into the details of epidemiology of cholera nor its management in terms of medical diagnosis, control measures and treatment procedures.

1.4 KEY CONCEPTS AND DEFINITIONS

In order to set a good working base for the study and establish a contextual framework, it is imperative that the main concepts and definitions of key terms be outlined and defined. The term 'community' will feature prominently throughout this research.

Community: a term that has a wide range of usage (Department for International Development-DFID, 2004).

~ Geographically, spatial physical barriers, demarcations and features such as rivers, roads and valley lines can be used to define and mark simplistic community boundaries.

~ Dreyer, Hattingh and Lock (1999) noted that communities can be defined from a geographical or social perspective. In the social sciences and particularly in the study of vulnerabilities in disaster management, communities are defined in terms of households, villages or neighbourhoods based on shared experiences. Such experiences include ethnicity and ethnic groups; special interest groups, common and shared language and social practices.

~ "A common concept of community is that a community is harmonious, having a harmony of interest and aspirations, and bound by common values and objectives" (DFID, 2004:11).

~ Whilst the definition would give the impression that the community is then homogenous, in reality, the community can be socially differentiated showing many variations in terms of power structures, domination, decision-making processes and its implications on access, control and ownership of resources. For example women, children and men of the same community and experiencing the same disaster risk have different vulnerabilities and capabilities (Sphere Project, 2004). This is consistent with principles and practices of vulnerability assessments which respect the wide differences within communities.

~ For the purpose of this study community is taken as a group that shares the same administrative boundaries of the local government structures of a ward. Attributes that relate to shared experiences and exposure to risk are traceable within the ward structures equally as Kadoma City Council (2010) uses these structures for administration purposes. The wards also constitute a common frontier for representation in local government through the elected Councillors.

Equation: the focus of this study is on the capacity and manageability parts of the risk equation (UNISDR, 2002) which can be presented in a basic mathematical equation as shown below:

$$R = \frac{H \times V}{C \times M}$$

Where

R = Risk, H = Hazards, **V** = Vulnerability, **M** = Management ability and **C** = Capacities.
(Source: UNISDR, 2002: 41**)**

The equation is a basic explanation tool, which shows that as the product of management ability and capacities of communities to withstand hazards or actual disasters increases, that is

attainment of higher levels of capacity to respond and withstand disaster situation and manage the processes, the risk to disaster is reduced. Alternatively stated, a reduction in the vulnerability and hazards through improved hazard mitigation efforts and better livelihoods respectively would result in reduced risk.

Management ability: Is about the way that institutions both public and private (Government, Non Governmental Organisations, CBOs, Private Organizations) reduce the risk to disasters and apply measures on how to effectively deal with the negative consequences of disaster impact (UNISDR, 2009). This study observes an identifiable practice of reference to capacity as the only ingredient to the dividend of the equation by authorities such as International Federation of Red Cross and Red Crescent Societies (2000:6), Buckle *et al.* (2007) and CAFOD (2008:3). The position of UNISDR (2002) in its cognisance of the need to separate management ability from capacity is considered in this research because this allows for in depth analysis of what to address in reducing disaster risk.

Capacity: It is a measure or expression of the degree to which a community can intervene and manage a hazard in order to reduce its potential impact (UNISDR, 2009). It also refers to the ability of a community to prevent, mitigate and cope with the effects of the disaster mainly from the perspective of how the community makes use of resources.

Manageability: In contrast manageability is about institutional set up and systems. For the purposes of this study and in line with general practice for ease of reference, the use of the term capacity shall be taken to include and encompass the manageability part of the equation, and shall be taken to be inclusive of the manageability dimension.

Disaster Risk Reduction: The research presents a framework for DRR, a phrase which constitutes the underlying principles of key disaster terminology. Disaster Risk Reduction involves interventions in three broad areas, namely hazard minimisation (where possible); reducing exposure and susceptibility and enhancing coping and adaptive capacity (DFID, 2004). DRR refers to all the elements that are required to minimise levels of susceptibility

(vulnerabilities) and disaster risks within the entire community through its main components, namely prevention, mitigation and preparedness (South Africa, National Disaster Management Framework 2005:3).

Risk: An expression or measure of the likelihood of a specific hazard occurring and its probable consequences for people, property and the environment (Twigg, 2004). A 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). In this study cholera is the hazard.

Vulnerability: The UNISDR (2009) defines vulnerability as a set of conditions and processes resulting from the interaction of physical, social, economical and environmental factors resulting in the increase of susceptibility or actual exposure of a community to the impact of hazards. In this context a disaster is a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses that go beyond the ability of the affected people to cope from their own internal resource base. This thesis therefore explores the manageability and capacity issues in the management of cholera in Kadoma for the purpose of defining ways of reducing disaster risk.

1.5 STRUCTURE OF THE THESIS

Chapter One introduces the existence of cholera as a disaster that has DRR options within CSS.

Chapter Two provides a detailed literature review of public participation principles and practice. The review traces the roots of CSS thinking and practice within the realm of public participation. International and localized country specific case study contexts are reviewed for the comparative understanding of what is happening in CSS.

Chapter Three discusses the research methodology used.

Chapter Four is a presentation of the results of the field survey done in Kadoma City.

Chapter Five consists of two parts: interpretation discussion, and the results obtained from the field work presentation of a framework for CSS for DRR specific for Kadoma with recommendations for practical risk reduction measures against cholera disasters, which can be applied within the study area.

CHAPTER TWO

LITERATURE REVIEW

2.1 SCOPE OF LITERATURE REVIEW

The three parts of the literature review are as follows:

- *Public participation principles and practice at international level*

  It is a review of public participation principles and practice at international level, to establish an understanding of the main frame of the theoretical base of the study. A historical perspective is provided using key literature that is relatively old, but has been cited in more recent work on the subject. Literature on the rationale for public participation in development planning and disaster risk reduction work is included. This part of the review will identify the paradigm shifts from mainstream DRR to long-term development planning work.

- *Perspectives of public participation in* **Zimbabwe**

  A historical review of public participation, thinking and practice in Zimbabwe is presented. The review is very much the same as the international level review; the difference is that it is set in context of the local political economy, which influences the practice in Zimbabwe.

- *Case study of the Philippines*

  It is a review of a case study of proxy work done on public participation in disaster risk reduction as a comparative basis for the research. The case study is based on the experiences of the Philippines.

2.1 INTERNATIONAL PERSPECTIVES ON PUBLIC PARTICIPATION

2.1.1 An Overview of Public Participation

Public participation falls within the field of political principles and practice. It occurs within the 'public domain' a term Neil (1996:16) defines as that realm between the 'state' and 'household', that is between what conventional social analysis recognizes as a 'macro' and 'micro' world (*ibid*). In the western or more democratic countries or cultures, public participation is recognised as a right. In these cultures public participation has had significant impact on sectors like education, business, public policy and international relief and development programmes.

However, King, Feltey and Susel (1998) noted that despite the advancement in democracy the political system in the United States of America is designed to reflect and engender an active citizenry, but at the same time is designed to protect political and administrative processes from what is feared as a citizenry that is too vibrant and active. In contrast, political economies on the lower levels of democracy development view public participation as a threat and a source of challenge to the existing status quo. "It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes to be deliberately included in the future" (Arnstein in Stein, 1995 in Victoria, s.a.:5).

The contemporary work which examines the role of the public in the process of administrative decision-making has come about in response to problems in the latter half of this century and as a result of concern on the part of citizens, administrators, and politicians over citizen discouragement and apathy (Box, 1996; Putnam, 1995; Timney, 1996; Thomas, 1995 in King *et al.* 1998). The main point from the research done by King *et al.* (1998) is that there is the need for authentic public participation.

This is defined in terms of participation that serves the interests of all groups or parties of people both citizens and the administrators. The intermediate bodies for increasing and improving public participation cannot continue to be the normal public institutions like government departments and political structures that are polarized. It requires rethinking the underlying roles of, and relationships between, administrators and citizens. The Kettering Foundation study in King *et al.* (1998) found an 'undeniable tension' that exists between the public's right to greater involvement, and the prerogative of public officials to act as administrative decision-makers.

Therefore public participation is a very sensitive area within any country or community set up and deserves in depth understanding to manage both the pressure that communities exert in demand of goods and services, and the administrative structures responsible for public goods and services delivery.

2.1.2 Public Participation: Rationale for Community-based Planning or Approaches

Community-based Planning (CBP) refers to any planning or interventions which address the activities or problems at community level, in which the members of the communities themselves are meaningfully involved (2001). The additional opinion of the research is that reference to the term 'involved' is taken to mean the full spectrum of public participation. The rationale for CBP can be traced from three types of objectives which CBP can achieve, namely:

- To make plans more relevant to local needs and conditions.

- To increase community involvement in the provision of public services, due to lack of capacity in government agencies.

- To increase people's control over their own lives and livelihoods.

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The last two objectives are more relevant for community-based interventions for disaster situations typical of economies that cannot meet the basic needs of its citizens. This, however, does not in any way ignore the importance of making the interventions relevant to the needs of the affected and local people as stated in the first objective. The opinion herein shared is that a mixture of the objectives is considered in varying weights for any intervention. A good example is cited by Conyers (2001): if the main objective is to increase people's control over their own lives and livelihoods, community planning is usually part of a wider process of establishing an effective system of democratic local governance and communities likely to play a major role in all stages of the process. At the more specialized levels, sector or 'industry' based terminologies for CBP have been developed. Some of the notable examples include:

- Community-based Management of Natural Resources as in the case of Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) (Lue-Mbizvo and Mohamed,1993). In Zimbabwe this example " is probably the only significant community planning activity in which substantial amounts of money have been made available to local communities to use as they wish"(Conyers, 2001:4).

- Community-based Management of Water and Sanitation Programme in Zimbabwe of the late 1980s to mid 1990s (Conyers, 2001). The project had an initial infrastructural bias at the expense of the equally important non tangible aspects like training and behaviour change.

- Community-based Disaster Management (CBDM). One of the focal areas within Asia is the Philippines' experiences in CBP specifically in Community-based Disaster Management given that the area is exposed to many hazards like floods, tsunamis and earthquakes (Asian Disaster Preparedness Center, 2001).

CBDM is hereby taken as a sector specific term that translates into the community thrust of planning within disaster management. In the context of disaster management, community input and involvement are essential in the development and disaster risk reduction processes because of the following practical considerations:

> Nobody can understand local opportunities and constraints better than the local communities themselves who therefore need to be involved in the identification and resolution of disaster vulnerability issues. Nobody is more interested in understanding local affairs than the community whose survival and well-being is at stake. Therefore the information should be generated in a manner and language that is understood by the community (Abarquez & Murshed, 2004:12).

The point of emphasis that differentiates these statements from their equal application to other fields like development work is that the lives of people and their livelihoods are at stake in disaster situations. The disaster situation would affect in one way or another any combination of the community's human capital (skills, knowledge, health and energy); social capital (networks, groups, institutions); physical capital (infrastructure, technology and equipment); financial capital (savings, credit); and natural capital (natural resources, land, water, fauna and flora) (Wisner *et al.*, 2004).

Externally-generated responses to disasters that have taken on the top-down approach to disaster risk management have failed to address contextual local needs of the affected communities and may have even increased people's vulnerabilities (Victoria, s.a.:269). This has been a result of failure to acknowledge and employ local resources and capacities (Abarquez & Murshed, 2004). Current thinking and practice represents a paradigm shift dominated by mainstreaming of disaster risk reduction strategies as part of the long-term development planning functions of state and local governments and support agencies (DFID, 2004 and Abarquez *et al*,. 2004).

Bankoff, Frerks and Hilhorst (2007:8) state that disaster management is notorious for its structured and hierarchical methods of governance done through the use of armed forces. In Zimbabwe the core members of the National Civil Protection Committee are drawn from the

uniformed forces (army, police, prison and the air force) giving the act a bias towards the reaction approach (Zimbabwe. 1996). The current thinking and practice challenges this management style since the early 1980s by recognising and advocating for more participatory forms of interventions for vulnerability, disaster and development (*ibid*: 8).

DRR practitioners are putting more emphasis on community-based disaster risk management approaches with the vulnerable people themselves involved in planning and implementing disaster risk management measures along with local, provincial and national entities through partnership. This change in thinking and practice is in recognition of the past decade which has seen parallel, but concomitant efforts in various regions worldwide. This calls for a shift in perspective from the prevailing emergency reactive management framework to disaster risk management, to reverse the trend of exponential increase in disaster occurrence and loss from small to medium scale disasters. These highlighted the need for proactive disaster management activities and the significant role of local communities in all aspects of disaster management (Victoria, s.a. a: 269).

Globally, national governments are shifting responsibilities to local communities for meeting citizens' needs (Hunter, 1999). In the more developed political economies like the United State of America the process has gone as far as the development and implementation of a Citizen Corps Personal Behaviour Change Model for Disaster Preparedness (United States of America, 2007). The project is implemented and regularly reviewed by the Federal Emergency Management Agency (FEMA). The model was designed to study the individual behaviour patterns (not the focus of this research) in response to various factors affecting disaster situations. Arnstein (1969) and Hunter (1999) noted that the same trends are also taking place in the corporate world where it is expected that there would be a few large international level industries on one hand, and many small community-based business service firms. The cautionary observation made here is that it is imperative that such a shift of responsibilities be carried out based on two considerations:

~   Firstly the shift should not be based on a deliberate evasion of responsibility by national governments or local authority from their responsibilities of looking after its communities. Each country is mandated the direct responsibility of protecting citizen, infrastructure and other national assets from the impact of disasters. This is enshrined in article number ten of the Principles, Strategy and Plan of Action of the World Conference on Natural Disasters, Yokohama Strategy and Plan of Action for a Safer World (1994) (United Nations, 2002:18). It is worrying though to note that the realisation by governments comes from the experiences of those that have faced economic challenges (Conyers, 2001:2; Hunter, 1999).

~   Secondly, is that any such responsibility shift to communities must be matched with the requisite capacity building plan and resourcing for the communities to manage. This is the source of both irony and resistance. The irony is that whilst governments acknowledge the need for communities to be empowered to make decisions about disaster risk reduction and development, the same governments are hesitant and reluctant to the growth of vibrant civil society and CSOs who are acknowledged as the bodies responsible for sustainable interventions that can champion DRR.

Resistance to growth of CSO comes in from the fears that governments have due to the strong interest and pressure groups that are often associated with civil society activities at both local and international levels (King *et al.*, 1998). Conyers (2001:6) notes that Zimbabwe has a long history of autocratic national and local political systems which have been within all of the country's political economies, namely the pre-colonial kingdoms and chieftainships, the colonial regimes and the de facto one-party state system of the 1980s. This makes attempts to establish a democratic system of governance, especially at the local level, very difficult. The pressure to do so is summarised well by Anderson and Woodrow 1998 in Wisner *et al.* (2003:84):

> The employment of the concept of vulnerability as a tool in and by the community also involves a thorough analysis with and by the residents of their own resources and capacities. This is the 'other side' of the vulnerability coin. It is in the hands of local people that the logic of their situation, the phenomenology of their living with risk, forces them to be aware of and to discuss their strengths and capacities, as well as their weaknesses and needs.

What should therefore come out of these realisations is a system or structure of governance at local authority and state levels with clear mandates on policy and legislature governing all spheres of the country. Alternatively local authority on the one hand, whilst on the other hand communities are well organised to participate and provide input regarding the decision-making processes affecting them through various representative structures like CBOs, NGOs, pressure and interest groups which all constitute CSOs. Within the context of CSS, communities have increasingly become aware of their conditions to the extent that they take action. Communities have become cognisant of their own environment, structures and decided to take action to resolve issues related to hazards or actual disasters that they face.

2.1.3 Theoretical Framework: Typologies of Public Participation

Figure 3 shows the eight typologies in a ladder of public participation.
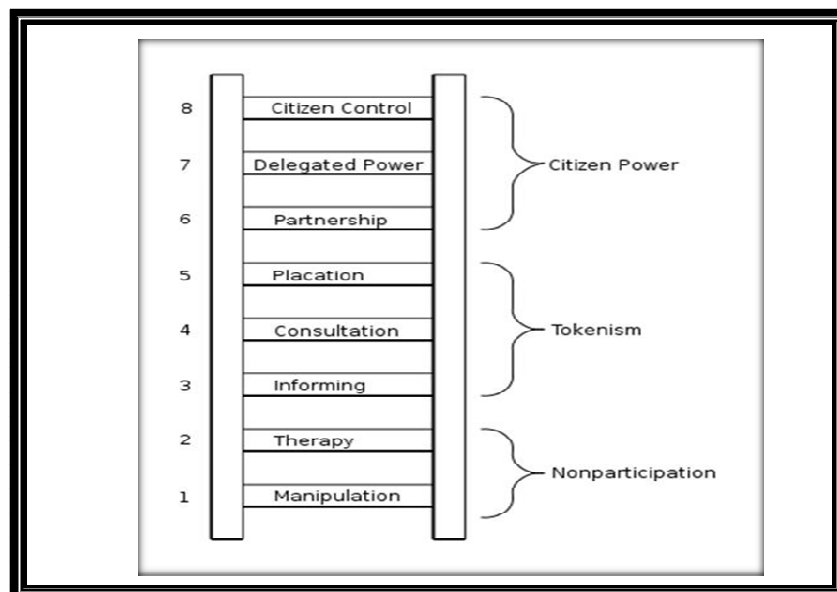
Figure 2: Ladder of citizen participation (Source: Arnstein, 1969).

Arnstein (1969) presented typologies of eight levels in analysing public participation or non participation thereof. Victoria (s.a.b) also refers to the work of Arnstein (1969) in the presentation of public participation experiences in the Philippines. Steps on the ladder are referred to as 'rungs' (Arnstein, 1969). The lower levels at rungs one (Manipulation) and two (Therapy) represent the absence of participation. They are designed for the elite and ruling class referred to in simplistic language as the 'haves' to make decisions, and in most cases exploit the lower classes of society. The connotations and prevalence of typical autocratic rule or management style can be deduced from these rungs.

Rungs three and four represent Informing and Consultation respectively as forms of tokenism, that is interpreted here as a way to be seen to be consulting the lower classes of society by the ruling class or "haves" to use Arnstein's (1969) terminology. These forms of participation do allow limited extent of consideration of the views of the "have-not" as mere gestures, but do not guarantee their adoption. The interpretation of this is that the opinion of the general public is solicited and known by the decision-makers, but this is not the automatic gateway to consideration in the decision-making and any actions related to particular decisions.

At rung five, Placation is basically a higher level of the same tokenism in rungs three and four. Lower level classes of society can advise the ruling class or the 'haves' though the latter retains the overall decision-making power (Victoria, s.a. b).

Arnstein (1969) states that it is from rung six up to eight that citizen power is realised in decision-making. A key word used by Arnstein is 'partnership' which is considered as platforms for the public to engage in negotiations that see benefits accruing to them. At the topmost rungs, seven, Delegated Power and eight, Citizen Control the 'have-not' citizens obtain the majority of decision-making seats or representation, or comprehensive managerial power (*ibid*).

The limitations of the typology are worth noting in consideration of the potential application of the typologies of public participation to CBDM, DRR and CSS. Firstly, there is inherent generalisation in grouping of people as those in power that is, the 'haves' who have resources

versus those who are categorised as poor that is, the 'have-not' who are limited in resources and decision-making power. Vulnerabilities of people as individuals and as communities are very varied and cannot be generalised within DRR. This warrants detailed risk assessments for any interventions so that specific needs of identified individuals and communities become the subject of an intervention (CBDM, DRR or CSS).

The second observation from the typologies is the subject of modification attempts by other players such as the Co-Intelligence Institute (CII) 2008, The International Association of Public Participation and The Community Development Society to identify land marks for the achievement of any particular rung (Arnstein, 1969). Thus overlaps between successive rungs are evident.

The overall use of this simplification is that it helps in conceptualising the manner in which communities are organised. The typologies reveal the power interactions that exist and may be responsible for causing vulnerabilities through the differences people have in terms of access, control and ownership of resources. The hierarchy and typologies can be applied to various situations where there are issues of power, access and ownership of resources.

2.1.4 Principles and Practice of Public Participation

For the purposes of this review the work of three international level institutions are considered to represent the wider thinking, understanding and trends in public participation. In Figures 4 and 5 the Core Values of the International Association of Public Participation (IAPP) and the Principles of Good Practice of the Community Development Society (CDS) are re-arranged from their original order of presentation and placed side by side for a comparative analysis. A separate discussion on the input of the Co-Intelligence Institute is also provided based on the comments of its founder member (Tom, 2008).

Core Values of The International Association of Public Participation	Comparative Analysis	Principles of Good Practice of The Community Development Society
	Common features	
1. Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.	⟷ making an input to the decision	1. Promote active and representative participation toward enabling all community members to meaningfully influence the decisions that affect their lives.
2. Public participation includes the promise that the public's contribution will influence the decision.	⟷ process engagement	2. Engage community members in learning about and understanding community issues, and the economic, social, environmental, political, psychological, and other impacts associated with alternative courses of action.
3. Public participation promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers.	⟷ sustainability of decision making and the outcome	3. Be open to using the full range of action strategies to work toward the long term sustainability and well being of the community

Figure 3: Comparative analysis: CII core values and IAPP good practice: common feature (Source: Tom, 2008): developed from IAPP and CDS

❖ **Common views:** the important point summarised from the work of IAPP and CDS is that communities or disaster-affected people must have input in the decision-making through CBDM and development planning. Figure 4 summarises the common views of the two authorities. IAPP and CDS emphasise the need to clearly define the community engagement process such that there is participation at various levels in the planning processes as shown by the top most arrows in Figure 4. This includes initial sensitization of communities for the need to plan jointly; actual joint planning; programme design; monitoring; implementation and feedback. In the comparative analysis done in this research this refers to 'process engagement' highlighted in the middle arrows in Figure 4. Overall this represents a planning cycle similar to the disaster management continuum (Victoria, s.a. a).

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Sustainability (as shown in the lower most arrows in Figure 4) features very prominently in the work of the two institutions. Elsewhere in relevant literature on public participation and CSS, emphasis on the need for sustainable local level organizations and decision-making is noted as being the key to public participation (GFATM, 2008; Victoria, s.a. a:7)

❖ **Different complementary views:** the other aspects highlighted in the comparative analysis (Figure 5) are specialized areas of focus which the two authorities individually identify with. These are all complementary as shown by a combination of the semi curved arrows in Figure 5, and can be outlined as follows.

Participation in decision-making does not exclude people with direct interest, in addition to considering those who are affected directly (IAPP in Tom, 2008). This allows for the participation of stakeholders who can bring in various contributions such as expertise and funding to the disaster situation.

The identification of the correct and acceptable leaders and leadership structures is emphasized by CDS (Tom, 2008). The lead individuals involved in the planning process like the established community leaders or members of a planning committee should include one or more people who have the personal leadership qualities necessary to steer the process. Such qualities include interest in the subject or project, commitment to the development of the community, honesty, integrity, organisational ability and charisma (Conyers, 2008).
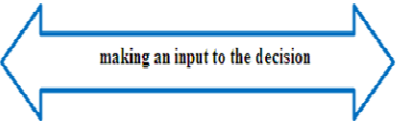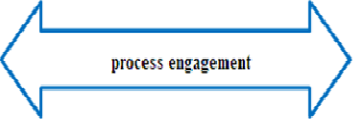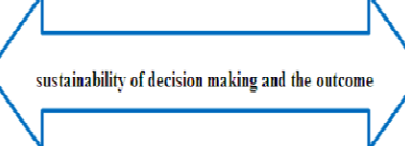
Core Values of The International Association of Public Participation		Comparative Analysis		Principles of Good Practice of The Community Development Society
Features of emphasis and complementarity				
4. Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision.	*direct interest of the affected*		*leadership is recognized as key*	4. Work actively to enhance the leadership capacity of community members, leaders, and groups within the community.
5. Public participation seeks input from participants in designing how they participate.	*process of participation is key*			
6. Public participation provides participants with the information they need to participate in a meaningful way.	*access to information*		*the general good*	5. Incorporate the diverse interests and cultures of the community in the community development process; and disengage from support of any effort that is likely to adversely affect the disadvantaged members of a community.
7. Public participation communicates to participants how their input affected the decision.	*provision of feedback on processes and outcome*			

Figure 4: Comparative analysis: CII core values and IAPP good practice: different/ complementary features (Source: Tom, 2008): developed from IAPP and CDS

Process of participation, access to information and the need for feedback mechanisms of processes and decisions can be included in the analysis of community engagement as part of the planning or disaster cycles. It is noted here that more often the processes are one directional in terms of external facilitating agents acquiring data and information from the community and making a decision. The feedback mechanisms need to be built into the whole planning process and allow regular updates to filter to communities.

The final note as presented by CDS is to ensure that the participation serves the cause for the general good, which is derived from wide consultation to capture the varied views of different interest groups (Tom, 2008).

To summarise the foregoing analysis, the views of both institutions are valid and relevant to this study. Their points of differences as discussed are only complementary to each other in that the CDS emphasises the leadership development aspects in the promotion of public participation (number four). The two views are very comparable on numbers one to three which in the analysis done, refer to the importance of communities making a meaningful input into decision-making (1); having a deliberate and elaborate and publicised process of engaging the community members (2); and lastly the need to explore available intervention options which are sustainable and have a futuristic orientation.

The Co-Intelligence Institute carried out a critique of both the IAPP and CDS (Tom, 2008). Whilst acknowledging that IAPP and CDS proposed "excellent guidelines for public participation" (Tom, 2008:56), both however, "fail to deal with the collective intelligence (and co-stupidity) dimensions of public participation". Tom (2008) provides another set of seven principles based on current understandings of co-intelligence and suggests that the three lists together build very powerful criteria for evaluating or improving the status of public participation in any community or project. The CII principles as presented by Tom (2008) are:

- Include All Relevant Perspectives

- Empower The People's Engagement.

- Invoke Multiple Forms of Knowing.

- Ensure High Quality Dialogue.

- Establish Ongoing Participatory Processes.

- Use Positions and Proposals as Grist.

- Help People Feel Fully Heard.

These are nothing more than qualitative statements that fit well into the first two lines of thinking as presented in Figures 4 and 5, and as rightly put by Tom (2008), the seven items list is best used for evaluating public participation interventions. The CII principles are hereby taken as an additional checklist that one can use in designing any programme for improving public participation.

2.1.5 Summary of International Perspectives on Public Participation

The overview pointed out to the public participation's place in the public and political domain, citing the challenges regarding the needs of citizens which often present points of conflict with state institutions. The review of the typologies of public participation provided the different contextual political economical management environments, which have a bearing on the decision-making processes applicable also to disaster management. The last part discusses contemporary public participation principles and practice. By and large the above forms a theoretical basis for the study.

2.2 PERSPECTIVES OF PUBLIC PARTICIPATION IN ZIMBABWE

A detailed historical perspective of public participation and practice in Zimbabwe is provided by Rambanapasi (1992), Mutizwa - Mangiza (1990) and Conyers (2001).

2.2.1 Socialist Egalitarian Political Model

In theory Zimbabwe purports to follow the socialist egalitarian political philosophy (Conyers, 2001; Mutizwa-Mangiza, 1990; Rambanapasi, 1992). This is rooted in the ideology which guided the country's processes of attaining national independence through the armed struggle. In addition, Conyers (2001) states that even in the pre-colonial kingdoms and chieftainships the features of autocratic rule existed. "In 1980, the Zimbabwean government emphatically stated its Marxist-Leninist ideology in the running of government. Supposedly economic-policy planning would be informed by socialist principles" (Mutenheri, 2009:471).

Examples of the major post-independence reforms in support of the Marxist-Leninist ideology include policies and legislation such as:

- The promotion of cooperatives through the Co-operative Societies Act, Chapter 24:05; the 1980 District Councils Act which looked at joint ownership of projects such as irrigations schemes, home industries, women's income generating clubs.

- The 1984-85 Prime Minister's Directive on Decentralization and the follow up 1985 Provincial Councils and Administration Act which were designed to establish a hierarchy of local government structures (Conyers, 2001).

- The amalgamation of District Councils and Rural Councils through the 1988 Rural District Councils Act (Roe, 1992) which was designed to correct the resource imbalances created through the segregated and racial local government structures of the colonial era.

"Decentralization and community-based planning are closely related" (Conyers, 2001:2). Decentralization is the transfer of central government functions to government (or in some cases, non-government) institutions at 'lower' levels. Although the types of functions which are decentralized vary, they inevitably involve the planning and implementation of local (community-based) development activities (*ibid*).

However, although the level to which functions are decentralized also varies, more often than not it is an 'intermediate' level, such as the 'district', rather than the community level itself. This research puts forward the argument that the subject matter for CSS then is ensuring that the sub-district structures or the lowest level of representation are empowered to be able to demand services and goods from the intermediate bodies. Alternatively such intermediate bodies should facilitate the operation of sub-district structures for them to be self-sustainable.

According to Conyers (2002) the institutions at the intermediate levels face the challenging question of whether to involve communities in the planning of local development activities and, if so, how. This becomes more complex given that in most cases the intermediate institutions are in place as elected office bearers who should be accountable to their electorate or constituency. In summary, therefore, community-based planning is, or should be, an integral part of the decentralization process and an essential component of any local authority's activities. Examples of the intermediate bodies in Zimbabwe are the councillors at ward level and who form the urban or rural local authority at district or city level; the Members of Parliament (MP) who represent bigger constituencies and form the lower house of the country's parliament; and the Senators representing several MP constituencies to form the upper house of country's parliament.

The Prime Minister's Directive on Decentralisation (1984) was further translated into the Provincial Councils and Administration Act in 1985 giving rise to the appointment of Provincial Governors setting up a hierarchy of decentralised decision-making and planning levels from the national, provincial, district, ward and village levels. In each of the hierarchies there was supposed to be a down-top form of decision-making. Provincial Governors were supposed to mobilise resources and achieve a top-down allocation of resource. It is noted that recent changes of the development structures since 1984 with reference to ward and village assemblies have not brought any real change except to enforce political domination of the structures (Mutizwa- Mangiza, 1990; Rambanapasi, 1992).

Most of the problems faced in public participation in Zimbabwe are summarised by Conyers (2001) as arising, directly or indirectly, from four main factors, namely the lack of a democratic environment and participatory organisational culture at national, district and community levels; poor organisation and management within both communities and supporting organisations; lack of people with appropriate leadership qualities at all levels and financial constraints. To conclude the discussion, Zimbabwe does not follow the Socialist Egalitarian Political Model despite the efforts made to try and reflect otherwise.

2.2.2 Liberal Incrementalism Model

The theoretical base of this model is that incremental stages are taken in the development planning systems of an economy to allow for regular reviews before full scale implementation of a programme, policy or project (Faludi, 1973). In practice Zimbabwe is found to entertain the political ideology characteristic of Liberal Incrementalism. Rambanapasi (1992:s.p.) categorically states that:

> The liberal democratic ideology has been entrenched in the institutional framework developed in the colonial period, which post-independence Zimbabwe has not been able to replace by any other discernible alternative political model. The result of this failure to replace or adequately reform the colonial political model has been the continuation of functional planning procedures, which inevitably allow for representative, elitist and institutional participation opportunities rather than the hoped for and cherished mass participation.

The interpretation is that one can link this to the 'tokenism' (Arnstein, 1696) rungs on the ladder of public participation: the representation structures of local government in the country amount to elitist and institutionalized citizen participation within the public service and not within civil society domains.

The elitist model of public participation assumes public interest to co-exist with the interest and values of people at the top of the social hierarchy that is the ruling class. Decisions made by the ruling class are assumed to be reflective of the needs of the masses. Masses are viewed as passive and not well informed. Decision-making is centralized and makes use of comprehensive planning (ibid) from standards which are supposed to be based on the public interest. Mutenheri (2009) refers to the same view and uses the term, rationale comprehensive planning. Applied to development planning and DRR, this implies that the practitioner is out to meet the set standards and thus he/she can do without any specific interactive references to any particular group of people.

In contrast the pluralist model assumes society is divided, hence divided group interests. The role of the institutional representation in public participation becomes one of setting the overall guidelines rather than giving out comprehensive solutions. People at grass roots level are appreciated as having a say in the decision-making process whilst the ruling class are there to moderate the processes to reach compromises and balances in resource allocation. This is achieved through broad public policies which all interest groups are expected to abide to.

2.2.3 The Revolutionary Dialectical Model

This typically resembles Marxist critique by stating that society can change as a whole in itself and that the elitist model is a product of the relations of production (Mutizwa-Mangiza, 1990). If these relations of production are changed, new values will emerge and bring in with them new ways of public participation. Anderson (1984) explains that the relationships which people enter into for purposes of survival or for livelihoods define the relations of production, power, decision-making and the overall economic structure. Thus revolutionary approaches to public participation do not rely on history or the past, but on what will come up with the revolutionary change. Public participation would be aimed at modifying the existing organisations and institutions.

This model is very distant in the experiences of Zimbabwe. There are negative political perceptions and fears about the promotion of the growth and/or increased action of CSOs. The political and economic environment of the country has had a history of scepticism and non tolerance of CSO activities especially NGOs/CBOs. This is evidenced by, for example the ban and/or stalling of NGO activities on 6 June 2008; controls of the public gatherings regulated through the promulgation of the Public Order and Security Amendment Act (Zimbabwe, 2007).

The overall weakness of the development planning system in Zimbabwe is that there is no localised mechanism for resource mobilisation. The Provincial Governors do not have a resource generating mechanism whilst their role has remained that of coordination. Planning

and budgeting have remained sector based through the various government ministries and departments. Mutizwa-Mangiza (1990) also noted that there was overall weakness in that provincial and district level structures of local government continued to rely on central government for funding. The review of public participation policy and practice in Zimbabwe was done to set the pointers for the research to identify points of entry in studying areas that need strengthening.

The presentation of the three models above does not in any way attempt to find a neat fit for each of the models into the public participation typologies as expounded by Arnstein (1969). This is because of the limitations noted in the typologies; the difficulty in drawing clear cut lines of each typology and the absence of clear landmarks to denote attainment of a particular typology.

It is also the position of the research that no attempt is made to match the capitalist and socialist ideologies to the typologies of public participation as this is beyond the scope of the study. The study is limited to the identification of public participation opportunities within any political economical context. However, it is the opinion of this study that contextual observations and deductions can be done drawing on the typologies and the political economical experiences of Zimbabwe.

In this regard broad statements of analysis can be done: Zimbabwe is overall in between the Consultation (4) and Placation (5) rungs of the ladder of participation. Assuming the political economy born of the Government of National Unity (UN, 2009b) and its well intentioned plans succeed, and is translated into action at grass roots level then one can start to think of a transition phase to the Partnership rung. "The policy planning process in Zimbabwe in the 21st century has had a propensity to assume elitist and somewhat non-participatory approaches, which are based on populist and benign governance" (Mutenheri, 2009:480).

Additionally, key actors in policy-making in Zimbabwe have to a larger extent been the affluent, yet the intended beneficiaries are the poor. Scholars in third world development planning have also tended to focus more on state theory in policy making at the expense of others. Also, policy planning in Zimbabwe has to a larger extent failed to transform the poor lives for the better, which ought to be its main objective. Based on the aforesaid, there is need to focus on the policy planning-philosophy environment for alternative approaches in Zimbabwe (*ibid*: 480).

This is the background to the development of this thesis as it searches the alternatives to responding to cholera disaster situations in Kadoma which are rooted in CBP.

2.3 COMMUNITY SYSTEMS STRENGTHENING

This part of the literature review focuses on CSS practice drawn largely from the work of the GFATM and the International Working Group on Capacity Building (IWGCB). This is because the work of GFATM on CSS is both very current (2008 to 2010) and is the only literature available that directly refers to CSS. The work of the IWGCB provides direct gap analyses of capacity building issues and priorities for the CSOs in developing countries (IWGCB, 1998). The choice to review CSS arises from the fact that it offers a formal structured basis of possible interventions that can be applied to public participation.

An up-to-date understanding of CSS is provided and adapted from the work of The GFATM (2009) and key writers for the same organization such as Amuyunzu-Nyamongo (2008), International HIV and AIDS Alliance and International Council for AIDS Service Organizations (2010) and Green (2010. In the process GFATM (2009) acknowledged that there is no general understanding of what constitutes CSS. Because of this lack of general understanding the GFATM carried out wide consultations which included a civil society online survey and several feedback consultative meetings to establish an understanding of CSS and its draft framework for HIV and AIDS, TB and Malaria application. The results of

these processes constitute the core basis for the literature review on CSS. Additional reference is made to Health Systems Strengthening given that it is the nearest related body of practice and thinking to CSS.

> CSS is an approach that promotes the development of informed, supportive and engaged communities and community-based structures, enabling them to contribute to longer-term sustainability of health and other interventions at community level, and to the development of an enabling and responsive environment in which these contributions can be effective (GFATM, 2008).

Criticism of this definition advocates for the removal of the phrase 'longer-term' as this is inherent in the sustainability reference (International HIV and AIDS Alliance and International Council for AIDS Service Organizations, 2010).

Community involvement in work related to improving health is not a completely new concept (WHO, 2008). Communities are known to have always taken a direct interest in the welfare family or household or community members. The land mark activities in the realization of the important role of community input to health include the Alma Ata declaration of 1978 which emphasized the role of primary health care (WHO,1978); publication of the WHO social determinants of health; and the re-launch of the primary health care concept in 2008 (*ibid*).

The primary health care approach has since then been accepted by member countries of WHO. These are landmarks which highlight the role of communities in increasing the reach and impact of health systems, for example in TB, malaria and HIV care and prevention. IHAA and ICASO (2010) have criticised the CSS bias which GFATM has towards HIV and AIDS, TB and Malaria. This is despite the recognition that the focus of their work was directed by the core business of the GFATM that is HIV and AIDS, TB and Malaria. There is acknowledgement from both WHO and GFATM that CSS is not all about health, but includes other issues such as livelihoods, resource mobilization, leadership and governance.

Work which is related to CSS is Health Systems Strengthening (HSS). WHO (2008), Green (2010b) and Partners for Health Reformplus (2005a) have documented HSS showing the

relationship of CSS and HSS wherein an overlap zone or intersection of community and health actors and systems (as shown in Figure 5) is identified denoting the scope for synergies, cooperation and joint action between the community and the health systems and actors (GFATM, 2010). WHO (2008), Green (2010b) and Partners for Health Reformplus (2005a) concur that community systems complement health systems. However, the striking observation noted by the same authorities is that community systems have unique advantages in taking on advocacy work, leading in community mobilisation, demand creation and linkage of communities to services. This unique aspect separates both CSS and HSS from the more pronounced references to capacity building. Capacity building is very broad in its target groups and types of interventions.
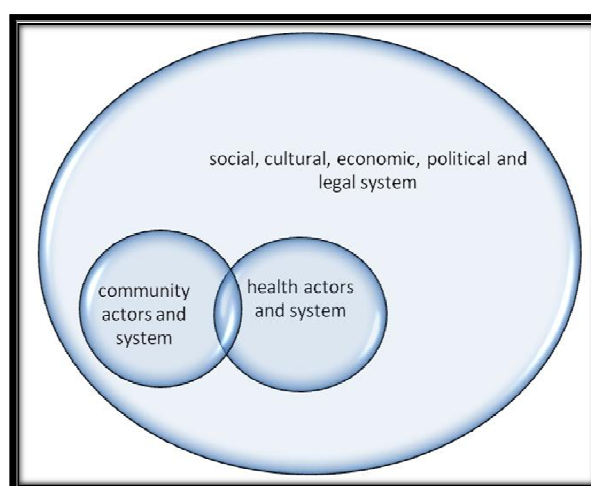
Figure 5: Complementarities and connectedness of community and health actors and systems (Source: GFATM, 2010)

From this understanding one can note that CSS is very specific to the needs of community structures whilst HSS is specific to the health sector. This distinction allows for the analysis of the needs of communities in the thrust to improve their capacity in disaster management which necessarily calls for clear identification of a hazard in its context. In this study cholera is identified within the health sector as requiring the support of health actors through increased public participation.

Community systems also have key roles in health promotion and delivery of community health services, and in monitoring health systems for equity and quality of services aspects which are applicable to the cholera hazard in this research. Community actors are also able to play a systematic, organised role in advocacy, policy and decision-making and in creating, maintaining and enabling environment that supports people's health and reduces the effects on vulnerable people of poverty, discrimination, marginalisation, criminalisation or exploitation and harmful socio-cultural practices. This throws light on the earlier review regarding the overall political economy of a country.

Lack of clarity in the past has made it difficult to discuss how community systems relate to health outcomes and how they link with health systems (GFATM, 2010). This may be because community systems are often more fluid and harder to define than the structured systems of a health or social support service. This difference arises from the fact that health systems depend on the clearly structured nature of the medical field as compared to the diversity of the professions that are grouped within the community systems sector. Another reason is the difficulty in defining boundaries between health and community systems and identifying the links between them, especially when community actors are direct health care providers and make major contributions to health services through home-based and facility-based services (*ibid*).

Community actors are all those who act at community level to provide community-based services and activities. This includes many different types of community groups, organizations and individuals, primarily those in the community and civil society, but also including public or private sector actors who work in partnership with the community and support community-based service delivery. Thus the foregoing literature review on power structures and analysis of the levels and typologies of public participation is necessary in understanding the community dynamics. Other related work defining social hierarchy, power structure and their implications for vulnerability in relation to access, ownership and control of resources is

found within the DFID Sustainable Livelihoods Framework (Department for International Development, 2004). There is no intention in this study to dwell on the SLF as another body of theory for the study.

The critical part of the SLF which has direct relationship to the CSS is the reference to 'Transforming Structures and Processes': applied to CSS this part of the model summarises the core focus of CSS in terms of identifying the central issues that also inhibit CSO activities and in a way may contribute to vulnerability. These are the laws, policies and institutional arrangements of communities on the side of the processes, whilst existence of government at various levels and the functions of the corporate world or private sector represent the structures of power and governance.

It is the opinion of this research that CSS is the group of activities and efforts which are the real translation of the thinking expressed in the SLF. Additionally, and from the Marxist theories, reference to the relations of production as noted earlier in 2.3.3 is a political economy view of the same issue of the community structures and systems around resource access, ownership and control as in the SLF. The SLF is important in clarifying processes within communities especially in the context of vulnerabilities whilst CSS identifies the more specific actions and interventions required to reverse the vulnerabilities.

The point of emphasis is on the processes set to create structures of change for the community. Community systems themselves are the structures and mechanisms led by communities through which community members and community-based organizations (CBOs) interact and coordinate their response (GFATM, 2010). CSOs whatever level they work at include community-based organizations (CBOs); non-governmental organizations (NGOs); faith-based organizations (FBOs); networks and/or associations of people affected by particular challenges or focused on particular advocacy or policy issues. Civil society includes many community actors along with other non-governmental, non-commercial organizations with roles at relevant levels in society, such as those working on public policies, processes and resource mobilization at national, regional or global levels.

In addition to gaining clarity about the relationship between health systems and community systems, it is also important to be clear about how community systems may have comparative advantage with respect to certain health-related activities. These are specific to local contexts but may include:

- Ensuring that services and support are available close to people's homes.

- Using the experience and language skills of trusted, culturally competent community members, ensuring continuity of follow-up for people with chronic diseases.

- Community-level promotion of health literacy, social/psychological support.

- Changing harmful socio-cultural practices.

- Providing respite for home-based care workers.

Support for research on the health consequences of community-led interventions has also been very limited, even when funders increasingly require that all programmes and interventions be measurable and evidence-based.

2.3.1 Review of CSS Building Blocks

The GFATM (2008) suggests that there are three building blocks for CSS which are:

- Building capacity
- Building partnerships
- Sustainable financing

There are two core areas where CSS and HSS are in agreement with the views of GFATM, those are the need for sustainable partnerships and funding. Funding in particular deserves special mention: the example of the GFATM CSS framework has as one of its major objectives to, "facilitate increased funding and technical support for CSS, particularly (but not only) for community-based organisations and networks" (GFATM, 2010:6). The lack of clarity about community systems and their comparative advantages has resulted in limited and inconsistent funding for community activities or services and for organisational strengthening of community actors.

Partners for Health Reformplus (2005a) approach the subject matter, functions of a health system, from a different perspective. The priority consideration in terms of institutions is to have stewardship as a source of oversight for an existing problem or situation. Creation of resources is separated from funding, and it is noted from Partners for Health Reformplus (2005a) that funding constitutes a major topic of focus in CSS and capacity building debate. Uganda is identified as a good example of strong government stewardship in health, where the government's proactive approach in preventing HIV and AIDS is likely to have reduced the incidence of the disease.
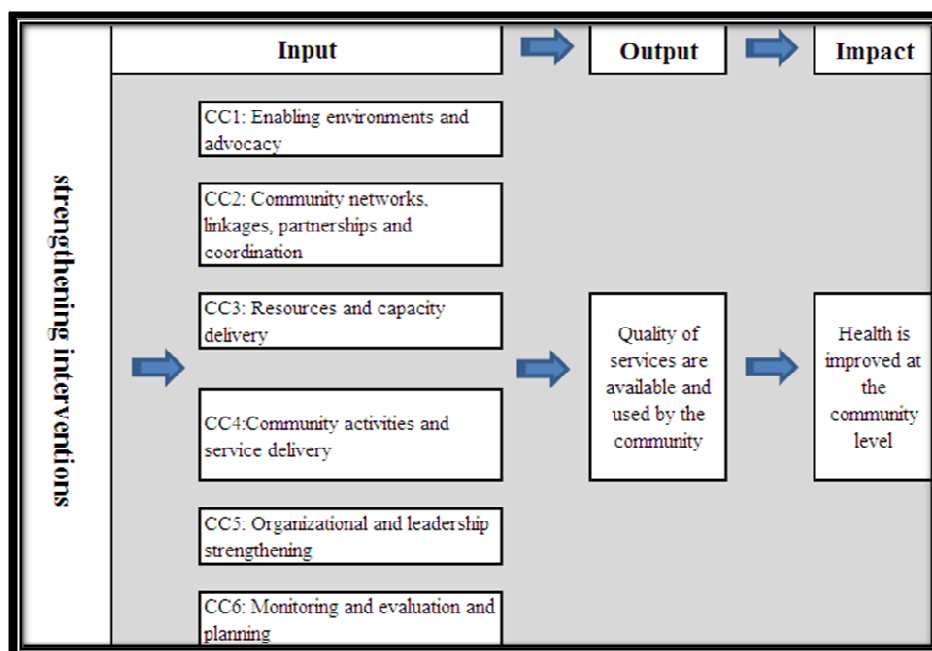
Figure 6: An overview of a strengthened community (Source: GFATM, 2010:12)

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This was achieved through the creation of an enabling environment which promoted the community-based initiatives and supporting mass communication campaigns, which promoted prevention and behaviour change. Stewardship in this case centred on community-based systems and structures with the deliberate and appropriate government support in terms of building the capacity of the CBOs. On the subject of building capacity (GFATM, 2008) a more detailed review is provided below.

According to (GFATM, 2010) there are six core components (CC) of CSS. The CCs outline the possible areas of CSS activities and interventions (Figure 7), which can be applied to achieve the impact as shown under the extreme left column of Figure 6 if health is improved at community level. The success of CSS for any community or country rests on the political economy of the area in terms of its responsiveness to:

- Creating the enabling environment for participation (CC 1).

- The creation and sustained existence of community networks and organizations (CC 2).

- Deliberate and conscious allocation of resources such as core funding CBOs, and enhancing their capacity to operate and deliver services and goods (CC 3).

- Planning and implementing community initiated programmes (CC 4).

- Leadership development alongside organizational development (CC 5).

- Monitoring and evaluation (CC 6).

Whilst there is no definite list of items that can be fixed to any one of the core components, the CSS framework provides guidelines and reference points for what to present to both

communities, intermediate agencies and governing authorities (local and state). The interest of the CSS review was to find out as much as possible the variety of interventions for CSS as guidelines. This is particularly important in situations where there are fears about the growth and activities of CSOs (Kettering Foundation in King *et al.,* 1998).

The IWGCB has done comparative work which is set in the context of capacity building. Some important lessons can be derived from their work. In the opinion of the IWGCB (1998) five core areas of capacity building are relevant for CSOs in the developing countries. These are summarized and discussed below:

- ▪ *Individual capacities*

  The observation made was that there is need for leadership development programmes that go beyond the founder members of CSOs. This would ensure the passing on of leadership qualities and skills to future generations to be able to lead the organizations.

- ▪ *Organizational Capacities*

  The areas of intervention and support relate to strategic planning and programme designing that sustains organizations to remain relevant and deliver services.

- ▪ *Capacity for Resource Mobilization*

  The IWGCB's (1998) findings are very much the same as GFATM (2010) conclusions on resource mobilization. IWGCB emphasis is on the capacity of local CSOs to mobilize local resources as there is a tendency to look for resources at the international community level. The argument in favour of local

resource mobilization is that it, "will also increase the likelihood that programmes will be locally sustainable,' (IWGCB, 1998:10)

- *External Relations Capacities*

    This is a recognition of the fact that as NGOs play an increasingly important role in development and relief work, it is inevitable that the importance of their relations with external constituencies, funding partners, governments and business will also increase.

From the review of international principles and practice of public participation, the typologies of public participation, down to the example of Zimbabwe and the elaboration on HSS and CSS it is evident that CSS is not confined to any particular disease, hazard or sector. The six core components of CSS presented in Figure 6 represent a consolidation of the various aspects of this review, principles and practice of public participation and the typologies of public participation.

2.4 PUBLIC PARTICIPATION EXPERIENCES OF THE PHILIPPINES IN CBDM

The case study below is presented to reflect both the national and local sub-district (village) levels CSS activities and policies resulting in effective DRR in the Philippines.

The Philippines is one of the world's most disaster prone countries (Heijmans in Bankoff *et al.*, 2007; Victoria, s.a. b). This is the basis on which the country was selected as a case study for this thesis. The Centre for Research and Epidemiology of Disasters in Belgium recorded a total of seven hundred and one disaster incidents from 1900 to 1991, which on average gives eight disasters per year. The Philippines National Disaster Coordinating Council recorded five hundred and twenty three disasters for the period 1982 to 2000. These statistics do not include the localised disasters which NGOs capture and respond to, but never find a lot of media

publicity and international community attention. Heijmans in Bankoff *et al.* (2007:8) points out that local communities in the Philippines have become convinced that their vulnerability status resulting in disasters is mainly from manmade developments such as the construction of dams and clearing of forests through logging in the Philippines.

This has given the communities the impetus to go as far as being identified with and showing signs commensurate with the Revolutionary Dialectical Model in which they advocate for and embark on complete change processes to fight against conditions that perpetrate vulnerability. In the opinion of this research, there is some level of extreme reaction in this, and to an extent it confirms the fears around the activities of CSOs when they take on a more political oriented posture.

2.4.1 An Overview of CBDM in Philippines

In 1984 NGOs and CBOs in the Philippines were compelled to find alternative approaches to disaster management in response to the government's inadequacy and the limitations of the prevailing view of the disaster management at that time. This work was spearheaded by and through the Citizens' Disaster Response Centre (CDRC). According to Victoria (s.a. b) the notable landmarks in the development and work of the CBDM in the Philippines are:

- The Philippine National Red Cross has implemented its Integrated Community Disaster Planning Program since 1994.

- The Philippine Relief and Development Services have integrated CBDM into their existing emergency services. Other agencies such as World Vision, Caritas-Manila and the Philippine Relief and Development Services have integrated CBDM into their existing emergency services.

- In the government sector, the Department of Social Welfare and Development through its Bureau Emergency Assistance has promoted Family and Community Disaster Preparedness to local government units.

- The municipality of Guagua and the province of Albay in the environs of Mt Pinatubo in Central Luzon and Mayon Volcano in Southern Luzon respectively, are among local government units which are recognized to excel in the local and community level disaster management.

- In 2002 the Philippine Disaster Management Forum (PDMF) emerged as a network of key disaster management agencies and advocates of CBDM.

- The First Philippine Conference on Community-based Disaster Management was held in November, 2002 with community partners of the PDMF, national government agencies and local government units interacting with one another (South East Asia. Partnerships for Disaster Reduction, 2003).

The greater part of the work of Victoria (s.a. b) dwells on the principles and processes of engaging the community in CBDM in the Philippines, which were documented from the First Philippine Conference on Community-based Disaster Management. These are not repeated here because they have been adequately addressed in the main literature review on public participation principles and practices; CSS building blocks and the review on capacity building issues and priorities for Southern NGOs.

The CDRC is generally recognized among the organizations in the Philippine Disaster Management Forum as having initiated and taken a lead in CBDM since 1984 (Morillo, 2001). The features of its citizenry-based development-oriented disaster response (CBDO-DR) have found applications in many CBDM programmes. Some of the notable aspects of

their work which gives details of the possible activities in promoting CSS for disaster management are:

- The goal is to reduce people's vulnerability by increasing their capacities to prepare for, to cope with and to mitigate the adverse effects of disasters. This is commensurate with the research's focus on the capacity and manageability components of the risk equation.

- Aware and organized communities can pressure government to implement policies and programs recognizing people's needs and interests and promoting a safer environment.

- People affected by disasters are active actors in rebuilding their life and livelihood. People's existing capacities are recognized and further strengthened.

- It addresses roots of people's vulnerabilities and contributes to transforming or removing structures generating inequity and underdevelopment.

- People's participation is essential in all phases (pre-, during and post) and process (risk assessment to counter disaster planning and contributes to building their capacities.

- Premium on building organizational capacity of most-vulnerable communities through formation of grassroots disaster response organizations.

- The less vulnerable sectors are mobilized into a partnership with the vulnerable sectors in disaster management and development work.

CDRC's mitigation measures are mostly non-structural in nature and directed to the building of capability in disaster preparedness and mitigation covering such areas as community organizing, food security, nutrition improvement, disaster management training, public awareness and advocacy. CDRC implemented a Food Security and Improvement Program (FSNIP) which resulted in enhanced capacity of vulnerable communities to be resilient to

against the effects of disasters through food and income sources diversification, increasing access to food supply and improvement in nutritional status of beneficiaries, especially children (*ibid*).

In 2.4.2, a more focused and localised example of the work done through the CDRC is presented. The important observed points in the case study are that the project addressed the basic survival issues affecting the vulnerable communities: these included food production with a special focus on the nutrition component for the children, diversification of livelihood activities to ensure steady income throughout the different seasons, training and skills development which was supported by local community organisations that were developed in light of the need to have local sustainable institutions as 'watchdogs'. Victoria (s.a. a) and Victoria (s.a. b) presented other works of the CDRC which all contributed to the success and lessons learnt in the Philippines.

2.4.2 Capacity Building Essential in Vulnerability Reduction

Ag-Agama Success Stories in CBDM

> The village of Ag-agama, an indigenous community in the Cordillera, Northern Luzon regularly experiences typhoons, drought, pest infestation, and earthquakes. Disaster events have become windows of opportunity for preparing and strengthening community capacities for the next disaster that is most likely to happen. After the Ag-Agama community profiling workshop using Participatory Rapid Appraisal tools, a community development plan for two years was formulated (Morillo, 2001 in Victoria s.a.b:4).

Diversification of food and income sources was based on a number of interventions which included distribution of vegetable seeds, fruit seedlings and farm implements; training in sustainable agriculture practices; construction of waterworks and rehabilitation of the community irrigation system; livestock and fish production and distribution of draft animals and veterinary medicines.

Other than the support towards improvement in food supply, health and nutrition-related activities were also implemented and included de-worming of children; sanitation campaigns; construction of latrines; establishment of village pharmacy and herbal gardens; and medical missions into the communities.

CBDM considered diversification of livelihood activities to widen and guarantee a steady income base for the disaster-affected communities and their local CBO (Morillo, 2001). Training and education covered disaster management, functional literacy campaigns and organizational development support. An evaluation of the effectiveness of CDRC CBDM work by its funding partners in 1999 concluded:

> The key (to effectiveness) is increased self-confidence (of vulnerable communities) through meaningful participation, one of the central elements of the CBDO-DR approach. As a rule, not only the organized members of the community benefit from counter disaster planning, but also the unorganized (Morillo, 2001; MRRS, 2001 in Victoria, s.a. b:4).

The experiences of Buklod Tao, that is People Bonded Together were documented as the only shining example of a community-based organisation that is taking on the responsibility of teaching other communities in various aspects of disaster management (Abinales, 2002: Heijmans & Victoria, 2001 in Victoria, s.a. b). Buklod Tao was formed following the formation of the Philippine Disaster Management Forum. Other success stories in CBDM have been documented by the Philippine National Red Cross (PNRC). The PNRC started its support for Barangay in the development of village-based Disaster Action Teams (BDAT) in 1994. The BDAT are led by elected persons who undergo intensive training for them to be able to work with their communities. The key areas of training cover risk assessment through the use of participatory methods in, for example resource and hazard mapping. The BDAT also make use of drama, poem and comics to communicate disaster management issues through public awareness meetings.

In summary the main points to take note of from the Philippines case study are:

- Organisational development for the CBOs
- Leadership development at grass roots level
- Government support towards local initiatives
- Sustainable funding based on diversified livelihood activities
- Core funding in support of CBO development and activities
- Creation of partnerships drawing on comparative advantages and capabilities of people and organisations.

2.5 SUMMARY OF CHAPTER ISSUES

Chapter Two has detailed the principles and practice of public participation as the main body of theory and practice which CBDM and CSS draw on. CSS is a relatively contemporary phrase. However, a closer analysis of CSS shows that it draws on other related fields such as capacity building and HSS. With the aid of examples and trends at international level, country specific level and the case study the review pointed out the challenges faced by both citizens and public administrators charged with responsibility of ensuring that communities could be enabled to engage in authentic public participation in DRR and development planning work. Community Systems Strengthening is only a vehicle of achieving some of the principles of public participation in CBDM through means that can differentiate the core business of CSS from the general political fears that are associated with CSO.

The focal areas to address in increasing or improving public participation in DRR through CSS should be cognisant of the political economy of the target community as this determines the mode and extent to which the views of the community and the disaster affected groups become part of the planning and decision-making processes. From the review it is observed that there is need for deliberate initiatives and effort from governments (state and local level)

and the various players within CSOs to provide resources. These go towards the strengthening of community initiatives to improve their ability (capacity and manageability) to prevent and mitigate the impacts of disasters and be prepared to face the menace of hazards or actual disaster situations. Funding, skills training and development in leadership and in specialist subject areas of disaster management and the existence of community-based institutions are the critical aspects in promoting public participation for CBDM.

CHAPTER THREE

RESEARCH TOOLS AND DATA COLLECTION

3.1. FOCUS GROUP DISCUSSION (FGD) INTERVIEW FRAMEWORK

FGDs were used in this research to meet the direct objective of doing an assessment of the community's capacity to respond to cholera disasters. The focus is on the community perspective. The FGDs were designed to capture issues around the community perceptive on institutional support to community participation and initiatives, existence of community systems, policies/procedures, records, resource mobilization (finances, human and material) and evidence of the DRR agenda.

FGDs are applied largely in the social and urban planning sciences for the purposes of understanding communities as opposed to the individual questionnaires (Henderson, 2009). Within the marketing field FGDs are used for testing new products and product ideas. This is the basis on which this research considered the use of FGDs. There are other advantages that were considered and these include the fact that the wide opinions of the community members could be heard within very limited time and financial resources for carrying out the study. More importantly the interaction that occurs within a group brings out data and sheds some light on or points to issues, which is not possible in the individual one-to-one interviews (Lindlof & Taylor, 2002).

The FGDs were designed to target the ward levels which have been chosen deliberately as administrative units, around which communities were defined for the purpose of data collection. Kadoma municipal area is made up of seventeen wards.

Pre-testing of the tool was done in ward two on 28 August 2010. This was followed up by a review of the tool to check on any emerging issues in the design of the tool in relation to the

study objective. The data from ward two was not entered for statistical analysis: doing so could distort the study given that ward 2 was used to pre-test the tool for review before use in the other wards. Only qualitative information from ward two was used without statistical computations. Selection of the ward for pre-testing was based on the information that the ward was the hardest hit during the 2008 to 2009 cholera disaster, and that the ward has the very popular single room residential structures which are occupied by at least five people (interview with Aaron Masembura and Councillor Gore, August 2010). In 2002, the ward had the second highest population of 6 595 in Kadoma City (Zimbabwe. Central Statistics Office, 2002)

One FGD session was planned for each of the sixteen wards. Participants were drawn from community health workers and volunteers; opinion/religious/church leaders and representatives of CSOs both local and international. Targeting all wards ensured coverage of the population (i.e. all wards) in terms of all administrative areas under Kadoma Municipality. However, only fifteen wards were covered and the results from these were used for the analysis. A meeting with the community in ward nine was not possible due to other commitments and programmes taking place in the ward.

The different levels of participation of individuals within groups are acknowledged as a limitation in the research. Within group dynamics there are issues of fear of victimisation of participating individuals; domination of the group discussions by the powerful and more eloquent individuals within the group; indecisiveness or 'sitting on the fence'; and non representation of some people within the community especially the most vulnerable members of the community (Everly *et al.*, 1995; Figley, 1995; James *et al*, 2001). The use of experienced Environmental Health Technicians working for Kadoma City Council was a key consideration to regulate some of the aforementioned challenges.

Other limitations in the use of FGDs include that the participants are assumed to be representative of the population. Where this is applied carefully selection of the participants is important. In this study Councillors and church or religious leaders were deliberate targets as

elected or confirmed leaders of communities. Volunteers were also a very critical group to consider as they constituted front line operations in liaison with local authority, government and CBO or NGO personnel.

Individual or household-based interviews through questionnaires were not used for this study because no actions emanating from the individual or household are the direct subject of the study. Individual knowledge, attitudes and risk perceptions of people about cholera (infection, spread, diagnosis, treatment and management) is assumed to be of acceptable level for the study community as stated in the research assumptions in 1.2.4. Only the community reflection on these aspects was considered for this study.

3.1.1 Institutional Questionnaire

The institutional questionnaire (Appendix I) was designed and delivered for purposes of establishing the formal institutional understanding of CSS at the following three levels that have a bearing on CSS:

- Local Authority level (Kadoma City Council)
- CSO perspective at international NGO level
- CSO perspective at local CBO level

Three institutional questionnaires were delivered for direct interviewing of key informants from the institutions. Only the CSOs that operated in the area and responded to the 2008 to 2009 outbreaks were selected because that was the worst disaster the area had experienced (interview with Aaron Masembura, August 2010). The identification of these CSOs was also guided by the local authority as a key informant so as to identify institutional variations. Other than serving the purpose of providing an overall picture of the CSS in Kadoma, the institutional interview acted as a mirror exercise of what could be found at grassroots level.

At Kadoma City Council the Assistant Director, Health and Environmental Services, was interviewed on 30 August 2010. The department of Health and Environmental Services was

interviewed given that the study falls within its portfolio. Other agencies to consult in the study were also identified with the support of the department of Health and Environmental Services (question 44a of the local authority questionnaire deliberately sought for the local authority to identify two other organisations to interview. Practical Action was identified to represent the INGOs because their work in Kadoma during the 2008 to 2009 outbreaks focused more on community-based approaches to disaster management. Celebration Health (an arm of the Celebration International Church) was identified to represent the local CBOs.

The guiding factor to limiting the institutional questionnaire for CSO to two organisations was the reality of the huge differences that exist between the international NGOs and the local CBOs. These differences are largely evident in the international NGOs. They have more resources and operate at larger scales through partnership and sub-granting arrangements than their local counterparts. For the purposes of this study there were no differences expected within these two main camps.

The usefulness of the institutional questionnaires was in providing official records that could substantiate or invalidate the issues from the focus group discussion.

3.2 DATA CAPTURING AND PROCESSING

The data from FGDs was entered into a predesigned and coded template following the same numbering used in the question guidelines. EpiInfo was used for capturing the data. The same could have been done using Microsoft Excel, but would have the limitations of performing many functions using spread sheets. The data was then exported to Statistical Package for Social Sciences (SPSS) for data processing and analysis.

3.3 ETHICAL CONSIDERATIONS

Permission to carry out the study was obtained based on a formal application to carry out the study and a decision made by the local authority. The assignment of the City's Director of Health and Environmental Services to the research was very welcome in defining the study direction, and acquiring the support of community leaders and the citizens they represent in their constituencies. The scanned letter in Appendix I was used by all field enumerators as the approval basis for carrying out the research.

Enumerators were drawn from the local authority's pool of Environmental Health Technicians (EHTs) because of their comparative advantage of understanding the communities, and past experience of working in the area during the 2008 to 2009 cholera outbreaks. The EHTs underwent training in the use of tools designed for the research, and participated in the pre-test runs of the tools and their modification prior to actual delivery.

Local leaders such as councillors, religious leaders and key informants such as volunteers and Environmental Health Technicians were used as entry points to the communities. The study proceeded, conscious of the negative political perceptions and fears about the promotion of the growth and/or increased action of CSOs in the political economy of the country.Zimbabwe has had a history of scepticism and non tolerance of NGOs/CBOs and CSO activities as a whole as evidenced by, for example the ban and/or stalling of NGO activities on 6 June 2008 (Practical Action, 2008; Zimbabwe AIDS Network, 2008:5; Zimbabwe Department of Social Welfare, 2008). "The year was characterized by an unfavourable macro-economic environment, NGO ban, a critical drop in donor support to Zimbabwe," (Zimbabwe AIDS Network, 2008:5).

In conclusion the study made use of FGDs for the community input as the major source of primary data. Three institutional-based interviews with key informants were done to support the community input in addition to the use of secondary information such as the local authority bulletins and national census information.

CHAPTER FOUR

RESULTS OF FIELD SURVEY

4.1 RESULTS OF INTERVIEWS: INSTITUTIONAL QUESTIONNAIRES

Three key informants were interviewed and the results are presented in sections 4.1.1 to 4.1.3 for each interview.

4.1.1 Results from Interview with Local Authority Informant

➢ *History of Cholera in Kadoma*

The interview with the Assistant Director of Health and Environmental Services for Kadoma City Council (20 September 2010, Kadoma) established an insight into the cholera outbreak in the town. The cholera history of Kadoma indicates that over the period 2006-07 only one cholera case was reported and controlled. This was an isolated case believed to have originated from Mary Mount in Mutare, and was only detected during a workshop at Kadoma Ranch Motel (interview with Aaron Masembura, August 2010). Over the 2008 to 2009 period five thousand two hundred and seventy two (5 272) cases and one hundred and eighteen (118) mortalities were recorded. In 2010, one hundred and twenty one (121) cases and four mortalities were recorded. However, that was verified from the actual records to be one hundred and thirty (130) cases and three mortalities up to the date of the interview 30 August 2010 (Kadoma City Council, 2010)

➢ *Disaster Planning and Management*

Disaster Planning and Management function of Kadoma City Council has not been established as a standalone department and assigned specific personnel. Instead it was

clear from the interview that it was embedded mainly within the Engineering and Town Planning departments of the local authority, thus giving it a physical infrastructural bias (interview with Aaron Masembura, August 2010). The local authority has been working on a draft disaster management policy document for the past three years. The progress has been affected by high staff turnover during the period that the country underwent economic challenges. With the relative stability being experienced in almost all sectors of the economy associated with the introduction of a multi-currency system in foreign currency, work on the policy had since resumed and was expected to be tabled to KCC before end of September 2010.

> *Public Participations in Cholera Disaster Management*

The participation and/or input of either communities or their representatives through CSOs were rated as non-existent (*ibid*). This is a pointer to a top-down approach that assumes the work done by the technocrats (local authority office bearers) know the needs of the communities. Notably the local authority had just sent all staff for training in Humanitarian Charter and Minimum Standards in Disaster Management based on the Sphere Project (2004), with special focus on emergency preparedness earlier the week before this interview was conducted. Ninety five percent (95%) of personnel trained were drawn from the Health and Environmental Services Department and the balance from the Engineering Department of Kadoma City Council.

> *Partnerships in response to the 2008 to 2009 Cholera Disaster*

The CSOs that operated in Kadoma during the 2008 to 2009 cholera outbreaks were German Agro Action (GAA) and their local partner Merlin; Oxfam and their partner Practical Action; Red Cross (Australia, France and Zimbabwe) and MSF Holland; and Celebration Health. UNICEF and WHO were singled out as major funding partners who worked through other agencies like Oxfam and MoHCW as implementing partners. These

CSOs were coordinated through the local authority supported by the MoHCW and the Civil Protection Unit (CPU).

However, the discussion revealed that the CPU was not visible as was expected of the institution charged with the responsibility of disaster coordination. Besides the enlisting of institutions or organizations working in Kadoma, the support (goods and services) provided was all based on the emergency response plans. Practical Action, Merlin and Celebration Health are the organizations that are still operating in Kadoma beyond the 2008 to 2009 cholera outbreaks. Practical Action deserves special mention in that the organization has clear DRR programming in Kadoma despite its limited coverage and bias to rural Kadoma. On the whole, the respondent expressed the concern that the attention of partners is more on the side of humanitarian relief operations as opposed to long-term DRR.

The protocol for operating in Kadoma is based on an organization being registered at the national level as a private voluntary organization (PVO) in terms of the Private Voluntary Organizations Act (Zimbabwe, 2007). The act is administered by the Ministry of Labour and Social Welfare. Acceptance within any area is sanctioned by the respective Provincial and District Administrators before a local authority like Kadoma City Council can work with the prospective organization. At local authority level, organizations enter into partnerships with the local authority through coordination meetings.

➢ *Cholera Risk Assessment*

The overall impression obtained from the interview was that there had been very little positive change to the key determinants of disaster situations from a hazard perspective: the provision of safe clean drinking water, sewer and solid waste disposal services have not improved significantly. Kadoma is still at risk of cholera. However, the analysis of the risk assessment and the discussion noted that issues around household and individual knowledge and attitude about cholera have greatly improved. Negative responses (that is,

'non existence' to 'poor' categories) were given on all issues to do with public knowledge on cholera diagnosis; procedures for the public to take on diagnosis; cholera treatment; the public providing information (reporting cases and deaths); availability of volunteers; access to a health centre; access to oral re-hydration solution and acceptance of treatment by all religious groups for the pre 2008 to 2009 cholera disaster.

In contrast the responses recorded for the same questions and attributes in the post 2008 to 2009 ranged from 'moderate' to 'good' categories with 'excellent' recorded for the improvement in the availability of volunteers, access to ORS and access to a health centre. The indicative interpretation of this is that there is definite potential positive impact which can be derived from interventions that support the organization of communities to take on local initiatives to address disaster situations. This is accepted, given the fact that there was limited change in the infrastructural aspects of water and sanitation services.

The informant was also guided through the process of doing a risk assessment for Kadoma using the risk assessment tools as in Part 7 of Annex II. The respondent was asked to provide ratings of their opinions of the cholera hazard in terms of:

~ Its intensity and likelihood of occurrence as a measure of the hazard.

~ The probable impact, as a measure, on human lives, their livelihood resources and environment which summarises the vulnerability part of the risk equation.

~ The respondents' opinions of the capacity the community.

~ Their views on the manageability of institutions to respond to cholera disaster.

The result is an average of the four parts of the equation which is applied to the scale range of any figure that is equal or less than 1 = low risk; any figure between 1 and 3 = moderate risk; and any figure above 3 = high risk. The risk assessment done by the respondent placed Kadoma in the moderate (2.5) category. The process of inputting

variables to establish the risk assessment as explained above was also applied to get the opinion of the CBO and INGO on the cholera risk in Kadoma.

➢ *Availability of Resources for Responding to Cholera Disaster*

The interview also sought to establish the availability of funding and resources specific to the various sub-components of the disaster cycle, which is relief, reconstruction, and rehabilitation through the DRR (prevention, mitigation and early warning systems). The results showed that Kadoma City Council only had a budget line for disease control and there was a proposal for a disaster fund for the 2011 Kadoma City Council Budget. There is a tendency to respond to the problem situation (interview with Aaron Masembura, August 2010), and the response resources are made available at the formalized structures of government.

From the local authority's perspective the top five critical and locally available resources are:

- Human resources at the local authority and volunteers levels
- Stocks of disinfectants
- Protective clothing and equipment for response teams
- Transport and logistics support services
- Medical supplies.

This was, however, qualified to mean that these were resources that could only manage the current situation of a small outbreak such as the 2010 outbreak, which recorded one hundred and thirty (130) cases and three mortalities up to the date of the interview 30 August 2010 (Kadoma City Council, 2010). The likelihood of another cholera outbreak of high severity was rated a certainty by the vulnerable community members, because the water and sanitation services had not improved.

The key constraints of the local authority centre are funding and cash flow. These are required to support the provision of consumables, support for the response teams operations and transport and logistics support for a major cholera outbreak.

4.1.2 Results from Interview Celebration Health as Local CBO Informant

The Programmes Coordinator for Celebration Health was interviewed (11 September 2010, Harare) to get insight into the local CBO perspectives on CSS within the context of cholera in Kadoma. Celebration Health was established as a development arm of the Celebration International in Zimbabwe (Celebrate International, 2010 and personal communication with Dr Kuda Katurura, August 2010).

Celebration Health has a clear relief and development mandate to work with communities through existing structures such as, directly with the church, Ministry of Health and Child Welfare, corporate bodies and various CSOs including NGOs. The key informant emphasized the community driven nature of the partnership arrangements which Celebration Health.

Entry and operations of Celebration Health in Kadoma were based on direct invitation by the Ministry of Health during the cholera crisis of 2008. There is no documented working basis such as memorandum of agreement for their operations in Kadoma. Instead the work is formalized through the existence of the church in Kadoma and the participation in coordination meetings for the cholera response.

Celebration Health has been mobilizing resources from local and international partners identified as 'Friends for Zimbabwe'. On the availability of funding, the informant categorically stated that funding partners were prepared to fund distressed situations like emergencies or crisis situations. It was clear that advocacy work needed to be done in the area of resource mobilization so that more resources could go towards the long-term development of disaster prevention and mitigation.

Celebration Health's response to the 2008 to 2009 cholera outbreaks had a diverse package which covered most critical areas including programme or project funding; medical personnel, medical supplies to the local authority; training of volunteers and provision of incentives for the volunteers; cholera awareness campaigns combined with the distribution of IEC (Information Education Communication) material; distribution of non-food items (bucket, soap, aqua tabs, ORS); sanitation services (disinfection) and food distributions to needy and affected households. It is only in the area of waste management and direct water supply that Celebration Health did not have any interventions. It was noted that the response was two-pronged: medical operations at the cholera treatment centres and the community outreach activities covering the distribution of various commodities and the awareness campaigns.

The CBO is still operational in Kadoma and is focusing on a livelihoods programme which is supporting 3 000 households with NFIs and medical supplies to Kadoma General Hospital. Simultaneously, a cholera awareness and education programme is being run. This is being done in view of the need to strengthen the vulnerable households to be able to withstand the effects of another cholera outbreak. It is the opinion of the key informant that the conditions resulting in the 2008 to 2009 outbreaks have not improved much on the part of provision of clean and safe drinking water and the sewer and waste management services. This position was reached from the inquiry done on the key areas that need resourcing or stand as resource constraints. and from the detailed review of the changes that have taken place in key aspects and attributes of the hazard cholera i.e. safe clean portable water supply; public knowledge on cholera diagnosis; procedures for the public to take on diagnosis; cholera treatment; the public providing information (reporting cases and deaths); availability of volunteers; access to a health centre; access to oral re-hydration solution; acceptance of treatment by all religious groups; existence of an early warning system; communications and media relations management plan and funding for responding to cholera outbreak.

The overall picture is that all aspects relating to services provision of water have not changed significantly since the 2008 to 2009 outbreaks. The technical knowledge of managing cholera disasters is available at both community and local authority, but the challenge is lack of

funding at the local authority level. The risk assessment done placed Kadoma in the moderate (2.5) category.

4.1.3 Results from Interview with Practical Action as INGO Informant

The Health and Hygiene Officer for Practical Action, Tendai Tendere was interviewed on 20 September 2010 in Harare. Practical Action has a clear long-term development approach to its work in Kadoma with a clear DRR framework in partnership with Oxfam Great Britain. It was established by Practical Action whose operations in Kadoma were based on a Memorandum of Understanding with Kadoma City Council. Regular coordination meetings are conducted with the local authority's meetings.

The package of goods and services offered by Practical Action comprised of training of volunteers and provision for volunteer incentives; awareness campaigns; NFIs; waste management; distribution of IEC materials and water supplies (infrastructure and actual commodity).

In the opinion of the respondent the major changes that have taken place in aspects that have a bearing on cholera risk, are mainly in the knowledge of cholera treatment; providing information to any suspected or actual cholera cases, and access to health centres which were rated excellent as of August 2010. These aspects were rated 'non-existent' to 'moderate' during the 2008 to 2009 crisis. Cholera diagnosis; procedures for the public to take when they diagnose cholera; the availability of volunteers and the existence of an early warning system have improved from poor rating to a good rating. The overall rating for all aspects shows a shift from a non-existent rating to a moderate rating.

The CBO does not have funding specific to any of the stages of the disaster cycle: instead Practical Action's approach is that of mainstream DRR with more focus on the disaster preparedness aspects than the actual response to a crisis. Water supply, sanitation resources and waste management were noted as the top three critical resources needed for management of cholera in Kadoma. The need for improvement in stakeholder coordination and support to

volunteers (incentives) were also mentioned. The risk assessment done by the respondent placed Kadoma in the moderate (2.3) category.

4.2. RESULTS FROM FOCUS GROUP DISCUSSIONS

The results from the FGDs are presented in line with the four parts in the design of the FGD guidelines used, namely cholera risk assessment; partnerships; public participation in cholera disaster management; and resources available for cholera disaster planning . The FGD guidelines are provided in Appendix III.

4.2.1 The Cholera Situation in Kadoma

The results are presented on a comparative situational analysis between the 2008 to 2009 outbreaks and the situation in August 2010 when the study was conducted. As shown in Figure 7, representing the average opinion of the communities who participated in the FGDs, there is a marked improvement in the town's cholera disaster status between the 2008 to 2009 cholera outbreaks and the situation in August 2010. The reference to 'Before' and 'After' in Figure 7 denotes the comparative analysis of the pre and during 2008 to 2009 disaster as compared to the post 2008 to 2009 disaster respectively.
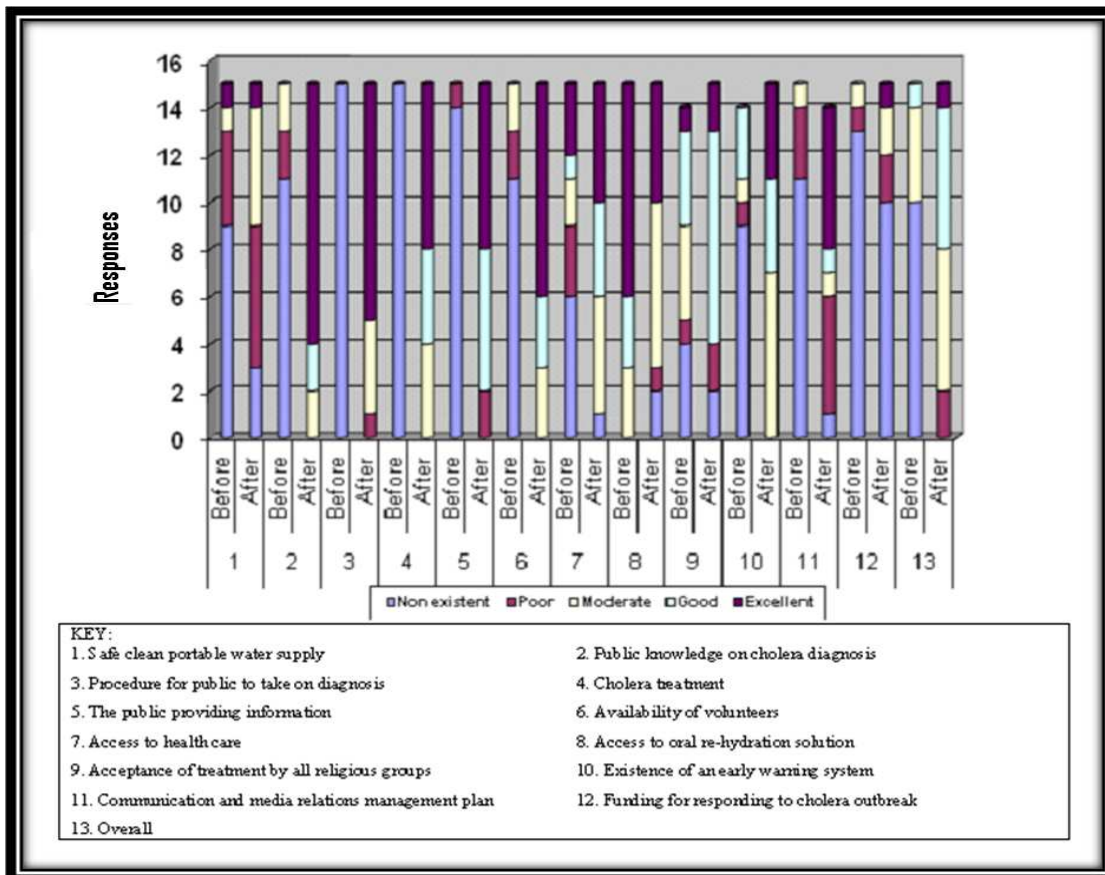
Figure 7: Views on situational analysis of cholera (2008 to 2009 and 2010)

In the opinion of the communities and the local authority informant interviewed, the improvements are not attributed largely to water and sanitation infrastructure and services provision, though the results for the water supply show a positive improvement. Instead, attribution is to the knowledge and attitudes aspects relating to cholera.

In Figure 7 the colour coding represents the ratings starting from non-existent up to excellent representing the situational changes per given attribute or criteria of measurement as shown in numbers 1 to 13 at the bottom of Figure 7. Cross-tabulations of cholera situation before and after for each attribute were performed (see Appendix IV) and Chi-square tests (Table 1 below) were performed to test if the transition from the before situation to the current situation was statistically significant.

TABLE 1: CHI-SQUARE TEST FOR WATER SUPPLY: PRE VS. POST 2008 TO 2009 DISASTER SITUATIONS

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.167(a)	9	0.017
Likelihood Ratio	12.414	9	0.191
Linear-by-Linear Association	0.023	1	0.878
N of Valid Cases	15		

For example the light blue bar for safe clean portable water supply was rated nine indicating that nine wards stated that safe clean portable water was non-existent prior or during the 2008 to 2009 cholera disaster. In contrast only three wards rated the same aspect as non-existent as of August 2010. The Chi-square test's p-value suggests that there is a significant association between the before and the after situation, as indicated by the cross tabulations. The interpretation is that there has been some improvement in the supply of water in the city.

The majority 73% of the ward responses (n=11) noted that public knowledge on cholera diagnosis was largely non-existent prior to the 2008 to 2009 disaster. The responses for the post 2009 disaster show a response of 66% rating that public knowledge of cholera is excellent. None of the responses rated this aspect as non-existent in the post disaster situation. The research did not go into the individual behavioural changes related to water and sanitation in the context of cholera. Instead, the research sought for the opinion of the public in terms of the stage the communities had reached in their knowledge of cholera diagnosis. The results imply that this aspect has greatly improved due to the exposure during the 2008 to 2009 cholera outbreaks.

There was a 100% confirmation that the knowledge on procedures for the public to make a diagnosis was non-existent (Figure 7). Seventy three of the ward responses (n=11) noted that the situation had changed, and was rated excellent.

Positive trends similar to the analysis above regarding the knowledge about procedures to make a diagnosis were recorded for cholera treatment; the public providing information; reporting cases and deaths; availability of volunteers. However, there were variations in the ratings.

The foregoing analysis of the cholera situation in Kadoma allows one to isolate the problem areas or aspects in the management of cholera. The basic understanding of the hazard is at a satisfactory level given the responses of the communities' ability to understand the basics of the disease. Figure 7 on the other hand also shows the critical areas where the capacity of the communities is still limited to effectively respond to cholera. There is reflection of the non-existence rating for access to a health centre for both the before and after disaster situation. Probing into this aspect confirmed that wards 15, 16 and 17 did not have a cholera treatment centre during the 2008 to 2009 disaster. These communities had to seek treatment in Rimuka some 12-15km away. Overall only two cholera treatment centres were established and operated during the 2008 to 2009 cholera outbreaks.

Access to oral re-hydration solution was rated excellent (60% of the responses where n=9) and the balance, 40%, rated this moderate to good during the 2008 to 2009 disaster. The access to ORS has remained largely the same as August 2010. Nevertheless 13% (n=2) of the responses noted that ORS was no longer found within the community in the post 2008 to 2009 disaster period. The investigation into the availability of ORS was for checking the level of preparedness of the communities to be able to provide instant remedy to ill members of the community whilst seeking medical attention.

Some of the apostolic sect groups were noted to resist medical treatment of cholera on religious grounds. This position was confirmed by 26% of the responses (n=4) regarding the prior disaster situation. A positive change was noticed by the smaller response of 13% indicating that there was improvement in that the non acceptance of medical treatment for cholera has gone down by about half.

Sixty percent (n=9) of the responses are of the view that the early warning system was non-existent before the 2008 to 2009 disaster. The post disaster responses are all within the moderate to good range. Communication and a media management plan was established to be largely non-existent (73% of responses where n=11) before and during the 2008 to 2009 disaster. The post disaster situation shows some mixed and equal responses rating excellent

and poor communication and media management. Eighty six percent (n=13) of the responses rated funding for cholera disaster as non-existent prior to the 2008 to 2009 disaster. Sixty six percent (n=10) rated the same aspect as non-existent in the period post 2008 to 2009 disaster.

The overall picture of the results of the key determinants of the cholera situation in Kadoma is presented under coding 13 of Figure 7. In the prior and during the 2008 to 2009 disaster period the overall rating (66% where n=10) is that most aspects were in the non-existent category. In the post 2009 disaster phase 75% (n=12) of the responses rated the overall change from non-existent to moderate and good. Therefore many of the positive changes that have taken place are not the results of planned interventions through DRR. Instead they are a result of the immediate reactions to the crisis that arose. This still leaves room for improvement in disaster management planning.

The results of the individual ward risk assessments for thirteen communities (wards) are presented in Figure 8. The analysis was not done for ward two because the ward was used for pre-testing the tool; no meeting was conducted for ward nine due to communities being occupied elsewhere; and whilst the risk assessment was done in ward 17, there were no comparative population details because the ward was only constituted in 2008. This accounts for the computations done for thirteen wards in Figure 8 and carried forward to Table 2.
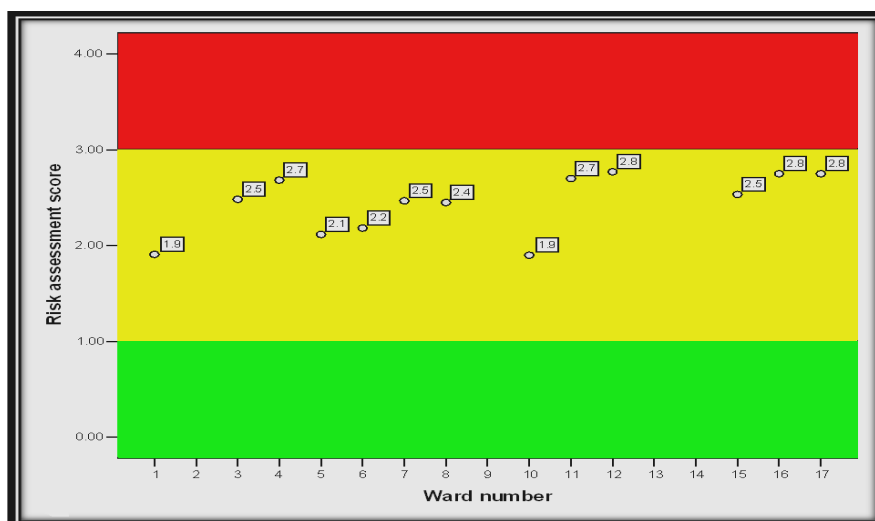
Figure 8: Cholera risk assessment by ward

All wards studied and with valid entries fall within the moderate risk category of $1 \leq score < 3$ (yellow) range. None of the wards falls within the high risk, that is, $score \leq 3$ (red) range and $score \leq 1$ low risk (green) range. Sixty nine percent (n=13) of the wards were assessed to be above the 2.5 mark. The implications of the risk assessment findings are that the city is still in the potential disaster state which requires preventive intervention. The estimated population figures presented in Table 2 (CSO, 20020) were matched with the respective ward risk scores presented earlier in Figure 8 above.

TABLE 2: WARD DEMOGRAPHICS AND DENSITY ZONING FOR KADOMA

| Ward | Population | | | Projection | | | Risk score | Zoning by density |
	M	F	Total	Annual net increase of 3%	10 yr increase	Estimated population		
1	3791	4156	7947	238.41	2384.1	10331.1	1.90	high
3	2326	2447	4773	143.19	1431.9	6204.9	2.50	low
4	2137	2444	4581	137.43	1374.3	5955.3	2.70	high
5	2783	2736	5519	165.57	1655.7	7174.7	2.10	high
6	3324	3450	6774	203.22	2032.2	8806.2	2.20	high
7	1877	2075	3952	118.56	1185.6	5137.6	2.50	high
8	3606	4030	7636	229.08	2290.8	9926.8	2.40	high
10	2014	2281	4295	128.85	1288.5	5583.5	1.90	medium
11	2501	2598	5099	152.97	1529.7	6628.7	2.70	high
12	1081	1144	2225	66.75	667.5	2892.5	2.80	medium
15	2621	2548	5169	155.07	1550.7	6719.7	2.50	high
16	1174	1159	2333	69.99	699.9	3032.9	2.80	high
Total	29235	31068	60303	1809.09	18090.9	78393.9		

(Source: adopted and developed from CSO, 2002)

It can be seen that the lowest risk score is found in both the medium and high density suburbs, that is wards 1 and 10 respectively. The highest risk score of 2.8 is also found in both the high density areas such as ward 12 and medium density areas such as ward 16. Assessing if there is association between risk score and zone in which the wards lie, a Chi-square test was performed and the results are shown in Table 3.

The p-value of 0.802 which is greater than 0.05 indicates that there is no evidence of significant association between the zone type and risk score of a ward/community, implying that the risk score is independent of a low density or medium density. This can be explained by the fact that occurrence of cholera is more related to the level and type of water and sanitation services provision, which does not necessarily translate to the density zones.

TABLE 3: CHI-SQUARE TESTS FOR ZONING AND RISK SCORE

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.778	12	0.802
Likelihood ratio	7.951	12	0.789
Linear-by-Linear Association	0.002	1	0.962
Number of valid cases	12		

Given that the sample used has only one low density suburb, and absence of a clear pattern from the above discussion, comparative analysis of the prevalence of cholera against zoning by density, is limited.

4.2.2 Attendance at the FGDs meetings

A total of fifteen FGD sessions were conducted. The basic statistics for the attendance is shown in Table 4. The overall attendance at the FGD meetings was positive and good based on the expectation that a minimum number of 20 and maximum of 30 people were set as the expectation. This expectation was based on determination of a manageable group size that a facilitator or enumerator could handle to establish good communication between the group and the facilitator whilst at the same time allowing enough numbers for meaningful discussion. In eight of the wards being 53.3% the minimum number of participants was 20

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individuals. The attendance at the remainder of wards (46.7%, that is n=7) was below 20 participants. The average attendance was 23 people.

TABLE 4: ATTENDANCE DETAILS OF FGD MEETINGS

Mean	23.4
5% Trimmed Mean	21.17
Median	20
Minimum	8
Maximum	79
Range	71

The presence and participation of volunteers, nurses, teachers and church leaders (as detailed in Table 5 below) was considered critical to the findings in the study. The mobilisation for conducting the FGDs was deliberately targeted and done through these key community members since they were role players or major stakeholders in community driven interventions.

TABLE 5: FGD ATTENDANCE ANALYSIS BY ROLE PLAYER

Specialty	Number of wards with at least 1 present
Councillor	6
Local CBO volunteer	5
International volunteer	10
Volunteers	6
Teacher	7
Nurse/health worker	4

These were the predetermined groups of people with influence to lead in public participation. Table 5 shows the attendance by each of the key groups of participants. The fifteen meetings were all coordinated through the respective ward councillors despite the fact that in 60% (n=9) of the wards, councillors could not attend the meetings due to other work and personal commitments. A councillor from a neighbouring ward and the councillor responsible for the Health and Social Services Committee of Kadoma City Council were present at all meetings

where the respective ward councillor could not attend. These results are useful in as far as they identify the key players in communities.

A decision to ignore the collection of information on ward population and number of households was made during the field study given that the official details were obtained from secondary sources as detailed in Table 2.

4.2.3 Public Participation in Disaster Planning and Management

The study sought to establish the existence of any form of community-based disaster planning and management of cholera through a set of seven questions. The results are summarised in Figure 9.
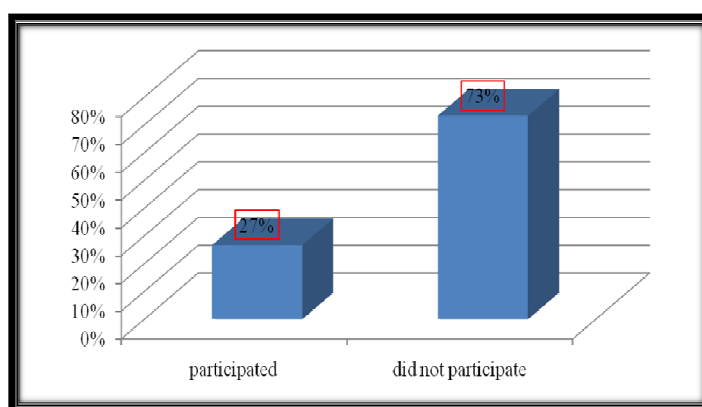
Figure 9: Development of ward/community plans for cholera disaster management

The results show a majority of 73.3% (n=11) negative response of communities stating that they had not engaged to participate in the development of any plan to combat cholera. The balance of 26.3% positive ward response (n=4) said they had participated in the development of their respective ward/community cholera disaster plans. This was cross checked against the inquiry on whether the plans were documented and/or at least shared widely within the community.

The results in Figure 9 above indicate the existing limited participation that the public in Kadoma has in the management of cholera. This is a pointer to the lack of understanding of cholera by disaster management in the public domain. This has negative implications

regarding the community's risk with a strong possibility of downplaying its threats. Of the valid entries made (Table 6) the results show responses of 27.3% (n=20) 'not sure' and 54.5% (n=40) unaware (none) of the plans for the management of cholera in their ward/communities.

TABLE 6: AWARENESS OF ANY CHOLERA MANAGEMENT PLANS FOR THE WARD/COMMUNITY

Response	Frequency	Percent	Valid Percent
Yes	2	13.3	18.2
Not sure	3	20	27.3
None	6	40	54.5
Total	11	73.3	100
Missing	4	26.7	
Total	15	100	

The study sought to find out of the existence of plans either in the form of shared common expectations of the communities or a more advanced plan that is documented as a reference for the community members. This is consistent with the results shown in Figure 9, that is, the majority is not aware of the cholera disaster management plans having not participated in the development of the plans. The 18.2% (n=13.3) response of community members who confirmed that they knew of the existence of cholera management plans within their communities, was cross checked and observed to come from volunteers. This is because volunteers are directly involved in the work and had regular exposure to what was happening within their communities. This checking was done by probing to establish the correct understanding to avoid bias.

The more direct question on the rating of the community's participation in the development of cholera management plans in Figure 9 above, confirms the same result that there was limited participation.

Figure 10 below shows that the majority, being 53.3% of the respondents stated minimum participation; 20% cited average rating of participation; and 6.7% indicated a satisfactory rating in participation in the development of cholera management plans. The 20% that did not

respond as shown in Figure 10 is very significant in that it can be considered to represent communities who are not sure or completely ignorant of their role in the management of cholera. This constitutes a community or sections of communities that could unwittingly or otherwise work against the efforts to control the cholera hazard and its threats.
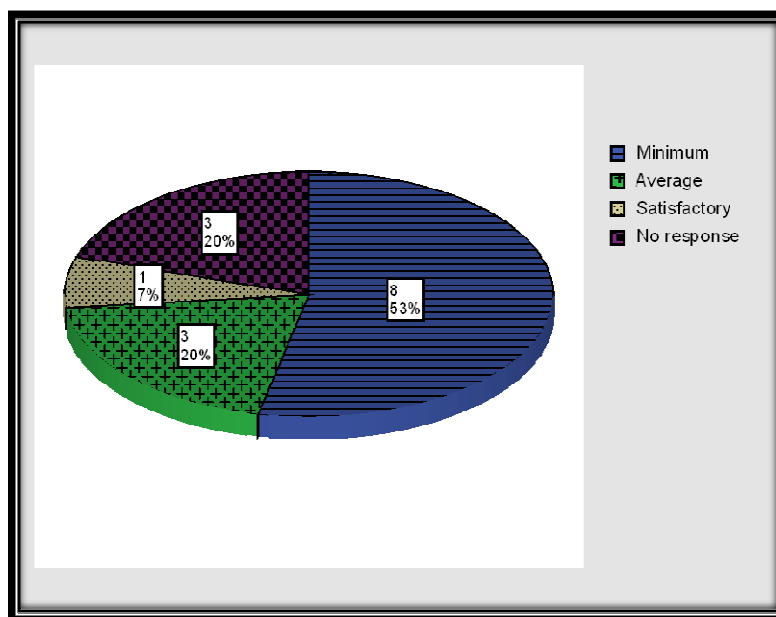
Figure 10: Extent of community participation cholera disaster management

The results of the ownership of the cholera management plans are not divergent from the earlier results on the awareness of the existence of ward/community disaster management plans for cholera: the dominant response of 40% stated ownership by the ward councillors. Responses indicating ownership by the community constituted only 7%, which was the same for ownership by volunteers and Environmental Health Technicians (EHTs); 13% of the wards had no responses to this question because it was regarded to be very politically sensitive. This was positive for the purposes of this research in that the discussion revealed that one of the core areas of challenges faced in promoting public participation was the influence of administrative and political office bearers within government (central and local levels). The Kettering Foundation study in King *et al.* (1998) referred to in Chapter 2, made the same observation that there existed tension between the public's right to greater involvement, and the prerogative of public officials to act as administrative decision-makers.

The combined response for ownership by the councillors (40%) and the municipality (27%) that is 67%, suggests that the communities are inclined to believe that ownership of the plans is in local authority structures whilst on their own, communities have limited participation in the development of cholera management plans at ward/community level.The main issues of emphasis from the results in Figure 11 are that councillors play a central role in the ward/community disaster management structures as the lead persons in decision-making on behalf of the local authority. However, in as much as the literature revealed, such institutional or organisational representation faces the challenges of political clout with the assumption that it represents the wider community, and allows for meaningful participation in disaster planning and management. Councillors are elected on political party lines, and there is the potential of biased representation of community development issues.
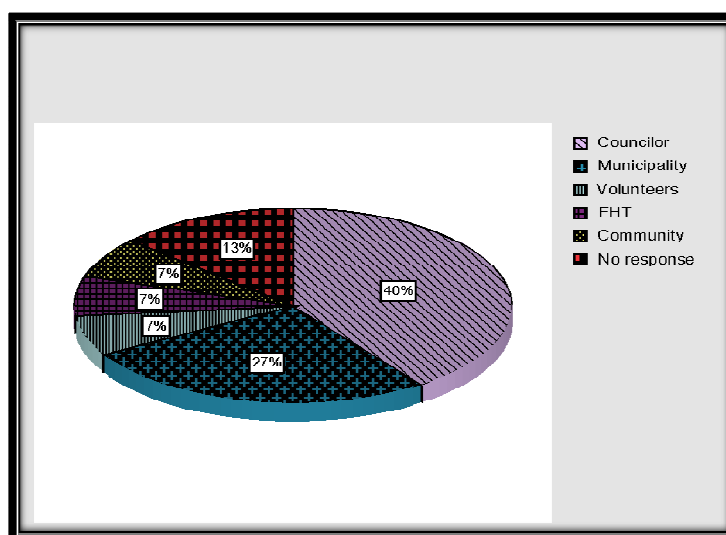
Figure 11: Ownership of ward/community cholera management plans

The majority of communities (80%) felt that the responsibility of convening coordination meetings for cholera related activities was expected of the councillors, although 13% and seven percent felt it was the responsibility of INGOs and EHTs respectively.

In the study there is an evident sense of exclusion of the public in the decisions around the responses to cholera disaster as shown in the presentations on knowledge, ability of the

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planning processes, perceptions on who has the plans and the measurement of the level to which the communities or wards can be said to have contributed and participated in the cholera management plans.

4.2.4 Partnerships in Kadoma

Figure 12 shows the variety of goods and services which role players provided during the 2008 to 2009 cholera disaster in Kadoma based on multiple responses. It was also noted that there seemed to be duplication of activities and interventions in the same area of operation (interview with Aaron Masembura, August 2010)
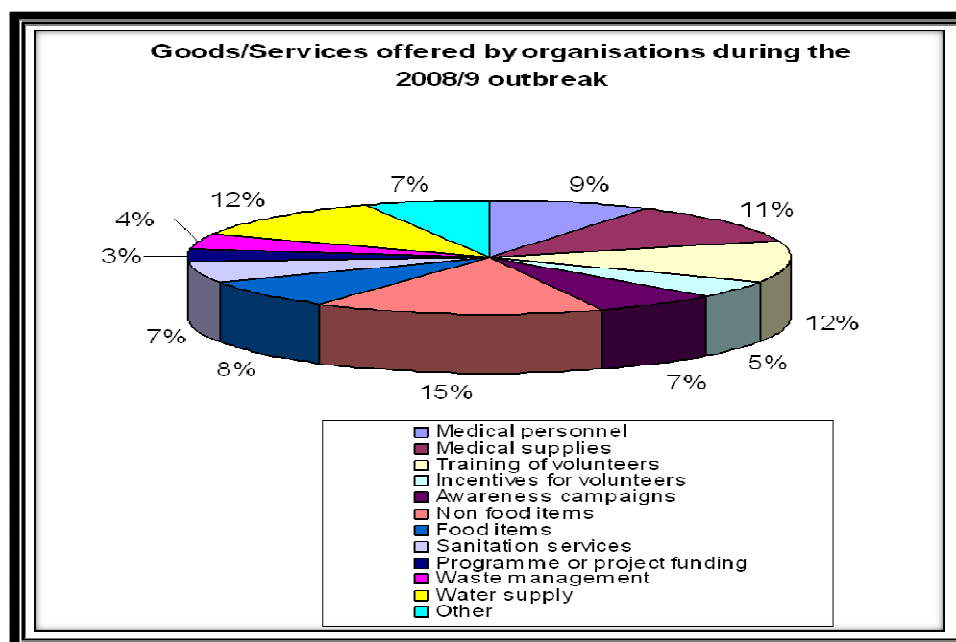
Figure 12: Distribution of goods and services provided during 2008 to 2009 cholera outbreak in Kadoma

The findings suggest that none of the organisations or institutions had any specific means of support. Instead, packages of at least two forms of support were provided. Figure 12 shows the percentages of all responses that a particular good/service was mentioned for any particular organisation. From this single source of support was the provision and distribution of non food items (NFIs).

The standard composition of NFIs was found to be a water bucket, soap, water purification tablets and ORS sachets. Water supplies and training of volunteers were rated second at 12%. Support as regards the provision of medical personnel was rated third at 11%.

The combination of NFIs, medical supplies, medical personnel, training of volunteers and water supply were immediate responses to the crisis. The interventions for which low scores were recorded were project or programme funding (3%), waste management (4%) and incentives for volunteers. In particular, project or programme funding was verified and understood to be an invalid inclusion since it was cross cutting. The point of caution in the interpretation of this is that the goods and services are specialised, for example medical personnel. A low score does not necessarily imply it was not a critical service. However, the inquiry is useful in determining the intervention gaps and areas of existing strength.

The question on the steps and entry protocol to be followed by organizations to operate in and work with communities in Kadoma, was deliberately open ended to capture all possible responses. Whilst this was the intension, very few responses were obtained. All responses confirmed the central role of the councillor at ward level. None of the interviewed communities was clear of the processes beyond the level of the councillor. However, mention was made of the involvement of the District Administrator and the local authority. The majority of the responses of 69.2% indicated they had the knowledge that the process was based on the local authority practice, whilst 15.4% of the responses indicated that the entry protocol was based on local ward practice, another 15.4% said it was based on local ward policy.

4.2.5 Availability of Resources for Disaster Management

The study made separate inquiries regarding resource availability and if funding would be given special attention in addition to the group of resources that were classified under locally available resources. The study, however, considers funding as a cross cutting resource that deserves detailed analysis on its own.

Funding for cholera disasters

The questions set on specific funding for the various phases of the disaster continuum all produced exactly the same results as shown in Table 7 and Table 8. The research sought to establish if communities were knowledgeable about the availability of funding for disaster management and at what levels such funding was available. The options given were at ward, municipal, provincial, INGO or any other level.

The results in Table 7 show that 13.3% of the responses confirmed their knowledge of the existence of funding, and these responses were from direct programme participant,s mainly volunteers, as compared to 86.7% who said they were not aware of any funding.

TABLE 7: AWARENESS OF FUNDING FOR CHOLERA DISASTER RISK REDUCTION

Response	Frequency	Valid Percent
Yes	2.00	13.30
No	13.00	86.70
Total	15.00	100.00

In Table 8, the communities identified availability of funding at ward and municipal levels only. Only 6.7% of the wards stated that they were aware of the existence of funding at either ward whilst another 6.7% stated their knowledge of funding at municipal level. In sharp contrast the majority of 86.7% respondents stated that they had no knowledge of the existence of any funding for disaster management. It was also noted that issues relating to funding were a very distant aspect or a preserve of a few privileged members of the community.

The overall result is that issues of funding do not get a lot of publicity. There were clear open statements to say funding issues were never shared at community level. The results in Tables 7 and 8 provide insight to avenues for resource mobilisation in that the very low levels of knowledge about funding for disaster management shown, offer the opportunity to create awareness for use of locally available resources generated outside the communities

TABLE 8: AVAILABILITY OF FUNDING FOR CHOLERA DISASTERS

Availability of funding and level at which funds are available	Frequency	Percent
Ward Level	1	6.70
Municipality Level	1	6.70
Not aware of funding	13	86.70
Total	15	100.00

Such awareness can create the much needed interest in communities to be able to sustain themselves through disaster situations. In the case study of the Philippines and the CSS building blocks, it was noted that success of DRR interventions rested on the sustainable resource mobilisation which drew on the capacity of the local community to diversify.

4.2.6 Resources Locally Available for Cholera Disaster Management

Communities interviewed stated that the most critical resource available at community level is water supplies, mainly in the form of boreholes. This is represented by the 31% response as shown in Figure 13. The second major resource identified was human resources in the form of volunteers. The communities gave human resources a rating of 17% in terms of importance, and noted that volunteers were the focal point for driving programmes at local community level
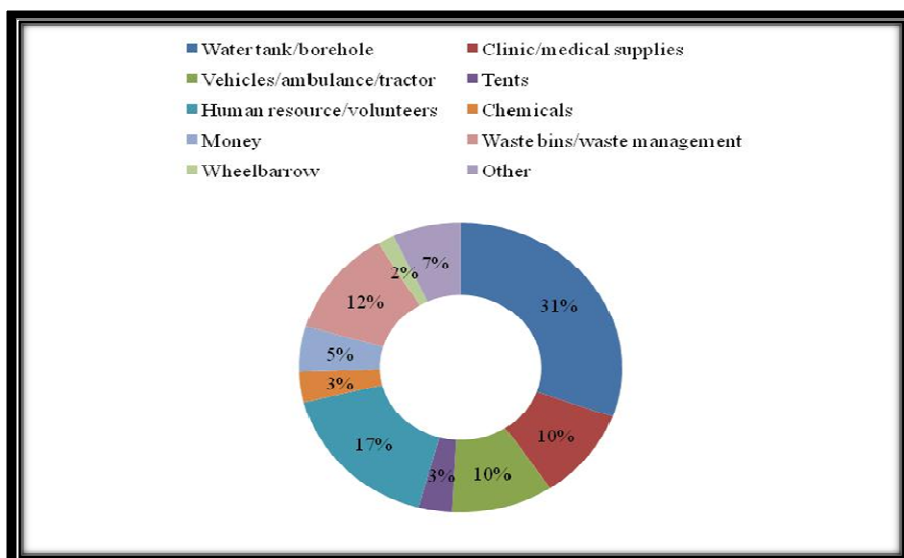
Figure 13: Community perspective of locally available resources for cholera disasters

The category of issues placed under waste bins/waste management includes all waste management resources such as carrier bicycles used for carrying waste from homes to central intermediate handling sites, sweeping equipment and protective clothing for the volunteers.

The following coding applies to Figure 14: a-boreholes/water supply; b-sewer system repairs; c-clinic/ambulances; d-funding; e-protective clothing; f-waste management; g-disinfectants/chemicals; h-tractors/vehicles; i-human resources/volunteers; j-other.

Boreholes and water supplies were identified as the two most critical resource constraints facing the communities at risk of cholera disasters as shown in Figure 14. The availability of ambulances in the face of an emergency and waste management services were rated third and forth respectively. The overall picture therefore is that key resources needed are water, sanitation and emergency services.

In Figure 14 it was established that the areas of greatest need were borehole water supplies and improvement in the sewer system. Access to a health facility or clinic and to ambulance service was rated priority three, followed by improvement in the waste management services. These results are commensurate with the results in Figure 13 in that the priority areas are the same.
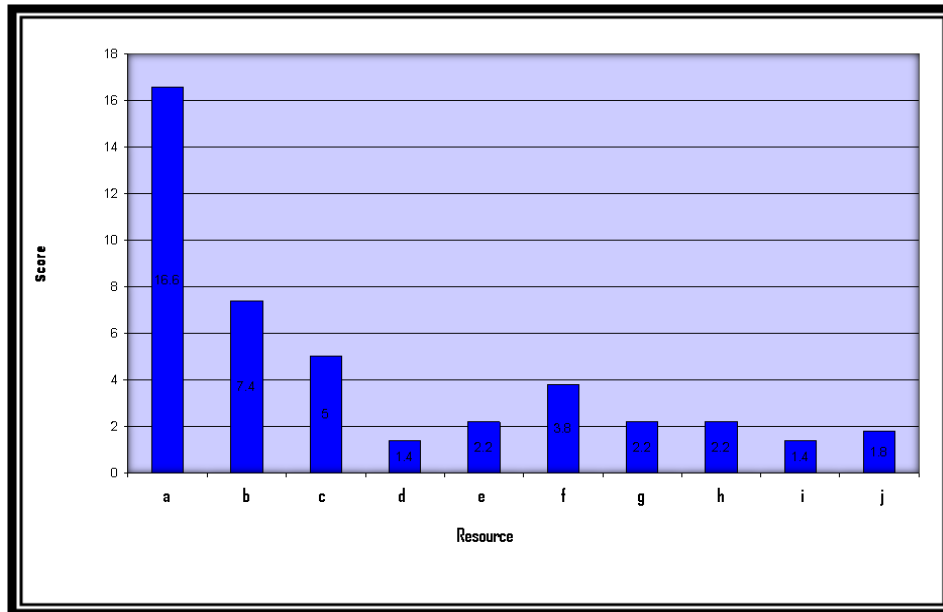
Figure 14: Community perspective on resource constraints for cholera disaster management

4.3 CONCLUSION OF RESULTS

The results of the risk assessment confirm the existence of a potential disaster situation in Kadoma. The poor water and sanitation service provision remains the source of the problem. However, no clear relationship was established between the zoning and the risk assessments done per ward.

The overall picture shown from the results on the behavioural aspects of the risk is that the disaster experiences of communities in Kadoma are associated with lessons learnt, bringing about positive changes in the communities' perception of cholera risk that exists. In the outline of the results it was shown that whilst there is limited improvement in the water and sanitation services provision, there are positive changes in the manner in which communities view and handle the key determinants of the cholera hazard.

The core issues of public participation remain very limited, yet they are an available option for DRR given the potential cholera risk status of the city. The communities indicated that they had limited participation in the planning for cholera, and that funding for the management of cholera was largely unknown to them. The three key informants interviewed, provided useful insight to qualify the inputs from the FGDs.

CHAPTER FIVE

DISCUSSION OF RESEARCH FINDINGS

5.1 INTRODUCTION

In this last chapter of the thesis, detailed discussion, analysis and qualification or limitations of the results from Chapter 4 are presented with the aim of pointing out the CSS options for improving DRR in Kadoma City. The chapter ends with a presentation of recommendations for Kadoma City Council.

5.1.1 Risk Assessment and Community Capacity

At national level cholera is endemic in Zimbabwe (European Commission Humanitarian Aid Office, 2009) and will thrive under conditions of poor water and sanitation facilities and services as is the case in Kadoma. According to the results of discussions with the key informants and the FGDs there has been very little positive change in the services to improve the water and sanitation systems in the city.

The risk assessment presented in Figure 9 points to a potential disaster situation in that the ratings are all in the higher moderate risk category. The conditions favouring the hazard are still very much the same as those that resulted in the 2008 to 2009 cholera disaster. The minimum is 1.9 and the maximum is 2.8. The average rating is 2.4. However, 69% (n=13) of the wards were assessed to be above the 2.5 mark which is an inclination towards the high risk category. In Figure 10 the study looked at the basic zoning of the residential areas in Kadoma against the population and the risk scores. Despite the limitation that only one area was used for the low density areas, the results show that the lowest risk scores are found in the medium density areas.

The positive implication of the risk assessment exercise done is that it is in agreement with the official records and views of the local authority and key informants within the interviewed COs. On its own the risk assessment would be a summary view of the community's perceptions of the cholera hazard. Bankoff *et al.* (2007) observe that in many communities the term 'vulnerability' does not exist and has to be explained to find proxy meanings. This is the same situation for the study area. An additional limitation in the FGD tool used in the risk assessment was that communities really wanted to give the impression that cholera was a real problem. However, the use of local experience EHTs and application of participatory reflection tools assisted in better understanding of the term to carry out the risk assessment. Further counter reflection of the situation using the key informants was a means of regulating and cross checking the results from the FGDs. On this basis the study is of the opinion that the results of the risk assessment done are a fair representation of the situation in Kadoma city.

Real change has occurred in aspects such as public knowledge of detecting cholera, basic hygiene processes and the steps to take when one detects cholera. Figure 8 shows the changes from the communities' point of view. This is not to say all is well and that no further work is required in these areas: instead knowledge management requires continuous processes for passing on to other groups of people to maintain and retain the benefits of an informed community. The interpretation of this is that there is a potentially positive impact which can be derived from interventions that support the organization of communities to take on local initiatives in addressing disaster situations.

The argument continues that despite limited improvement in the water and sanitation infrastructure services, communities have survived through the disaster situations. In using the results from Figure 8, caution must be taken in that no exact figures were used for the responses. Qualitative ratings representing broad categories of non-existent, poor, moderate, good and excellent were used. Additionally the responses came from a relatively long recall period when comparing the 2008 to 2009 to the post August 2010 situations. This could have influenced the quality of the responses. However, the responses are very useful in

understanding the communities' views, and the tool used assisted in identifying the aspects of cholera disaster management where more effort was required to avert another crisis.

It is the opinion of this study that there are two sources for the cholera risk; infrastructure (water and sanitation) is on the one hand, and the community behavioural aspects on the other. In essence Figure 8 presents the changed processes in the community's behavioural aspects, and indicates the capacity which the community has when faced with the cholera hazard. The basic issues of cholera diagnosis; detection of signs and symptoms; procedural and mandatory reporting of suspected or actual cases; and basic hygiene and sanitation practices were found to have improved.

The study hereby emphasizes the fact that individual behaviour was not the object of assessment, but the broader community perspective of cholera management aspects that have changed. This is in line with the assumption which was made in section 1.2.4 wherein it was stated that knowledge, attitudes and risk perceptions of people about cholera (infection, spread, diagnosis, treatment and management) is of acceptable level for the study community. There is therefore consistency between the results and assumptions made.

The changed processes are attributed to the massive awareness campaigns which were carried out during the 2008 to 2009 disaster. Kadoma City Council has also continued to carry out health promotion activities as part of the efforts to ensure communities are continuously reminded of the potential disaster situation that the city faces.

5.1.2 Partnerships among Role Players

The investigation into the partnership landscape in Kadoma is critical. This part of the research established an understanding of the various role players in the response to the 2008 to 2009 disaster, and also checked for any sustained existence of the partnerships beyond the disaster period. Of particular interest was to assess the intervention areas and answer the

question of growth and development of the local sustainable community-based institution for disaster management.

From the results it is only Celebration Health which seemed to be self-sustaining because of its church and membership base. According to Wisner *et al.* (2004) effective public awareness programmes should focus on institutions of instruction (i.e. churches, neighbourhood associations, village development committees), which focus on communicating the message via key informal/formal leaders, rather than trying to educate a large population. This can be extended to the wider public participation thinking. Notably, the study tool pre-test exercise done in ward two captured the undefined existence of a local community waste management initiative under the name 'Shandira' (meaning an encouragement to work for others). This is an example of the neighbourhood associations that can champion the cause for community-based disaster management.

The fact that only Practical Action is currently operating with a DRR agenda raises concern about the partnership focus. UNICEF and WHO were singled out as major funding partners who worked through other agencies like Oxfam and MoHCW as implementing partners. When this is related to the analysis of services and goods provided (Figure 14) the conclusion is that the response was a relief operation that was driven more by the immediate needs of saving lives. The focus of the response was on NFIs with low pronouncement of the need to build local capacities and partnerships for future needs.

Project or programme funding was verified and understood to be an invalid inclusion since it was cross cutting. The point of caution in the interpretation of this is that the goods and services are very specialised, for example medical personnel, such that a low score does not necessarily imply it was not a critical service. However, the inquiry is useful in determining the intervention gaps and areas of existing strength. Volunteers greatly appreciated the support given in the form of incentives. However, there is a definite gap which exists in terms of the same volunteers having expectations from funding partners. Their expectations arise from

their knowledge of the existing cholera risk since they are frontline development and relief workers. The area that needs support is organising the groups of volunteers into a more formalised structure for their recognition. Discussion with volunteers indicated that their incentive packages varied from organisation to organisation and that the incentives were provided at different times. This affected their commitment to supporting the cause.

The subject of volunteerism and incentives has been topical in Zimbabwe especially in the HIV and AIDS sector (interview with Dagobert Mureriwa, former Programme Manager for National Volunteering for Voluntary Services Organisation Zimbabwe in September 2010) and the same applies to the study. Discussions on volunteerism have questioned the motives of the root of the spirit of volunteerism, that is, the drive to work for the incentives or personal benefits as opposed to the passion to work for the community or the cause. The discussion with Tendai Tendere (September, 2010) pointed out to the need for more coordination effort when working with volunteers, and some light was shed on the possibility of engaging them in income generating activities that include their family members. This would be a good way of ensuring there is sustainability which helps in lessening the high expectations of getting incentives from the CBOs or NGOs or the local authority.

In the theoretical background to CSS in Figure 7 and section 2.4.1 the core components that constitute the building blocks for CSS were outlined as creation and sustained existence of community networks and organizations; the deliberate and conscious allocation of resources such as core funding CBOs and enhancing their capacity to operate and deliver services and goods; and planning and implementing community initiated programmes. The study found that there was potential for supporting volunteers fashioned along the work of Shandira. There was neither intervention towards such aspects as core funding support for local CBOs nor were there any signs of harnessing the initiatives to structure them into a community institution.

As a result volunteers had expectations of external interventions as opposed to local initiatives. It was noted from the FGDs that volunteers received training and incentive

packages, but these volunteers were not organised to be operational on their own to drive the cholera disaster agenda. There is potential for development and growth of a local vibrant organization/entity. Shandira in ward two where pre-testing of the FGD questionnaire was done is a loosely defined grouping of volunteers whose work involves waste management and cleaning services for the ablutions blocks in parts of the ward.

The main points of emphasis from the results are that councillors play a central role in the ward/community disaster management structures as the lead persons in decision-making on behalf of the local authority. However, in as much as the literature review noted, such institutional or organisational representation faces the challenges of political clout with the assumption that it represents the wider vies of the community. The public participation policies and structures in Zimbabwe were reviewed and showed that these were tied to the local government structures and political systems (Conyers, 2001; Mutenheri, 2009; Rambanapasi, 1992). The study noted that communities could easily and willingly identify with the non partisan structures such as Celebration Health and the Celebration International Church in the Cholera response.

In contrast, disaster planning in general was viewed with suspicion if spearheaded by a councillor. It is probably because the position of the councillor has political connotations. There is need for community leaders that serve the interests of all communities or an organization that is neutral to serve all such that DRR is not associated with any political party or activities. The conclusion which can be made from this is that there is need for locally based structures that are driven by a local agenda and representation. The use of political structures appears to be viewed with a negative perception, and communities would rather affiliate themselves with religious bodies such as Celebration International Church. It was clear in the literature review that the identification of the correct and acceptable leaders and leadership structures is critical in public participation (CDS in CII, 2008).

The study also sought to find out the deliberate policy or practice of promoting the activities of CSO in disaster management. This part of the study was very sensitive pointing to the fears

around political activity associated with CSOs (interview with Aaron Masembura, August 2010). The partnerships around the response to the 2008 to 2009 and 2010 cholera outbreaks in Kadoma can be classified as reactive. This is also supported by an absence of a disaster management plan or policy at the level of the local authority, although there is work in progress in this direction. With the exception of the work of Practical Action and Celebration Health this has not been followed up by any further programming of a medium to long-term nature. It is necessary, to address the community strength upon which depends any form of success that can be achieved in a situation where the water and sanitation infrastructure has not improved much since 2008 to 2009. The limitation of the research is that no attempt was made to go deeper into any politically-related discussions that had a bearing on CSOs. This was deliberate given the understanding of the sensitive nature of the issue in Zimbabwe. It would constitute a completely different research area.

5.1.3 Disaster Planning and Management

Communities felt that the responsibility of convening coordination meetings for cholera-related activities was the responsibility of the councillors (80% of the responses). The other responses were 13% and 7% responsibility of INGOs and EHTs respectively. In the study there is an evident sense of exclusion of the public in the decisions around the responses to cholera disaster. It is clearly shown in the presentations on how knowledgeable the communities are of the planning processes, perceptions on who owns the plans and the measurement of the level to which the communities or wards can be said to have contributed and participated in the cholera management plans. In Figure 10 it was shown that communities was largely not aware of the planning around cholera disasters. In Figure 11, the argument was carried further to establish that communities did not participate in cholera management.

It is in sharp contrast to the case study of Ag-Agama in the Philippines (Abinales, 2002 and Heijmans & Victoria, 2001 in Victoria, s.a. b) and the theoretical understanding of public participation from the point of view of the ladder of citizen participation (Arnstein, 1969). In the Ag-Agama case study, the community through their elected leaders are reported to have

taken the lead in going out to neighbouring communities with awareness and training programmes in disaster management. In terms of public participation this resembles the higher rungs of the ladder within the citizen power category (Arnstein, 1969). The work of external agencies such as The Philippines National Disaster Coordinating Council, Citizens' Disaster Response Centre and Philippine National Red Cross is all in support of local initiatives of a community that is well informed in terms of its risk status.

A point of caution to be considered in the analysis and interpretation is that the question was problematic because four wards recorded a missing system due to failure to separate between actual participation in development of a community disaster management plan, and knowledge existence of any cholera management plan (Figure 10) in their community. The argument is that a community member may not have participated in the planning process, but is aware of the processes and what is happening in the community regarding the disaster management plan for cholera.

In disaster management the vulnerable members of communities are at the core of any planning and this does not allow for general representation: instead the specific interest and needs of the vulnerable communities or groups within the communities need to be addressed. This includes initial sensitization of communities for the need to plan jointly; actual joint planning; programme design; monitoring; implementation and feedback. In the comparative analysis done in this research this refers to 'process engagement' highlighted in the middle arrows in Figure 4. Overall this represents a planning cycle similar to the disaster management continuum (Victoria, s.a. a).

CBDM is hereby viewed as necessarily requiring the conducive or favourable operational environment as noted in core component one of the building blocks of CSS. Conducive operational environment refers to the political economy context of the country, region and/or local authority level governance structures and systems in as far as they promote public participation in CBDM. The Government of National Unity supposedly meant to bring harmony between the two main political parties in Zimbabwe which still is the hope of many

to restore economic, social and political stability in the country. Government of National Unity in Zimbabwe presents opportunities for open dialogue at grass roots level to focus on disaster management issues as part of mainstream development planning work for communities.

The non existence of any actual plan at ward level was noted in the study. In finding out about the existence of any disaster management plan for cholera the research considered both documented material reflecting the ward specific cholera management issues, and alternatively evidence of forum at which the community members shared views and decided upon a course of action in response to cholera. What came out were disjointed elements of various efforts to carry out cholera awareness and sanitation programmes. For the local authority there is no disaster management plan or policy though this is being developed. However, the local authority's mandate and activities through its Health and Environmental Services are not well publicised to the extent that most of the work in response to the cholera disaster is attributed to the CSOs. This also makes the position of the ward councillors even worse in terms of public perception wherein the role of the local authority is not known and appreciated (interview with Aaron Masembura, August 2010)

5.1.4 Availability of Resources for Disaster Management

It was noted that the communities in Kadoma are not aware of the funding for cholera related activities except for the volunteers who were aware more of the actual activities funded than actual funding details.

The research looked at the various stages of the disaster continuum, that is the emergency and relief phase; the long-term interventions related to continue work in the context of DRR; and disaster preparedness. The communities were assessed to establish their knowledge of what areas or parts within the disaster cycle received funding. The same questions were also used to show which programming areas received attention during the response to the disaster. The results in Table 8 show that funding is not a matter which is public knowledge. This can be

contrasted with the results presented in Figure 13, which show that it is the low level operating resources that the communities have some say in.

The manner in which the communities singled out water supplies in the form of boreholes as a locally available resource needs to be qualified: the communities separated the municipal water supplies from the boreholes on the basis that the latter were established by the INGOs with direct creation of localized water point management committees. Thus the communities view the existing boreholes as their most important resource in the event of another cholera outbreak since municipal water supplies are abrupt and they have limited say over this. Reference to the same resource in Figure 14 is an indication that there is need to provide more boreholes to the communities.

It was noted from the FGDs and from observations during the field study that the existing boreholes were overloaded and reported to be serving more than one ward (as reported in ward two). The standard set by the local authority is to provide at least 15 litres of water per person per day (Kadoma City Council, 2010) and this is based on reticulated water supply system. The comparative and recommended standard used in rural Zimbabwe for borehole water supply is twenty five households per borehole (UNICEF, 2006). The observation made is that none of the wards in Kadoma meets the minimum standard in terms of borehole numbers in relation to household numbers. For example ward six has 1 551 households (see Table 2) and would require at least 78 boreholes. Thus the borehole water sources should be treated as emergency resources though the current position is that they constitute the main source of safe clean portable water supply in the city.

Advocacy work needs to be done in the area of resource mobilization so that more resources go towards the long-term development of disaster prevention and mitigation (interview with Dr. Kuda Katurura, August 2010). Sustainability (as shown in the lower most arrows in Figure 4) features very prominently in the work of the CDS and CII. However, this is mostly related to funding to sustain both the CSO and the specific programmes which are implemented by the CSO.

Literature on public participation and CSS emphasizes the need for sustainable local level organizations and decision-making as being a key factor to public participation (GFATM, 2008; GFATM, 2010; IWGCB, 1998; Partners for Health Reformplus, 2005b; Victoria, s.a. a:7) emphasize the need for core funding towards organizational and leadership development. Addressing this aspect, in part answers the hypothesis which the study made, that is the absence of deliberate efforts to recognize CSS to cholera DRR and having a clear plan for the activities of CSOs.

In the presentation of results on the attendance to FGD meetings it was noted that the expected role players included teachers, religious leaders, leaders, volunteers and EHTs. Knowledge of cholera-related issues such as planning and funding was limited to the volunteers as noted in Table 6. Further reflection was made in Figure 11 showing that ownership of the cholera management plans is largely perceived to be in the hands of the councillors. The literature review pointed to the need for stewardship in CSS. This can be a way of ensuring there is ownership of programmes and that the stewardship structures provide the oversight role. In the case study of the Philippines it was noted that such stewardship is best established at local community level where community members identify and elect their own local leaders. Whilst the position of the councillor is based on election, it is the opinion of this study that the position is associated with party political issues which have the potential of deterring the open participation of disaster affected people due to party affiliation.

The response to the 2008 to 2009 cholera outbreak was largely supported by external resources of INGOs whilst the local contribution mainly by the local authority mostly in the form of coordinating services. At the level of the key informants, the research established that there was no policy for the direct support of local initiatives of CSOs or mere recognition of their work by other parties. This presents opportunities for further studies into what local initiatives can be found within Kadoma and supported for development into structures that can locally respond to the cholera hazard. The research acknowledges the limitation that no details of the local initiatives were established.

5.2 RECOMMENDATIONS: CSS OPTIONS AS A FRAMEWORK FOR DRR IN KADOMA

5.2.1 Need for Disaster Planning and Management in Kadoma

Making disaster management in general and not just specific to cholera a public matter is of paramount importance. It was noted that Kadoma City Council does not have a disaster management policy or plan (interview with Aaron Masembura, August 2010) There is, however, specific reactive response plans that were developed for the cholera outbreaks in 2008 to 2009. The overall picture is that both the local authority and the communities it serves do not have a common plan to address the cholera hazard. Preparation of the once shelved city disaster management policy or plan did not capture the participation and input of the communities (*ibid*).

This study recommends that Kadoma City Council makes the deliberate effort of putting in place a disaster management policy and relevant plans. This would be a basis for resource mobilisation and a basis on which to engage the communities to be more proactive contributing to the fight against cholera.

5.2.2 Representation and Participation of Vulnerable/ Affected Communities

The response to the 2008 to 2009 cholera disaster was managed and coordinated at both national, provincial and district or local authority level through the respective level Cholera Control Command Centres (CCCCs). These were largely formal gatherings of the role players in the response and had representation from MoHCWZ, Department of Social Welfare, local authorities, NGOs and CBOs, United Nations organs such as WHO, UNICEF and OCHA. The meaningful participation of communities at the forum was limited, and was assumed to be adequately represented by the parties to the CCCC. On the basis of a disaster management policy as recommended in 5.2.1 communities should have representation in the decision-making processes as this directly relates to their vulnerability. This non-representation has

connotations of or actually resembles the non-participation and/or tokenism typologies of participation as presented by Arnstein (1969) in the review done under 2.1.3 and shown in Figure 2.

At ward/community level the study noted that disaster planning and representation was limited to a few volunteers and role players like councillors. It is a situation which also limits the extent to which communities view their own capacities to contribute to addressing the cholera hazard. The two recommendations from this discussion are:

- The study recommends that the representation of affected communities in CCCC be directly through the identification of appropriate community representatives besides the formal structures like councillors.

- The study recommends that leadership for local community-based disaster management planning be identified and centred on neutral institutions. Where this is problematic then the local authority should look at improving the leadership qualities of the councillors through training aimed at making their work neutral. It is equally important for any CSO involved in disaster management to ensure their neutrality and focus on the core business of disaster management There is the potential of the CSOs being aligned to political party activities.

The absence of documentation of cholera-related plans and the limited participation of the communities in the management of cholera at community level are key findings of this research. The response to and interventions in the 2008 to 2009 disaster are viewed as external and top down generated interventions reflecting much of the central and local government controlled interventions. The study reviewed the relationships in partnerships for disaster management and noted that contemporary thinking and practice challenge the intermediate bodies to increasing and improving public participation. This responsibility cannot continue to be the normal public institutions like government departments and political structures that are polarized.

It is therefore recommended that institutions with a civic education agenda be offered the opportunity of taking the DRR agenda to communities in Kadoma. This requires detailed institutional and social mapping of Kadoma City to explore the gaps and existing strengths. The outcome of this mapping will require publicity for purposes of identifying potential partners at national, regional and international levels for the purposes of setting up linkages and resource mobilisation strategies.

5.2.3 Sustaining Local Initiatives through Diversified DRR Interventions

The foundation of DRR is prevention foremost with mitigation and curative measures following. In the case study of the village of Ag-agama in the Philippines DRR interventions constituted an intricate part of the long-term development planning for the communities. It included a diverse range of income generating activities to support the communities to overcome the adverse impacts of disasters. Whilst this example is from a rural context, it is clear that urban vulnerability has increased in Zimbabwe over the past decade: "policy decisions around land reform and last year's [2004] initiatives to clean up urban areas have increased vulnerability for many households" (DFID, 2005:2). The Urban Zimbabwe Vulnerability Assessment Committee (2009) reported that the country and the various aid agencies traditionally exerted more effort and support towards the rural areas than the urban areas, which are equally important particularly given that the cholera problems of the country started in, and have their root cause in the breakdown of urban water supply and sanitation services infrastructure.

In Figure 3, the comparative analysis of CII core values and IAPP principles of good practice (Tom, 2008) sustainability of outcomes of the public participation in key decision-making was discussed. Such outcomes relate to the existence of income generating activities for communities with some support from NGOs, the local authority, central government and the private sector. It is recommended that long-term development planning be designed to include DRR and the direct definition of programmes that communities engage in to improve their

livelihoods. DRR taken in the wider context of development planning work ensures that disasters are planned for, and that responses are not reactive.

5.2.4 Organising Communities Promoting Civil Society Activities

The availability of volunteers within the community remains critical for any CBP activity or programme including DRR. The study found the existence of a loosely knit group of volunteers working under the name Shandira. Additionally the role players in the 2008 to 2009 cholera disaster all worked with volunteers at ward levels to do community sensitisation and mobilisation, distribution of NFIs, health promotion activities and the coordination of the various interventions. The study found the volunteers to have an expectation for continued external support of incentive packages.

- ✓ The first recommendation is to harmonise the incentive packages for volunteers to avoid negative competition and identification of volunteers with funding partners mainly NGOs. The variations in the incentive packages can be coordinated through the local authority, based on the partners presenting their detailed programmes of interventions and signing programme agreements with the local authority.

- ✓ The second recommendation related to the above is that the local authority in conjunction with CSOs can make the deliberate effort of organising communities into disaster management structures at ward and sub ward levels. This would effectively mean an extension of the District Civil Protection Committees as mandated by the Civil Protection Act (Zimbabwe, 1996). This is an area for further action research which can be included as part of the disaster planning and policy development by Kadoma City Council. The pursuance of this recommendation should also take on board role players such as the VSO Zimbabwe and Zimbabwe AIDS Network for the purposes of informed decision or guidelines around volunteerism and CSO work. This is a core component of the CSS building blocks as explained in the review of the building blocks for a strengthened community. The case study of the Philippines

showed the existence of strong networking links of village level disaster management structures with national structures such as the Citizens' Disaster Response Centre, Philippine National Red Cross and Philippine Relief and Development Services.

✓ The third recommendation is that all responses to a disaster situation need to be coordinated through formal documented procedures. One of the findings of the study was that there was a multiplicity of agents working in the same area/community and providing the same services resulting in differences in practices and/or standards. Such situations result in inefficient allocation of resources due to duplication of efforts. This can be avoided through a clear policy guide at the local authority level. Funding and response agencies should have a clear expectation from the local authority when they express interest or when the local authority appeals for support. The coordination is expected to improve the identification of critical areas that require intervention based on gaps that may exist in resources for the response.

5.2.5 Capitalising Existing Comparative Advantages in Behaviour, Knowledge, Attitudes

Whilst the study did not assess the individual behaviour, knowledge and attitude of cholera, the community perspectives of these are very positive and encouraging. This related to the positive risk perception that communities in Kadoma have. The study revealed that the city was still at risk of cholera outbreaks as a result of limited improvement in the provision of water and sanitation services. The study further revealed that beyond the 2008 to 2009 disaster only three NGOs have remained operational in Kadoma in addition to the city's own health promotion activities. In the absence of both a disaster management policy and plan and civil society that is organised to respond to cholera, the risk and probable impact of another cholera outbreak remains very high. Individual ward risk assessments were done for thirteen wards. Figure 8 shows the dominant risks score to be in the upper moderate range, which is a cause of concern.

Health promotion activities which the local authority was doing at the time of the study need to be intensified and given to communities to lead. The option to extend this through schools is available as a means to ensure generation transcending of the acquired behaviour, knowledge and attitude to cholera.

5.2.6 Investment in Water Supply in Kadoma

Boreholes were cited as critical resources that the communities had. They constituted the major source of safe clean portable water given that the local authority still faced challenges in providing piped water to the city. Partners like UNICEF, Practical Action and German Agro Action supported the communities with water deliveries, erection and installation of water storage tanks and pumping equipment for some of the boreholes. These efforts are still way below meeting the city's water requirements and water deliveries remain a temporal relief measure until more long-term and sustainable solutions are put in place.

The study recommends that Kadoma City Council prepares and markets its water supply investment plan. This should have clear details on requirements in terms of boreholes required to meet the city's needs should the reticulated water supply system be down.

5.2.7 Core Funding For Community-Based Organisation

Core funding in support of the work of CSO is acknowledged by the GFATM as a weakness and challenge that faces CSOs. This is because of the absence of local sustainable sources to finance the core existence of the organisations, and the fact that funding partners are more interested in funding direct programme-related activities.

The first recommendation in relation to the above finding is that CSOs themselves need to broaden their resource bases to find means of generating incomes to sustain themselves. Zimbabwe has seen a mushrooming of CSOs within the HIV and AIDS sector which cannot sustain themselves and are largely dependent on external funding. It was noted in the results

that the 2008 to 2009 response to the cholera outbreaks was largely funded by INGOs and UN agencies like UNICEF, WHO and OCHA.

The related recommendation is for advocacy work, which must be done by CSO networks to lobby for the direct support to their member organisations. One of the lead CSOs programmes in Zimbabwe is the Non-State Actors Support Programme (NSASP). Kadoma City Council can consider engaging NSASP in a variety of ways, which include identification of potential CSOs to develop and support; engaging the public on civic education in relation to disaster management within Kadoma; and advocacy work on core funding for CSOs and programmes they implement.

The foregoing can be conceptualised diagrammatically as shown in Figure 15. The framework recognises the need for the local authority to make a commitment to DRR within and as part of the development planning system.

This can be achieved through consultative processes with the community members in the city through various representation structures and fora such as disaster affected or at risk religious groups, residents associations, political parties and interest or pressure groups like the youth and women. The consultative process should result in the identification of core areas that require mass civic education in DRR. The objective of civic education includes making DRR a public matter for soliciting public input (ideas and resources) in the design of DRR strategies and interventions. From the point of view of the ladder of public participation discussed in Chapter Two the consultative process allows for 'partnership', 'delegation of power' and 'citizen control' (Arnstein, 1969).The framework does not limit the number and content issues for civic education; instead local conditions should be assessed to establish the needs.
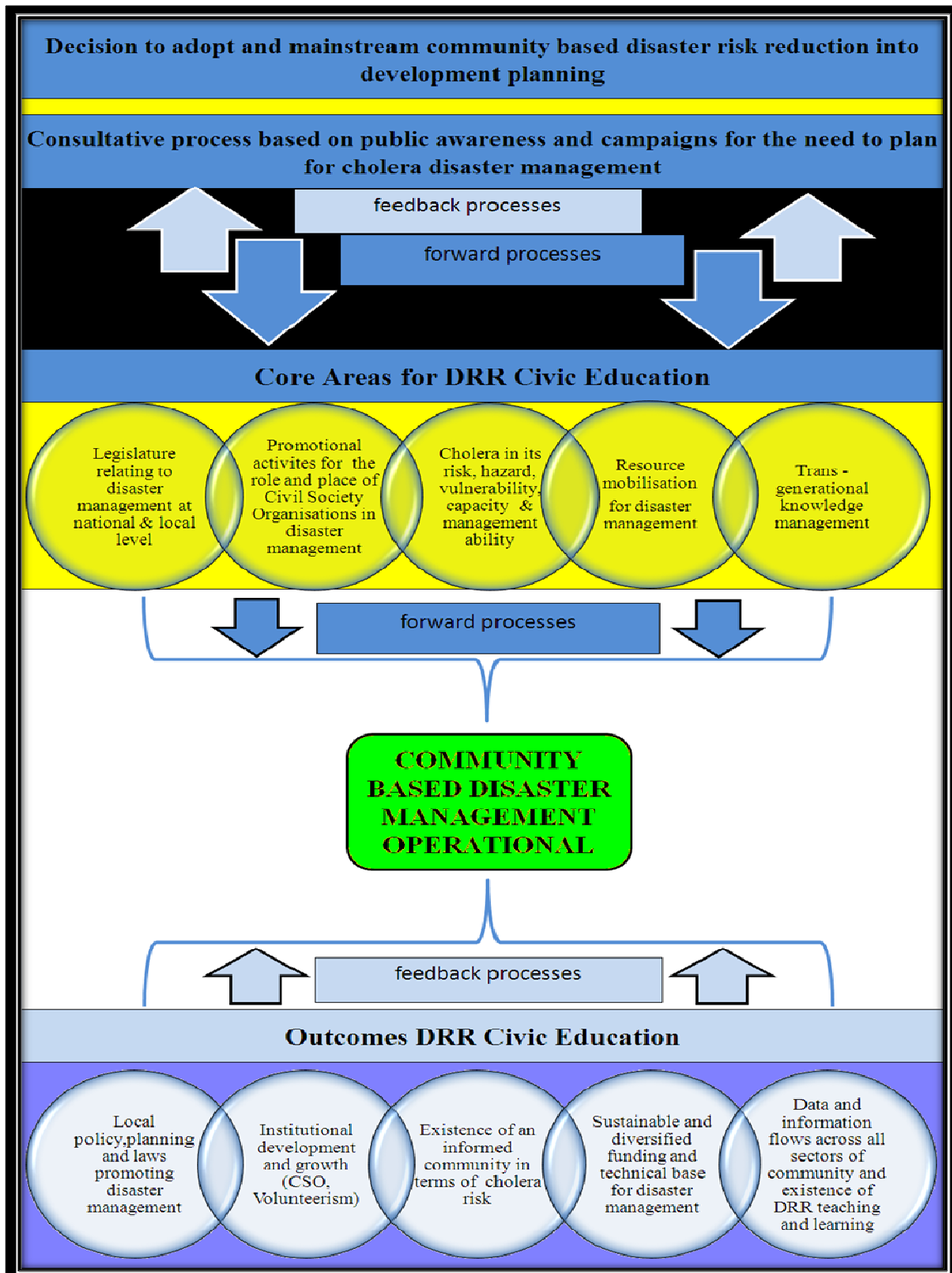
Figure 15: Proposed Framework for CSS for Kadoma

In Figure 15 five core areas are suggested and these can be considered as informing Community-based Disaster Management (CBDM). The expected outcomes of each of the five core areas for civic education are represented by a matching circle at the bottom of the framework.

The framework allows for both forward (input into planning) and backward (feedback for monitoring and evaluation) processes. This allows for necessary adjustments to the assessed needs at any stage in the development and implementation of the CBDM based on public participation.

5.3 STRATEGIES FOR CARRYING FORWARD THE RECOMMENDATIONS

This part of the study is complementary to the recommendations and the CSS Framework presented above in that it provides some guidelines on how the recommendations can be translated into action and implementation. The strategies are not prescriptive, but they do address the major action and land marks to realise the benefits of DRR through the sustained existence and functioning of strengthened community systems:

- The local authority needs to identify and designate personnel responsible for disaster management. The incumbent or team should carry out the detailed documentation that the local authority requires in developing the disaster management policy in relation to the national policy as enshrined in the Civil Protection Act (Zimbabwe, 1996. The incumbent or team should also take on the responsibility of facilitating a move towards the local authority making the decision to commit to DRR as suggested in the CSS Framework.

- Detailed consultations with existing CSOs, civil society and the community members in Kadoma should be carried out within the context of civil education and disaster management. The expected results from the exercise are institutional mapping; public

awareness of disaster management and potential roles that the public could play in DRR; potential partnerships; and resource mobilization potential.

- Production and sharing of the draft policy on disaster management. This should set off from the current work which Kadoma City Council is doing in the development of a disaster management plan. It remains important for the local authority to ensure that plan and policy are based on meaningful engagement and participation of the public for it to get the buy in of stakeholders and the disaster-affected people.

- Development of specific disaster management plans based on individual hazards identified. The study looked at cholera only. The local authority should do a detailed risk assessment and analysis of all hazards in Kadoma. and relate each hazard to the vulnerability, capacity and management.

- Marketing of disaster management policy and plans for resource mobilization.

- Creating a fund for disaster management.

- Establishing localized disaster management structures and supportive livelihood activities is critical for sustainability of DRR efforts.

- Setting up a platform for regular designing of programmes/project; monitoring and evaluation of disaster management interventions.

- Creating and making operational knowledge management including the teaching of DRR within the context of cholera within schools.

5.4 CONCLUSION OF THE STUDY

The research has served to highlight the existence of a potential disaster in Kadoma. This was shown through the risk assessments done at ward/community level and by the three key informants. In the literature review it was noted that CSS offers opportunities for communities to participate in decisions and actions that affect their vulnerability. The findings of the research established that communities in Kadoma are surviving the risk environment through the positive changes that have occurred in terms of their perception of cholera risk through the acquisition of knowledge and skills in core issues affecting cholera.

The communities' capacity regarding these aspects is therefore satisfactory, but requires more effort in the institutional and management aspects. These should result in communities being more organised to respond to cholera disaster risk. The changes in the communities' capacities have taken place without commensurate changes in improving or eradicating the root cause of the risk, that is, the water and sanitation services provision. The study noted some positive changes in the water supply situation, but this is only relative to the 2008 to 2009 cholera disaster. Therefore the research concludes that the capacity of communities in Kadoma to respond to cholera disaster situation has not been fully capitalised upon. The recommendations presented in the study, were translated into a framework which can be used to guide the change processes towards achievement of strengthened communities to drive the DRR agenda.

REFERENCES

1. Abarquez, I. & Murshed, Z. 2004. *Community-Based Disaster Risk Management: Field Practitioners' Handbook.* Asian Disaster Preparedness Center (ADPC). Thailand.

2. Anderson, P. 1984. *In the Tracks of Historical Materialism.* University of Chicago, Chicago.

3. Arnstein, S. 1969. A ladder of participation in USA.

4. Amuyunzu-Nyamongo, M. 2008. *Report on Community Systems Strengthening Training for International Council of AIDS Service Organizations.* Nairobi.

5. Australian Embassy Harare. 2010. *Media Release: Australia commits USD 4million for water and sanitation repairs in Bulawayo.*

6. Bankoff, G., Frerks, G. & Hilhorst, D. (Eds). 2007. *Mapping Vulnerability: Disasters, Development and People.* London: Routledge.

7. Pan - American Health Organisation. 1995. New, Emerging and Re-emerging Infectious Diseases Epidemiological Bulletin. Volume 16, No.3

8. British Broadcasting Corporation. 2009a. *Zimbabwe cholera 'to top 100,000'.* [Online]. Retrieved from: http://news.bbc.co.uk   (2009, May 26).

9. British Broadcasting Monitoring Reports. 2009b. *UN says Zimbabwe cholera epidemic could spread to southern African states.* Gale Group Michigan.

10. Buckle, P. & Harris, C. 2007. Key concepts of DRR, CAFOD workshop. [Online] Retrieved from: http://cafodportal/sites (2010, August13).Catholic Agency for Overseas Development (CAFOD) 2008.

11. Carstens, S.W. 2009.DIM_602__Module_2_06.02.09.ppt [Online] Retrieved from: http://ilearn.ufs.ac.za   (2006, March 20).

12. Conyers. 2001. *Decentralization and Community-based Planning in Zimbabwe*: A Critical Review. (Report on the workshop held at Chapman Golf Club, Harare, 6-7 June 2001) (Unpublished Report) [Online]. Retrieved from: http://www.khanya-aicdd.org   (2010, August 22).

13. Celebrate International. (2010). Celebration Health [Online]. Retrieved from: http://www.celebrate.org (2010, August13).

14. Zimbabwe. Central Statistical Office. 2002. *Preliminary Report of 2002 Census*. Harare: Central Census Office.

15. Department for International Development. 2004. *Disaster risk reduction: a development concern: A scoping study on links between disaster risk reduction, poverty and development.* ODG.

16. Department for International Development. 2005. (Unpublished paper) Terms of Reference for Poverty and Vulnerability Targeting Study: Protracted Relief Programme, Zimbabwe.

17. Dreyer, D., Hattingh, S. & Lock, M. 1999. *Fundamental Aspects of Community Nursing.* 2nd edition. Halfway House, South Africa: International Thompson Publishing.

18. European Commission Humanitarian Aid Office (2009). *Question and Answer - Cholera in Zimbabwe*.

19. Everly, G. S. & Lating, J. M. 1995. *Psychotraumatology: Key papers and core concepts in Post-Traumatic Stress.* New York: Plenum Press.

20. Faludi, A. 1973. *A Reader in Planning Theory*. Pergamon Press.

21. Figley, C.R. 1995. *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. Palo* Alto: Brunner/Mazel.

22. Global Fund to Fight AIDS, Tuberculosis and Malaria. 2008. Global Fund Fact Sheet Series, 2 of 5. *Community Systems Strengthening.* [Online] Retrieved from: http://www.theglobalfund.org (2010, August13).

23. Global Fund to Fight AIDS, Tuberculosis and Malaria. 2009a. *Community Systems Strengthening (CSS) Round 9 Asia Pacific Documentation Workshop* (Report on Meeting held at Zenith Hotel, Bangkok in September 2009).Thailand.

24. Global Fund to Fight AIDS, Tuberculosis and Malaria. 2009b. *Malaria Control: Community Systems Strengthening and Community-owned Response* (Report on consensus meeting on best practice for use in the development of Global Fund Round 9 malaria proposals and National Strategy Applications, held on 23 to 25 March, 2009 Geneva.

25. Global Fund to Fight AIDS, Tuberculosis and Malaria. 2010. Community Systems Strengthening Framework (Unpublished Report).

26. Green, C. 2010a. Draft Community Systems Strengthening Framework (Unpublished Report).GFATM

27. Green, J. 2010b. The World Health Organisation Commission on Social Determinants of Health. Critical Public Health. 20(1).1-4. [Online] Retrieved from: http://www.informaworld.com   (2010, November 18).

28. Heijmans, A. & Victoria, P. L. 2001. *Community-based Disaster Operation - Disaster Reduction: Experiences and Practices in Disaster Management of the Citizens' Disaster Response Network in the Philippines.*

29. Heijmans, A. & Victoria, P. L. 2001. *Citizenry Based and Development Oriented Response: Experience and Practice in Disaster Management of Citizens' Disaster Response Network in the Philippines,* Manila.

30. Henderson, N. R. 2009. Managing Moderator Stress: Take a Deep Breath. You Can Do This! *Marketing Research.* 21 (1). 28-29.

31. International Working Group on Capacity Building. 1998. (Unpublished Report) Southern NGO Capacity Building: Issues and Priorities – A Synthesis of Consultations and Surveys with Southern NGOs, Northern NGOs and Donor Institutions.

32. James, R. K. & Gilliland, B. E. 2001. *Crisis intervention strategies.* Belmont, CA: Brooks/Cole.

33. Kadoma City Council. 2010. Cholera Bulletin No. 2. 10 April 2010. (Unpublished Report), Kadoma.

34. Kalson, D.J. & Baker, R. 1998. [Abstract of, 'Fighting cholera in Ecuador: building a public health system that works']. *Journal of Environmental Health.* Gale Group, Michigan.

35. King, S. F., Feltey, K. M. & Susel, B.O. 1998. *The question of participation: toward authentic public participation in public administration.* American Society for Public Administration. Gale Group, Farmington Hills, Michigan.

36. Lindlof, T. R. & Taylor, B. C. 2002. *Qualitative Communication Research Methods.* 2nd Edition. Thousand Oaks: CA: Sage.

37. Lue-Mbizvo, C. & Mohamed, J. C. 1993. The Institutional and Legal Framework for Natural Resource Management Local Level Natural Resource Management Project (Zimbabwe) Stockholm Environment Institute, Sweden.

38. Mangizvo, R. 2009. The Problem of Burst Sewage Pipes and Sewerage Outflows in East View Suburb in Kadoma City, Zimbabwe. *Journal of Sustainable Development in Africa* .11(1) 394-403) ISSN: 1520-5509.Clarion University of Pennsylvania, Clarion, Pennsylvania

39. Morillo, O. 2001. *Towards A Community-Based Risk Reduction Approach*. (Unpublished Report). Paper presented at the Disaster Management Practitioners Workshop, Da Nang, Vietnam in November 2002.

40. Mutenheri, F. 2009. Rational or Disjointed: Grappling with Philosophical Contradictions in 21st Century: Economic Policy Planning and Development in Zimbabwe. Journal of Sustainable Development in Africa 10(4) .470-486ISSN: 1520-5509. Clarion University of Pennsylvania, Clarion, Pennsylvania: [Electronic]. Retrieved (2010, August 22).

41. Mutizwa-Mangiza, N.D. 1990. Decentralization and district development planning in Zimbabwe. *Public Administration and Development*. 10(4):423-435. John Wiley & Sons, Ltd DOI: 10.1002/pad.4230100406 [Online]. Retrieved from: http://onlinelibrary.wiley.com   (2010, August 22).

42. Neil, C. & Mack N. 1996. Public participation and risk taking: a case study of farm households: *International Journal of Social Economics*. 23(12).

43. Partners for Health Reformplus. 2005a. *Child Survival Health Grantees Program (CSHGP) Partners' Meeting, January 19*, 2005 (informal survey conducted by Partners for Health Reformplus), Bethesda, MD. Bethesda, MD: Partnerships for Health Reform, Abt Associates, Inc.

44. Partners for Health Reformplus. 2005b. The Montreux Challenge: *Making Health Systems Work (draft)*. Bethesda, MD: PHRplus, Abt Associates, Inc.

45. Partnerships for Disaster Reduction - South East Asia. 2003. [Online]. Retrieved from: http://www.adpc.net   (2010, August 24).

46. Practical Action. 2008. Fighting disease and poverty in Zimbabwe: Practical Action's work continues. (Unpublished).

47. ProVention Consortium. 2006. *Working in Partnership to Build Safer Communities and Reduce Disaster Risk: Community Risk Assessment Toolkit.* [Online]. Retrieved from: http://www.proventionconsortium.org   (2010, August 24).

48. Public Health Agency of Canada. 2009. [Online] Retrieved from: www.phac-aspc.gc.ca   [2010, August 24].

49. Rambanapasi, C.O. 1992. [Abstract of 'The Political Economy of Public Participation in Planning in Pluralist Societies: The Case of Zimbabwe,' *Geoforum 23(1)*: 95-104]. Retrieved from: [Electronic]. [Online]. (2010, August 19).

50. Roe, E. 1992. *Report on the amalgamation of district councils and rural councils.* Centre for Applied Social Sciences, University of Zimbabwe

51. South Africa. 2005. *National Disaster Management Framework.* Pretoria: Government Printer.

52. Sphere Project. 2004: *Humanitarian Charter and Minimum Standards in Disaster Preparedness.* Switzerland.

53. Thornycroft, P. 2008. *Zimbabwe's cholera epidemic hits 10,000.* London: Reuters. [Online]. Retrieved from: http://www.telegraph.co.uk (2008, December 02).

54. Tom, A. 2008. Co-Intelligence Institute. *Principles of Public Participation.* http://www.co-intelligence.org   (2010, July 20).

55. Twigg, J. 2004. *Good Practice Review Disaster risk reduction, Mitigation and preparedness in development and Emergency Programming,* Humanitarian Practice Network, London.

111

56. United Kingdom Embassy. 2010. [Online]. Retrieved from: http://zimbabwe.embassyhomepage.com (2010, December 20).

57. United Nations. 2004. Department of Cartographic Services. *Reference Map of Zimbabwe.* [Online]. Retrieved from: http://www.un.org (2010, September 16).

58. United Nations. 2009a. Office for the Coordination of Humanitarian Affairs, Zimbabwe. *Zimbabwe Cholera Situation Report # 18.*

59. United Nations. 2009b. Office for the Coordination of Humanitarian Affairs, Zimbabwe. *Zimbabwe Monthly Humanitarian Update, April.*

60. UNICEF. 2006. *WASH Inventory ATLAS Zimbabwe: Inventory of the national rural water supply and sanitation facilities.* UNICEF Development Cooperation Ireland, Harare, Zimbabwe.

61. United Nations International Strategy for Disaster Reduction. 2009 .*Terminology on Disaster Risk Reduction* [Online]. Retrieved from: http://www.unisdr.org (2009, April 05).

62. United Nations. 2002. International Strategy for Disaster Reduction. *Living with Risk: A global review of disaster reduction initiatives*. Geneva.

63. United State of America. 2007. Department of Homeland Security Federal Emergency Management Agency (FEMA) National Preparedness Directorate Community Preparedness Division. *Citizen Corps: Community Resilience through Civic Responsibility and Self-Reliance Citizen Preparedness Review Issue* 5: Fall 2007. [Online]. Retrieved from: www.citizencorps.gov (2009, April 12).

64. Victoria, P. L. s.a. (a) Community-based Approaches to Disaster Mitigation. Asia Centre for Disaster Preparedness. (Unpublished Report). [Online]. Retrieved from: http://siteresources.worldbank.org (2010, August 26).

65. Victoria, P. L. s.a. (b). Community-based Disaster Management in The Philippines: Making a difference in people's lives. Asia Centre for Disaster Preparedness. (Unpublished Report). [Online]. Retrieved from: http://siteresources.worldbank.org (2010, August 26).

66. Water Works Digest. 1999. Preventing waterborne cholera. *Public Works Journal Corporation.* Gale Group, Michigan.

67. Wisner, B., Blaikie, P., Cannon, T. Y. & Davis, J. 2003. *At Risk.* Natural *hazards, people's vulnerability and disasters.* Second edition. Wiltshire.UK: Cromwell Press.

68. World Health Organisation. 1978. *Declaration of Alma-Ata International Conference on Primary Health Care.* Alma-Ata, USSR, 6-12 September 1978. [Online]. Retrieved from: http://www.who.int   (2009, April 30).

69. World Health Organization. 2003. World Health Report 2003: Shaping the Future Depends on Strengthening Health Systems. *British Medical Journal*. January 2003. (Editorials) (World Health Organization).

70. World Health Organization. 2004. *Global Task Force on Cholera Control*.

71. World Health Organisation. 2008. *The World Health Report: Primary Health Care: Now More than Ever.* [Online]. Retrieved from: http://www.who.int (2010, August 24).

72. World Health Organisation. 2009a. *Global Task Force on Cholera Control, Country Profile, Zimbabwe.*

73. World Health Organisation. 2009b. Epidemiological Bulletin Number 36, Week ending 6 December. (Unpublished Report). [Online]. Retrieved from: http://www.who.int (2010, August 26).

74. World Health Organisation. 2010. *Cholera Fact sheet N°107*. [Online]. Retrieved from: http://www.who.int (2010, August 24).

75. Zimbabwe AIDS Network. 2008. (Unpublished Report) Zimbabwe AIDS Network 2008 Annual Report.

76. Zimbabwe. 1973. *Housing Standards Control Act*, Chapter 29:08: Government Printers. [Online]. Retrieved from: http://www.parlzim.gov.zw   (2009, April 12).

77. Zimbabwe. 1976. *Regional, Town and Country Planning Act, Chapter 29:12*. Government Printers. [Online]. Retrieved from: http://www.kubatana.net (2009, April 12).

78. Zimbabwe. 1996. *Civil Protection Act*, Chapter10:06 of 1996. [Online]. Retrieved from: http://www.Parlzim.Gov.Zw (2009, April. 12).

79. Zimbabwe. Ministry of Health and Child Welfare. 1998. Department of Environmental Health Services. *Cholera Prevention and Control, Information Pack 3*. Harare: Government Printers.

80. Zimbabwe. 2003. *Public Health Act*. Government Printers, Chapter 19 of 1924. [Online] Retrieved fro*m*: http://www.parlzim.gov.zw   (2009, April 12).

81. Zimbabwe. 2007. *Private Voluntary Organisations Act [Chapter 17:05]*. [Online]. Retrieved from: http://www1.umn.edu   (2010, August 13).

82. Zimbabwe. Ministry of Health and Child Welfare. 2009. Factors Contributing to Community Cholera Mortalities in Zimbabwe (Unpublished Report). CDC, Atlanta.

83. Zimbabwe. 2009. *Short Term Emergency Recovery Programme (STERP): Getting Zimbabwe Moving Again.* [Online]. Retrieved from: http://www.zimbabwemetro.com (2010, December 20).

84. Zimbabwe. 2010. Ministry of Health and Child Welfare. *The Zimbabwe Health Sector Investment Case (2010 – 2012). Accelerating progress towards the Millennium Development Goals.* Harare: Sable Press.

85. Zimbabwe Vulnerability Assessment Committee 2009. *National Report on Urban Food Security Assessment*. Harare, Zimbabwe.

APPENDICES

Appendix I: Cover letter authorising the study in Kadoma

City of Kadoma

Telephones: 263-68-22044/5/6
Fax: 263-68-22681

Health And Environmental Services Dept.
P.O. Box 460
Kadoma, Zimbabwe

OUR REF...
YOUR REF...

ALL COMMUNICATIONS SHOULD BE DIRECTED TO THE DIRECTOR OF HEALTH AND ENVIRONMENTAL SERVICES

26th August 2010

TO WHOM IT MAY CONCERN

RE: DISASTER PREPAREDNESS RESEARCH

May you please assist the bearer who is undertaking Disaster Preparedness Research on behalf of council.

TONDAI CHIKUMBA (63-791030 A71)

pp D. CHIRUNDU
DIRECTOR OF HEALTH AND ENVIRONMENTAL SERVICES

CITY OF KADOMA
HEALTH & ENVIRONMENTAL
SERVICES DEPARTMENT
2 7 AUG 2010
P.O. BOX 460
KADOMA

"PROVIDE THE COMMUNITY WITH QUALITY INFRASTRUCTURE, HEALTH AND SOCIAL SERVICES IN PARTNERSHIP WITH STAKEHOLDERS AND HAVE SOUND FINANCIAL MANAGEMENT"

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Appendix II: NGO and CBO Level Questionnaire

Enumerator's First Name:		Surname:		Organisation:		Date:	
Part 1: Introduction							
Title: COMMUNITY SYSTEMS STRENGTHENING: A FRAMEWORK FOR PUBLIC PARTICIPATION OPTIONS FOR CHOLERA DISASTER RISK REDUCTION KADOMA: ZIMBABWE							
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 (United Nations International Strategy for Disaster Reduction ,2009)							
Community Systems Strengthening: refers to inventiveness that add and build up to the development and/or enhancement of community-based organizations in order to improve knowledge of, and access to improved health service delivery (Amuyunzu-Nyamongo, 2008)							
Part 2: General							
Respondent's details							
First Name:		Surname:		Org and Title:			
Part 3: Disaster Planning and Management							
1. Do you have a disaster planning and management department/strategy/mandate?[structure, functions, focus areas like prevention, mitigation, preparedness, relief]							
2. What would be the rating in terms of community participation in the development of the plan(s) and policy?							
nonexistent (1)	**poor (2)**	**moderate (3)**	**good (4)**	**excellent (5)**			
3. What would be the rating in terms of Civil Society participation in the development of the plan(s)?							
nonexistent (1)	**poor (2)**	**moderate (3)**	**good (4)**	**excellent (5)**			
4. Is there a Council policy on Civil Society Organisations activities and operations?							

Part 4: 2008 - 09 Partnerships (note numbering order changes to match other tools for comparison)					
20a. Service/goods	**Tick services and goods offered /Areas of specialisation**				
Medical personnel					
Medical supplies					
Training of Volunteers					
Incentives for volunteers					
Awareness campaigns					
Non-food items (bucket, soap, aqua tabs, ORS)					
Food items					
Sanitation services (disinfection)					
Programme or project Funding					
Waste management (equipment, actual cleaning and disposal)					
IEC (Information Education Communication) Material					
Bereavement services					
Water supply					
Other services (specify here >:					
20b. Is organisation still operational in Kadoma? Provide details of programmes, duration, funding sources.					
21. a. Are there any challenges that the organisation faced in the entry processes to operate in Kadoma?					
21. b. (follow up to 21a) How was these resolved?					
22b. Is there any agreement/MoU/Contract entered into and at what levels(identify all applicable)	**Ward**	**Municipal**	**National**	**other (specify)**	
Additional notes:					

Part 5: Capacity to respond to a cholera outbreak						
Note: This question refers to the PAST situation (BEFORE THE 2008-9 OUTBREAK) against each of the criteria numbers 23 to 34. The boxes represent a 1 to 5 scale, 1= being worst case scenario and 5= being the desired state) where would Kadoma be placed against each of the following aspects?						Comments
	nonexistent (1)	poor (2)	moderate (3)	good (4)	excellent (5)	
23. Safe clean portable water supply						
24. Public knowledge on cholera diagnosis						
25. Procedures for the public to take on diagnosis						
26. Cholera Treatment						
27. The public providing information (reporting cases and deaths)						
28. Availability of Volunteers						
29. Access to a health centre						
30. Access to Oral Re-hydration Solution						
31. Acceptance of treatment by all religious groups						
32. Existence of an early warning system						
33. Communications and media relations management plan						
34. Funding for responding to cholera outbreak						

Note: This question refers to the CURRENT situation against each of the criteria numbers 23a to 34l. The boxes represent a 1 to 5 scale, 1= being worst case scenario and 5= being the desired state) where would Kadoma be placed against each of the following aspects?					Comments
	nonexistent (1)	poor (2)	moderate (3)	good (4)	excellent (5)	
23a. Safe clean portable water supply						
24b. Public knowledge on cholera diagnosis						
25c. Procedures for the public to take on diagnosis						
26d Cholera treatment						
27e. The public providing information (reporting cases and deaths)						
28f. Availability of Volunteers						
29g. Access to a health centre						
30h. Access to Oral Re-hydration Solution						
31i. Acceptance of treatment by all religious groups						
32j. Existence of an early warning system						
33k. Communications and media relations management plan						
34l. Funding for responding to cholera outbreak						

35a. (Overall PAST situation) During the 2008 to 2009 outbreaks, if cholera could be rated on a scale with 1 being the worst situation, what rating would you say Kadoma was by then?								
		nonexistent (1)	poor (2)	moderate (3)	good (4)	excellent (5)				

35b. In your opinion what rating would you assign for the CURRENT situation for Kadoma?								
		nonexistent (1)	poor (2)	moderate (3)	good (4)	excellent (5)				

Part 6: Resource Mobilization											
36. Are you aware of the availability of funding for disasters at any of these levels? (tick all appropriate levels)	Ward	Municipality	Provincial	National	Local CBO	INGO	No funding	other (specify)	other (specify)	other (specify)

37. Is there specific funding for cholera disaster relief (the emergency state i.e. when there is an outbreak) (mark X for the appropriate answer and get details)	Yes	
	No	
38. Is there specific funding for cholera disaster preparedness? (mark X for the appropriate answer and get details)	Yes	
	No	
39. Is there specific funding for coordination of all cholera related? Efforts (mark X for the appropriate answer and get details)	Yes	
	No	
40. Is there specific funding or resources for awareness and education about cholera? (mark X for the appropriate answer and get details)	Yes	
	No	

41. Based on your knowledge of and experience in Kadoma can you identify the top five critical locally available resources to respond to a cholera outbreak or managing the current situation?

	41.1 Resource	42.2 Resource	41.3 Resource	41.4 Resource	41.5 Resource	

42. In terms of resources what would you identify as the main constraints communities face in management of cholera (do not provide examples, instead facilitate views and record responses in detail)	Use numbering to order the priorities (1 being top priority)
42.1	
42.2	
42.3	
42.4	
42.5	
42.6	
42.7	
42.8	

43. Do a priority ranking of the constraints listed above by inserting the priority numbers >>>
44b. Which key reference materials would you recommend to be used as part of this study ?(materials on background of Kadoma, cholera statistics by ward, policy documents related to the study)
44c. Before we do the last part of this interview, I would welcome any further comments you feel might be useful to the analysis, especially where your particular areas of expertise or responsibility are not sufficiently covered by answering the questions above.

Part 7: Cholera Risk Assessment Tool											

45. Cholera hazard

	45a. Frequency			45b. Intensity				45c. Overall Rank			Only one answer is applicable and must be circled in under the appropriate numbered heading and corresponding criteria. E.g. if community feels that intensity of cholera (45b) is moderate then circle number 2 under 45b
	What do you think is the chance that cholera will occur in the next 5 yrs?			*Usually how strong or severe is cholera in a single event?*			*What do you think is the overall importance of cholera?*				
Hazard	**certain**	**may occur**	**not likely**	**very**	**moderate**	**not very**	**high**	**moderate**	**low**		
Cholera	3	2	1	3	2	1	3	2	1		

Vulnerability (Impact of cholera on)

	46a. Is the impact on human populations?			46b. Water supplies and sanitation facilities			46c. Economy: revenue, damages, lost employment		
Hazard	**certain**	**may occur**	**not likely**	**very**	**moderate**	**not very**	**high**	**moderate**	**low**
Cholera	3	2	1	3	2	1	3	2	1

Manageability (at local authority and government level)

	47a. what is the overall awareness of the public?			47b. how good is the standard practice and by-laws that governs this cholera?			47. c how good is the warning or prediction that an event will occur?			47. d how well does the government/municipality respond to an event?			47e. how well does the government /municipality anticipate and prepare for an event?		
Hazard	**good**	**modest**	**Poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**
Cholera	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1

Capacity (of the community)

	48. a what is the overall awareness of the public?			48b. how good is the legislation that governs this hazard?			48c. how good is the warning or prediction that an event will occur?			48d. how well does the government/municipality respond to an event?			48e. how well does the government /municipality anticipate and prepare for an event?		
Hazard	**good**	**modest**	**Poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**
Cholera	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1

This is the end of the questionnaire. Thank you very much for your time and cooperation into this FGD and the whole study.

Appendix III: Focus Group Discussion Guidelines

FOCUS GROUP DISCUSSION: COMMUNITY LEVEL GUIDELINES										
Enumerator's First Name:			**Surname:**			**Organization:**			**Date:**	

Part 1: Introduction

TITLE: COMMUNITY SYSTEMS STRENGTHENING: A FRAMEWORK FOR PUBLIC PARTICIPATION OPTIONS FOR CHOLERA DISASTER RISK REDUCTION KADOMA: ZIMBABWE

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 (United Nations International Strategy for Disaster Reduction ,2009)

Community Systems Strengthening: refers to inventiveness that add and build up to the development and/or enhancement of community-based organizations in order to improve knowledge of, and access to improved health service delivery (Amuyunzu-Nyamongo, 2008)

Part 2: General

1.Ward Number		2. Population		3. Number of Households		

Participants attendance details

5. Total number of people attending FGD		6. Males		7. Females		

	8. Councillor	9. Church representatives	10. Local CBO volunteers	11. International NGO volunteers	12. Volunteers	13. Members of general public	other (specify)	other (specify)	other (specify)	other (specify)	Comment on attendance:
Number →											

Part 3: Disaster Planning and Management

15a. As a ward or community have you gathered to develop a cholera management plan? If no go to question 16.	Yes		No						
15b. Are you aware of any cholera management plans for the ward/community?	yes	vague	not sure	none					
15c. If yes or vague answer is given in 15a then ask: is the cholera management plan documented and shared with the ward/community?	yes	vague	not sure	none					
16. What would be your community's rating in terms of participation in the development of the cholera management plans? (tick only one appropriate rating based on those present at the FGD meeting and who made input to the plan development)	minimum	average	satisfactory	good					
17. In your opinion whom would you say owns the cholera management plan(s) in your ward/community ?(probe adequately and reach to only one answer)	Councillor	Municipality	Church	Local CBO	International NGO	Volunteers	EHT	Community	other (specify)
18. In your opinion whom would you say updates the cholera management plan(s) in your ward/community?	Councillor	Municipality	Church	Local CBO	International NGO	Volunteers	EHT	Community	other (specify)
19. Who is responsible for convening and chairing co-ordination meetings related to cholera in your ward/community (only one response is applicable)?	Councillor		Church rep	Local CBO rep	International NGO rep	Volunteers	EHT	other (specify)	other (specify)

Part 4: 2008 to 2009 Partnerships							

20a. Service/goods	Which institutions/organizations or companies were operating in the community during 2008/9 outbreak (tick service or goods vs. institution/organization/company)						
Medical personnel							
Medical supplies							
Training of Volunteers							
Incentives for volunteers							
Awareness campaigns							
Non-food items (bucket, soap, aqua tabs, ORS)							
Food items							
Sanitation services (disinfection)							
Programme or project Funding							
Waste management (equipment, actual cleaning and disposal)							
IEC (Information Education Communication) Material							
Bereavement services							
Water supply							
Other services (specify here >:							
Other services (specify here >:							
Which of the above institutions is still operating in the area (ward) (tick if still operating or mark 'x' if no longer operating in the ward)							

21. a May you please elaborate the protocol and procedures for agencies to operate in the ward/community? (Summarize the community's understanding of the protocol for entry into the ward)

	Local ward policy	Local ward practice	Municipal policy	Municipal practice	Programme understanding with respective partners (CBOs/NGOs)	other (specify)	other (specify)	other (specify)	other (specify)
22b. What is the set up of this protocol based on? (please note the difference between policy and practice)									

Part 5: Capacity to respond to a cholera outbreak						

Note: This question refers to the PAST situation (BEFORE THE 2008 to 2009 OUTBREAK) against each of the criteria numbers 23 to 34. The boxes represent a 1 to 5 scale, 1= being worst case scenario and 5= being the desired state) where would this community be placed against each of the following aspects?

	nonexistent (1)	poor (2)	moderate (3)	good (4)	excellent (5)	Comments
23. Safe clean portable water supply						
24. Public knowledge on cholera diagnosis						
25. Procedures for the public to take on diagnosis						
26. Cholera Treatment						
27. The public providing information (reporting cases and deaths)						
28. Availability of Volunteers						

	nonexistent (1)	poor (2)	moderate (3)	good (4)	excellent (5)	
29. Access to a health centre						
30. Access to Oral Re-hydration Solution						
31. Acceptance of treatment by all religious groups						
32. Existence of an early warning system						
33. Communications and media relations management plan						
34. Funding for responding to cholera outbreak						

Note: This question refers to the CURRENT situation against each of the criteria numbers 23a to 34l. The boxes represent a 1 to 5 scale, 1= being worst case scenario and 5= being the desired state) where would this community be placed against each of the following aspects?						Comments
	nonexistent (1)	**poor (2)**	**moderate (3)**	**good (4)**	**excellent (5)**	
23a. Safe clean portable water supply						
24b. Public knowledge on cholera diagnosis						
25c. Procedures for the public to take on diagnosis						
26d Cholera treatment						
27e. The public providing information (reporting cases and deaths)						
28f. Availability of Volunteers						
29g. Access to a health centre						
30h. Access to Oral Re-hydration Solution						
31i. Acceptance of treatment by all religious groups						
32j. Existence of an early warning system						
33k. Communications and media relations management plan						
34l. Funding for responding to cholera outbreak						

35a. (Overall PAST situation) During the 2008 to 2009 outbreaks, if cholera could be rated on a scale with 1 being the worst situation, what rating would you say this ward was by then?								
		nonexistent (1)	**poor (2)**	**moderate (3)**	**good (4)**	**excellent (5)**		

35b. In your opinion what rating would you assign for the CURRENT situation for the ward?								
		nonexistent (1)	**poor (2)**	**moderate (3)**	**good (4)**	**excellent (5)**		

Part 6: Resource Mobilization											
36. Are you aware of the availability of funding for disasters at any of these levels? (tick all appropriate levels)	**Ward**	**Municipality**	**Provincial**	**National**	**Local CBO**	**International NGO**	**No funding**	**other (specify)**	**other (specify)**	**other (specify)**	

If 'Yes' for questions 37 to 40 please tick the appropriate level at which the funding or resource is available. If answer is 'No' provide explanation stating desired level for funding. Note only one option 'Yes' OR 'No' is applicable											
37. Are you aware of specific funding for cholera disaster relief (the emergency state i.e. when there is an outbreak) (mark X for the appropriate answer)	**Yes**	**Ward**	**Municipality**	**Provincial**	**National**	**Local CBO**	**International NGO**	**other (specify)**	**other (specify)**	**other (specify)**	**other (specify)**
	No										
Probe to get an understanding for the 'NO' answer and record notes→											
38. Are you aware of specific funding for cholera disaster preparedness? (mark X for the appropriate answer)	**Yes**	**Ward**	**Municipality**	**Provincial**	**National**	**Local CBO**	**International NGO**	**other (specify)**	**other (specify)**	**other (specify)**	**other (specify)**
	No										
Probe to get an understanding for the 'NO' answer and record notes→											
39. Are you aware of specific funding for coordination of all cholera related? Efforts (mark X for the appropriate answer)	**Yes**	**Ward**	**Municipality**	**Provincial**	**National**	**Local CBO**	**International NGO**	**other (specify)**	**other (specify)**	**other (specify)**	**other (specify)**
	No										
Probe to get an understanding for the 'NO' answer and record notes→											
40. Is there specific funding or resources for awareness and education about? Cholera (mark X for the appropriate answer)	**Yes**	**Ward**	**Municipality**	**Provincial**	**National**	**Local CBO**	**International NGO**	**other (specify)**	**other (specify)**	**other (specify)**	**other (specify)**
	No										
Probe to get an understanding for the 'NO' answer and record notes→											

41. Can you identify the top five critical locally available resources to respond to a cholera outbreak or managing the current situation? Against each resource tick if community has access/control/ownership and or likewise mark with 'x' if the community does not have access/control/ownership					
Resource (1-5)→	**41.1 Resource**	**42.2 Resource**	**41.3 Resource**	**41.4 Resource**	**41.5 Resource** / **Comments**
Access					
Control					
Ownership					

42. In terms of resources what aspect is the community most constrained (do not provide examples, instead facilitate for participants to share their views and record responses in detail.	Use numbering to order the priorities (1 being top priority)
42.1	
42.2	
42.3	
42.4	
42.5	
42.6	
42.7	
42.8	

43. Do a priority ranking of the constraints listed above by inserting the priority numbers ahead >>>

44. Before we do the last part of this FGD , I would welcome any further comments you feel might be useful to the analysis, especially where your particular areas of expertise or responsibility are not sufficiently covered by answering the questions above.

	Part 7: Cholera Risk Assessment Tool											

45. Cholera hazard

	45a. Frequency			45b. Intensity			45c. Overall Rank				Only one answer is applicable and must be circled in under the appropriate numbered heading and corresponding criteria. E.g. if community feels that intensity of cholera (45b) is moderate then circle number 2 under 45b
	What do you think is the chance that cholera will occur in the next 5 yrs?			*Usually how strong or severe is cholera in a single event?*			*What do you think is the overall importance of cholera?*				
Hazard	**certain**	**may occur**	**not likely**	**very**	**moderate**	**not very**	**high**	**moderate**	**low**		
Cholera	3	2	1	3	2	1	3	2	1		

Vulnerability (Impact of cholera on)

	46a. Is the impact on human populations?			46b. Water supplies and sanitation facilities			46c. Economy: revenue, damages, lost employment		
Hazard	**certain**	**may occur**	**not likely**	**very**	**moderate**	**not very**	**high**	**moderate**	**low**
Cholera	3	2	1	3	2	1	3	2	1

Manageability (at local authority and government level)

	47a. what is the overall awareness of the public?			47b. how good is the standard practice and by-laws that governs this cholera?			47. c how good is the warning or prediction that an event will occur?			47. d how well does the government/municipality respond to an event?			47e. how well does the government /municipality anticipate and prepare for an event?		
Hazard	**good**	**modest**	**Poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**
Cholera	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1

Capacity (of the community)

	48. a what is the overall awareness of the public?			48b. how good is the legislation that governs this hazard?			48c. how good is the warning or prediction that an event will occur?			48d. how well does the government/municipality respond to an event?			48e. how well does the government /municipality anticipate and prepare for an event?		
Hazard	**good**	**modest**	**Poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**	**good**	**modest**	**poor**
Cholera	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1

Appendix IV: Cross-tabulations of cholera situation: pre vs. post 2008 to 2009 disaster

Safe clean portable water supply(before) * Safe clean portable water supply(current) Crosstabulation

			Safe clean portable water supply(current)				Total
			Non existent	Poor	Moderate	Excellent	
Safe clean portable water supply(before)	Non existent	Count	2	4	3	0	9
		% within Safe clean portable water supply(before)	22.2%	44.4%	33.3%	.0%	100.0%
	Poor	Count	0	2	2	0	4
		% within Safe clean portable water supply(before)	.0%	50.0%	50.0%	.0%	100.0%
	Moderate	Count	0	0	0	1	1
		% within Safe clean portable water supply(before)	.0%	.0%	.0%	100.0%	100.0%
	Excellent	Count	1	0	0	0	1
		% within Safe clean portable water supply(before)	100.0%	.0%	.0%	.0%	100.0%
Total		Count	3	6	5	1	15
		% within Safe clean portable water supply(before)	20.0%	40.0%	33.3%	6.7%	100.0%