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**CHILDRENS' PARTICIPATION IN DROUGHT MITIGATION ACTIVITIES IN
NYATIKE DISTRICT, MIGORI COUNTY, KENYA**

BY

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**A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILLMENT OF
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ABSTRACT

Child participation is both an act and process that allow children to engage in issues that concern their wellbeing and the welfare of society at large. Children have an understanding and perception of their circumstances, and their actions would be determined by prevailing situations. Drought situation is a recurrent phenomenon whose onset and end are often difficult to determine, just as its severity. Its effects and associated pressures disrupt the functioning of a society. Nyatike District is a semi arid area in Kenya that often experiences recurrent drought situations which make children adjust by participating in varied drought mitigation activities threatening their welfare and preventing them from realizing their dreams in life. The problem for the study therefore was that despite all the systems in place for improved child wellbeing, children from Nyatike District were still engaged in various kinds of activities as ways of drought mitigation which not only interfered with their rights and welfare, but also hindered them from realizing their full potential in life. It was on this ground that this study sought to examine child participation in drought mitigation activities. The specific objectives of the study were to examine the activities children were involved in as drought mitigation efforts, establish levels of children participation in drought mitigation activities and find out the challenges and effects of participation in drought mitigation activities among children. The study was guided by Basic Needs Theory by Abraham Maslow (1943) who posited that human beings are motivated inwardly to fulfill the most basic needs in life. The study focused on child participation in drought mitigation activities and households were the unit of analysis. It adopted cross sectional descriptive design where both cluster and simple random sampling methods were used. The district according to the Kenya population census of 2009 had a population of 144,625 people and 30,423 Households. A sample of 395 respondents of both children between the ages of 8 and 17 years and their parents were selected using Glenn Israel's formula from the entire number of households in the district with a margin error of ± 5 . Both quantitative and qualitative data were collected using questionnaires, key informant interviews and focus group discussions. Data was analyzed using inferential and descriptive statistics such as means, averages and percentages. Open ended responses were recorded word for word to determine the frequencies of each response. The number of respondents giving similar responses was converted to percentages to illustrate relative levels of opinion. Data analysis was carried out using Statistical Package for Social Sciences (SPSS) Version 16. The findings were presented in tables and graphs. The study findings showed that children performed various activities as drought mitigation measures at various levels with the family and schools being the most prevalent levels of participation. The study findings also showed that children were exposed to many challenges and were affected severely by participating in drought mitigation activities. The study contributes to the academic body of knowledge and provides policy makers with a basis for designing responsive approaches and interventions required to meet the threshold for the protection of children and thus safeguards the rights and welfare of children.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Children Participate by engaging with other people around issues that concern their individual and collective life conditions. A child partakes in and influence process decisions and activities for the improved wellbeing and realization of life's full potential (GOK 2005). Many children are demonstrably participating in everyday life and child participation takes place in different ways, forms and places, depending on age and circumstances (Hart, 1997). In accepting participation as a right, but also recognizing children's various capabilities and experiences (for example in survival in difficult circumstances), then the opportunities for participation are opened up. Towards this approach, Corsaro (1997) considered participation in two basic forms, of individuals and groups. Individual children can participate in decisions about their personal lives, can be consulted and can participate in groups or associations. Given a broader perspective, Crimmens and West (2003), observes that possible locations for children's participation are varied and enormous and they range from children's participation in the prevention of separation from families, participation in their temporary and permanent accommodation arrangements, participation in reintegration into families, to participation in decision making in their communities and social life. Children therefore have an understanding and perception of their circumstances, and their actions would be determined by prevailing situations and environment.

Children in drought situations are triggered to demonstrate participation through engaging in activities geared towards survival strategies and drought mitigation efforts. Wilhite et al., (2000) refers to drought as creeping phenomenon, that is a normal part of climate for virtually all regions of the world; it results in serious economic, social, and environmental impacts that is

complex to understand and much more difficult to anticipate. In their description, drought is seen as natural hazard that differs from other hazards because it has a slow onset, progresses over months or even years, affects a large spatial region and yet its onset and end are often difficult to determine, just as its severity. It affects practically all climatic regions and more than one-half of the earth is prone to drought each year just as Rekacewicz (2002) notes that drought affects more people than any other disaster in Africa. Fitzgibbon and Hennessy (2003) considered that drought effects and associated pressures disrupt the functioning of a society causing widespread human and material or environmental losses that sometimes exceeds the ability of the affected society to cope using its own resources. Contrasted to other natural hazards like floods, earthquakes, and hurricanes, the damage brought by drought is usually non-structural but spread over larger geographical areas. Its effect accumulates slowly over a considerable period of time and lingers on for years. Since its onset and end, as is its severity, is difficult to determine, people generally are not fully aware that they are in the midst of such an event. Droughts have often resulted in famine, displacement of people, homelessness, ill health, social disorder and in advanced stages death as Odongkara (2002) observes.

Children's unique conditions of physical, cognitive and physiological immaturity mean they can be more at risk from intense drought, recurring floods, the impact of climate variability on livelihoods and other weather related disasters (UNICEF, 2008). They are especially vulnerable also to the longer-term effects of disasters, such as intensified poverty, hunger and disease. On average, children make up more than half of all people requiring immediate help in crisis situations like drought, and the international child rights and development organization Save the Children estimates that around 175 million children a year are affected by disasters. Save the Children (2008). During the 1990s, the UNCRC undoubtedly increased recognition of the

importance of the provision of education and of psychosocial and protective measures for children and adolescents in emergencies. It also emphasized the point that a child is both a “vulnerable human being that requires protection and assistance” and an individual who “is able to form and express opinions, to participate in decision-making processes and influence solutions, to intervene as a partner in the process of social change and in the building of democracy”. As a result, child-rights based agencies are beginning to involve children in the development of processes for disaster recovery. Indeed, children often constitute a large proportion of the affected population in drought and Jabry (2005), notes that ignoring their capacity means undermining that of the community as a whole to cope with the situation.

The United Nations Development Programme (UNDP) in its Human Development Report (2000) pointed that, as the incremental risks created by climate change intensify over time, they will interact with existing structures of disadvantage. Prospects for sustained human development in the years and decades after the 2015 target date for the MDGs (Millennium Development Goals) are directly threatened (UNDP, 2007). It is therefore important to bear in mind that human factors aggravate the effects of droughts. Not only do they aggravate the effects, human factors are also responsible for mitigating the ill effects of droughts therefore societies have their own response systems to live through droughts and similar calamities. Kivaria (2007), described such activities as responses of an individual, group or society to challenging situations. The coping mechanisms lie within the framework of the individuals, groups or society’s risk aversion or tolerance level, i.e. they are instituted to minimize risk or to manage loss. Drought coping activities as described by Davies (1993), is a short-term response in securing livelihood system to periodic stress and represents the actual measures to adjust to the event that occurred. In the words of Arnold, (1967), ‘the persistent fear of hunger, the recurrent threat of starvation, reinforced by the periodic

visitation of famine itself, have profoundly influenced human society throughout the ages and helped fashion elaborate strategies for survival, subsistence and collective security.'

Drought in Kenya is experienced in cyclical manner in various arid and semi arid regions. Nyatike District which is a classified semi arid area (GOK 2010), experiences recurrent drought situations which make children adjust by participating in varied drought mitigation activities. The district is uniquely situated to favour various forms of child participation activities in drought situations as it borders Republic of Tanzania to the South and Lake Victoria to the West; through which one can easily cross over to the Republic of Uganda or even stay in the islands of Migingo, Remba and Ringiti which lie closely to the Kenya Uganda border. Insignificant quantities of gold deposits are found underlying the rocky surfaces and mining for gold is often practiced alongside fishing and cattle rearing. The district therefore is exposed to various child participation activities which are drought influenced for livelihood and subsistence. According to McNabb (2008), the relief response will always be availed but, 'the time the response finally comes, they (the victims) may have liquidated productive assets, withdrawn children from school or engaged in environmentally or socially destructive activities. Although they did not starve, they are poorer and more vulnerable to the next drought. This downward cycle is seen in the increasing numbers of destitute and chronically vulnerable populations among children in drought situations.

According to Longhurst (1986), children have come to evolve over a period of time a rhythm of life which is in accordance to the normal seasons. This rhythm comprises of strategies that are time tested, and therefore just as in the case of seasons, there is certain predictability in the rhythm of life also. However, the rhythm of social and economic life is thrown out of gear, often requiring mid-seasonal adjustments whenever there is a fluctuation in the seasons culminating in

a drought. Children are then compelled to adopt strategies and activities to cope up with the break in the rhythm of seasons and consequently in the rhythm of life hence participation activities in drought situations. This study sought to examine the ways by which children in drought prone areas survive droughts and to identify their survival strategies through participation in daily activities. The dynamics of drought survival activities among children through participation in drought mitigation activities were identified. An understanding which becomes necessary both in the light of criticisms of real life dispensation mechanisms as Gupta, (1991), points out and to sensitize the policy makers of perception of activities among children during drought situations.

1.2 Statement of the Problem.

Many organizations, governmental, non-governmental and even the international agencies have put a lot of emphasis on improving the rights and welfare of children in difficult situations and circumstances. Kenya ratified both the United Nations Conventions on the rights of the child, the Africa charter on the rights and welfare of children and even enacted the children's Act of 2001 to improve welfare of children. From the social pillar of Kenya's vision 2030, a ministerial vision was crafted of ensuring a just and cohesive society where children become responsible citizens through fulfillment of their prescribed rights and welfare. Despite all these arrangements for improved child wellbeing, children from Nyatike District still engage in various kinds of activities as ways of drought mitigation which not only interfere with their rights and welfare, but also hinder them from realizing their full potential in life. It is on this ground that this study sought to examine children's participation in drought mitigation activities in Nyatike District of Migori County.

1.3 Research Questions

The study sought to answer the following questions:

- i. How were children involved in drought mitigation efforts?
- ii. What were the levels of children participation in drought mitigation activities?
- iii. What were challenges and effects of participation in drought mitigation activities among children?

1.4 Objectives of the Study

The main objective of this study was to examine children participation in drought mitigation activities in Nyatike district. The Specific objectives of the study were;

- i. To examine the activities children were involved in as drought mitigation efforts.
- ii. To establish levels of children participation in drought mitigation activities.
- iii. To find out the challenges and effects of participation in drought mitigation activities among children.

1.5 Study Justification.

There are various interventions in place by both international and national institutions to help improve the welfare of children in difficult situations like drought. Such interventions include the Millennium Development Goals (MDGs), United Nations Legislations' and the National societies Actions Plans among others. The Kenya's Vision 2030 aims at creating a just and cohesive society with equitable social development in a clean and secure environment where all citizens (including children) enjoy quality life. To achieve quality life for children in drought prone areas, there is need to understand children's drought mitigation activities as this will inform policy formulation. It is against this background that this study sought to examine child participation in drought mitigation activities. The study contributes to the academic body of

knowledge and also provided policy makers with a basis for designing responsive approaches and interventions required to improve child protection in disasters such as drought. Its findings identified various gaps and areas that need improvement in order to meet the threshold for the protection of children and thus provide an opportunity to make informed decisions on the most effective approaches to use in order to maximize the impact of interventions for child protection.

1.6 Scope and Limitations of the Study.

The study was conducted among children aged between 8 years and seventeen years and the Government policies as laid down in the Children Act 2001, The Constitution of Kenya, the African charter on the rights and welfare of children and the United Nations convention on the rights of the child were considered when giving recommendations. The limitation of this study was that some categories of children were not interviewed because of their evolving capacities. The study was to a large extent limited to information given by the respondents as it was not possible to get adequate information from the available literature.

1.7 Theoretical Framework.

This study was guided by Basic Needs Theory by Abraham Maslow (1943). Maslow posited that people are motivated inwardly to fulfill basic needs before moving on to other more advanced needs and this can be seen in the activities adopted by children during emergencies to help cope with its effects. He identified minimum requirements that are essential to a decent standard of living and categorized them into physiological, security, social, esteem and self-actualizing needs. Physiological needs include the most basic needs that are vital to survival such as food, shelter, health and clothing and must be catered for before other needs are met. Undoubtedly these physiological needs are the most pre-potent of all needs. This means specifically that a human being who is missing everything in life in an extreme fashion, his major motivation would be the physiological needs rather than any other needs.

The need for security and safety become primary in the next level since people want control and order in their lives so this need contributes largely to behaviors hence the prompted activities in drought mitigations. Social needs emphasize the diversity and strength of associations, belonging and relationships and here the need for emotional relationships drives human activities and behavior during hard situations. Esteem needs reflect accomplishment, a sense of making a contribution, personal worth, confidence and participation in activities. This plays a prominent role in motivating behaviors. And finally, the self actualization needs is the highest level in Maslow's hierarchy of needs where full exploitation of talents, capabilities, potentials and people are self aware, concerned with personal growth and are interested in fulfilling their potentials. This may be considered as the peak of actions and activities in drought mitigation to promote children's wellbeing and survival.

As Maslow observes in this theory, it is evident that children constrained with hard environmental situations like drought are motivated to participate in several adaptive activities that are aimed at ensuring their wellbeing, and the hierarchy of basic needs as stipulated by Maslow is determined by circumstances. These activities help children adjust to the needs of their surrounding and help them overcome the situations that they are exposed to hence the application of the basic needs theory in this study.

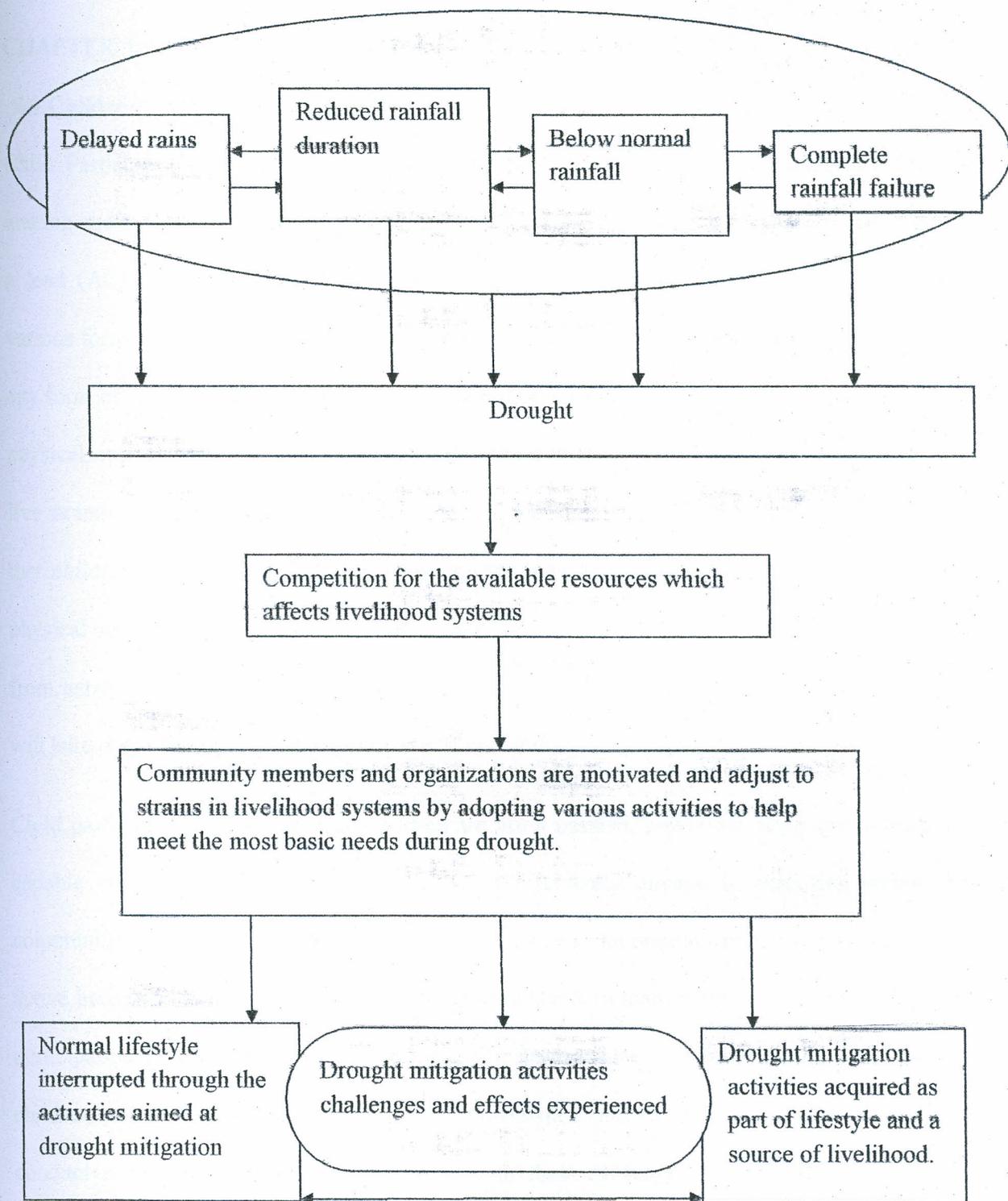


Figure 1.0: Diagrammatic representation of theoretical framework

CHAPTER TWO: LITERATURE REVIEW

2.1 Children's actions in mitigation

Child Participation is seen as having the opportunity to express a view, influence decision making and achieve a change. It is also child involvement, inclusion, being part of or even taking a lead (ACRWC, 1989) Drought influence actions and general participation of children in various forms for child's optimum survival and development. Children should be protected from any form of violence, abuse or neglect and should grow up in an environment that ensures their physical, mental, spiritual, moral, psychological and social development and prepares them to live as individuals in a free society. (CA 2001). According to John Parr (2008), 'the relationship that children have with their surrounding environment has a profound effect on their mental, physical and spiritual health. Young people need to have the opportunity to experience and learn from nature in their growing years, in order to become citizens and future decision makers who will take responsibility for the stewardship of the earth.'

Child participation recognizes that children are not a passive, powerless target group but rather capable communicators, who can, and should effectively engage in activities within their communities. Genuine and effective child participation is an ongoing process of expression and active involvement in decision-making at different levels in matters that concern children. Child participation is a process (and product) of child development that provides an opportunity for children to access relevant and appropriate information and to express their views freely in a conducive environment and in accordance with their evolving capacity (SITAN 2009). This practice make children to forge survival strategies in coping with uncertainties like drought in communities. Garmezy and Rutter (1983) observes that theories of coping activities focus on the individual, seeking to generate universal and generalisable conceptualizations of coping

processes actions. Ungar (2008), in his study of coping theories believe that coping will always be a context-specific activity – shaped by the particular problem that a child faces, and enabled or limited by the social, political and economic situation in which he or she is located.

Reflecting Qvortrup's (1994) conceptualization of children as active co-constructors of their social worlds, this study sought to contribute to social psychology of coping by mapping out how children cope through the way in which they engage with what Rutter (1979) refers to as 'protective factors' (e.g. social support, household cohesion, personal attributes) within their communities. Echoing Panter-Brick (2002), coping is a reflection of children's agency and engagement with their social environment and not only the availability of protective factors.

During droughts and other natural disasters, children require special protection. Adolescent girls and women, and pregnant women in particular, bear an additional burden of vulnerability based on gender. The vulnerability of socioeconomically marginalized and minority groups increases. At such times the family remains the chief source of protection for children and separation of children from their families increases their vulnerability. There is no better way to prepare children for such events than to educate them on how to cope with the disaster when it does eventually come – which is more often sooner than later. The importance of preparing children for disaster is emphasized by the fact that children are often overlooked in disasters. They tend to go "unperceived", demographic data often is not disaggregated by age or gender. Some cultures do not priorities children for care and protection. Questions of scale also arise to the detriment of the child as sizes are usually calculated for adults (food and water rations, medications, latrines, clothes and so on). Educating children on how to take care of themselves during drought gives them self confidence, the ability to speak about their concerns, and the desire and enthusiasm to

try and make a difference in their communities. It is widely considered a worthy investment, Smita Patel (2005).

However, on the basis of cross-cultural resilience, Ungar (2008) argues that in the context of exposure to significant adversity, whether psychological, environmental, or both, resilience is both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community and culture to provide these health resources and experiences in culturally meaningful ways. It is this conceptualization of resilience that frames the coping activities. In line with Ungar's (2008) emphasis on the cultural and contextual specificity of resilience, social psychology of coping is necessary to shift attention from the individual to the individual-community interface, as well as highlighting the active participation of children and their communities in the coping process.

According to Wildavsky (1991), resilience as a strategy in drought mitigation is the capacity to cope with unanticipated dangers of drought after they have become manifest. It is learning to bounce back, withstand shocks and rebuild. Resilience' as applied to ecosystems, or to integrated systems of people and the natural environment, has three defining characteristics: The amount of change the system can undergo and still retain the same controls on function and structure, the degree to which the system is capable of self-organization and ability to build and increase the capacity for learning and adaptation. Keil et al., (2008) derive a measure of drought resilience based upon reduction in consumption of basic household necessities. Stehlik et al., (2000) argued that drought is a gendered experience. Women, for example, may be focusing on decisions about the affordability of children's education; how to eke out a precarious budget; accessing food and services for the family; whether or to what level they will work off-farm; whether to leave the

area to find work; assessing the role changes expected of them on and off-farm; coping with a low level of decision-making; keeping up community involvement; the impacts on their own and partner's health; and the impact on gardens and other areas of their spirituality Stehlik et al.,(1999: 80-92). Bogenschneider (2002), consider families as the basic building blocks that underpin our fundamental social structure and the most durable basis for imparting social values, customs, traditions, beliefs and languages between generations. They are a mediating link between society and individuals and form an alternative safety net by playing prominent roles as health care providers, educators, social workers, and personnel managers. The family functions to promote health and wellbeing, boost education outcomes, care for the young, the sick and the elderly, and disseminate ethics and values hence impact of drought interferes with building a cohesive and inclusive society and the consequence of the drought experience is the destruction of the family unit.

Sacha Kagan et al., (2009) observed that new approaches are currently being implemented by humanitarian agencies working with communities to find out existing ways of preparing for and managing drought situations, it calls for use of local knowledge and practices, e.g. for drought contingency planning, as the droughts are becoming more and more frequent and last longer than in the past. A change of attitude is also required in the protection of the environment particularly with respect to the cutting of trees, planning grazing and the management of the use of rivers and other water sources. Consistent attention to the protection of the environment will yield dividends in form of sustainable livelihoods in these delicate ecological settings. The Convention is often discussed in terms of its four main principles: nondiscrimination, best interests of the child, survival and development and child participation (UNCRC 1990). These principles are mutually reinforcing, interrelated and indivisible and should be reflected in the interpretation of all other articles. The Preamble emphasizes that all rights have equal significance. Conditions of

child poverty mean that children are even less well equipped to cope with and adapt to the changes brought about by climate change. In this sense, securing child rights is an essential element of adaptation. Despite the many risks and stressors associated with disease, drought and poverty, counterintuitive accounts by children, call for a greater understanding of the strategies and activities constructed by children to cope with adversity. Some attention has already been given to the potential benefits of children which include learning new skills, developing close and loving relationships with the person that is cared for and growing up as a mature and responsible person, Donald & Clacherty, (2005); Robson et al., (2006). Many children endure stressful life events as their parents fall ill to tropical and infectious diseases, assuming significant caring and head of household responsibilities, often in contexts of extreme poverty, Bauman et al., (2006); Robson et al., (2000) and Ressler et al., (1993) recognized that children as young as six or seven years old fetch water or fuel, and even tend animals and by the age of twelve to fifteen, they may be contributing at nearly adult capacity in many societies. Consequently, the well-being of women and their dependent children is closely linked.

2.2 Hierarchies in mitigation actions.

According to Tortorici and Marcelino (1993), the pre-disaster social role definitions of women and their dependent children should be understood, so that together they can be given meaningful involvement in disaster mitigation, relief and recovery. The claim that children have an extensive and intimate knowledge of their environment that should not be overlooked, however, interventions are generally best made through the primary caregiver and should reflect the best interests of the child. Torry (1979), further states that normal societal conditions cannot be assumed to be in the best interests of women and their dependent children. Charbonneau (1988) also consider girl children, particularly in agrarian societies to have a mortality rate nearly twice that of boys in the first two years and experience rigid role casting in many societies. They are

socialized for domestic duties, including childcare, are the first to be kept out of school for household labour, and generally marry earlier than boys. These practices perpetuate their subordination and the poverty cycle. He observes that drought relief and recovery should show cultural sensitivity to the labour of dependent children, but should not perpetuate exploitative and abusive child labour. A study produced by Ressler, et al., (1993) for UNICEF reports that children's responses to disasters can only be well understood through a consideration of their family and social environment. IFRC World disaster report (2007), points that Children and young people are the potential disaster management experts of the future, and can also teach disaster management within the family. It is therefore crucial to develop ways of involving families and communities in disaster education at school. Disaster education can contribute significantly to the ability of minorities to help themselves in time of disaster. Cando Lee (2008), emphasizes that today's investment in 'environment-friendly' education and outreach with special attention to the needs of girls will lead to future generations of environmentally responsible citizens. So far, however, children's involvement in the domestic and international climate regime development process is sparse and sporadic. Hyogo Framework for Action (2005-2015), calls for every one's action to consider disaster risk reduction as part of everyday decision-making: from how people educate their children to how they plan their cities. Each decision can make us either more vulnerable or more resilient.

2.3 Challenges and effects of mitigation activities among children

The effects of drought mitigation activities are likely to be widespread and affect people differently but children are disproportionately vulnerable to the effects and challenges of such activities. Constituting nearly a third of the world's population, children have particular characteristics of vulnerability. These characteristics are multidimensional, shaped by the changes that take place over the course of childhood as well as by their heightened sensitivity to

negative or high-impact events during the early stages of development and by their general lack of agency and voice. This results in specific experiences of climate change impacts and unique properties in relation to children's capacity to adapt. Goodman and Iltus, (2009). In many senses, drought mitigation activities and development have a dual relationship and such activities among children may be a threat to sustainable development and the achievement of many key development targets, such as the Millennium Development Goals (MDGs). Alexander et al., (2011). In this sense, interventions seeking to promote sustainable development can play an important part in helping people to adapt to the impacts of drought. This is because the drivers of vulnerability and people's capacity to adapt are determined by socio-economic characteristics. Returning to the MDGs, for example, efforts in "reducing poverty, providing general education and health services, improving living conditions in urban settlements, and providing access to financial markets and technologies, will all improve the livelihoods of vulnerable individuals, households and communities, and therefore increase their ability to adapt", Ayers and Huq (2009). In the case of children, the direct consequences posed by the inadequacy of basic services for those who have migrated, migration already means that many children in rural areas do not live with their biological parents, who have relocated to work in urban areas. Weaker care systems, when children are left with friends or families, can negatively affect children's emotional well-being and, in some cases, lead to child protection violations by host families UNICEF, (2011).

According to McMichael et al., (2004), the health-related effects of drought activities are predicted as being heavily concentrated in poorer populations. It follows that the total burden of disease as a result of mitigation activities appears to be borne primarily by children in developing countries. Malnutrition is a leading cause of infant and child mortality and has significant effects

on child development. The likelihood of a child becoming chronically malnourished increases with repeated exposure to drought disasters and related activities from slow onset droughts to rapid onsets UNICEF, (2008). In addition, conditions at household level, brought about by drought situations such as loss in livelihoods, could hinder families' ability to provide children with a nutritious diet. There are also links between drought mitigation activities and education, particularly during and immediately after extreme drought situations when children's possibilities of schools attendance may be limited. Children may be removed from school to support the household. This can sometimes be highly gendered as, in some contexts, boys are prioritized over girls. Girls are pulled out of school more promptly, either to provide additional reproductive work or for cost-ritual concerns such as early marriage. The added burden of disease in areas suffering food and water insecurity can also reduce the time available for education when the household division of labour is restructured to cope with illness. In any case, ill or malnourished children lack the energy to be active learners (Bartlett 2008).

Drought mitigation activities can expose children to higher risks of abuse, neglect and exploitation because of separation from parents and caregivers, heightened household stress levels or displacement. As conditions become more challenging so do the burdens facing caregivers, who are more likely to leave children unsupervised and neglected (Bartlett 2008) or to become more aggressive towards them as a result of stress. Various mitigation activities may therefore have severe social and psychological effects on child well-being. Additionally, loss of or separation from family members and displacement or relocation (migration) can have a profound effect on children's emotional well-being. When social safety nets fail during or after natural drought situations and resource conflicts, children are particularly vulnerable to trafficking, gender-based violence and physical harm (UNICEF 2008).

Disadvantaged adolescents who have had fewer opportunities to develop their capabilities can face more difficulty generating an income. This is more particularly the case in rural areas negatively affected by drought situations or in urban areas to which they might have migrated. In addition to increasing the risk of poverty, this situation can lead to emotional stress. Households may also spend less money on food, turning to more readily available or cheaper products (Osbaahr et al., 2010; Quinn et al., 2011). Other changes can be noticed in efforts to reduce consumption of scarce natural resources such as water or fuel. In this regard, Osbaahr et al., (2010) found that individuals within rural households reprioritized elements of the production, consumption and ecological systems they employed. These lifestyle changes can have important implications for children.

Evidence indicates that, when faced with income shocks, poorer households are more likely to cut down on food expenditure. This includes shifting to less nutritious food or consuming less food, both of which have the most detrimental effects on children's development. They may transfer children to cheaper schools (which are often of a lower standard) or they might be unable to send children to school at all, owing to insufficient money to pay for school-related costs such as transport (UNICEF 2011). Households may migrate temporarily in response to drought to take part in labour exchange, work and support or to obtain water for livestock (Osbaahr et al., 2010). During drought situations, children, particularly older boys, also migrate in search for alternative livelihood opportunities. Depending on the conditions of migration, adolescents can face challenging circumstances, including inadequate housing with poor water and sanitation facilities, which expose them to disease or unstable and exploitative employment, which harms their physical and emotional well-being. Migration is often linked to school dropout.

CHAPTER THREE: METHODOLOGY

3.1 Research Design

The descriptive design was used in this study which helped describe features of the population and supported inferences of cause and effect of variables studied. A sample of 395 respondents of both children between the ages of 8 and 17 years and their parents were selected using Glenn Israel's formula from the entire number of households in the district. The unit of analysis for this study was households from the sixteen locations in the district and both quantitative and qualitative data was collected using questionnaires, key informant interviews and focus group discussions with a cross sectional approach. Library and internet were sources of Secondary information and were vital to back up primary data.

3.2 Study Area.

3.2.1 Location of study area

The study was carried out in Nyatike District, Migori County-Kenya. The District is one of the 39 Districts of Nyanza Province. It is located between latitude 0° degrees 40' and 0° south and longitude 34° and 34° degrees 50' east. It borders Dhiwa District to the North, Migori District to the East, Republic of Tanzania to the South, Uriri District to the North-East and, Lake Victoria and Suba District to the West. It covers an area of 502 km square. Administratively the District is served by five (5) divisions and sixteen (16) locations. The Divisions are Macalder, Karungu, Muhuru, Kaler and Got Kachola. The district is served by one political constituency, that is, Nyatike which transverses the whole District. The constituency is composed of seven electoral wards and three nominee wards under Nyatike County Council.

3.2.2 Socioeconomic activities

The settlement structure for the district is predominantly rural. However, this is changing fast owing to the economic development as a result of improvement of the road networks in the region. It has encouraged settlements of more people from the surrounding districts resulting in a heterogeneous society. The district has an average population density of 682 persons per km². The population engages in livestock rearing, fishing along Lake Victoria and the surrounding rivers, small scale farming both for cash crop and food crops and working in gold mines. The 475km² of Lake Victoria serves not only as a source of fresh water fish but also as a potential tourist attraction. Rock formation in the district constitutes granite surfaces particularly in the marginal areas of Muhuru, Nyatike and Karungu. Insignificant quantities of gold deposits are found underlying the rocky surfaces around Kalangi, Aego and Osiri in Nyatike Division. These support small-scale mining activities which at present are still not well organized. The population is also involved in other business enterprises like running of retail and wholesale for consumer products in the market centre. The poverty level which has been rated in reference to incidences of inability to feed oneself and family, inability to provide education for the children, lack of shelter and in adequate land for farming stands at 47.2% (GOK, 2009)

3.2.3 Topography, Drainage and Climate

In terms of topography, the Altitude ranges from 1,135 meters at the shores of Lake Victoria in Muhuru, Got Kachola, Kaler and Karungu Divisions to 1700 meters in Nyatike with several undulating hills and plains stretching from 20 to 70 km along the lakeshore. The hill dotting the District's landscape is God Kwer (1,420m). The main rivers are the Kuja and Ongoche. There is potential for generating electric power for industrialization and domestic purposes in the major urban areas in the District. The rivers and rivulets in the district are characterized by waterfalls and cataracts, hence not conducive for river transport. They can, however, support irrigation

schemes though at their lower reaches they often cause fatal floods. Possibilities exist for exploiting irrigation for horticultural production especially in the lakeshore divisions of Muhuru, Nyatike and Karungu. Rainfall patterns in the district vary, ranging from 700 mm to 1800 mm annually, with the long rains occurring between March and May, while the short rains fall during the October-December period. Climate is of a mild inland equatorial type, modified by relief, altitude and proximity to the lake. It favors the cultivation of cotton, maize and a variety of other food crops. Nyatike District has comparatively harsher climatic conditions than other Districts in Migori County. It experiences unreliable and poorly distributed rainfall. Temperatures show mean minimum of 17⁰ C and maximum of 20⁰ C, with high humidity and a potential evaporation of 1800 to 2000 mm per year (GOK, 2009).

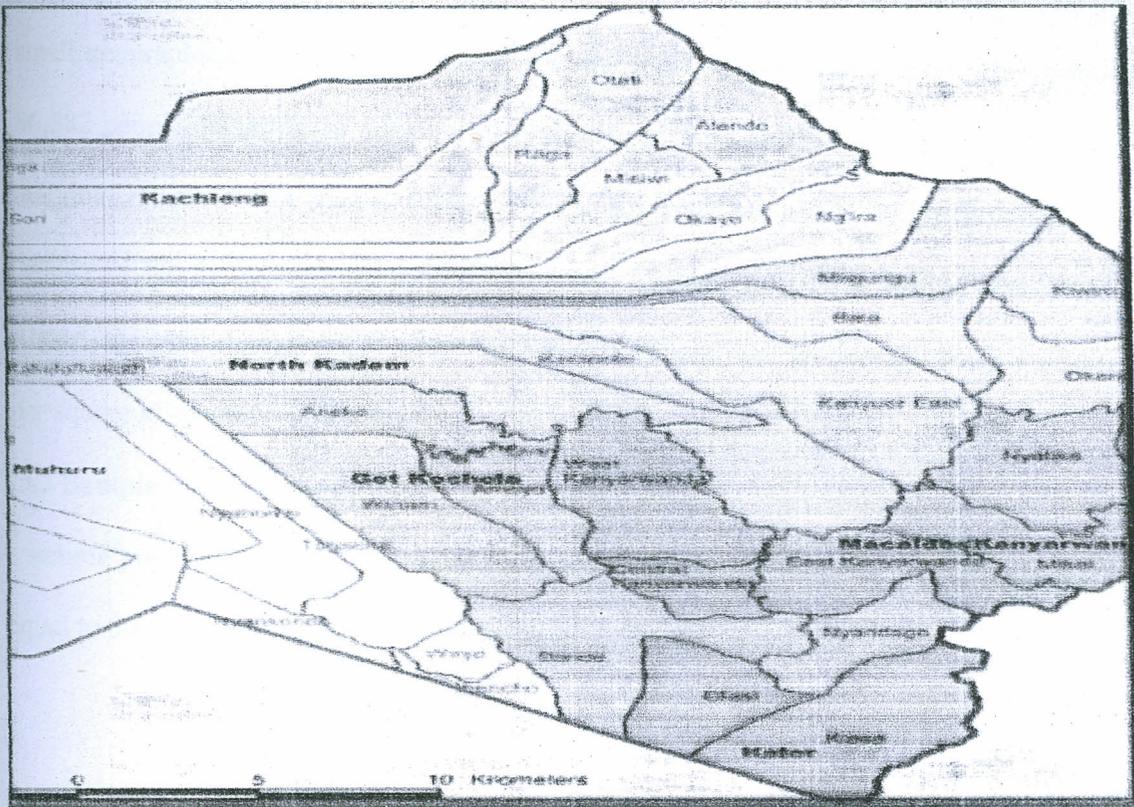


Figure 3.1: Map of Nyatike District

3.3 Study Population and Sampling

3.3.1 Study population

The study population was the entire number of children between the ages of 8 to 17 years in Nyatike district. The Kenya population census of 2009 indicates that the district had a population of 37,649 children that is, 18,968 boys and 18,681 girls. (GOK, 2010).

Administratively, the district is divided into five (5) divisions namely; Nyatike, Karungu, Muhuru, Kaler and Got Kachola. The divisions are further divided into a total of sixteen (16) administrative Locations. (GOK, 2008). The major urban centers include Nyatike, Sori and Muhuru. Muhuru is the least populous Division with a population of 23,742 but with a relatively

high population density of 162 people per square kilometer. This is attributable to the division's small geographical size. Nyatike Division is the most sparsely populated with a population of 86,582 people. Majority of the rural poor are found throughout the District due to the relative marginalization of this region. (GOK, 2009). The population is growing fast leading to high density of the population per square kilometer. According to 2009 Kenya Household Census Report, the total district population was 144,625 people with an average density of 682 people per square kilometer (GOK, 2010).

3.3.2 Sample and sampling

A sample population was drawn from the entire number of households in the district which was equal to 30,423 households using Glenn Israel's formula (Israel, 1992).

$$n = \frac{N}{1+N(e)^2}$$

n= the required sample size

N- Population size (30,423)

e- The precision level. At a precision level of 95 % with a ± 5 margin of error the set precision level is 0.05

Using the above formula, the required sample size was calculated as follows:

$$n = \frac{30,423}{1+30,423(0.05)^2} = 395$$

A sample of 395 respondents was needed for the study and to get the number of respondents interviewed per location, the percentage representative of the number of people in each location against the total population in the district was calculated. The percentage representative of each location against the sample size determined the number of questionnaires that were distributed

in each location. The respondents were then drawn by use of simple random sampling and child respondents were first clustered as per their sexes then randomly sampled.

LOCATIONS		REPRESENTATION
1.	South Kadem	29
2.	South East Kadem	33
3.	West Kadem	40
4.	East Kadem	21
5.	Kaler	27
6.	North East Kaler	18
7.	North Kaler	23
8.	Central Kadem	42
9.	Muhuru	13
10.	West Muhuru	14
11.	South East Muhuru	8
12.	Central Muhoru	29
13.	East Karungu	14
14.	West Karungu	47

15.	Central Karungu	19
16.	South East Karungu	18
Total		395

3.4 Methods of data collection

Data collection involved both quantitative and qualitative techniques (Triangulation). Triangulation is a mixing of methods so that diverse viewpoints cast light upon a topic. This mixing of methods helped to validate the research study. Through triangulation the researcher was able to realize areas of convergence and divergence of different methods.

3.4.1 Secondary Data

The library as well as the internet was vital source of secondary information for the study. Secondary data was to back up the primary data as well as provide insights which primary data alone could not achieve.

3.4.2 Primary Data

Primary data was collected through the use of Questionnaires, Key Informant Interviews and Focus Group Discussions (FGDs).

3.4.2.1. Questionnaires.

The questionnaires were administered by the researcher and were used to collect quantitative data from households on pertinent issues of the research. The questionnaire was divided into sections with each addressing key areas of the research such as types of activities children engage in as drought mitigation efforts, levels of child participation in drought mitigation activities and effects and challenges of drought mitigation activities on children. These sections addressed varied issues of engagement that define child participation in drought situations giving

considerations to interpersonal actions and their relations to the realization of child welfare and rights.

3.4.2.2. Key Informant Interviews

Key Informant Interviews was pertinent in this research. It was carried out by interviewing persons who are professionally endowed with in-depth knowledge on child participation activities in the district. The Key Informant Interviews (KII) was conducted to yield information from the teachers, health workers and the local administrators (chiefs and assistant chiefs). The Key informant interviews were held face to face through the use of interview guides and schedules.

3.4.2.3 Focus Group Discussions (FGDs)

The focus group discussions was conducted for the children from the households sampled and for the adults such as teachers, health workers and the local administrators, that is, the chiefs and assistant chiefs from the district. The focus group discussion was conducted to yield useful information from the children and adults on their attitudes and opinions on the children's drought mitigation activities and its effects on the wellbeing of children. The FGD was conducted through the use of a schedule that contained the list of questions asked. The discussions were led by a moderator who asked questions which participants responded to. The participants were informed on the subject of discussion beforehand to enable them prepare themselves appropriately. The discussions were conducted in the language that was most appropriate to the participants and translation was made into English as appropriate.

3.5 Data analysis and Presentation

Collected data was edited by checking the completed research instruments to identify and minimize errors, incomplete responses, and misclassification. This was done through the use of

inferring, recalling or where possible going back to the respondents. Data from the questionnaires was analyzed according to the nature of the response. Closed ended questions were coded such that a question requiring a yes response was coded as 1 while no responses were coded 2. Open ended responses from open ended questions were recorded word for word to determine the frequencies of each response. The number of respondents giving similar responses was converted to percentages to illustrate relative levels of opinion. The researcher after editing and coding carried out data analysis using Statistical Package for Social Sciences (SPSS) version 17.

3.6 Ethical Considerations

This study took into considerations various ethical issues that enhanced the credibility of the research work. The research embraced the ethical principles of informed consent, respect for privacy, safeguarding confidentiality of data and avoiding harm to subjects and researchers. More emphasis was placed on obtaining express consent from the parents and the teachers to enable the researcher interview the children. A research permit was also obtained in order to enable the researcher access the respondents.



CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.1 Child participation in drought mitigation activities in Nyatike District.

To achieve the objective of this research study, two sets of questionnaires both for adults and children were administered to the respondents, an interview schedule was used to get the opinion of key informants and the focus group discussion was also conducted. In this research study 395 questionnaires were administered to the respondents, 375 questionnaires were fully filled and returned which represented 95% of response which was a significant questionnaire return rate adequate for the study. In Nyatike District which was the focus for this research study, drought situations and the district's unique location together with the socio economic activities, cultural beliefs and traditions influenced the nature and types of participation activities among children in drought mitigation.

In reference to the findings in the SITAN (2009), child participation recognizes that children are not a passive, powerless target group but rather capable communicators, who effectively engage in activities within their communities, a practice that make children forge survival strategies in coping with uncertainties as confirmed also by the findings of this research study. It is also clear from the research findings that environment influence physical, mental, spiritual, moral, psychological and social development of children preparing them to live as individuals in a free society by participating in various activities for growth and development. Considering also the provisions in ACRWC, child participation is perceived as having the opportunity to express views, influence decision making, and enhance change in various circumstances and situations. This means that during child development process, child participation forms a key pillar of child socialization that is often determined by circumstances, environment and situations children find themselves in. This conforms to the arguments in Ressler, et al. (1993) that children's responses

to disasters like drought can be well understood through consideration of their family and social environment, which in this research study were considered as levels of children participation. This research study findings also agreed with arguments of John Parr (2008), that relationship that children have with their surrounding environment has a profound effects and challenges on their mental, physical and spiritual health.

4.2 Activities that children were involved in as drought mitigation efforts

The first objective of the study was to examine the activities children were involved in as drought mitigation efforts. Child respondents were then asked in the questionnaire for children to identify some activities they participated in during drought and the results were represented in table 4.1 below.

Table 4.1 Children activities in drought mitigation from children respondents

	Frequency	Percent
Fishing	3	2.1
Migrating in search of pasture	3	2.1
Putting up with relatives	1	.7
Casual labour	3	2.0
Begging for food	2	1.4
Attempted all activities listed in questionnaire	133	91.7
Total	145	100.0

According to the findings of this study, 91% (133) of the children who participated attempted all the activities pointed out in the questionnaire such as fishing, casual labour, working in the mines, putting up with relatives, begging for food and many more. This is therefore an indication that children are engaged in various activities as efforts of drought mitigation. 51% (68) of the children who participated were females and 48% (65) were male. This result was seconded by

the findings from the adult participant's questionnaires' and from key informant interviews as illustrated in table 4.2 and 4.3 below respectively.

Table 4.2 Children activities in drought mitigation from adult respondents

	Frequency	Percent
Fishing	11	7.6
Working in the mines	3	2.1
Migrating in search of pasture	1	.7
Seeking employment in urban areas	4	2.8
Putting up with relatives	1	.7
Casual labour	6	4.1
Wild game hunting and searching for water	7	4.8
Selected all activities from the questionnaires	112	77.2
Total	145	100.0

Adult respondents were asked to identify some activities children participated in during drought and the results were represented in table 4.2 above.

Table 4.3 Children activities in drought mitigation efforts response from key informants

	Frequency	Percent
Working in the mines	1	1.3
Migration in search of livestock pasture	13	17.3
Putting up with relatives	1	2.7
Selected all activities from the questionnaire	58	77.3
Total	58	100.0

Key Informant interviewees were asked to identify some of the activities children engaged in as drought mitigation efforts and the results were represented in table 4.3 above.

Table 4.2 illustrates that about 77% of adult respondents who participated in the study acknowledged the fact that children engaged in the identified activities as drought mitigation efforts. The findings collected by questionnaires from adult respondents confirmed that children participate by helping parents in the activities aimed at mitigating drought. The findings from the key informant interviews in Table 4.3 gives 77% agreement on activities children engaged in to mitigate drought. It is also evident that children drought mitigation activities vary to a large extent and children participated in a number of these activities. An estimate of 91.7% of children participants attempted all the activities listed in the questionnaire (Annex 3: Section B; Q3) such as fishing, working in the mines, putting up with relatives just to mention but a few and the activities are location specific. A study of coping theory argues that coping will always be a context-specific activity – shaped by the particular problem that a child faces, and enabled or limited by the social, political and economic situation in which he or she is located (Ungar, 2008). This was proven by the findings of this study in that, an approximation of 77% of children participants engaged in drought mitigation activities due to all the reasons listed in the interview guide (Annex 2; Q4) such as drought situations, for survival, forced to undertake such activities by parents and some do it to help parents. Chiefs from Muhuru West, East Karungu and Central Kadem locations confirmed during the key informants' interviews that children activities during drought are enormous and at times it is difficult to categorize them as either child labour or child responsibility an experience which reminds of Charbonneau (1988) sentiments that drought mitigation practices should show cultural sensitivity to the labour of dependent children, but should not perpetuate exploitative and abusive child labour.

This study findings also confirmed Qvortrup's (1994), conceptualization of children as active co-constructors of their social worlds and map out how children cope through the way in which they

engage with what Rutter (1979), refers to as 'protective factors' (e.g. social support, household cohesion, personal attributes) within their communities which appeared to be real reasons for participation activities from the findings. The study findings conforms as well to the arguments of Ungar (2008), that activities will always be a context-specific – shaped by the particular problem that a child faces, and enabled or limited by the social, political and economic situation in which he or she is located. An observation which agrees with the assertions of Gist and Lubin (1989) that drought is a collective stress situation that interferes with the ongoing social life of the community but is subject to human management through various activities which according to O'Keefe et al. (1976), modifies socioeconomic conditions of a population. An argument also confirmed by Start and Johnson (2004) in their observation that Households may need to completely abandon current livelihood practices in favour of opportunities that are more sustainable in the changing situations and make choices that result in a complete change of normal livelihood activities.

4.2.1 Reasons for child participation in drought mitigation activities

To find out the reasons for child participation in drought mitigation activities, respondents from in depth interviews were asked to identify some reasons for child participation in drought mitigation activities and the results were represented in table 4.4 below.

Table 4.4 Reasons for child participation in drought mitigation activities

	Frequency	Percent
Drought situations	14	18.7
It is a survival strategy	2	2.7
Forced by parents	1	1.3
Selected all activities from the questionnaire	58	77.3
Total	58	100.0

From the findings 77% which is equated to a frequency of 58 of the participants agreed that children engaged in mitigation activities for all the reasons provided in the in the interview schedule such as children being forced to undertake such activities by parents; survival strategy; drought situations and many more. Out of 77% of the participants, 44% (26) were male and 56% (32) were female. From the findings some children were forced to participate in drought mitigation activities by the prevailing drought circumstances as survival strategy. The study findings agree with Smita (2005), observations that through participation in drought mitigation activities children get the desire and enthusiasm to try and make a difference in their communities. This also agree with the observations in Bauman et al. (2006) that children as young as six or seven years old fetch water or fuel, and even tend animals and by the age of twelve to fifteen, they may be contributing at nearly adult capacity in many societies.

4.2.2 School attendance during drought.

In relating child participation activities with school attendance, child respondents were asked in the questionnaire for children if they went to school during drought. Findings in this study proved that most children do not go to school during drought as illustrated in table 4.5 below

Table 4.5 School attendance during drought response by child respondents

	Frequency	Percent
Attended regularly	53	38.1
Missed some days	84	60.4
Above 4 times per week	1	.7
Can't remember	1	.7
Total	139	100.0

The findings above show that 60% (84) of the children who participated in the study acknowledged the fact that they did not attend school regularly during drought while an estimate of 35% (53) attended school regularly during drought. On the other hand the results of adult participants in questionnaire for adults contradicted that of children, in that an approximate of 96% (130) of adults acknowledged that children attended school regularly during droughts as represented in table 4.6 below.

Table 4.6 School attendance during drought response by adult respondents

	Frequency	Percent
Attended regularly	130	96.3
Missed some days	5	3.7
Total	135	100.0

This opens a new field of research for one to study on how drought affects the daily life activities of the people in Nyatike District and bear substantial results. However, it was clear from the discussion with teachers that many children don't attend school during drought spells in the area. These sentiments were also reaffirmed by the local administration officials for example the District Officers from Karungu and Muhuru Divisions who said that it is difficult to send children from beaches along the lake because they will stream in at night and go fishing deep in

the lake. The District Officer Macalder Division said it is indeed a hard task that always required parental interventions to keep children out of the goldmines during school hours. The teachers interviewed confirmed that parents promptly pull out children from school to perform productive work at home and may even migrate temporarily in response to drought to take part in labour exchange, work and support or to obtain water for livestock as argued in Osbahr et al.,(2010).

4.2.3 Failure to attend class during drought

To find out whether children missed classes during drought children respondents were asked how often they missed class during the last drought spell and results were represented in table 4.7 below.

Table 4.7 Failure to attend class during drought child respondents

	Frequency	Percent
Once/week	2	1.4
Twice/week	1	2.2
Thrice/week	4	5.0
Above four times/week	39	33.1
Can't remember	93	58.3
Total	139	100.0

According to the findings illustrated in the tables above, 58% (93) out of which 55% were male and 45% were female, could not recall the number of times they missed school while 33% (39) out of which 41% were male and 59% female, missed school more than four times. Table 4.8 illustrates that 58% (84) of the adult participants attested that children go to school during drought but on an irregular basis. It was made clear during the interview with teachers from the district that children often miss classes since they are engaged in domestic activities like taking care of livestock hence skived classes and irregular school attendance. Some parents also

confirmed during the focus group discussions that children could be picked from school to attend to some domestic activities during drought spells. These findings agree with Charbonneau (1988) observations that girl children experience rigid role casting in many societies and are socialized for domestic duties, including childcare, are the first to be kept out of school for household labour, and generally marry earlier than boys. These practices perpetuate their subordination and the poverty cycle in difficult situations.

Table 4.8 Failure to attend school during drought spells response from adults

	Frequency	Percent
Once	2	1.4
Only at the beginning of drought	24	16.7
They rarely go to school	27	18.8
They are not consistent with school	84	58.3
Can't remember	7	4.9
Total	144	100.0

Adult respondents were asked how often children missed school during drought spell and results were represented in table 4.8 above.

Even though child participation was majorly perceived as socialization process among the adult respondents, as observed by a study produced by Ressler, et al., (1993) which showed that children's responses to disasters can be well understood through a consideration of their family and social environment which determines the nature of their socialization its effects on the daily performance of children in various structures of the society, is also an area that requires further research study. An estimate of 18.8% as projected in the findings rarely go to school and 4.9% do not remember the number of times they missed classes. On the other hand, 58% of the adult

participants acknowledge that children in Nyatike District go to school irregularly and are not consistent in school during droughts.

4.2.4 Reasons for missing school

To find out the reasons for missing school during drought spells child respondents were asked reasons why they missed school during drought and results were represented in table 4.9 below.

Table 4.9 Reason for failing to attend School during drought spells by child respondents

	Frequency	Percent
Taking care of siblings	58	47.5
Taking care of animals	27	22.1
Engaged in casual work	34	27.9
Other	3	2.5
Total	122	100.0

Findings in the table above indicate reasons that resulted to the irregular attendance of school by children in Nyatike District during drought spell. The finding shows that, 47% (58); out of which an estimate 43% was male and 56% female; had to take care of their siblings, 27% (34) with an approximation of 44% male and 55% female; were engaged in casual work and 2% were focused on sand harvesting for survival during drought period. The above findings show that irregularities in attendance of school are as a result of taking care of siblings, caring for animals, casual work and sand harvesting as also illustrated in the graph (Fig 5.1) below.

Reasons for not going to school response from children

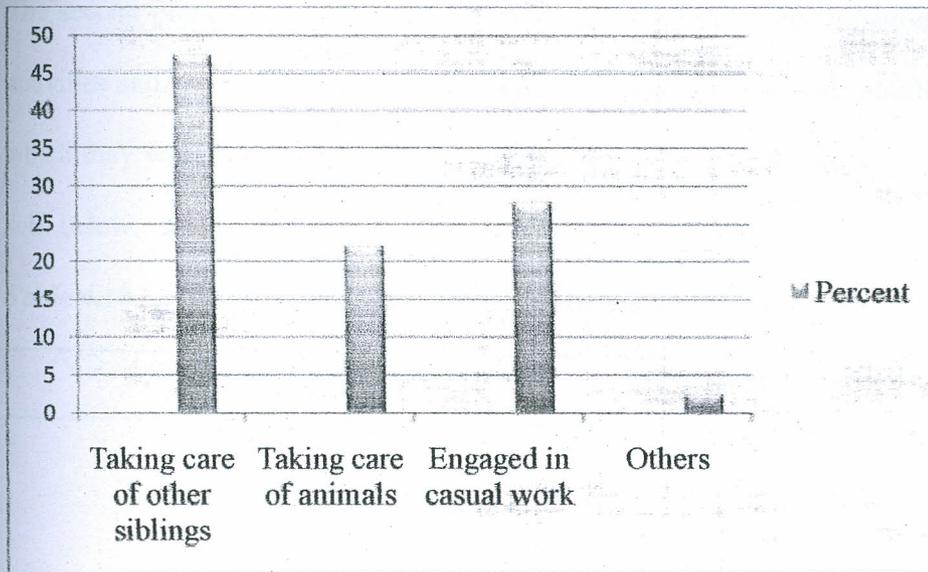


Figure 5.1: Reason for not going to school

This has been proved by 47.5% of children participants taking care of their siblings with a greater percentage being the female child (56%). This confirms Panter-Brick's (2002) assertion that adolescent girls, women, and pregnant women in particular, bear an additional burden of vulnerability based on gender during difficult circumstances. This also with Charbonneau (1988), observations that girl child, particularly in agrarian societies have a mortality rate nearly twice that of boys in the first two years and experience rigid role casting in many societies. They are socialized for domestic duties, including childcare and the first to be kept out of school for household labour and subsequently marry earlier than boys.

This finding further agrees to the arguments in Robson et al. (2000) that many children endure stressful life events as their parents fall ill to tropical and infectious diseases, assuming significant caring and head of household responsibilities, often in contexts of extreme poverty, and may be contributing at nearly adult capacity in many societies.

4.3 Levels of children participation in drought mitigation activities

The second objective sought to establish levels of children participation in drought mitigation activities and child respondents were asked in the questionnaire for children to identify levels at which they were involved in drought mitigation activities and results were represented in table 4.10 below.

Table 4.10 Levels of child participation activities among child respondents

	Frequency	Percent
Family	66	44.1
Church	12	8.1
School	63	42.4
NGO	8	5.4
Total	149	100.0

The findings show that 44% (66); out of which an estimated 55% was male and 44% female; of the children who participated in the study were engaged at the family level in drought mitigation activities while 42% (63) were involved at the school level. These findings were confirmed by results in table 4.11 and 4.12 respectively.

Table 4.11 Levels of child participation activities among adult respondents

	Frequency	Percent
Family	23	30.7
Government	2	2.7
NGO	1	1.3
Selected all levels	49	65.3
Total	75	100.0

Adult respondents were asked to identify levels at which Children were involved in drought mitigation activities and results were represented in table 4.11 above.

Table 4.12 Levels of child participation activities from key informant interviews

	Frequency	Percent
Family	19	12.8
Church	10	6.8
School	59	39.9
NGO	31	20.9
Government	29	19.6
Total	148	100.0

Respondents at in depth interview were asked to identify levels at which participate in drought mitigation activities and results were represented in table 4.12 above.

Findings from adult respondents in questionnaire for adults as presented in table 4.11 illustrates that child participation at family level was 30.7% (23) while there was evidence that children participate in several levels beyond the family such as NGO, government, school and many more was 65% (49). Table 4.12 which represented participants of the key informant's interview portrayed the school as the key level of involvement with an estimate of 39% (59) while the NGO is estimated to 20% (31). From the focus group discussion it was evident that family formed the basic level where children participate in drought mitigation activities. This study finding is in agreement with Bogenschneider (2002), considerations that families form the basic building blocks that underpin our fundamental social structure and the most durable basis for imparting social values, customs, traditions, beliefs and languages between generations. They are a mediating link between society and individuals and form an alternative safety net by playing prominent roles as health care providers, educators, social workers, and personnel managers. He

considered that the family functions to promote health and wellbeing, boost education outcomes, care for the young, the sick and the elderly, and disseminate ethics and values hence impact of drought interferes with building a cohesive and inclusive society and the consequence of the drought experience is the destruction of the family unit.

4.3.1 Participation at the levels out of child interest

The study also sought to find out whether it was for the interest of children to participate in drought mitigation activities at the mentioned levels. Child respondents were asked if it was for their interest to participate in activities at the mentioned levels and results were represented in table 4.13 below.

Table 4.13 Participation at the levels out of interest response from child respondents

	Frequency	Percent
Participation out of interest	104	82.1
Forced	22	17.9
Total	128	100.0

The table indicates that 104 (82%); out of which 50% was male and 50% female; acknowledged participation for their interest while 22 (17%); out of which 41% were male and 59% female.

Table 4.14 illustrates a contradiction in the findings from the children who participated in the study. An estimate of 70% of adult participants in the questionnaire for adults argued that children do not participate out of their own interest in mitigation activities while 29.9% agreed that children participate in various levels at their own interest.

Table 4.14 Participation at the levels out of interest response from adult participants

	Frequency	Percent
Out of interest	41	29.9
Forced	96	70.1
Total	137	100.0

Adult respondents were asked if it was for the interest of children to participate in activities at the mentioned levels and results were represented in table 4.14 above.

4.3.2 Reason for child participation in drought mitigation activities

The study sought further to find out the reasons why children participate activities performed at these levels and child respondents were asked if they participated in drought mitigation activities at these levels for survival, willingly, or out of interest or they are forced and results were represented in table 4.15 below.

Table 4.15 Reason for child participation in mitigation activities child respondent

	Frequency	Percent
Voluntary interest	78	52.0
Forced	12	8.0
Survival	49	32.7
Selected all levels	11	7.3
Total	75	100.0

The findings indicates that 52% (78); out of which 53% were male and 47% female; of the children who took part in the study argued that they participated in mitigation activities on a voluntary basis, 32% (49); out of which 51% was male and 49% female; engaged in such activities for survival, 8%; out of which 17% were male and 83% female; are forced and 7% argued that they engaged in these activities on voluntary, forced as well as survival strategies.

Adult participants on the other hand argued that children mainly did such activities for survival having an estimate of 69% (104) of adults as shown in table 4.16 below.

Table 4.16 Reason for child participation in mitigation activities adult respondent

	Frequency	Percent
Voluntary interest	2	1.3
Forced	7	4.7
Survival	104	69.8
Selected all	36	24.2
Total	149	100.0

Adult respondents were asked if children participated in drought mitigation activities for survival, out of interest or they are forced and results were represented in table 4.16 above.

This contradicts children's argument that they carry out drought mitigation activities on a voluntary basis. From the focus group discussion it appeared that children participated in drought mitigation activities for both survival and voluntary will. These study findings agree with the provisions in the Hyogo Framework for Action (2005-2015), that calls for every ones action to consider disaster risk reduction as part of everyday decision-making: from how people educate their children to how they plan their cities considering that each decision can make us either more vulnerable or more resilient.

4.3.3 Other drought mitigation activities at the various participation levels

The study sought also to find out other drought mitigation activities children participate in at the various levels and child respondents were asked in the questionnaire for children to identify other drought mitigation activities they were engaged in at these levels and results were represented in table 4.17 below.

Table 4.17 Other drought mitigation activities at participation levels

	Frequency	Percent
Skits on importance of education	4	2.7
Poems and songs on environment conservation	8	5.3
Facilitated to plant trees	25	16.7
Implementing child legal instruments	2	1.3
Attempted all activities	111	74.0
Total	150	100.0

Findings illustrated that 74% (111); out of which 47% were male and 52% were female; of children participants, agreed attempting all the activities such as; performance in skits on importance of education; presented poems and songs on environment; facilitated to tree planting; presentation of grievances in the children assemblies and many more. The results were confirmed by in depth interviews and adult participants in Tables 4.18 and 4.19 respectively.

Table 4.18 Other drought mitigation activities at participation levels response from adults

	Frequency	Percent
Selected the first three	49	65.3
Poems and songs on environment conservation	7	9.3
Facilitated to plant trees	2	2.7
Organized children forums	1	1.3
Implementing child legal instruments	1	1.3
Child sponsored		1.3
Selected all activities	14	18.7
Total	75	100.0

Adult respondents were asked to identify other drought mitigation activities children were engaged in at these levels and results were represented in table 4.18 above.

Table 4.19 Other drought mitigation activities at participation levels response from key informants

	Frequency	Percent
Skits on importance of education	42	28.2
Poems and songs on environment conservation	5	3.4
Facilitated to plant trees	23	15.4
Participated in children voices forum	5	3.4
Implementing child legal instruments	6	4.0
Selected all activities	68	45.6
Total	149	100.0

Respondents during interview with key informants were asked to identify other drought mitigation activities children were engaged in at these levels and results were represented in table 4.19 above.

The findings showed that 65% (49) of participants as shown in table 4.18; acknowledged great participation in performance in skits on importance of education; presentation of poems and songs on environment conservation and facilitated plantation of trees. 45% (68) of the adult participants in the study (table 4.19) argued that children attempted all the activities listed in the questionnaire. During an interview with the key informants, it was confirmed by chiefs and hospital administrators interviewed confirmed that children participated in drought mitigation activities by planting trees at home and in public spaces. These findings agree with the IFRC Word disaster report (2007), which pointed out that Children and young people are the potential disaster management experts of the future, and can also teach disaster management within the family hence it is crucial to develop ways of involving families and communities in disaster education at school. An observation which conforms with the arguments of Iltus, (2007) that by

raising awareness of risk factors, strengthening capabilities and giving opportunities to engage, children can develop positive attributes and skills that will help safeguard both the environment and their own health and livelihoods. An observation put forward in *The World Fit for Children* (1992), which articulates the commitment to protecting children and minimizing the impact of natural disasters and environmental degradation on them as pointed in Jones et al. (2010), where characteristics of adaptive capacity include children access to relevant knowledge and information, an enabling institutional environment that allows entitlements to those most vulnerable, support for innovation and exploring new opportunities and forward looking decision-making and governance processes. Sentiments which agrees further to the observations of Tortorici and Marcelino (1993), that pre-disaster social role definitions of women and their dependent children should be understood, so that together they can be given meaningful involvement in disaster mitigation, relief and recovery.

4.3.4 Impacts of other drought mitigation activities and their effects on children

Alternative activities that are carried out by children beyond drought mitigation activities were viewed to have impacted on the effect of drought on children at varied extents and the child respondents were asked to identify the extent to which the mentioned activities influenced the effect of drought on them and results were represented in table 4.20 below.

Table 4.20 Impact of other drought mitigation activities and drought effects on children

	Frequency	Percent
Not at all	13	8.9
Little extent	25	17.1
Moderate extent	20	13.7
Large extent	25	17.1
Very large extent	63	43.2
Total	146	100.0

According to the findings from children participants, the activities impacted to a very large extent on the life of children at 43% (63); out of which 51% was male and 49% female. This is slightly contradicted by the findings of adult participants who argued that the activities had impacted on the effects of drought on children to a large extent at 35% (53). From the discussion with the focus group discussants it was also expressed that these activities at various participation levels impact to a very large extent on the life of children. The study findings agree observations of Cando Lee (2008), which emphasized that today's investment in 'environment-friendly' education and outreach with special attention to the needs of girls will lead to future generations of environmentally responsible citizens.

Table 4.21 Impact of mitigation activities on drought effects on children by adult respondents

	Frequency	Percent
Not at all	10	6.7
Little extent	22	14.8
Moderate extent	48	32.2
Large extent	53	35.6
Very large extent	16	10.7
Total	149	100.0

Adult respondents were asked to identify the extent to which the mentioned activities influenced the effect of drought on children and results were represented in table 4.21 above.

4.4 Challenges and effects of participation in drought mitigation activities

The third objective of the study sought to find out the challenges and effects of participation in drought mitigation activities and child respondents were asked in the questionnaire for children if children who participated in drought mitigation activities faced some challenges and the results were represented in table 4.22 below.

Table 4.22 Challenges faced in drought mitigation activities

	Frequency	Percent
Yes	78	55.7
No	62	44.3
Total	140	100.0

The table above gives the finding from child respondents who represented a clear illustration that 55% (78); out of which 43% was male and 57% female; of child participants attests encountering challenges as a result of participating in drought mitigation activities. This was also confirmed

during the focus group discussions where those engaged in discussions raised challenges experienced by children who participate in drought mitigation activities. The study findings agree with the observations of Goodman and Iltus, (2009) that the effects of drought mitigation activities are likely to be widespread and affect people differently but children are disproportionately vulnerable to the effects and challenges of such activities since they have particular characteristics of vulnerability. These characteristics as he observes are multidimensional, shaped by the changes that take place over the course of childhood as well as by their heightened sensitivity to negative or high-impact events during the early stages of development and by their general lack of agency and voice hence results in specific experiences of climate change impacts and unique properties in relation to children's capacity to adapt.

4.4.1 Identified common challenges children faced in drought mitigation activities

The study also sought to find out the various challenges children face as they participate in drought mitigation activities. Child respondents were then asked to identify common challenges children face as a result of participating in drought mitigation activities and the results were represented in table 4.23 below.

Table 4.23 Challenges faced in drought mitigation activities by child respondents

	Frequency	Percent
Competition for resources	60	42.3
Survival and support other members of household	1	.7
Selected all activities listed in the questionnaire	81	57.0
Total	142	100.0

The finding from the questionnaire for children showed that 57% (81); out of which 56% were male and 44% female; accepted encountering all the challenges listed in the questionnaire such as competition for scarce resources; demand for survival of members of household; role conflict

that may lead to abandoning some important responsibilities; exposure to hazardous life experiences; challenge of handling stressful activities; and begging for food from relatives. These findings were seconded by the results from in depth interviews and adult participant in Tables 4.24 and 4.25 below respectively.

Table 4.24 Challenges faced in drought mitigation activities by in depth interview respondents

	Frequency	Percent
Competition for resources	4	5.3
Survival and support other members of household	5	6.7
Role conflict	1	1.3
Selected all activities listed in the questionnaire	65	86.7
Total	75	100.0

Respondents from in depth interviews were asked to identify challenges children face as a result of participating in drought mitigation activities and the results were represented in table 4.24 above.

Table 4.25 Challenges faced in drought mitigation activities by adult respondents

	Frequency	Percent
Competition for resources	9	6.0
Begging for food from relatives	10	6.7
Selected all activities listed the questionnaire	131	87.3
Total	150	100.0

Adult respondents were asked to identify common challenges children face as a result of participating in drought mitigation activities and the results were represented in table 4.25 above.

In Table 4.24, 86% (65) and table 4.25, 87% (131) identified all the challenges provided in the questionnaire as being encountered by children participating in drought mitigating activities.

The key informant interview with the nurses and teachers confirmed that in deed children face a lot of challenges as they participate in drought mitigation activities. The study findings agreed with the observations in Alexander et al., (2011), where it argued that in many senses, drought mitigation activities and development have a dual relationship and such activities among children may be a threat to sustainable development and the achievement of many key development targets, such as the Millenaium Development Goals.

4.4.2 Effects of drought mitigation activities on children

Children who participated in drought mitigation activities are affected in one way or another. Child respondents were asked if they were affected by the activities they engage in as drought mitigation efforts and the results were represented in table 4.26 below.

Table 4.26 Effect of drought mitigation activities on children by child respondents

	Frequency	Percent
Yes	133	98.5
No	2	1.5
Total	135	100.0

The table above illustrates that 98% (133); out of which 48% was male and 52% female; of children participants agreed that children are affected as a result of participating in drought mitigation activities. This was seconded by the findings from adult participants who had 100% confirmation of out of the statement result of children participants' response and the key informants. These research findings agree with the observations in UNICEF, (2011) where it is pointed that weaker care systems, when children are left with friends or families, can negatively affect children's emotional well-being and, in some cases, lead to child protection violations by

host families. The research findings also conforms to the arguments by Bartlett, (2008) that drought mitigation activities can expose children to higher risks of abuse, neglect and exploitation because of separation from parents and caregivers, heightened household stress levels or displacement and as conditions become more challenging so do the burdens facing caregivers, who are more likely to leave children unsupervised and neglected or to become more aggressive towards them as a result of stress as argued in Mocellin, et al., (1991). The study further agrees with the assertions in UNICEF, (2008) that various mitigation activities may have severe social and psychological effects on child well-being and loss of or separation from family members and displacement or relocation (migration) can have a profound effect on children's emotional well-being, hence when social safety nets fail during or after natural drought situations and resource conflicts, children are particularly vulnerable to trafficking, gender-based violence and physical harm.

4.4.3 Common effects of drought mitigation activities on children

The study also sought to find out the common effects of drought mitigation activities on children and child respondents were asked to identify common effects of drought mitigation activities on children and results were represented in table 4.27 below.

Table 4.27 Child respondent common effects of drought mitigation activities on children

	Frequency	Percent
Irregular school attendance	1	.7
Selected all activities listed in the questionnaire	144	99.3
Total	145	100.0

Children participants in the study agreed that they were affected by effects such as school dropout; bad influences that lead to bad behaviour; death; lose of direction and many more. This is illustrated in the table 4.27 where 99% (144); out of which 49% were male and 51% female;

identified all the effects presented in the questionnaire which included, school dropout; bad influences that may lead to bad behavior; some activities are risky and lead to death; once exposed to activities that expose them to access money, they become difficult to handle; lose of direction; irregular school attendance; depression as a result of stress; some children don't come back home/detached from their original homes and start new life in places they migrated to; children are exposed to abuse; migration to places of safety among others. These results were proved by in depth interview and adult participant as demonstrated in tables 4.28 and 4.29 respectively.

Table 4.28 Key informants interview response to common effects of drought mitigation activities on children

	Frequency	Percent
School drop out	10	13.5
Lose of direction	1	1.4
Selected all	63	85.1
Total	74	100.0

Key informant interviewees respondents were asked to identify common effects of drought mitigation activities on children and results were represented in table 4.28 above.

Table 4.29 Common effects of drought mitigation activities on children by adult respondent

	Frequency	Percent
School drop out	1	.7
Migration to places of safety	1	.7
Selected all	148	98.7
Total	148	100.0

Adult respondents were asked to identify common effects of drought mitigation activities on children and results were represented in table 4.29 above.

The finding showed that 85% (63) in table 4.28 pointed out that the interviewees agreed that children are affected by all the effects provided in the questionnaire. On the other hand, table 4.29 had 98% (148) attesting to all the effects provided in the questionnaire and interview schedule. The nurses interviewed from Macalder and Muhuru Divisions confirmed death among the effects of child participation in drought mitigation activities. Teachers interviewed also raised high school dropout and deviant behaviors' among children as major effects of drought mitigation efforts. The study findings agree with the observations in McMichael et al. (2004) that the total burden of disease as a result of mitigation activities appears to be borne primarily by children and the likelihood of a child becoming chronically malnourished increases with repeated exposure to drought disasters and related activities from slow-onset droughts to rapid onset as pointed out in UNICEF (2008).

The study findings also agree with the observations in Osbahr et al. (2010) that households may migrate temporarily in response to drought to take part in labour exchange, work and support or to obtain water for livestock and may transfer children to cheaper schools (which are often of a lower standard) or they might be unable to send children to school at all, owing to insufficient money to pay for school-related costs as pointed out in UNICEF (2011), which further points that during drought situations, children, particularly older boys, also migrate in search for alternative livelihood opportunities and depending on the conditions of migration, adolescents can face challenging circumstances, including inadequate housing with poor water and sanitation facilities, which expose them to disease or unstable and exploitative employment, which harms their physical and emotional well-being and is often linked to school dropout as Huebler (2006), pointed that children are pulled out of school and put to work to help their families recover, their

education and health suffer accordingly, the negative effects of extended periods of labour may be irreversible for many and are also exposed to child maltreatment, through increased parental stress and decreased social supports. The findings also conform to observations of Motsisi (1993), that children are affected more severely by the disruption of social relations due to their dependent status in most societies, and their limited control of resources.

The effects of drought mitigation activities are likely to be widespread and affect people differently but children are disproportionately vulnerable to the effects and challenges of such activities. Children participants who encountered drought within Nyatike District have argued that there are challenges faced by children who engage in drought mitigating activities. It is therefore evident from the findings of this study that the common effects of child's participation in drought mitigation activities include; school dropout; bad influences that lead to bad behaviour; death; loss of direction and many more as illustrated with 99% (144); out of which 48% were male and 51% female children respondents. This was confirmed to be true findings by both adult respondents and the key informants interviewed. These findings prove what McMichael et al., observed (2004), health-related effects of drought coping activities are predicted as being heavily concentrated in poorer populations. It follows that the total burden of disease as a result of mitigation activities appears to be borne primarily by children in developing countries as the case in Nyatike District in Kenya.

In conclusion, conditions at household level, brought about by drought situations such as loss in livelihoods, could hinder families' ability to provide children with a nutritious diet. There are also links between drought mitigation activities and education, particularly during and immediately after extreme drought situations when children's possibilities of schools attendance may be limited. Children may be removed from school to support the household. This can

sometimes be highly gendered as, in some cases, boys are prioritized over girls. Girls are pulled out of school more promptly, either to provide additional reproductive and productive work or for cost-ritual concerns such as early marriage. This practice jeopardizes the realization of a child's full potential, thus children who are exposed to such drought mitigation activities undergo negative socialization that require keen supervision for realization of child rights and welfare by state apparatus and community at large.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

5.1.1 Activities that children were involved in as drought mitigation efforts

The first objective of the study was to examine activities children were involved in as drought mitigation efforts. To achieve this, the study sought the opinion of the respondents on whether children participated in drought mitigation activities and an average of 82% respondents revealed that children participated in drought mitigation activities by performing various activities. The study findings showed that such activities included, fishing, working in the mines, moving from place to place in search of livestock pasture, seeking employment in urban centre's, engaging in casual labour, putting up with relatives in safe places, wild game hunting, searching for water and begging for food in the light of provision and availability of basic needs among children in the areas of education, health, food, shelter and clothing. The study further explored opinion of respondents on reasons for participating in such activities and it was clear from the findings that children participated in drought mitigation activities for survival and were also forced to perform such activities by parents.

On provision and availability of basic needs to children, the study established that drought situation forced children to participate in activities aimed at ensuring their well being, sustaining and supporting their families and participating in activities that promote family cohesion by helping parents, care givers and guardians in fending for other family members. These reaffirmed Giddens (1984) assertions that people are intrinsically involved with the society and actively enter into its constitution; they construct, support and change it because it is the nature of human beings to be affected by, and to affect their social environment. The study under first objective also sought to establish school attendance among children during drought spells and the study

found that children rarely went to school during drought since they were engaged in drought mitigation activities. This is in contradiction to the provisions in the Kenyan constitution and child protection policies which allows for free and compulsory primary education. The study found out that the reasons for missing school among school going children included taking care of other children, taking care of animals and engaging in casual work to help support families. This is a confirmation of an argument by Abraham Maslow in his theory of Basic need that children like other human beings will be motivated to participate in several adaptive activities that are aimed at ensuring their wellbeing and the hierarchy of basic needs determine the order of activities.

5.1.2 Levels of children participation in drought mitigation activities

The second objective was to establish levels of children participation in drought mitigation activities. To achieve this, the study considered knowledge on existence of these levels and the types of activities performed at each level. The study found out that family, church, school and organizations like NGO's formed major levels of participation in drought mitigation activities among children. The study also revealed that activities varied from one level to the other depending on the family structure and exposure of children to the levels. Therefore, the study revealed further that these levels determined the types of activities that children participated in as drought mitigation efforts. The study also sought to establish other drought mitigation activities children participated in other than those common at family level and, if it was for the interest of children to participate in such activities. The study found out that it was for the interest of children to participate in such other drought mitigation activities at these levels and such activities included performing skits on importance of education, performing poems and songs on environment conservation, planting trees, participation in children voices forum and participation in the implementation of children's legal instruments. The study under this objective also sought

to establish whether such activities had any impact on effects of drought on children and the findings showed that such activities to a very large extent influenced the effects of drought on children.

5.1.3 Challenges and effects of child participation in drought mitigation activities

The third objective sought to find out the challenges and effects of participation in drought mitigation activities. To achieve this, the study considered opinion of the respondents on what they considered to be the challenges faced by children in drought mitigation activities. The study revealed that majority of the respondents rated at 52% agreed that children faced very many challenges as a result of participating in drought mitigation activities. The challenges common to these children included competition for scarce resources in unlevelled playing ground, high demand for survival and maintenance of other members of household, role conflict that lead to abandoning some important responsibilities like going to school, exposure to hazardous life experiences and challenges of handling stressful and traumatizing activities like begging for food from relatives. The study under this objective also sought to establish effects of drought mitigation activities on children and to achieve this, the study sought the opinion of the respondents and from the study an average of 88% respondents agreed that children were affected as a result of participating in drought mitigation activities. Findings from the study also revealed that effects that children experienced as a result of participating in drought mitigation included; school dropout; bad influences that may lead to bad behavior; once exposed to activities that expose them to access money, they become difficult to handle; lose of direction; irregular school attendance; depression as a result of stress and trauma; some children don't come back home, they are detached from their original homes and may start new life in places they migrated to; exposure to abuse; migration to places of safety.

5.2 Conclusion

The overall objective of the study was to examine children participation in drought mitigation activities in Nyatike district, Kenya.

The study found out that very many children participated by performing activities aimed at ensuring that drought effects seemed less serious for children and the community at large, hence child survival strategies during drought spells in the district. This study showed that children assumed the roles of the elderly members of the community as they participated in such activities. The study also revealed that there were four levels where child participation was evidently practiced and the levels included the family, church, school and organizations like NGO's. The study also found out that children were affected and faced various challenges as a result of participating in drought mitigation activities. Generally, the findings portrayed a lapse in child protection system and called for a keen supervision of child friendly policy implementation by the government, stakeholders and community at large.

Child participation in drought mitigation activities in the district and in Kenya is a real issue and the government has enacted policies that address child protection in the country but the implementation has been limited due to various challenges. On the basis of the findings, the study concluded that child participation in drought mitigation activities hinder children from realizing their full potential in life since children are exposed to myriad challenges and the effects of such activities on the life of children and society at large may be detrimental for growth and development, and the policies that addressed child protection had only been implemented to a little extent in the study area.

5.3 Recommendations

The following recommendations pertinent to policy making, practice and further research are made as follows:

5.3.1 Recommendations for Policy and Practice

The findings of the study revealed that the children repeat classes majorly because of poor performance resulting from irregular and inconsistent school attendance that is prohibited by the education policy in Kenya and the constitution of Kenya; therefore from this research findings it is recommended to the policy makers and relevant stakeholders the need to come up with key policy directions on ensuring the policy is revised and to ensure compliance to the policy and constitution of Kenya as this will help eliminate child participation in drought mitigation activities and increase children school enrolment, retention and completion rate.

The study to a large extent may be of significance to the stakeholders in the sector and government of Kenya to come up with relevant social protection policies to address the livelihood challenges that results from disasters and are the catalysts of child abuse. The findings of the study therefore recommends to the National Council for Children Services and all child protection stakeholders to consider a multi sectoral approach and come up with strategies to address social and economic aspects related to child wellbeing during disasters in the country.

The findings also revealed that despite the existence of policies on child protection, both the main target of these laws who are the children and the community at large who engage children in labour are very ignorant of their existence majorly because of poor dissemination and delivery that has led to lack of awareness. It is the recommendation of this study that a clear policy on dissemination of all policies addressing child protection be put in place and relevant stakeholders

take up the responsibility to ensure that members of the community and children are conversant with the relevant policies and laws.

5.3.2 Suggestions for Further Research

It is suggested that further research be carried out to determine the effects of child participation activities on child socialization process. Little is known whether children socialization process would be determined by the fact the child is exposed to hazardous situations or even the nature and type of the family structure and the social environment of the child that would make them develop unique traits of character for survival.

It is also suggested that further research be carried out to determine the effects of child participation activities on the child wellbeing. From the findings it is evident that children face challenges and are affected as a result of participating in drought mitigation activities. It is better to find out through research the nature of challenges and the extent at which children's wellbeing is affected as a result of participating in drought mitigation activities.

The study area gives a great opening to research due to its unique location and several socio-economic activities adopted by children for survival. The central limitation of this research study was the restricted scope included in the analysis. Data were gathered from five divisions with the same investigator, primarily involving personality and mood. Studies involving more controversial topics or intense data collection techniques like ethnography will yield more data on child participation in drought mitigation activities. Thus additional research on the influence drought mitigation activities on the daily life of children across the world would be necessary to draw a broader conclusion about generalizability of the results. Several researches could also be conducted in the area and this is due to the fact that several contradictions have been encountered from the findings of the study creating new areas of research.

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