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DECLARATION

I hereby declare that this MA dissertation entitled “Socio-Cultural Change and the Life Style of the Hadza in North-Eastern Tanzania” was carried out by me for the degree of MA Social and Cultural Anthropology in English under the supervision of ao. Univ.-Prof. DDr. Werner Zips, at the Institute of Social and Cultural Anthropology (KSA) at Vienna University, Austria. This is my own work, it contains nothing which is the outcome of work done in collaboration with others, except books, articles and websites, which I have made use of and are acknowledged at the respective place in the text.

Grace Edward MOSHA, Vienna, 2018

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TABLE OF CONTENT

1.	INTRODUCTION.....	1
1.1.	THE HADZA	2
1.2.	BACKGROUND TO THE STUDY: SOCIO-CULTURAL ASPECTS	4
2.	METHODOLOGY	8
2.1.	RESEARCH APPROACH.....	8
2.2.	RESEARCH DESIGN.....	9
2.3.	RESEARCH INSTRUMENTS.....	9
3.	INDIGENOUS.....	13
3.1.	INDIGENOUS RIGHTS IN THE AFRICAN CONTEXT	16
3.2.	THE TANZANIAN PERSPECTIVE ON INDIGENOUS PEOPLES: RECOGNITION AND THEIR RIGHTS..	19
4.	CULTURE AND TRADITION	22
4.1.	CULTURAL AND TRADITIONAL PRACTICES IN AFRICAN SOCIETIES.....	23
4.2.	CULTURAL AND TRADITIONAL PRACTICES IN TANZANIA	25
5.	SOCIO-CULTURAL CHANGES	25
5.1.	SOCIO-CULTURAL CHANGES IN AFRICAN SOCIETIES.....	27
5.2.	SOCIO-CULTURAL CHANGES IN THE LIFESTYLE OF THE HADZA	29
5.2.1.	CHANGES IN LANGUAGE	30
5.2.2.	CHANGES IN FOOD CONSUMPTION.....	32
5.2.3.	CHANGES IN MARRIAGE	34
5.2.4.	CHANGE IN RELIGIOUS PRACTICES.....	35
5.2.5.	BUILDING SOCIAL INFRASTRUCTURE SYSTEM	36
5.2.5.1.	PRESENCE OF SCHOOLS	37
5.2.5.2.	HEALTH FACILITIES	39
5.2.6.	BIRTH AND DEATH	40
6.	CAUSES OF SOCIO-CULTURAL CHANGES OF THE LIFE STYLE OF THE HADZA.....	43
6.1.	CULTURAL INTERACTION AND ITS IMPACTS.....	44
6.2.	TANZANIAN AUTHORITIES.....	48
6.3.	TOURISM ACTIVITIES	50
6.3.1.	THE HADZA AND TOURISM ACTIVITIES.....	51
6.3.2.	ECOTOURISM.....	52
6.4.	PHYSICAL ENVIRONMENT	53
6.4.1.	IMPACTS ON RAINFALL AND TEMPERATURE	54
6.4.2.	IMPACT ON HUNTING ACTIVITIES	59
6.4.3.	IMPACT ON FORAGING ACTIVITIES.....	60
7.	THE EFFECTS OF SOCIO-CULTURAL CHANGES OF THE LIFE STYLE OF THE HADZA SOCIETY	64
7.1.	HADZA ENGAGING IN LIVESTOCK KEEPING.....	64

7.2.	HADZA ENGAGING IN BEE KEEPING	66
7.3.	HADZA ENGAGING IN TOURISM INDUSTRY	68
7.4.	HADZA EMPLOYED BY FARMERS AND PASTORALISTS	69
7.5.	HADZA ENGAGING IN EXCHANGE OF COMMODITIES	71
7.6.	HADZA ENGAGING IN FARMING ACTIVITIES	72
8.	CLIMATE CHANGE	74
8.1.	HISTORICAL BACKGROUND OF CLIMATE CHANGE IN THE WORLD	76
8.2.	CULTURAL ASPECTS AND CLIMATE CHANGE IN SOCIETY	77
8.3.	STUDIES CONDUCTED IN DEVELOPED COUNTRIES CONCERNING CLIMATE CHANGE	78
8.4.	IMPACTS OF CLIMATE CHANGE ON CULTURE AND TRADITION OF SOCIETIES IN TANZANIA	79
8.5.	ENVIRONMENTAL STRESSES AND THEIR IMPACT ON CULTURES	83
9.	STRATEGIES TO EMPLOY CULTURAL PRESERVATION	85
10.	STRATEGIES TO BE EMPLOYED TO PREVENT THE SOCIO-CULTURAL CHANGES OF THE HADZA	86
10.1.	PROTECTING INDIGENOUS LANDS	87
10.2.	MAINTENANCE OF THEIR CULTURES AND TRADITIONS	89
10.3.	RECOGNIZING HADZA'S (INDIGENOUS) RIGHTS.....	90
11.	CONCLUSION AND RECOMMENDATIONS	91
12.	REFERENCES	95
12.1.	LITERATURE	95
12.2.	INTERNET	115
12.3.	FROM THE FIELD: INTERVIEWS, QUESTIONNAIRES AND GROUP DISCUSSION	118
13.	APPENDIXES	123
13.1.	LIST OF ABBREVIATIONS	123
13.2.	ABSTRACT/ ZUSAMMENFASSUNG	124
13.3.	CURRICULUM VITAE - CV	126

1. Introduction

This master thesis investigates socio-culture changes in the livelihoods of the Hadza in Tanzania. It examines the current situation of the Hadza in comparison to previous centuries. The primary aim of this historical comparison is to illustrate what changes have taken place in their lifestyle, before discussing how and why change has occurred along with the resulting effects brought on by those changes. According to Strauss (2012: 371-377), cultures are not static; they change in response to wars, plagues, new inventions, as well as to environmental and climate variability. In particular, this work focuses on environmental crises and the effects of *climate change* and considers these conditions the current challenging factors responsible for culture change worldwide.

For several centuries, the Hadza, a hunter-and-gatherer ethnic group living in Tanzania, have managed to keep their traditional ways of living. This was possible, on the one hand, by avoiding excessive interaction with other ethnic groups and, on the other, through their nomadic way of moving from one place to another. Before the 18th century, there is no documentation of contact between the Hadza and other Tanzanian ethnic groups. Nevertheless, it cannot be concluded that the Hadza never interacted with non-Hadza people. According to Marlowe (2010) the Hadza have increasingly experienced contact with farming and herding people who have entered Hadza land and neighboring areas (Marlowe 2010: 19-28).

According to Costanza et al. (2005: 82), human populations have always been moving and changing their subsistence strategies in response to changing climatic conditions. Strauss further states that “encroachment by other populations, or other kinds of changes in the subsistence base, have also forced groups to migrate...” (Strauss 2012: 371-377). For instance, (Costanza et al. 2005: 82) state that during periods of drought or warfare, agricultural families could migrate to better regions or adopt a migratory life as herders until the climatic and environmental situation improve to support agricultural activities. Population growth and environmental changes raise demand for resources like land, and as a result not only the Hadza have had to move from one place to another (though their movements were mainly within their occupancy land). Other ethnics groups have also had to migrate. Occasionally, beyond the borders of their own lands, to occupy land that does not belong to them. Not only does this process take time, it forces people to adopt changes to better fit into their new environment, which also involves assuming new ways of life.

Historically, changes in culture and tradition (general ways of life) occur over a long period of time. Every society has a different history, nevertheless, examining them the results will obvious shows changes of culture and tradition over time. Some of the behavior, traits, norms and generally was of living that were common at time and shared by people, nevertheless, in a certain time some culture and tradition (daily livelihood) are found completely replaced or modified (URL 21). In a diversified country like Tanzania, with about 130 different ethnic groups, it is possible to adopt new culture and traditions or lose them in a process of interactions. In the case of the Hadza, despite keeping their distance from other non-Hadza people, they still found their way of life being influenced and touched by the many different societies and groups they encountered, such as farmers and pastoralists. Since the historical background of the socio-cultural changes in the way of life of the Hadza is only partly documented, researchers at times have to rely on narrated stories to get the undocumented historical way of Hadza life.

To help the reader understand the historical background, present and predictable future of the life style of the Hadza, this study is conducted through four objectives which are; (i) identifying the indicators of socio-cultural changes among the Hadza, (ii) exploring the causes of socio-cultural changes of the way of life of the Hadza, (iii) investigating the effects of socio-cultural changes of the way of life of the Hadza, and (iv) identifying the strategies that can be used to solve the problems associated with the socio-cultural changes among the Hadza. These objectives are the key points of this study which can help the reader to understand who real the Hadza are, their historical background as well as their current situation.

1.1. The Hadza

According to Marlowe, compared to most other ethnic groups in Tanzania, like the Bantu people, the Hadza are more conservative (Marlowe 2002: 20). Lee states that “the Hadza (hunter-and-gatherer) are click-speaking peoples who differ significantly from their neighbors both linguistically and socioeconomically” (Lee and Hitchcock 2001: 262). Geographically, the Hadza people live around Lake Eyasi, in Northern Tanzania. According to Matagi (2004: 16), Lake Eyasi runs SW-NE and is 80 km long, with a mean width of 14.5 km. It has an area of 1,160 km² and is located at an altitude of 1030 meters above sea level. Lake Eyasi is highly saline and shallow; the seasonal water level fluctuations in the lake are dramatic. During the dry season, the lake may dry almost entirely leaving a thin crust of salt (Mabulla 2012: 23).

The Hadza people are a culturally distinguished people in East Africa, because they are the only population that continues to extensively rely on foraging for their subsistence (URL 1). As Marlowe (2002: 3) notes (Lee 1984), in many ways the Hadza resemble the Ju/'hoansi of Botswana as they were until the 1970's. They have a similar tool kit, hunt many of the same animals, gather some of the same plants, live in almost identical huts, have a similar mating system and they speak a language with clicks. These clicks (and some etymologies) have caused many researchers to classify them together with South African Khoisan speakers (see also Bleek 1931; Fleming 1986; Ruhlen 1991; Woodburn 1977 and Sands 1995).

For centuries, the Hadza have kept a distance from other societies and they considered their neighbours as enemies. Blurton (2016) describes the Hadza people as a somewhat closed population. They are not close with non-Hadza people. Based on accounts from the earliest documentation of the Hadza by the German geographer Erich Obst¹ (1912: 3), from the years 1910 and 1911 respectively, the Hadza were involved in several wars with their neighbours: the Isanzu, Iraqw, and Maasai. One reason, as provided by Obst, was that the Isanzu would sometimes capture Hadza women and children for the purpose of trading them as slaves in the Arab slave trade, which was conducted about 250 kilometres south of the Hadza settlements (Marlowe 2002: 7-8).

In recent years, the lifestyle of the Hadza has changed as their interactions with other societies have increased and cross marriages have even taken place. A contrast to what Erich Obst experienced during their research time. As Sutton (1992) noted, farmers and pastoralists have lived in the general area of the Hadza for several centuries. However, for centuries, Tanzania had a small, sparse population. So it is possible that the Hadza existed for hundreds of years with little to no interaction with neighbouring societies. This would have allowed a much easier preservation of their culture and traditions, in contrast to the present day, where Tanzania's population is continuously growing, forcing communities to shift closer as they search for space.

Like other Tanzanian societies, the Hadza ethnic group, with a population of approximately 1000-1500, has experienced change: culturally, linguistically, and genetically. Similar to indigenous and minority peoples all over the world, "the Hadza now face grave challenges to

¹ Erich Obst is the German geographer who did the first research in the Hadza land in 1911 year. He spent 8 weeks living with the Hadza, researching their ways of life.

their traditional ways of life” (URL 2). Most notably, the necessary adoption of new behaviours and lifestyles in order to survive.

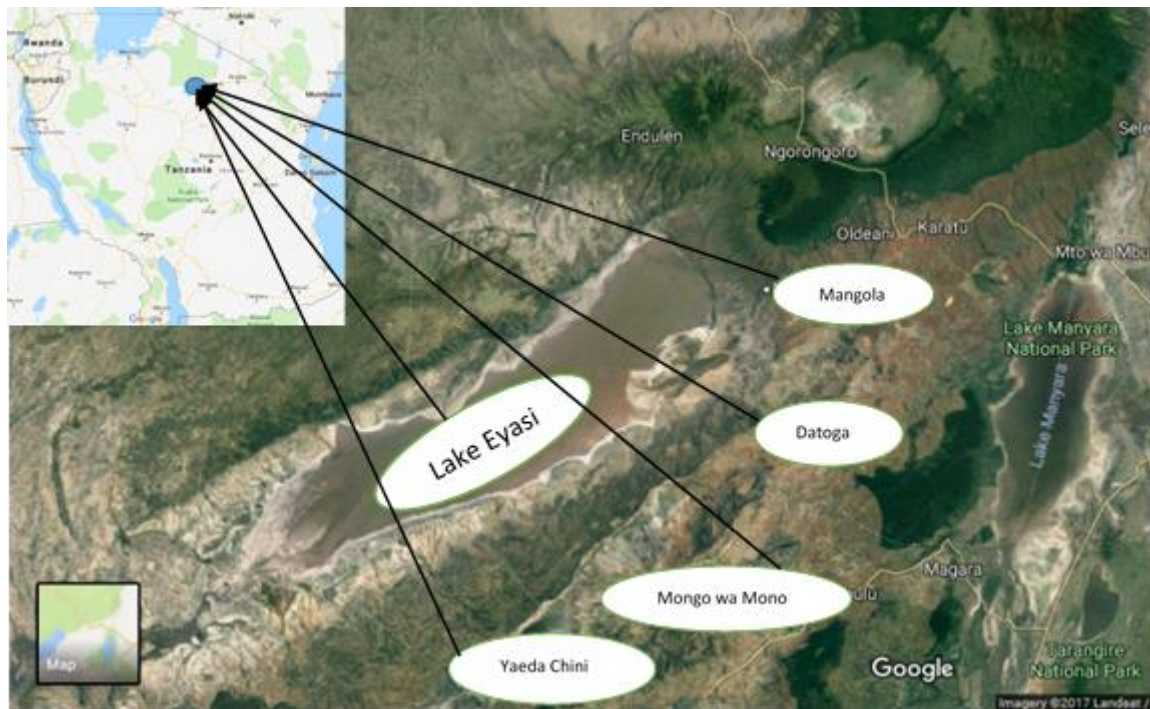


Figure 1: A map of Tanzania zoomed to show the Hadza Land- source- Created from google map.

1.2. Background to the Study: Socio-cultural Aspects

Many scholars argue that, for human beings, it is normal for culture and tradition to change. “No man is an island to himself. Likewise, no nation or society is an island to herself. Global culture, a part of modernization and globalization in the name of modern society, has not only transported the good side of the economic and social development across the globe but has also changed in the culture of host communities” (Emmanuel, 2015: 67).

Super and Harkness (2002: 8) argue that cultural change is an on-going process over the course of the human life cycle. Many factors are associated with this phenomena. Inglehart and Baker (2000: 36), for instance, distinguish between social, economic, political, and environmental factors. This means, changes occur in all aspects of human life in different forms whether in modification or adaption both affects people’s way of reasoning, thinking and acting which results to changes of general peoples’ way of life.

According to Farooq (2014: 47) social factors, such as “ideologies, values, attitude, and ideas” are especially important aspects of cultural change, as they continuously take place within

societies. Further, it is noted that there are various paths in life that people may follow, which means they, too, are not static but change over time. These variations include “rituals, ceremonies, etiquettes, manners, conventions, and other behaviours for various other occasions” (URL 24).

Culture is a full-fledged economic sector in the sense that it impacts rural and urban environments, generating changes that range from direct and indirect expenditure to the generation of employment (Borg & Russo 2005: 34). Borg and Russo further stated that culture generates substantial intangible or non-pecuniary economic effects, thereby possibly leading to a more balanced and ‘sustainable development’² of human beings (ibid: 7). However, while culture can contribute to more sustainable livelihoods, it is important to realize that it can generate negative impacts as well. For example, traditional agricultural methods can be less invasive on the environment and even support local ecosystems. Yet, some traditional celebrations may require a substantial amount of resources like slaughtering a very big animal; historical data shows that early human societies still caused remarkable changes in animal populations through hunting. In fact, humans caused the extinction of many giant prehistoric animals, such as mammoths, giant kangaroos, and woolly rhinoceros (URL 13).

Further, there is evidence that the growing processes of globalization, mass media, and the internet generates considerable cultural effects on a given society. Global flows, according to Melomo (URL 18), result in new ways of living and therefore new forms of culture are created. In many ways, globalization contributes to cultural diversity and heterogeneity, encouraging fragmentation and cultural differences by spreading, mixing, and creating culture in new ways. Furthermore, contact between different parts of the world and different sectors of society, including interactions among diverse ethnic groups, attest to more exchanges and influences in all directions (Arjun 1996). Thus, societies have borrowed many cultural traits in matters such as trade, industries, agriculture, and keeping livestock.

Human life is characterised by the rise and fall of human traditions and cultures. Individuals in social interaction actively create culture. Meaning production is a process of creation

² The concept of “sustainable development” as used in this work focuses on the definition from the World Commission on Environment and Development, (1987), which refers “sustainable development” as development that meets the needs of the present without compromising the ability of future generations to meet their own needs

or recreation in interaction with others. The result is change of culture (Borg & Russo 2005: 33). Of course, among many factors and causes for the rise and fall of some cultures and traditions, one apparent and crucial global challenge, according to the United Republic of Tanzania (URT 2012: 36), is *climate change*. In our time, the advancements in science and technology, despite their positive properties and potential for raising the standard of living, also bring about negative side effects, such as *climate change* and ecological crises (Shiva, 1991: 93). To this day many cultures and traditions remain highly dependent on the surrounding natural environment as far as their native localities are concerned (URT 2012: 18). This means that socio-economic activities of these societies rely heavily on the surrounding environment and are susceptible to climatic influence on their territories.

Cultures and traditions around the world are impacted by the effects of *climate change*. Sometimes the changes experienced are very severe. Crate and Nuttal (2009: 42) found that some of the most environmentally vulnerable communities across the globe are situated in Tuvalu, Papua New Guinea, the United States, Botswana, Australia, Bangladesh, the Arctic, the Andes, and the Alps.

According to the Intergovernmental Panel on Climate Control (IPCC 2007: 9), *climate changes* and climate variations are beginning to affect many other natural and human systems. For instance, settlements in mountainous regions are subject to enhanced risks of glacier-lake outburst floods caused by melting glaciers. In some African regions, warmer and drier conditions have reduced the length of the growing season leading to detrimental effects on agricultural crops. The rise of the sea-level and together with human development are contributing to losses of coastal wetlands and mangroves thereby increasing potential damages from coastal flooding in many areas (ibid). However, based on literature published on *climate change*, the impacts have not yet become established trends.

According to Msafiri (2012: 44), numerous socio-changes take place in the course of human daily life. Some factors associated with these changes are information technology, environmental, *climate change*, medical support, and more. Among these mentioned factors, physical environment seems to be a very powerful factor which leaves no room for human being to decide whether to accept changes or not. Changes of physical environment and *climate changes* affects the whole ecological system and the outcome of this can lead to disappearance or poor production of various species like animals and other food products which

are important for supporting human daily life and this forces changes in people's life as they search for the means to survive.

Given such stress in people's daily life as due to environmental and *climate change*, Msafiri further state that there have been efforts to rescue communities from the problems associated with global *climate change*, to enable societies to live comfortably, or even just to assure their survival in some cases. Still, in light of these critical changes in weather patterns, more efforts are needed to further support those societies affected. Additionally, Msafiri noted that research activity on the impact of global warming and *climate change* on minorities and vulnerable on their daily life is slight presented. Discussions heavily focus on environmental and ecological crises and on methods by which to save the world from the effects of global warming. Conceivably, these may in turn cause considerable socio-economic challenges and in one way or another affect cultural traditions and customs of some ethnic societies (ibid).

In view of the current situation and challenges of global *climate change*, and in consideration of my observations of the Hadza land during my field, in my opinion as a researcher *climate change* and its effects on the life style of the Hadza should be examined. Various environmental challenges, from long draughts to floods, are currently considered critical challenges to the livelihood of the Hadza people. According to Strauss, the results of *climate change* will affect all cultures; many in severe and dramatic ways. She further stated that there is really no question about the truth of this statement, nor a lack of evidence that confirms that these developments are already well underway (Strauss 2012: 371-377). For the most part, environmental and *climate change* have the strongest effect on minority groups though they still affect the majorities, as well; only in different ways. Some irrespective of variations between minority and majority groups, there should be a worldwide unity for developing different ways to deal with the effects of *climate change*. Whether through scientific or traditional methods, the focus should be on finding sustainable solutions for the challenges caused by environmental and *climate change*. I will return to this topic when discussing the report from my fieldwork in the next sections.

2. Methodology

This study aims to identify and understand the socio-cultural changes that affect the livelihood of the Hadza. The method for collecting data used in this study is qualitative rather than quantitative. The qualitative methods applied, enable researchers to make use of different approaches to collect data that might not be clearly obtained through ethnographies. According to Yin (2003: 6), qualitative methods enable researchers to obtain more knowledge from the respondents since the approach calls for open-ended questions, which creates a venue for new insights, whereas a survey or form with closed categories could leave valuable information out of sight.

The plan for this research started with a Pilot Study. Cohen et al (2007: 58) argues that on some occasions it may be better for the teacher or a researcher to develop a pilot study and uncover some of the problems in advance of the research proper. The Pilot Study should also include instruments to be used and Cohen et al. further argue that those instruments must be pretested in order to check whether the sample of the subjects has sufficient understanding of the instrument (Ibid: 41). In this study, I conducted a one-week pilot study from 27 August to 04 September 2016 in Lake Eyasi, Manyara region in Tanzania. This was a very productive and beneficial study as it helped me establish networks which I could later use for my fieldwork in September 2017. The pilot study methods included: participant observation, stakeholder and key actor mapping, interviews, as well as informal talks with residents and experts.

2.1. Research Approach

This research employs a qualitative approach as defined by Denzin and Lincoln (1994: 3-4) “is a multi-method focus, involving an interpretive, naturalistic approach to the subject matter”. This method as cemented by Denzin and Lincoln “enables researchers to study subjects in their natural settings; to make sense of or interpret phenomena in terms of the meanings people ascribe to them (ibid)”. Furthermore, “qualitative research involves the studied use and collection of a variety of empirical materials (ibid)”, for instance case studies, personal experiences, life stories, interviews, as well as observational, historical, interactional, and visual texts that describe daily life problematic moments of individuals in a meaningful way (ibid: 192).

Based on my previous research experience in the region, I evaluated the most effective methods and concluded that the best options for my empirical study are those that foster direct relations between researcher and research partner, such as interviews, focus groups, and participant observation. For the purpose of my research, surveys and written forms would have been less efficient and unsuitable as a significant amount of the Hadza population are not familiar with communication in written form.

2.2. Research Design

Kombo and Tromp (2006: 107) defined the term research design to mean the arrangement of condition and data analysis in a manner aiming to combine the relevant data and research purpose. Research design helps in structuring and collecting, analysing and interpreting data (Best and Khan, 1993).

Qualitative research is designed to answers questions related to ‘what’, ‘why’, and ‘how’ by looking at human behaviours, opinions, and experiences which are generally more difficult to obtain through quantitative data collection (Khan 2012: URL). Moreover, qualitative research provides details about respondents’ behaviours, needs, desires, routines, alongside a variety of other information that, in this case, is important to understanding the Hadza people’s voice (URL 19). Likewise, Family Health International (FHI field by Mack, et al. 2005: 1) point out that qualitative research gives a complex textual description of how people experience a given issue, especially contradictory behaviours, emotions, beliefs, and relationships that exist among the subject individuals. In summary, this research design is appropriate for this study, as it allows the researcher to collect data from multiple sources and track for responses to questions of ‘what’, ‘how’, and ‘why’ that enable the researcher to thoroughly probe causes of socio-cultural changes experienced by the research subjects (Ungar 2006; Creswell 2009). That is why, the research presented in this thesis was conducted in the form of in-depth, semi-structured interviews, focus group discussions, and open-ended questionnaires.

2.3. Research Instruments

For this research, I employed a variety of data collection instruments to enrich the research and as a way to cross check the authenticity of single source data. Given that relying exclusively on one empirical method may bias or distort the picture of the particular slice of reality a researcher is investigating (Cohen et al. 2007: 68, 141) by applying multiple-methods

my research has avoids this particular challenge. In this study, secondary data are obtained from the library and internet. The primary data were obtained from questionnaires, interviews, focus group discussions, and participant observation during my fieldwork.

a) Questionnaires

For this research, I opted for an open-ended questionnaire for which a question guide was developed and given to participants to gain insight on their experiences, feelings, and opinions on the causes and effects of the socio-cultural changes in the lifestyle of the Hadza. I personally delivered the questionnaires to Hadza teenagers in order to establish rapport and to avoid ambiguities during data collection. The choice of questionnaires for Hadza teenagers was intentional as some of them had attended primary level school. However, for the purpose of my research, it was enough if they could read and understand the questionnaire. Before leaving for my fieldwork, I prepared the questions and structured them so that the questionnaire would be easy to understand and respond to, considering the specific knowledge of the place, culture, and language of the research subjects. As Jones and Rattray (2010) state, a questionnaire is a quick, convenient, and inexpensive method of data collection. Further, it can be used to collect information on attitudes, knowledge, and experience of staff (Parahoo, 2006: 280-282).

b) Semi-Structured interviews

According to Kothari (2004: 152), interviews are the only method for studying abstract and intangible personal factors, such as attitudes, feelings, and reactions that are not observable. They also allow researchers to gain first-hand information since the best person to narrate any event is the one who was involved in or witnessed it.

For this study, I led semi-structured interviews face-to-face with the male and female Hadza elders. These semi-structured interviews helped me obtain a broad understanding of the experiences of the identified participants relating to the socio-cultural changes of the Hadza. Cohen *et al* (2007: 29) argues that, interview is “a valuable method for exploring the construction and negotiation of meanings in a natural setting” it allow the researcher to ask follow-up questions that motivate participants to express themselves while the conversations are recorded. Following ethical ethnographical practices, I informed the participants of my research intentions and of the use of the data. This is a very important mechanism, as,

according to Mack, et al. (2005), “a researcher must ensure that the participants understand what it means to participate in a particular research study so they can decide in a conscious, deliberate way whether they want to participate or not “(Mack, et al. 2005: 6, 9). Furthermore, as Bernard (2006: 227) explains, it is important to not rely on memory for interviews. Instead, one should use a voice recorder in all structured and semi-structured interviews, except in the case that interview partners specifically ask you not to. For my research, consent of participants to use recording instruments was secured. I asked all interview partners for their authorization and their willingness to participate. With permission from the respondents, I recorded the interviews through voice recorder devices and additionally took notes.

c) Focus group discussions

Focus groups are group interviews that give the researcher the ability to capture deeper information which could be harder to be collected through personal individual interviews (URL 20). This method enables researchers to gather information from several respondents and simultaneously observe power dynamics within groups. Kombo and Tromp (2006: 77-82) assert that focus group discussions are a valuable tool because they enable researchers to identify ideas, opinions, and beliefs with regard to the institution or community surveyed. Furthermore, Focus groups discussion provide insights into how people think and gives a deeper understanding of the phenomena being researched (URL 20). In this study, with the help of one tour guide, Rasuli Hamisi, I managed to arrange 4 groups of 6 - 8 Hadza participants from each selected Hadza villages and community locations.

Another thing to consider was the area of the study. According to Cohen et al. (2007: 192), it is very important for any researcher at a planning stage to clearly specify and define the area where research will be conducted. For me, this was clear from the beginning: this study is conducted in the Manyara region in Tanzania, an area that has been inhabited by the Hadza for centuries. Accordingly, the focus group discussion was conducted in the forest where they live. This also gave me the chance to observe their life and better understand their feelings regarding life in hard and unforgiving environment, where it is very dry, difficult to access water, and provide daily meals.

As Best and Kahn (1998) point out, the target group for a focus group discussion is one that enables the researcher to gather important information and therefore draw insightful conclusions. The subject of this research are the Hadza, who are hunters and gatherers

(Marlowe 2002; 2004; 2016). In addition, I have included some experts and tour guides in my discussion groups. They are non-Hadza respondents but have experience living among the Hadza, like Rasuli Hamisi, a tour guide who has worked close to the settlements for over 10 years and speaks Hadzabe fluently.

d) Data Analysis

Parahoo (2006: 375) defines data analysis as a means of making sense of data before presenting them in an understandable manner, and as “an integrated part of research design”. Kothari (2004: 95) explains data analysis as a process, which involves three steps mainly: editing, coding, and tabulating collected data. In this research, the data collected through interviews, focus group discussions, and documentation were examined through a process of content analysis. Content analysis according to Wamboldt is “a wide and heterogeneous set of manual or computer-assisted techniques for contextualized interpretations of documents based on communication processes” (Wamboldt 1992: 314) for the ultimate goal of phrase or signification processes producing valid and trustworthy inferences. The goal of content analysis is therefore to provide knowledge and understanding of the particular phenomenon that was studied (ibid).

The strength of content analysis is being unobtrusive and nonreactive because it is conducted without disturbing the setting in any way. The data collected through questionnaires were evaluated by descriptive analysis which involves the “transformation of raw data into a form that will make them easy to understand and interpret through rearranging, ordering, and manipulating data to generate descriptive information” (Zikmund 2003: 740).

Findings for this study were procured through interviews, group discussions, questionnaires and personal observation in Swahili language. The questionnaires method did not work well in the field because a good number of respondents were unwilling to read the question and write down the answers. Some respondents requested that I read the questions to them; they then provided answers that I wrote down on the questionnaire papers.

The interviews were fully transcribed, edited, and coded by me. Subsequently, the codes were grouped into key topics, which I used for my analysis. Some of the emerging topics include: Socio-cultural changes, factors for those changes, effects of those changes, *climate change*

and associated environmental concerns, like the above mentioned droughts, floods, and unpredictable weather patterns, and lastly the effects of *climate change*.

Overall, interviews were quick and a more acceptable method for data collection. As Bryman and Bell (2003) state, interviews can be structured, unstructured, or semi-structured. Interviews could thus be flexible, dynamic, and, at the same time, be in-depth. Thanks to this qualitative method, I realized that the topic of maintaining original cultures and traditions was extremely important to the Hadza people, whereas the invention of new cultures and traditions was less important.

3. Indigenous

Who are indigenous people, and what are the criteria to refer to a society as an indigenous one? The term “indigenous” the International Labour Organization’s; ILO Convention No. 169 (article 1) state that,

“People who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present State boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.” (ILO 1989)

According to Zips-Mairitsch (2013: 16) the term ‘indigenous people’ bears terminological problems and brings about complex questions of inclusion and exclusion. The definition of indigenous, as found in the encyclopaedia of sociology (2001: URL 14), is a cultural or ethnic group that lives in an area where its culture developed or where its people have existed for many generations. Most of the world's indigenous peoples live in remote forests, mountains, deserts, or the arctic tundra, where modern technology, trade, and cultural influence are slow to penetrate (URL 14). Hodgson points out that in Africa, in contrast with the North, Central and South Americas and Australia, it is quite unclear who the first inhabitants were, because of long histories of conquest, assimilation, and migration. Although, most African nation-states now claim that all of their citizens are indigenous (Hodgson 2002: 1086).

According to Lee (2006), since the late 1900s indigenous people have been striving for a new position on the national and global scales. Consequently, they have had to reinvent themselves as ‘indigenous’, strategically recognizing the empowering value of this term and self-

identifying with it. Global scale movements, international organizations, and a general awareness in the world for the term indigenous, were an opportunity many groups took to address cultural, economic, and political issues. For instance, the movement to recognize the indigenous people of Tanzania started in the year 1989 when two Tanzanians, Moringe Parkipuny, a Maasai activist, and Richard Baalow, a Hadza activist, were the first representatives from any community in Africa to address the sixth conference of the United Nations Working Group on Indigenous Populations in Geneva (Yatsuka 2015: 27).

At that UN conference, Parkipuny, as a Maasai activist, spoke on behalf of the Hadza hunter-gatherers, the Dorobo and the Sandawe, and many groups of pastoralists, a vulnerable minority subject to flagrant violations against their communal and individual rights in East Africa. He specified that the most fundamental rights to maintain specific cultural identities and to the land that constituted the foundation of their existence as a people were not being respected by the state or by their mainstream fellow citizens (Parkipuny, 1989). Parkipuny's statement challenged different East African pastoralist activists and Non-Governmental Organizations - NGOs. They began to attend the UN Working Group to claim rights and subsequently expanded the group's target group to include hunter-gatherers (Yatsuka 2015: 27).

By definitions, according to the African Commission on Human and Peoples' Rights - ACHPR and International Work Group for Indigenous Affairs - IWGIA (2006: 9), the term 'indigenous' has no global consensus as a single universal definition. There are major characteristics that help identify who the indigenous peoples and communities are (Barume 2010: 31). As advocated by the ACHPR and the United Nations bodies dealing with human rights of indigenous peoples, the major recognized characteristics for identifying indigenous people include: (1) people whose cultures and ways of life differ considerably from the dominant society, and whose cultures are threatened; in some cases to the point of disappearance. (2) People whose survival of their way of life depends on access and rights to their traditional lands and the natural resources thereon. Furthermore, they suffer from discrimination, various forms of marginalization - both politically and socially - are subject to domination and exploitation within national political and economic structures, and they are often geographically isolated (ACHPR & IWGIA, 2006: 10). The mentioned characteristics apply to indigenous communities internationally. For instance, the hunter-gatherer communities such as the San of southern Africa, the Hadza of Tanzania, and the Ogiek,

Sengwer, and Yakuu of Kenya, as well as other isolated communities are all considered indigenous peoples (ibid). According to Marlowe (2010: 26), indigenous communities are people defined in international or national legislation as having a set of specific rights based on their historical traits to a particular territory, and their cultural or historical distinctiveness from their populations that are politically dominant. Whereas Cobo (1986: 379) noted that indigenous communities, peoples, and nations have a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, and that they consider themselves distinct from other sectors of the societies now prevailing in those territories or parts of them. They form non-dominant sectors of society and are determined to preserve, develop, and transmit to future generations their ancestral territories as well as their ethnic identity, in accordance with their own cultural patterns, social institution, and legal systems, as the basis for their continued existence as a society (Cobo 1986: 379). This definition of 'indigenous people' by Cobo was launched by the UN and is widely used and accepted. Nevertheless, as Zips- Mairitsch stated, this definition cannot formally conclude the discussion about adequate terminology and its content. Moreover, the former definition vigorously differentiates between 'indigenous people' and 'minorities', which stands in contrast to the current understanding of the terms (Zips-Mairitsch 2013: 34).

Indigenous groups, according to Zips-Mairitsch, are often social minorities. The notion of indigeneity includes the common experience of injustices and land claims as well as the longing for recognition of their special legal status in the nation state (Zips-Mairitsch 2009: 88). As specified by the UN, every person has the right to self-determination. It is a basic prerequisite for fundamental human rights (Simpson 1997: 24). The UN and indigenous representatives from all over the world agree that any legal framework for indigenous people should cover basic human rights such as 'survival', dignity, and well-being (Disko/ Tugendhat 2014: 6). Moreover, as Werner Zips points out, the definition of the term 'indigenous', as specified by the declaration of the *UN General Assembly of the International Decade of the World's Indigenous People* (1995-2004), is a chance and opportunity for those concerned in terms of obtaining political and legal recognition as well as the universal right to self-determination (Zips 2006: 27-28).

Indigenous people, as Zips-Mairitsch states, are specific societies with cultural particularities and a deep connection to their environment (Zips-Mairitsch 2009: 88). Thus, the survival of indigenous and minority societies and their ways of life depend to a great extent on their

environment and in turn on the protection of their land. Most indigenous societies, including the subjects of this study, the Hadza, have a common problem as they fight to regain and claim their lands, previously taken from them by a government or another society.

For this paper, the term indigenous and indigeneity refer to people whose cultures and ways of life differ considerably from the dominant society and whose cultures are threatened, even to the point of disappearance. They are people whose survival of their indigenous lifestyle depends on access and rights to their traditional lands and the natural resources thereon. They suffer from discrimination, various forms of marginalization - politically and socially - are vulnerable to domination and exploitation within national political and economic structures, and are often geographically isolated (ACHPR & IWGIA, 2006: 10).

3.1. Indigenous Rights in the African Context

As described above, ‘indigenous’, as referred to by most international or national legislations, are people with specific rights based on their historical traits who are exposed to threats of losing their ways of life (ACHPR & IWGIA, 2006: 23). In the African context, the term ‘indigenous people’ is examined in states’ policies and in documents of international organizations. The reviews date back to the colonial period, through independence movements, and carry on into current times. Certainly, the people who lived within the territory we now call Africa before colonialism are indigenous and, consequently, deserve recognition and equal rights. Yet, some societies are denied their rights and are not equally recognized by their states (ibid).

The African Charter (1986: 2-5) states clearly a number of civil and political rights for the individual. It includes:

- the right to non-discrimination (Article 2)
- the right to equality and equal protection of the law (Article 3)
- the right to life (Article 4)
- the right to the respect of human dignity (Article 5)
- the right to liberty (Article 6)
- the right to have one's cause heard, i.e. minimum standards during legal proceedings (Article 7)
- the right to freedom of conscience and religion (Article 8)

- the right to information, (Article 9)
- the right to expression and dissemination of opinion, the right to freedom of association (Article 10),
- and the right of assembly (Article 11),
- the right to freedom of movement (Article 12)
- the right to participation in government and access to public service and public property (Article 13),
- and the right to property (Article 14).

Despite these civil and political rights all individuals should have, Zips-Mairitsch, (2009: 93) noted that there are certain marginalized groups still facing discrimination on account of their particular culture and mode of production. Similarly, the ACHPR and IWGIA (2006: 12) stated that certain marginalized groups are victims of discrimination in particular ways because of their culture, mode of production and marginalization within states, while other groups within the state do not experience same sufferings. This signifies unequal treatment and violates human rights. Though, it is always stated that all people are equal before the law (see article 3 of ACHPR), in reality some societies or individuals are above the laws and some are below. As argued by ACHPR and IWGIA (2006: 21), these marginalized groups should call for protection of their rights in order to diminish such form of inequalities and discrimination.

According to Zips-Mairitsch (2013: 94), the ACHPR binds members of the Organization of African Unity (OAU) and People's Rights, known as the Banjul Charter, which was ratified in 1981 but did not come into effect until 1986. The Banjul Charter became a unique and complex unification of philosophical and legal dimensions based on generations of human rights drafts. As stated by Thornberry (2002: 247), the charter connects a wide range of discursive spheres that adjust fundamental principles to the African context. For example, Article 3 (1-2) of the ACHPR states that 1) "every individual shall be equal before the law" and 2) "every individual shall be entitled to equal protection of the law" (ACHPR 1981-1986). This is similar to what The Constitution of the United Republic of Tanzania - CURT³ (1995) states in Part III: Basic Rights and Duties - The Right to Equality, Article 13 (1) "all persons

³ The original Constitution of the United Republic of Tanzania is that of 1977. In between 1977 – current year, the United Republic of Tanzania has made minor changes in the constitution but almost all basic article in the constitution have remain the same as that of 1977. This citation is from the constitution that was revised in 1995 by the URT.

are equal before the law and are entitled, without any discrimination, to protection and equality before the law”.

However, as Nanjira (2003: 223) pointed out, the rights of people and the rights of the state are controversial in Africa. Nanjira further states that in most of the African state especially states which use socialist system have not distinguished the rights of the state and peoples’ rights. For instance, states’ economical plans or centrally controlled economies as Nanjira notes give the state more power and authority over land (Nanjira 2003: 223) and that is in contrast to the African Charter, Articles 19-24⁴, which discuss “all people’s rights”(Zips-Mairitsch 2013: 95).

According to Nowak (2002: 179), the aim of the Assembly of Heads of State and Government, that adopted the Protocol to the Banjul Charter and established the African Court on Human and People’s Rights, was to emphasize freedom, equality, justice, peace, and dignity of the African peoples. However, it has some shortcomings, most notably associated with a lack of funding, their staff, and public critique of their advocacy of the rights of indigenous peoples (Zips-Mairitsch, 2009:109).

In Africa, indigenous rights are to a certain extent defined in each country’s Constitution. As stated by Nanjira (2003: 2016) the terms that most African states managed to clarify in their Constitutions are human rights clauses. However, only very few African states recognize the existence of indigenous peoples in their countries. Even fewer recognize them formally in their national institutions or legislation (ACHPR and IWGIA 2006: 47).

For example, in the preamble to its constitution, Cameroon explicitly acknowledges protecting indigenous rights. Their constitution states that “the state shall ensure the protection of minorities and shall preserve the rights of indigenous populations in accordance with the law” (Constitution of the Republic of Cameroon 1972: 4). This includes the protection of the minority groups of “pygmy” societies, specifically the Bedzan, Bakola-Bagyeli, and Baka, for whom securing funding for their people became important and inevitable (Stavenhagen 2002: 42).

⁴ See AFRICAN (BANJUL) CHARTER ON HUMAN AND PEOPLES' RIGHTS (1986: 6-7) what the articles states.

However, enforcement of the protection of indigenous people in Cameroon remains a problem. Though, for instance, Article 8(1) of the 1994 Laws on Forest and Fauna recognizes the ‘resident communities’ rights of use, but it neither establishes a right of ownership nor a monitoring right for indigenous peoples (Stavenhagen 2002: 42). The same can be said of the South African Constitution. While it includes a provision for the establishment of a Commission for the Protection of Cultural, Religious, and Linguistic Rights, the South African experience shows that this is not realizable in practice because of the tendency in postcolonial South Africa is to centralize control over land and resources for the benefit of national unity. Something that occurs in many African states (ibid: 42).

The above cases exemplify how many African countries, that had preserved at least some self-determination under colonial rule, became inert through inconvenient obstacles of nation building and through democratically weak and politically hardly communicated measures of nationalization. For this reason, legal or constitutional protection is a crucial and important aspect.

3.2. The Tanzanian Perspective on Indigenous Peoples: Recognition and their Rights

According to the Coalition of Indigenous Pastoralist and Hunter Gatherer Organizations - CIPHGO (2011) and as noted by the African Commission on Human and Peoples’ Rights (ACHPR) as well as the United Nations, the indigenous peoples of the United Republic of Tanzania include the Maasai, the Barbaig, the Akie, the Taturu, and the Hadza. The first two groups are predominantly pastoralist while the latter are recognized as forest-dwelling hunter-gatherers. Therefore, the groups mentioned above collectively practice pastoralism and hunting-gathering (CIPHGO 2011: 9).

While the United Republic of Tanzania has enacted several laws and policies which address land rights and other rights, misguided investment policies and abuse of power (legislative and administrative) are some of the main sources of the mistreatment of indigenous peoples in Tanzania (CIPHGO 2011: 10). For instance, Article 1.2 of the United Nations, International Covenant on Economic, Social and Cultural Rights -UNCESCR (1966) states: “All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic cooperation, based upon the principle of mutual benefit, and international law.”

Nevertheless, according to the UN report “the United Republic of Tanzania does not have a land rights regime meeting the obligations under Article 1.2 of the convention quoted above” (UN 2011: 11). Furthermore, the laws of the United Republic of Tanzania does not fully recognize and give protection to its indigenous (pastoralists’ and hunter-gatherers’) mandate of their ancestral lands which basically they rely on it for their livelihood and for their future generation’s development (ibid).

Also affected by this are the Hadza people, who are currently experiencing many difficulties in their daily lives as they have become surrounded by other communities, who occupy their lands (lands that for many centuries were used by the Hadza) for cultivating crops and animal husbandry. This issue has generated conflicts between communities since land is one of the most important assets for the livelihood of the indigenous peoples. This is also noted in the Declaration, which includes references to lands, territories, and resources in a number of articles, including Articles 25-30 and 32 (Charters/ Stavenhagen 2009). Nevertheless, the indigenous and minority peoples in Tanzania as stated in the UN report the are regularly exposed to “violations, abuses, and denials of human rights, including systematic land alienation, evictions, intimidations, and marginalization from social services as well as a lack of legal recognition” (UN 2011: 10).

According to the International Work Group on Indigenous Affairs (IWGIA 2013), many African governments regard all citizens as indigenous. In Tanzania, the government recognizes the existence of indigenous peoples in the country. Yatsuka stated that, today, the Hadza are widely known as indigenous peoples, have joined the UN Working Group on Indigenous Populations, and they receive additional support from international and local Tanzanian NGOs.

Though the Hadza are considered hunter-gatherers, internationally and domestically, they also engage in small scale farming (Yatsuka 2015: 28). The Hadza have claimed their land, and in 2012 they obtained a land title permitting them to maintain their traditional use of the natural resources (ibid: 28). Similarly, in 2011 the Tanzanian authorities, with the help of the Dorobo Fund⁵, issued land titles for over twenty thousand hectares to the Hadza living in the Yaeda Chini Ward so they could engage in their traditional practices. Still, this is only a small-scale

⁵ A fund provided by a safari company that promotes the protection of the cultures, people, landscapes, and biodiversity of Tanzania.

act of the Tanzanian government to protect the Hadza from disappearing. There are still many claims of Hadza lands being encroached on and confiscated by the government or neighbouring communities. A matter which needs to be solved to ensure the protection of the rights of the Hadza.

The Hadza are also provided with free hunting licenses. That is, they do not have to pay for hunting permits, which are issued by the Tanzanian government under the Wildlife Conservation Act of 1974 that restricts hunting without a license that is obtainable by both residents and foreigners by paying a regulation fee (Wildlife Conservation Act No.12 of 1974). The Hadza people are therefore free to hunt for their daily meals (Madsen, 2000). This is a noteworthy effort and strategy to secure the livelihood of the Hadza. It should, however, be accompanied with enough land space for hunting, therefore, claims made by the Hadza to regain their land should be widely considered.

To conclude this topic, generally, the issues of human rights and indigenous (minority) rights are crucial in most African countries. The term ‘indigenous peoples’ according to ACHPR and IWGIA (2005: 86) is today signifies a “global movement of groups fighting for rights and justice for those who have been left on the margins of development, who are perceived negatively by dominant mainstream development paradigms, and whose cultures and ways of life are subject to discrimination and contempt and whose very existence is under threat of extinction”. The linking up to a global movement - by applying the term ‘indigenous peoples’ - is a way for these groups to try and address their situation, analyse the specific forms of inequalities and repression they suffer from, and overcome the human rights violations by also invoking the protection of international law (ACHPR and IWGIA 2006: 11). It is crucial that the situation of indigenous peoples and their human rights are addressed and it is necessary to have a concept for highlighting and examining their situation and dealing with them appropriately. Ignoring their rights can cause them suffering. Furthermore, searching for alternative ways of living or producing should be precisely that, alternatives. They should provide indigenous peoples with choices. However, forced situations for survival may lead to severe changes in their ways of life, which could potentially eradicate the history of a particular state, especially with regard to people’s cultural and traditional practises.

4. Culture and Tradition

Tylor defined culture as a “complex whole, which includes knowledge, beliefs, art, morals, customs, and any other capabilities and habits acquired by man as a member of society” (Tylor 1968: 1). Along these lines, Schaefer (2002) defined culture as the “totality of learned and socially transmitted customs, knowledge, material objects, and behaviours”. This definition includes the ideas, values, customs, and artefacts of a group of people. Eriksen (2015: 52) stated that “what we think of as our human character is not inborn”. It is acquired through learning”, which can take place in families, schools, sport areas, and all places where people can meet and socialize with others. Eriksen further explained that what is

“truly ‘human’ in us, as anthropology sees it, is primarily created through our engagement with the social and cultural world; it is neither exclusively individual nor natural. All behaviour has a social origin; how we dress ... how we communicate through language, gestures, and facial expression, what and how we eat, and other practises that we do” (Eriksen 2015).

According to Eriksen, all of these behaviours are acquired, not natural (ibid: 52-53.). Traditions as cited from URL “are practices and beliefs that are passed down between generations of a certain family, culture, or group” (URL 11). Unlike laws and rules, which we observe for our safety and well-being, traditions is further explained as “practices or things we do by choice because they are customary and meaningful” and most of such traditional practises are “enjoyable things that help people commemorate occasions or feel unified with a certain group, such as a religion team, or community” (ibid). Furthermore, the term ‘tradition’ implies that,

“certain practice has been around for some time and is observed regularly. The tradition to eat specific foods, for example, usually goes back to parents, grandparents, great-grandparents, and beyond. However, new traditions grow all the time and sometimes even replace old traditions” (ibid).

Borg & Russo (2005: 32) state that Culture and traditions do not exist independent of the individual, thus, the existence of culture and traditions in the individual through interaction with others. Moreover, Borg & Russo Cultural further stated that individual identity in any society is formed through experiences from childhood, contact with parents, peers, others, education; and is unceasing, since people living in a society always receive and adopt new influences through communication with others (ibid: 32). This means, culture and traditions

are diversified all over the world, thus, studies on culture and traditions of people should be studied initially from historical background as how they came to existence.

4.1. Cultural and Traditional Practices in African Societies

Cultural and traditional practices in Africa have survived through several generations (Njoh, 2006: 9). Before colonialism, African societies had already developed treatments for major and minor diseases and disorders as well as performed surgeries (Michie, URL 22). Nelms and Gorski (2006) noted that, there is a deep rooted culture of traditional medicine, which has a significantly longer history than Western medicine in Africa. For example, rural African women usually prefer traditional health practitioners, such as traditional birth attendants, to biomedical health care professionals [6–8]. As Oyeboode (2016- URL 23) noted, in Africa over 80% of the population use traditional medicine, as for the majority, traditional medicine is the only accessible primary health care option, particularly for rural African communities (Romero 2002: 173–176). This is in line with a World Health Organization (WHO) report that also stated that up to 80% of people in Africa make use of traditional medicine. South Africa, for instance, has its own indigenous medical traditions that predate modern biomedicine and which continue up to this day (URL 15).

Cultural and traditional practices, inherited from past generations, can have positive and negative effects in different aspects. Taking the UN charter and the articles on human and people's rights as a reference, some traditional practices directly injure human rights. For instance, according to Msuya (2017: 1, 4), some cultural practices, such as forcing young girls into ritual servitude, *trokosi*⁶ (slaves to the Gods), Wahaya in Tanzania (fifth wife), Ukuthwala (kidnapping girls for marriage), payments of dowry, male dominance, female genital cutting, witchcraft, child marriage, and others not mentioned, are inhuman practices that perpetuate crimes. Such practices make individuals from many African states, women and girls in particular, flee from their homes in order to save their lives.

⁶ See Msuya (2017: 4) as cited Aird (2001), *trokosi*, or “slave to the gods,” is a traditional practice that is widespread in West African countries such as Ghana, Benin, Togo, and south-western Nigeria (Aird, 2001). This tradition involves young virgin girls from the Ewe ethnic group who are sent to live as forced laborers in traditional shrines. Apart from being used as slave laborers, these young girls are also used as sex slaves by the priests residing in the shrines. According to this religious custom, when a relative commits a crime, ranging in severity from petty theft to murder, the family must offer a virgin daughter, typically from six to 15 years of age, to the local shrine where she will become a *trokosi*, or “slave to the gods” (Aird, 2001).

On the other hand, the knowledge of iron technology had a very positive effect. This technology, common in Karagwe and Fipa in Tanzania as well as in Meroe, Axum, and Nok/Kush (Njoh, 2006: 9), enabled African societies to colonise a continent widely known for its harsh natural environment and climate (Duignan/ Gann 1975: 108). Despite the limitations of its time, pre-colonial Africa had succeeded in developing viable techniques of iron technology, making it possible for the great ancient empires of Africa to defend themselves since iron works were critical for the production of weapons.

Flint (2008: 15) stated that Africans practiced local traditions based on the knowledge of the forests that surrounded them. Traditional healers performed various duties in their respective societies, including bringing rain, detecting witches and criminals, negotiating with ancestors, and using herbs and surgical procedures to cure and mend the body. However, cultural boundaries are not only prone to shift overtime but are porous by nature, particularly when culture groups frequently encounter each other (ibid: 15). As a result, these medical practices changed over time due to influences of Arab, Indian, and European medical knowledge.

Dating back to ancient times, Africans practiced their religions. They are a set of worldviews, beliefs, symbols, traditions, and practices of African peoples (Mbiti 2015: 46). Traditionally, African religions are integrated into the entirety of a person's life. They feature prominently in family and communal rituals marking rites of passage, initiation ceremonies, pregnancy, parenthood, death, and burial (ibid). Some individuals got training to perform specific duties for their communities such as diviners, priests, prophets, and ritual elders. However, as Mbiti commented, the changes in the world due to globalization, economic expansion, political pendulums, and modern communication have lead things to fall apart. Many elements in the realm of beliefs and the way people worshipped in ancient times have changed (ibid).

In African societies, traditional “Ngoma”⁷ became popular for cultural festivals. According to Losambe and Sarinjeive (2006: 89), culture articulates its self-image through such performances and thus represents and exhibits itself to its own members as well as outsiders. Oral narratives, indigenous African wedding celebrations, and African indigenous doctors' celebrations became important aspects for traditional “Ngomas”. Just like the way cultures and traditions of African societies differ from one state to another, the traditional “Ngoma”

⁷ Ngoma are traditional African dances performed for special occasions and festivals, like harvesting, weddings, or even burials. The rhythms of Ngoma are made by using traditional instruments, like drums.

vary from region to region: the “Ngomas” practiced in West Africa differ from those in East Africa as well as southern and northern of Africa.

4.2. Cultural and traditional practices in Tanzania

The majority of the population of Tanzania is of African Bantu origin, amounting to around 95%. Other tribes include Cushitic speakers of Nilotic origins who migrated southwards in previous generations, often as nomadic pastoralists, and a small percentage of descendants of the first hunter-gatherer bushmen tribes who inhabited the land first, until around 1,000 BC when Cushitic speakers and Bantu tribes moved southwards and westwards to share this region. The hunter-gatherers are closely associated by physiognomic, cultural, and linguistic similarities with the Khoisan (Bushmen) of southern Africa. The Hadza and Sandawe societies represent the only small remaining pockets of these inhabitants (URL 9).

As previously mentioned in the introduction, Tanzania has 130 diverse societies, sub-divided into smaller internal groups which speak different languages and have their own cultures and traditions, though some share a few aspects of their practices. This variety of cultures and languages is the result of multiple influences and of contact and exchange between the diverse peoples living in and migrating to the region (URL 9). Thus, it is important for researchers to break down each individual society and study them in comparison to the other societies. This will help researchers avoid stereotyping and gain a clear understanding of the socio-cultural differences of societies in one state and their changes over time.

5. Socio-cultural Changes

This is the main theme of this study. For it will actually contain the examination of socio-cultural changes by pointing out some indicators as they are portrayed in the illustrational diagram below. That means, starting with Africa at large and then narrowing them down to the Hadza people. It will also draw on the history of the Hadza that I previously discussed in the introductory chapter (see 1.1).

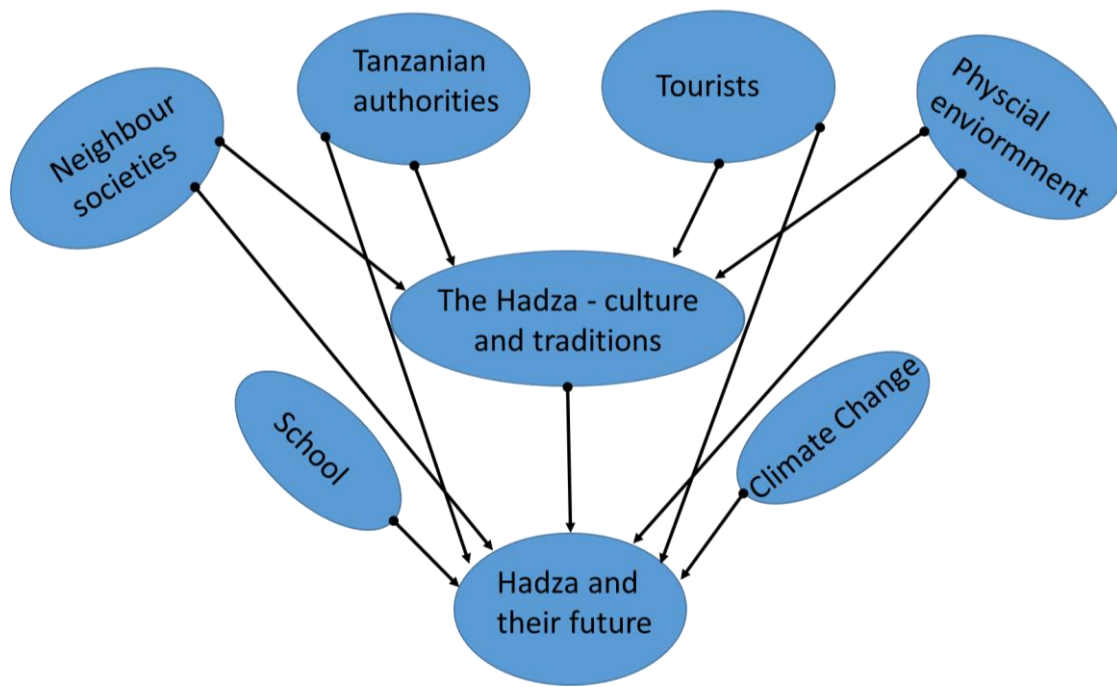


Figure 2: Research modal modal designed by author in May 2017

According to Wilkinson (2000: 62), “all cultures are inherently predisposed to change and at the same time to resist change”. In the world, there are dynamic processes, like interaction, diffusion, acculturation, which take place and encourage acceptance of new ideas and new things. However, there are also cultures and societies that avoid interactions with others which encourages changeless stability, as, for example, was previously the case for the.

There are diverse sources of influences that are responsible for both change and resistance within society, which includes invention and culture loss (ibid). Inventions can be either ideological or technological. Examples of technological inventions according to Wilkinson are “new working tools, energy sources, and transportation methods” (ibid). Culture and traditional loss occurs when old cultural and traditional values (people’s daily practises) are replaced with new ones. O’Neil (2006: 29) argued that innovations and inventions tend to enhance culture loss. However, within a society there are processes that form a resistance to changes; these include habits and the integration of cultural traits. This generally becomes evident when observing older generations who are often reticent to replace the comfortable, long familiar cultural patterns that confine their lives. Other sources of influence, as previously noted, include contact between societies through processes of cultural diffusion and acculturation (Spencer 1996: 59). Special attention should be paid to geographical and ecological factors. According to Melissa (1998: 134) climate or rainfall altitude, and closeness

to the sea can shape the culture and lifestyle of a region's inhabitants, and any change in physical features will automatically lead to changes in a society's culture, habits, and way of living.

5.1. Socio-cultural Changes in African Societies

According to Abanyam (2013: 27), Africa has a relatively rich body of indigenous knowledge and related technologies that have been used for thousands of years to solve their problems. However, in recent years such indigenous knowledge and technology seems to be neglected. Abanyam states that most states rely heavily on Western technology to accelerate their development (ibid: 27). Furthermore, Abanyam (2012: 105) in Akpan noted that "before the advent of modern science and its application technology Africans knew how to brew beer, distill local gin, preserve corpses, weave cloths, make pots of different shapes, colours, and sizes, build houses, make astronomical observations, heal diseases of different types through herbs and roots, rear cattle, and do many other things. But what has happened to these indigenous sciences today? Some of them have been lost to society because of the influences of Western scientific paradigms" (ibid: 105).

Socio-cultural and traditional aspects of many African societies today are at risk of disappearing. This is influenced by different factors, both natural and artificial, due to advancements in science and technology. Natural factors, including geographical and ecological effects, touch people's daily lives directly as well as indirectly (Mwaipopo & Shalli, 2005: 87). Considering the fact that the majority of African states are not industrial countries, most of their people or citizens depend on 'mother earth' for their livelihood. That is to say, culture and traditions of many African societies, as is the case of Tanzania, are designed in close relation to nature and the surrounding environment. So, changes in the environment accompany changes in people's life styles. Development of science and technology worldwide have positive and negative side effects. This depends more on a particular adoptee technology in a specific place of state. Most new technologies originated from western countries which are more developed and industrialized. Technology in one hand is good when is applicable in a right place with right people and on the other hand it can distort the people and their ways of life. Abanyam (2012: 27) states that "not all western technologies are congenial with African worldview. Some of these western technologies have rather helped to reduce African cultural values. The youths appeared be the most venerable group affected by the influx of these western technologies". That goes further to affect children as they learn

from their elder siblings especially in most of the African families where elder brothers and sisters act as care takers to the younger one in very young stage.

Moreover, Abanyam stated that Western technology also involves shaping children's attitudes and perceptions. In particular, Abanyam points out that computer games (electronic games) have shaped children's thinking (ibid: 2012: 28). Western technology has developed to the extent of affecting not only children, but also families. Parents and even elder family members may become addicted to television programs, like movies, sport programs, or different world contests, and forget their responsibilities to the younger generations. Communal family traditions, singing and dancing together, are in danger of disappearing.

Taking a critical look at the African continent today, we find it is facing several challenges and problems that raise many questions inside and outside Africa. In any case, where climate is changing a society's survival practices cannot remain same and likewise cultures and traditions cannot continue unchanged. For most African countries, whose economies and livelihoods depend mostly on natural resources, the effects of *climate change* are felt strongly and affect their means of production and their life styles, as well. Furthermore, these effects cause changes in cultures and traditions.

According to the summary of the projected impacts of *climate change* in Africa, by 2020 between 75 and 250 million people will be exposed to increased water stress. Communities that depend on agriculture will be directly affected. It is further projected that in some countries the yields from rain-fed agriculture could be reduced by up to 50% by 2020. This directly affects agricultural production, limits access to food, and puts food security at risk (IPCC 2007: 48).

According to Nelson and Stathers (2009: 11) poverty and vulnerability on account of *climate change* are very big challenges for Tanzania. In addition, traditional ways of life have been displaced by so-called modernization. The effects of *climate change* on agriculture, livestock keeping, local medicines, traditional dances, and the likes has put Tanzanian cultures into jeopardy. For instance, most African fore fathers knew how to cure a lot of human and animal diseases by using natural vegetation and animal products but current societies have lost that traditional knowledge and now rely on scientific medication which bring additional challenges in terms of costs and availability, especially in rural areas.

According to Kalua et al. (2009: 3), in most African countries traditional medicines are used by nearly 70-80% of the local populations to deal with their basic health care needs. There is scientific evidence that shows that over 120 pharmaceutical products are derived from plants, and 74% were first utilized by indigenous cultures. Most of African countries have recognized the role of knowledge and innovation, however, existing policies and legislative mechanisms are ineffectual in that they do not fully protect and promote the use of indigenous knowledge and innovation (ibid). This is to say that, the modernization and the rise of technology plus the effects of *climate change* that led to the disappearance of some species in the world have contributed to changes in cultures and traditions of various African societies and the world as a whole.

It is well understood that gender-based division of labour leaves men and women with different levels of exposure to climate risks and opportunities. It is possible that there could be shifts in hunting and gathering role patterns (especially if there are too little animals to hunt and fruits to gather) further limiting the range of possible means of support available to households (Rossi and Lambrou 2008).

An additional challenge for agriculture is the increasing prevalence of crop pests and diseases. Among the emerging diseases there are a number of fungal, bacterial, as well as viral diseases, such as batobato, banana, panama, or cassava mosaic. Furthermore, increases in temperatures have also led to the expansion of some weed species. Facing all these challenges, societies have had to adopt their cultures of eating and start cultivating other crops, a novel practice. According to a report of the United Republic of Tanzania (URT 2012: 17), *climate change* has led to agro-diversity. The rising temperatures and uncertainty of precipitation levels, that are associated with global warming, have resulted in ecological shift. As a result changes in plant and pasture species are evident (ibid: 13). In this context of *climate change* situation in Tanzania, non-palatable and toxic plant species have replaced the palatable and nutritious plants which also affects the livestock industry. In addition, global warming has created favourable conditions for insecticides and pests in turn leading to increased incidences of livestock diseases, such as the recent Rift Valley fever outbreak in Tanzania (ibid: 38).

5.2. Socio-Cultural Changes in the Lifestyle of the Hadza

The aim of this section is to determine what has changed with respect to the lifestyle of the Hadza and to answer the question: are there indicators of socio-cultural changes among the

Hadza? During my fieldwork in Tanzania, I assumed that the respondents would mention various indicators of socio-cultural changes, such as inter-marriages, invention of new food stuffs, and medical services. Information gathered through questionnaires, interviews, and focus group discussions identified community-based indicators of socio-cultural changes. These community-based indicators as identified in the findings are presented and discussed in the following sections.

The term ‘change’ can have various definitions in different fields over a certain duration of time (URL 16). That is, in all aspects of life - political, social, economic, religious and cultural - the term ‘change’ is applied when certain practices, behaviours, or things are not constant or the same over time. Thus, for the context of this study on the socio-cultural changes in the lifestyle of the Hadza, ‘change’ refers to descriptions of the Hadza by ethnographers (anthropologists like Woodburn, Blurton, Daudi Peterson, Hawkes, etc.) from the 20th and 21st centuries. These descriptions are used to find cultural traits or practices that are no longer the same.

I realize that the 20th to 21st century is enough period of time, and that data, analysis, and theories produced during this time period were intrinsically influenced by oppressive colonial structures, making them somewhat problematic. This is a good duration where historical background of the Hadza could already found in written documents; various movements and interaction with other non-Hadza people, tourist and researches. This means the fear of the Hadza to “strange” (As I noted former ethnographers, cited in previous chapters, the Hadza considered all non-Hadza as strangers and enemies so avoiding interaction with them was as weapon to avoid fight and killings from their neighbours societies like the Datooga, Iraqw and the Sukuma) is no longer there and that makes communication more easier. For instance, language wise, this work predominantly uses descriptions in Swahili instead of the Hadzabe language for better reference and comparison to my own primary data.

5.2.1. Changes in Language

This study examined whether or not, Hadza experienced any changes to their language. Interviews with elder Hadza males revealed that considerable linguistic changes have taken place. Isanzu, the language of Bantu, has replaced Hadza, the former the *lingua franca*. Furthermore, a difference in the use of language between the early 1900s and today, as

mentioned by Marlowe (2002:15), is that Swahili, rather than Isanzu, has become their second language. This is exemplified by one respondent:

“Since we were born, we used to speak our own language in which we communicated well. During our youth age and also when we were teenagers we still maintained that. But recently changes has been taking place slowly, we especially teenagers and some few elders are speaking Isanzu language which is foreign language in our land” (Yusufu, interview, 2017).

Language according to Sirbu “is essentially a means of communication among the members of a society. It is also a fundamental aspect to the expression of culture. It is a tool that conveys traditions and values related to group identity” (Sirbu 2015: 405). Data collected in the focus group discussions revealed that people migrating into the Hadza land especially have an impact on language acquisition and distribution. During my fieldwork, one Hadza teenager respondent stated:

“Our fathers are the one who can speak our Hadza language perfectly. It is very difficult for us to speak language of our origin without code mixing or code switching to the other languages like of Isanzu in which sometimes we don’t be identified easily which society do we belong” (Safari, FGD, 2017).

In this respect, the findings revealed that social interactions between societies influence cultural change. Any society can change whenever there are interactions among societies. In addition, this cultural change can lead to changes in cultural identity. In connection to that, respondents revealed that Hadza people from the South are bilingual in Isanzu and those from the West in Sukuma. However, a number of Hadza living in the central areas speak Dotooga and few of them know Iraqw. Additionally, two male teenagers who participated in focus group discussions commented as follows:

“To speak Hadzane language sometimes marks me to be seen as primitive one. Sometimes you will miss opportunities of getting money from the tourists because you can’t communicate” (Samwel, FGD, 2017).

Feeling ‘primitive’, especially for the younger generations of the Hadza people, is perhaps mostly influenced by external factors. One example of an external factor comes from the Tanzanian government and its administration: they regard the traditional ways of life of the Hadza as "archaic or primitive and as disgusting to the nation" (Ndagala 1988: 65-66). As a

result, Tanzania leaders, like Tanzania's first president Mwl. Julius Nyerere, put a lot of pressure on educating the Hadza. They restricted them in speaking their Hadza language and put them in permanent settlements, though with little success at the time. Another respondent had this to say:

“I like to speak more than one language, this is for me an advantageous because of assisting working together with tourists and our neighbouring societies like Maasai, Dotooga and the Sukuma” (Sundaye, FGD, 2017).

The above two assertions by Samwel and Sundaye reveal that expanding their language abilities was not a big problem for Hadza daily life management. As a result of the increasing number of interactions and therefore the need to communicate with other societies, the Hadza became multilingual. Though the Hadzabe language “has persisted for thousands of years and is one of the world's most distinct and ancient languages” (URL 17), its future is threatened. In Africa, “about 120,000 people still speak a click language, including the Hadza, Sandawe, Northern Khoisan, Central Khoisan, and Southern Khoisan. Among these, about 80,000 speak a San language, 40,000 speak Sandawe, and less than 800 people speak Hadza. Both Sandawe and Hadza are isolated languages and therefore in need of conservation” (ibid). There are, however, far fewer Hadza speakers and thus the language demands a higher conservation priority. Today issues of land use and cultural diffusion are the most pressing challenges for the future of the Hadza people and their language (ibid). This shows that the number of Hadza speakers is going down compare to the number of the Hadza people which numbered from 1,000 to 1,500.

5.2.2. Changes in Food Consumption

More information from the respondents revealed that, there have been substantial changes in food consumption among the Hadza, mostly from the 1990s to the current years. This was caused by a shortage of traditional foods, which the Hadza used to consume. Traditionally their diet consisted of five food types: meats, tubers, berries, honey, and ba-obab (Marlowe/Berbesque 2009). It has been reported that some 400 Hadza subsist on hunting and gathering (Marlowe 2002; 2010) but in some of their settlements they farm and cultivate agricultural products to supplement their diet (Yatsuka 2015: 34). Marlowe (2010) estimated that approximately 40% of the Hadza practice foraging exclusively. The remainder supplement the foraging diet with agricultural produce (Blurton et al., 1992). Furthermore, interviews

conducted with Hadza males revealed that they used other foods, like stiff porridge and beans, to substitute traditional hunting-and-gathering-foods. These foods are rare, as respondents acknowledged in interviews:

“We men in our society normally go for hunting for our daily food and if all goes well, we sometimes returned with wild meat from wild animals like impalas dik-diks wild pigs and monkeys. Sometimes it happens we do not find wild animals for our meals and therefore, we have to find an alternative to make our families survive” (Kapnoy, interview, 2017).

This is what I observed during my fieldwork. I walked around with some Hadza men, hunting for several days. But unfortunately, nothing was found. We returned with empty hands this situation is not facing just men on hunting activities, similarly, women are facing the same problem on foraging. This was proved by one respondent stating that:

“Women frequently gathered wild fruits, such as *cordia sinensis* and *adansonia digitata*, and wild herbs, like *portulaca oleracea*, *ceratotheca sesamoides*, and *limeum viscosum*. However, nowadays, availability of such fruits and herbs is scarce” (sety, Interview, 2017).

The implications of these changes are that many Hadza people complain about hunger and require food from other societies, especially from the nearby groups like the Datooga, Iraqw, and Sukuma, who keep livestock keepers and are agriculturalists. However, I observed that some Hadza people continue to rely on hunting and gathering to obtain the majority of their diet. As one of the respondents exemplified:

“My husband tried to go to Yaeda Chini market to buy us some staple foods like potatoes and cassava. Actually, I failed to cook it properly and when I tried the next day, the food was tasteless. In fact, we are unfamiliar to such foods and we don’t want to attempt cooking again” (Anna, interview, 2017).

As the above assertion indicates, some of the Hadza are able to adopt other foods as alternatives, however, the majority still practice hunting-and-gathering for their subsistence. Nevertheless, it is important to note that changes in terms of eating habits have taken place and will likely continue to take place due to cultural changes which occur all the time. This is in line with Marlowe (2010), who argued that no culture is static, they change with time. Thus, some Hadza guard the maize fields of their neighbours from animals, like vervets and

baboons, and receive maize in return (Blurton et al., 1992: 176) but will also eat the meat of the monkeys they kill while guarding the maize. Some Hadza are labourers on the two large European farms in the Mang'ola area. From time to time, a Hadza may work as a game scout or work for the game department. A few Hadza have paid government positions as community development officers, while a growing number of Hadza depend on income from tourists (Marlowe 2002: 3). In conclusion, hunting and gathering remain the main sources of food for the Hadza, with maize, together with other staples like potatoes, bananas, cassava, and rice, playing a minor role.

5.2.3. Changes in Marriage

As previously disclosed, questionnaires were administered to Hadza teenagers and interviews were conducted with male and female Hadza elders respectively. The data revealed that there have also been changes in the cultural tradition of marriage. Some perceive this as a negative influence on their cultural well-being, as pointed out by one male elder:

“We Hadza, formerly we didn't used practicing the wedding ceremonies and we usually described as serially monogamous. Nowadays there are changes in our society because we see some of the parents especially those who sent their children to school when they want to marry they go to church and later they make wedding ceremonies which is out of traditional one” (Isaka, questionnaire, 2017).

Similarly, one Hadza teenager had the following to say:

“Last year, my cousin who is a graduate from Sokoine University conducted a wedding ceremony at Yaeda Chini Lutheran church. I, myself, attended but I was not very much impressed with what was taking place there because it showed that we had left all our traditional ties and adopted the culture which is not of our own” (Jaco, interview, 2017).

Furthermore, for centuries intermarriages did not exist, though now that has changed. Marlowe (2004) noted that although there are only few intermarriages between the Hadza and other ethnic groups, it is more common for Hadza women to marry into a different ethnic group. This is a very new practice, which could become a strong catalyst for change in the lifestyle of the Hadza.

Moreover, the responses from the two respondents above reveal that some parents send their children to school. As a side effect, those children who attend schools are exposed to more

and other ways of thinking and being. In turn, they start to slowly become alienated from their cultural practices. In this case, in my opinion, education has a negative effect on culture simply because any education system that alters attitudes and beliefs, which are a source of pride for a society, is detrimental to entire communities' belief systems.

5.2.4. Change in religious practices

Lee (1989) once stated that, many hunter-gatherer societies have little or no concept of religion per se, though a religious dimension often permeates normal activities and is consistent with daily life. This clarifies why Obst (1912) stated that it was difficult to find out anything about the Hadza's religion beyond the fact that the sun is god and that prayers are said over dead animals. Otherwise, Cooper (1949) asserted that the Hadza had a primitive religion, while Bagshawe (1924-1925) claimed they had no religion.

Based on my reports from the field, the Hadza answered the question, whether the Hadza have a religion, with a "yes". Furthermore, they disclosed that there have been changes in their belief in gods. These changes are associated with interactions with other societies, especially the Sukuma, Iraqw, and Datooga. However, some traditional religious practices remain. With regards to this, two male elders explained:

Previously we had prayed to our ancestors and gods. We had our cosmology type of religion. Our gods are sun, moon and stars. We were and some of us are still proud of it. If you do wrong, our gods will punish you through endless disturbances like famine and diseases." (Muswi, interview, 2017)

Another respondent based on religious issue and prayers further stated:

"My friend, things now has fallen apart. New religions are disturbing our community. Some of our friends with their families nowadays are attending into churches. They are no longer praying to our ancestors. The youth are the most vulnerable group as they mock on us the elders that we pray to Satan (Pinseu, interview, 2017).

The responses clearly indicate that the Hadza face a significant challenges in preserving their cultural values, as new cultural qualities are imposed on their community.

As for the Hadza's religious beliefs, in 1979 Woodburn noted that the Hadza had acquired very little of their neighbours' religions (Woodburn 1979, cited in Marlowe 2002: 4). The

Hadza do not believe in an afterlife and there are few religious restrictions. Like other hunter-gatherer societies, the Hadza have fewer religious beliefs and participate in fewer rituals than other groups (Marlowe 2010). However, according to Marlowe, certain elements of religion are embodied in sacred healing dances and rituals marking life events (Marlowe 2016: 264).

According to Woodburn (1979), Hadza have few religious rules and they are sometimes even ignored, except for the rule about consuming the men's special *epeme*⁸ meat. This meat, as Woodburn (1964: 29) stated, is only eaten by initiated *epeme* men, essentially those who have killed *epeme* animals, and never by one individual alone (Marlowe 2010: 7; Skaanes 2015). Women and uninitiated youths are prohibited to see or know of the consumption of this meat, let alone to eat it (Woodburn 1964: 304; Marlowe 2010: 57). Violating the Hadza's *epeme* ritual may lead to severe consequences, such as the pain of illnesses or punishments sanctioned by powerful *epeme* beings (Kaare 1989: 70-73).

The *epeme* dance is, according to Marlowe (2002: 4), the most important ritual for the Hadza people. It is performed by large groups of adults, and it takes place after dark by the moon. Men wear bells on their legs, a feather headdress, a cape, and shake a maraca as they sing and dance one at a time in a call-and-shout manner, inspiring the women to sing and dance around them. This dance has changed. Nowadays it is danced even when there is no moon light (ibid: 4).

5.2.5. Building social infrastructure system

Social infrastructure systems are very important to all living beings. For this sub topic, I have chosen two categories of social infrastructures, namely the existence of schools and set-up of health care facilities. During my fieldwork, some Hadza people acknowledged that acquiring such infrastructure generates socio-cultural changes.

⁸ *Epeme* also refers to the communal – but gender-segregated – dance performed on moonless nights. The collective chorus of women provide the necessary accompaniment of *epeme* songs, while the initiated men dance, one by one, in the guise of *epeme* (Woodburn 1982b: 190).

5.2.5.1. Presence of Schools

Surrounding the Hadza settlements, there are two primary schools for all four villages I visited. One of the primary schools, Endamagha⁹, was built by missionaries for the Hadza people (URL 3). These missionaries aimed to settle the Hadza in fixed locations and thereby change their lifestyle. However, from the beginning, the success of integrating Hadza children in the schools was minimal.

According to McDowell (1981a: 7), the first attempt to settle the Hadza was organized by the British colonial government in 1939. Their efforts failed, and the Hadza retreated to the forest. In 1964 and 1965, soon after Tanzania gained independence from Britain, the government, with support from an American missionary, attempted to settle the Hadza at Yaeda Chini, a village that was prepared for settlement. A school and clinic were built, and Hadza from even the most remote bush camps were brought to Yaeda Chini, escorted by armed police. Nevertheless, by 1966 most Hadza had left the settlement and returned to foraging (ibid).

However, even after all attempts to settle the Hadza failed, the Endamagha primary school stayed open, educating the few Hadza children who remained and other children from non-Hadza societies. So, despite the fact that the school was constructed to help change the lifestyle of the Hadza, it neither offers a special curriculum for the Hadza, nor serves only Hadza students, as it is mostly populated with students from other societies (URL 3). The continued efforts of missionaries to transform the Hadza's ways of life illustrate how post-colonial ideas and practices prevail. In this case, the Tanzanian government allows and supports practices that marginalize the Hadza people, putting their existence and cultural expressions at risk.

One of the respondents during the field stated:

“In this village, we have a primary school having about sixty-four students with only two teachers. Still most of the parents are not ready to send their children to attend classes. This has brought with the notion that these children will be ruined and abandon their culture” (Kanrau, FGD, 2017).

However, the reasons for failure are not just cultural issues. According to Marlowe (2002: 11), the missionaries from Yaeda Chini used to provide food in Munguli, located in the southern

⁹ The aim of this school is to help the Hadza in particular. However, it does not exclude children from other societies. In comparing the number of students who are registered in this school, the Hadza student population varies between 35% and 40%.

part of the Hadza lands, where a school is located. The distribution of free food incentivised many Hadza to stay there as long as the food provisions lasted. At the same time, this was an opportunity for their children to attend classes at the local school. However, when the missionaries left after only a couple of months so did the Hadza. Following the Hadza's departure back to the forest, the Isanzu moved in to occupy the school and land in Munguli (Marlowe 2002: 11).

Today, the destruction of the environment and *climate change* have peaked, even causing the extinction of some species on earth. As a result of this situation, the life of the Hadza has become more difficult. Searching for alternatives, they have moved closer to settlements and villages where they interact with other societies, work with them (many Hadza are employed on neighbouring farms), and have access to social services, like schools and dispensaries. This is an opportunity for Hadza children to attend classes again as one of the respondents argued:

“I feel so proud to seeing my three children attend classes. When I turned back from my daily activities, I sat with them and they narrate me stories, which they learnt at school. I feel so proud of this” (Swakara, FGD, 2017).



Figure 3: Lake Eyasi Vocational Center. Photo taken by author during field research in September 2017

Despite of the Tanzanian government's efforts to construct schools, or a Vocational Training Center as seen in Figure 3, in Hadza villages, the number of pupils enrolled remains a challenge. Because the Hadza people have their own system of education based on rituals that are passed down from one generation to another. The response of Hadza parents to these offers are still not great since modern education is relatively new to their lives. Some still prefer their cultural education provided through songs and storytelling. From their point of view, modern education has little to no value for their children, who continue to live in the bush (Gudo Mahiya, interview, 2017). Furthermore, most students (including those from other tribes) who graduate from rural primary and secondary schools do not go on to get jobs in the city. Considering my own experiences and observations as a young graduate student from Tanzania, I can agree with the above statement that although youth may be graduating from schools, there are not enough employment opportunities. This is a major problem for youth, parents, and government alike. Therefore, according to some Hadza, sending their children to school will only damage their 'Hadza education', which teaches them their own language, culture, and foraging skills (URL 3).

5.2.5.2. Health Facilities

There are few hospitals bordering Hadza lands that are within one to two days walking distance from most Hadza settlements (URL 3). Thus, I wanted to know, whether the presence of these health care centres has changed the Hadza's traditional health practices. I also wanted to know, whether modern health facilities are important to Hadza. Respondents had the following to say:

"We the Hadza are not suffering from diseases like those which are caused by lack of food and we are still healthier may be than even our neighbors. Some diseases like yellow fever, malaria and frequent chest problem and sleeping sickness because of the animal flies are our problem. Because of such diseases, we need medicines. Also diarrhea diseases and when we get injuries or broken born we need medicines" (Sulama, interview, 2017).

An elder Hadza female remarked the following:

"We firstly depend on our local medicines so we start with our local medication before going to the hospital. Currently, due to the introduction of the modern health care in our society people no long rely much on natural medicine and because of that need situation

some health professionals visit us to our neighborhood Mangola and Barazani community regularly” (Hannah, interview, 2017).

These two statements declare that most Hadza people are impervious to illness, and that the importance of medical care from the hospitals is negligible apart from a few specific illnesses. The assertions also imply that the Hadza have received minimal information and education on the importance and benefits of these health facilities. Beyond that, the quotes show that access to modern health services provided by the government are limited since health facilities in the Hadza lands are scarce.

5.2.6. Birth and Death

a) Birth

Like many African and Western cultures, the mother is the principal caretaker of Hadza infants. According to Blurton (1993: 316), the baby spends most of its time riding on the mother’s side or back. Suckling is frequent and often, but by no means always “on demand.” The baby is usually surrounded by relatives, elders, adults, and youth, receives attention from all of them, and is also carried by them. As Blurton further notes, face-to-face interactions are observable between a Hadza mother and her child as well as other people and the infant. Still, by far the mothers spend the largest amount of time in interactions with infants during their first year of life and continue to be the dominant person in a child’s life until the age of three (ibid). Hadza children, like children from other Tanzanian societies, complete some useful tasks. These tasks were purposely devised to expose them to the hazards of life in the bush from the beginning. Examples of tasks Hadza children perform are fetching water or collecting firewood. Blurton further stated that even toddlers were sent to carry things from one house to another. However, this cultural practice of exposing children to the harshness of their environment is changing from day to day on account of some of the risks the children were exposed to. As is, the cultural tradition of hunting-and-foraging will likely be history for the future generations of Hadza people. Many changes take place over the course of a human’s life. This is also the case for the Hadza, though the rate of change in their society is slow.

b) Death

Previously, the Hadza did not practice the custom of burying their deceased. Rather, a person of certain age, who was about to die, would be left in the forest alone, while the remaining

group moved to another location and started a new life there. The person left behind stayed back to die or become prey to wild animals. The Hadza leader Gudo explained:

“We Hadza had no burial tradition. We believe on ancestors and the death is connected with them. As I was young, I never seen a dead person. There were old people in our society but as we were moving from one place to another, we left them away because they could not move far. What we were doing is to make sure that they have a hut and enough to eat. What we believe is that the ancestors will come to take them” (Gudo, interviewed by Peterson, 2012).

Records of this practice are also found in the Hadza book, written by the first tourists, who came into contact with the Hadza. Figure 3 is a picture taken from that book. The picture is titled “Tamati”. This is a Swahili word that means ‘end’. The picture shows the end of the life of an older Hadza male. Old people were left out somewhere in the forest when they could not move on with the others. After they were left behind in such way, the family was expected to not turn back and see how the person was doing. So, after eating the food provisions left for them and no longer able to search for their own food, they would die. After they passed away, or even before, animals could eat them.



Figure 4: Picture from the book written by Daudi Peterson found at Kangdet village office. Photo taken by author during field research in September 2017

However, this practice has changed over time. According to information provided by Peterson in the Wahadzabe book, a 90-year-old Hadza man, Gudo (pictured in Figure 4), stated:

“A lot of their traditions have changed. The traditional wearing has changed, girls are no longer wearing beads on their waists, men are no longer wearing goyogoda¹⁰. The animals that they use to hunt which brought people together and happy in feasting is no longer there. But what makes me happy is knowing that when I die my body will be surrounded with my children, grandchildren and friends” (Gudo, interviewed and translated by Peterson, 2012).



Figure 5: Picture from the book written by Daudi Peterson found at Kangdet village office. Photo taken by author during field research in September 2017

Muhiya made the same argument. When interviewed he stated:

In our community we did not had the culture of burying dead people. We used to live dead bodies for wild animals to eat and so, it was not normal to see a grave around our camps. We could only see graves to families of our neighbors like Datooga and Nyisanzu. This days it not the same as before, things have changed; we are now forced to bury our

¹⁰ This is the piece of animal skin that the Hadza men used to wear.

people when they die. Our community leaders have to control that and it is a rule to bury all dead people (Muhiya, interview, 2017).

This lies with what Woodburn (1982) noted on his research on the Hadza land. On his report, Woodburn stated that “the Hadza leave corpses out for hyenas to eat, or if the deceased is an old person, they may push his or her hut down on top of them and set it ablaze, they move away”. On this case, the Hadza have changed a lot. These changes are associated with the Hadza’s changing tradition of moving from one place to another. As they settle in one location, that means they are accessible and the advantage of this made easy for the government officials and for non-governmental associations to educate them and they managed to change the Hadza treatments to the old people and the deceased. Nowadays, older generations continue to live with their families in camps while being cared with their relatives; provided with their basic needs like food, clothes and shelter as well as medical care till they die and finally being buried.

6. Causes of Socio-cultural Changes of the Life Style of the Hadza

The discussion above shows that the Hadza, as an indigenous society and minority of the United Republic of Tanzania, have experienced many changes in their daily lives and have lost some of their valuable cultural and traditional practises. Though, they have also gained others, for example burying their deceased, or the clothing they wear. Overall, avoiding changes in culture and traditions is not possible. ‘Cultural evolution’ explains that human cultures normally change through socially transmitted beliefs, knowledge, attitudes, customs skills, and language (Mesoudi, 2012: IX).

This notion implies that cultural changes are in fact a feature of human society, and changes are unavoidable as they occur naturally. Changes are the result of forces that exist within and outside of societies. According to Berry (1997), different forces can arise from inside and outside of a community but combined they influence the acculturation process by shaping ways of living and loss of traditions.

Referring to the research modal above (see pg. 26), different forces operate from within and outside of the society and bring about changes in culture and traditions of people. I will divide the forces in this modal into two groups: The first group includes neighbouring societies, the Tanzanian authorities, tourists, and the physical environment. These are most claimed factors by the Hadza and Non-Hadza people for change people ways of life. I can say, these are the

factors which have more documented by many researchers on socio-cultural changes case study. The second group comprises *climate change* and schools (new education and social system among the Hadza; science and technology adaption). This factors (*climate change* and school) are for the Hadza people more new and unclear to them. For instance for societies which are aware of “*climate change*” and its effects on physical environment will understand the reasons of disappearance of some species on the earth, thus, for the Hadza people, all misfortunes happen on the earth like drought, flood, disappearance or poor production of fruits and others are due to God and the further connect that with punishment from God as a contributing factor course for the physical environment not to be able to support some production of some fruits which they. Together, the first and the second group comprise the contributing factors for changes that have occurred in the life style of the Hadza.

6.1. Cultural Interaction and its Impacts

Fatuyi, (1986: 35) argued that cultural interaction involves the introduction of ideas, information, techniques, technologies, or art from one cultural or ethnic group to another different group. These interactions always permits learning and understanding which may result in changes of behaviour of people in a particular location. Social interactions bring about very challenging aspects to the social well-beings of societies. However, this is not the case for all social situations. Sometimes societies do not change through interactions with others. This is known as cultural inertia which entails a resistance to change. Swidler (2003: 89) showed that an individual’s cultural repertoire provides models from which the person fashions her actions. Culture promotes identity formation and modifies values, it builds social cohesion, fosters community development, and civil participation. Furthermore, as Super and Harkness (2002) emphasis, culture changes: people see and experience new things, then adopt them and adapt them to fit their own ways of expressing culture. This is not bad per se. It is contact, fluidity, and the way of culture. It has negative effects, however, when changes are forced upon people who do not choose the changes.

Encroaching the Hadza land

In recent years, the Hadza have experienced an increase in encroachments from neighbouring societies, notably the Cushitic Iraqw, the Nilotic Datooga, and the Bantu Isanzu. These three ethnic groups belong to three different linguistic phyla, while Hadzane belongs to a fourth. That means that none of the four languages are closely related (Ruhlen 1991). As these

societies migrated into Hadza lands, they contributed to a reduction of already scarce resources in the areas, specifically those areas the Hadza use for foraging. The pastoralists Iraqw and Datooga, for instance, occupied Hadza lands for livestock grazing. As a result, the Mongo wa Mono and Domanga, areas formerly occupied and used by the Hadza, are now inhabited and used by the Datooga and Iraqw. In addition, the Sukuma's actions that led them to push into Hadza lands created a hostile relationship with the Hadza. They imposed on the Hadza a new culture of agriculture and farming activities.

My research showed that apart from eating traditional foods, which the Hadza got from hunting and foraging, they as well eat other traditional foods of other Tanzania ethnic people like *ugali*¹¹ as one respondent argued:

“I remember having a tradition of communal life and interactions with other communities and they introduced their cultures to us. We are day to day trying to accept the changes and specifically on our diet” (Pugai, interview, 2017).

Encroachment of the Hadza land is also associated with migration of big animals which were easily to get by the Hadza in hunting. During the interview, Panda Mlekwa stated that:

“Before people were few in this area. We used to get enough big animals like giraffes, buffalo, zebra ... when they come in this area to drink water but now the population of people has become high and the animals run to reserved areas like Ngorongoro. Now we don't get animals at all” (Panda Mlekwa, Interview 2017).

Immigrants can have many different impacts on the cultural identity of the society to which they immigrate. As its states in the above quote, the immigrants have not only imposed their culture to the Hadza but also affected the environment for the Hadza to get their traditional food. The broader historical and sociological literature suggesting that culture as a shared value has always been affected by other societies when they interact. Religion, war, devolution, and globalization all contribute to loss of cultural identity (Saggar et al., 2012: 1). Furthermore, Saggar et al. showed that immigrants may also influence societies through their processes of integration. Integration can be based on employment, housing, social interaction, marriage, and other factors that can be measured in hard and soft ways. On the other hand,

¹¹ *Ugali* is a staple food mostly eaten by the Bantu people like the Chagga, Sukuma of Tanzania and the Luhya of Kenya. It is made from maize flour mixed with water cooked for about 10-20 minutes. It is consumed with a variety of sauces like meat sauce, beans, spinach, or yogurt.

one can look at cohesion as another outcome of migration. The literature acknowledges that the perception of local neighbourhoods might rely upon two aspects, namely 1) the positive or negative changes in neighbourliness and 2) the respect and interaction between social groups (Cheong et al. 2007: 19). As pointed out by Crandall (1987: 10), migration can be a mixed experience for societies. It can bring with it a sense of hope and anticipation but these feelings may also accompany a deep sense of grief and loss with regards to the cultural identity of the indigenous societies.

As I observed from my fieldwork, the migration of neighbouring societies into Hadza lands has brought about changes of cultural values. The presence of cattle and other livestock and their grazing of Hadza lands has led to a scarcity of resources. The Hadza are a particularly vulnerable group because they are only familiar with hunting and foraging for and hence they now lack means of subsistence. I further observed that those societies that migrated into the Hadza Land have imposed a different new livelihood practises like of charcoal making. Charcoal is for most of the Africans people including Tanzanian people living in cities as source of energy used for cooking and heat production during cold seasons. The demand of charcoal product has made people cutting down trees, making charcoal and sell to generate income. This has affected many forests in Tanzania including the Hadza land as encroached by other ethnic people basically for the purpose of making charcoal and in one way or another this changed friendly character of the Hadza in protecting their environment and turning into destroying them by cutting down trees. This was confirmed by one of the Hadza respondents, who stated that: “I used to go into forest to cut trees for charcoal” (Mpanda, interview, 2017).

This shows that some of the Hadza people now use or consider charcoal production as source of income to sustain their livelihood. However, the number of Hadza who cut charcoal for domestic use or even to sell to other communities, especially to the Sukuma, Iraqw, and Datooga, considered to be very low. The reason is that some of Hadza thought the technology was not their own culture but rather foreign. This new practise of making charcoal in the Hadza land has caused problems for the daily life of the Hadza people. It is reported by the ACHPR and IWGIA (2015: 15) that the Hadza are now faced with charcoal burning problem by their neighbors which leads to deforestation and reduced tree cover which, in turn, reduces the shelter for wild animals. This basically has made wild animals migrate to reserved areas like Serengeti National Park and Ngorongoro Conservation area and the Hadza remain with nothing to hunt for their meals (ibid).

As the Tanzanian population increases, so does the demand for land. This, too, has led other societies to migrate to and occupy the Hadza's region for cultivation and pastoralism. As a result, the Hadza have lost access to many of their most important foraging lands (URT 2012: 18). Movement of peoples and interactions with other societies with different cultures leads to diversity. Though interactions with neighbouring societies were limited, there are accounts of interactions that go back several decades. According to Bagshawe (1924-1924: 126), a famine between the years of 1918 and 1920 prompted some Isanzu to take up living and foraging with the Hadza. During that time, and since the Hadza has a matrilineal descent, Hadza women married Isanzu men and some Isanzu women married Hadza men. According to further archaeological evidence, farmers and pastoralists have lived in the general vicinity of the Hadza for several centuries (Sutton 1989; 1990).

The Hadza also interacted with other societies through different economic activities. For instance, according to Marlowe (2002: 3), some Hadza guard the maize fields of their neighbours from animals, like vervets and baboons. In addition to the maize they receive in return they eat the meat of the monkeys they kill. Some Hadza do labour on the two large European farms in the Mang'ola area. These kinds of economic activities bringing other societies closer and increase the amount of interactions between societies. Even those societies that were previously considered great enemies of the Hadza.

Bagshawe (1924-1925) further told of one incident when the Hadza killed an elephant (this is not practised anymore) and in exchange for the ivory received some goats from a native stranger. The next morning the goats strayed into the bush and no one bothered to follow them because they were feasting on the elephant's meat. Then the Datooga attacked, declaring the goats had been stolen from them, and killed many Hadza. This example shows that, for a long period of time, there had been some hostile interactions between the Hadza and different neighbouring societies.

According to Bhugra and Becker (2005: 12), migration contributes to the richness in diversity of cultures. Migration always brings new values, attitudes, beliefs, and in some cases strong ideologies through which existing cultural identities might be distorted, destructed, or disappear. Migrants are in all aspects of life quite diverse. Based on their diversity on culture and tradition, beliefs, behaviours and other inner and outer characters and practices, all this can make the local populations react on them negatively or positively. The indigenous can react to migrants to the extent of distorting tolerant within individuals and leads to conflict

between the original dwellers and the new comers (Epstein and Gang, 2010: 2). The reaction of the local population to the migrants whether positive or negative in most cases depends on experience the dwellers had with the immigrants and thus, indigenous become more sensitive on their livelihood security.

In some cases, migrants might want to assimilate, or want to hold onto their cultural identities. The local people may be welcoming or not (Epstein and Gang, 2010: 4). This is not a problem when migration occurs in a way that does not affect or cause big problems for indigenous populations. How to control migration is a challenge but still the policy makers, government, and stakeholders have a role to play in order to make sure that cultural loss does not affect indigenous societies. Bhugra and Becker (2005: 27) stated that culture, as an icon of society, must preserve all her identities. The government should set principles and regulations to protect societies' cultural aspects, especially those with positive elements. Controlling or burning movement of people from one place to another might be very difficult for the state, nevertheless, there are things that can be controlled through laws imposed by governments and various institutes which deals with human and people's rights to avoid and minimize conflicts in societies. For instance the laws for protecting the indigenous once good observed by states, it could be one way of reducing conflicts between indigenous and immigrant.

6.2. Tanzanian Authorities

According to the International Work Group for Indigenous Affairs (IWGIA 2013), in many African countries the governments regard all citizens as indigenous. In the case of Tanzania that is different. The Tanzanian government hardly recognizes the existence of indigenous peoples in their country. The Tanzanian government regards all its peoples as citizens of the nation since they are born in the country and have lived there for a certain amount of time. The claiming of 'indigenusness' may be useful for minorities internationally but it is not much respected domestically (Yatsuka 2015: 42).

The Hadza are recognized as an indigenous minority society in danger of disappearing by the Tanzanian government. They are given special treatment by the government as 'minorities' but not as 'indigenous'. This is one of the government's strategies to protect the Hadza. Nevertheless, some strategies aim to transform them from how they used to live and get them to adopt a new lifestyle, like all other Tanzanian societies. Furthermore, in accordance with Yatsuka (2015), the Hadza are regarded as 'original hunter-gatherers' by the Tanzanian

government, Tanzanian citizens, the international community, and the Hadza themselves. Still, the Tanzanian government and its citizens are determined to ‘help’ the Hadza join ‘modern life style’ like many Tanzania ethics (which most of have lose some of their good traditional practice for accepting modern practises) and not helping them protecting their traditional ways of life “hunting-foraging” as among the few ethnic people with such practices in Tanzania and Africa at large (ibid: 42).

At first, basic demand of “hunt-gatherers” is enough land. For the Hadza to maintain their way of life, moving from one place to another for hunting and collection of berries and fruits, they need sufficient land space, nevertheless, this demand for them is undermine been by the Tanzanian government officials themselves (as for the Tanzania laws, land as a property under the authority of the government and not of people) or by other ethnic groups as their demand of space rise too. For instance according to Dorobo Fund report, on October 18, 2011, the Tanzanian authority issued land titles to the Hadza living in the Yaeda Chini Ward to engage in their traditional practices and encompassing over twenty thousand hectares (Dorobo Fund 2011). This occurred because the Tanzanian state noted that the Hadza were in greater danger of disappearing and more vulnerable than other societies. So, they put efforts into support for the Hadza’s way of life. Nevertheless, there are so many claims from the Hadza people to the government based on the land they inherited from their forefathers lived on it for centuries.

It is further noted by the ACHPR, as well as in the United Nations (ibid), that the Hadza people are in great danger of vanishing, considering that they do not receive equal rights like other societies. The land that was given back to the Hadza is just a portion of their claims and still it is not enough for their hunting and foraging activities. Reports from the field indicated that there are still unsettled land claims from the Hadza. One of the respondents stated that:

“The government has snatched our land and sold to the Whiteman without our concern. We cannot go inside the reserves zone for hunting and foraging, and anyone who tries to enter there will face consequences” (Binsa, interview, 2017).

The claimed area was occupied by the Hadza people, nevertheless, as to the time of this project, the same land is still a private hunting reserve, officially restricting the Hadza to a reservation within the reserve and prohibiting them from hunting there. Meanwhile, researchers observed that in the year 2007 the Tanzanian local government at Yaeda valley, let out about 6,500 km² of the land which belong to the Hadza to one of the royal family of the United Arab Emirates (URL 22) for their private hunting activities. As a result, both the

Datooga and the Hadza were overpowered and forced to move, while some Hadza who resisted were imprisoned. As one respondent revealed:

Some years ago, if I remember the year 2003 most of my youth relatives were arrested just because of not been ready to surrender their father's land, the land where they have lived for a so many years. They did not accepted to these decision because they did not have a place to go and they were not willing to let their land to be taken by outsiders (Kanzai, interview, 2017).

The fact that all Tanzanian land belongs to the government means that the government have authority and decision-making power over the land. It must be noted that land is a very valuable asset, especially to poor people who depend on what the land can offer for subsistence. Taking this valuable asset from people who have been using it for centuries is forcing those people to look for new ways of subsistence and that in turn changes their ways of life, including their cultures and traditions. That is to say that, the Tanzanian government with its authority has caused in one way or another, even forcibly, changes in the ways of life of the Hadza, be that in a positive or negative way.

6.3. Tourism activities

Tourism is one of the global factors that creates worldwide cultural interactions that can lead to cultural changes in a given society. Interactions between indigenous peoples and tourists have had many effects on specific indigenous societies. Tourism is a global industry with an estimated economic value of \$2 trillion (Cronin, 1990: 42) and involving the largest movements of goods, people, and services internationally (Greenwood, 1989: 18). According to Jafari (1982: 7), today almost every community, large or small, developed or developing, is influenced to varying degrees by tourism.

In any society, tourism has contributed to changes in value systems, individual behaviour, family relationships, collective lifestyles, safety levels, moral conduct, creative expressions, and community organizations (Fox 1977). Meanwhile Mathieson and Wall (1982: 80) observed that there impacts left by humans, specifically the effects on the residents of a host community that result from their direct and indirect interactions with tourists and their allied industries. Pearce (1982: 13) once claimed that tourists, as opposed to migrants, do not have to adapt to the local community and due to their relative affluence they are always placed in a unique privileged position within the resident population, allowing them to observe and

examine the host culture. This occurs in three main contexts: 1) where the tourists purchase some service or good from the host, 2) where the host and tourist intermingle in places such as the beach or market, and 3) where the two parties come face to face to exchange ideas or information.

Tourists and hosts always have different expectations. While tourists are mobile, relaxed, free to spend and utilize leisure time on the other part, the hosts are relatively stationary and are often in a position of serving the tourists' needs (Sutton, 1967: 56). The tourist-host relation is transitory in nature and non-repetitive (UNESCO, 1976: 16) simply because the tourists' stay in a host country is relatively brief and temporal, hence the relationship between host and tourist is different for each of the two interacting groups.

Some literature shows that tourism is a distinctive form of intercultural contact. Nevertheless, there is a debate among the social science tourism researchers as to what exactly constitutes the socio-cultural effects of tourism. Despite this paradox, it can still be argued that tourism contributes uniquely to socio-cultural change. Simply put, tourism is a live agent of change, it requires the tourists (consumers) to travel to the host nation (the product) and engage in face to face interactions (Bystrzanowski, 1989: 6). For sure, this physical interaction creates a unique set of socio-cultural consequences.

6.3.1. The Hadza and Tourism Activities

The Hadza, apart from cooperating with neighbour societies, have experienced an increasing number of interactions with tourists, researchers, state authorities, and different NGO members. These interactions are not recent. For instance, in the years 1945 to 1947 the British colonial game officer Cooper visited the Hadza on two occasions for 10 days each time. Cooper's guide was a Hadza whose father was an Isanzu (Cooper 1949).

Marlowe (2002) is convinced that because of such current developments the Hadza way of life is prone to change. It is more than the ever-increasing number of Datooga, Iraqw, Isanzu, and Sukuma societies moving into the area. The sudden influx of "ethno-tourists"¹² also pose a threat to the foraging lifestyle of the Hadza. Marlowe further noted that during his years of

¹² Ethno-tourism refers to the role or involvement of the local community in tourism; an activity that focuses on human-based works rather than nature to give tourist an understanding of the lifestyles of the local community (Bolnick, 2003).

research in 1995 and 1996 there was only about one van full of tourists per week visiting Hadza camps during the 3-4¹³ months of tourist season in the Mangola area, where a Swahili village exists. Nowadays, the situation has changed. Based on the pilot study I did in July 2016 as well as during my data collection for this study, more than just one van per week, from different tour companies, bring tourists to the Hadza area.

Marlowe (2002) also pointed out that some years back there were no tourists in bush camps with the exception of one company that brought very small groups of tourists out once or twice a year. In most bush camps many people, especially women, preferred gifts to money since they did not ever visit villages and had no way of spending money. Nowadays, some Hadza receive enough money from tourists to buy maize to live on and only forage when tourists show up and want to go on a walkabout.

Interviews with Hadza males revealed that tourism attractions had caused socio-cultural changes among the Hadza community. Tourists came to Hadza land with the purpose of observing foraging culture (food, traditional dances, language, and dressing attire). As a result the Hadza have stay at their camps for longer periods of time waiting for tourists. This is contrary to their tradition of moving around, as attested by one of the respondents:

“Here at this Mang’ola camp we stayed for a long time because here is a place where tourists can get to see us easily and we get money from them by doing tourists attractions. Doing that, we money to cover our needs like buying some food from our neighbor shops and arrows for hunting from the Datooga people” (Mkambu, interview, 2017).

The above response indicates that, the hunter-forager mobile land use system has changed towards a semi-permanent land use pattern in order to attract tourism. As Mabulla (2003) pointed out, traditionally, hunter-foragers used to be mobile, staying at a camp for only a couple of weeks.

6.3.2. Ecotourism

From an economic point of view, Crandall (1987: 69) pointed out that tourism is often promoted strongly as a means of improving socio-economic structures in developing nations

¹³ The 3-4 months, the tourists’ high season, are from June to September. This is the season in Tanzania that can be referred to as wintertime. There is no really winter, nevertheless, compared to other months of the year, this is the colder time. It is sometimes rainy, the lower temperature can go to 7 degrees, and rarely even drop to 4 degrees in Kilimanjaro, Mbeya, and Iringa.

specifically in terms of job creation and increases in foreign exchange. Despite all these benefits, Minerabi (1992: 11) cautioned that if tourism replaces another economic activity in a short period of time and heavy reliance is placed on tourism as a means for acquiring foreign exchange, social-cultural and psychological repercussions are inevitable. Truly, tourism may create employment opportunities but the forms they take might be inconsistent with traditional patterns of work (Ryan 1991: 36).

It is clear that through tourism geographic and labour force displacements may occur. Crandall (1987), Harrison (1992) as well as Minerbi (1992) argued that entire settlements are displaced sometimes to make way for tourist development. Sometimes the rising cost of land directly triggers an increase in living costs making it almost impossible for indigenous people, already financially marginalized, to be able to access the most basic consumer goods, such as staple foods and medicine.

On socio-cultural impacts, many local populations have argued that tourism will facilitate a growth in undesirable activities, such as drug trafficking, gambling, prostitution, and changes in local sexual mores (English 1986: 104). However, that does not happen in all places where tourist industry prevails. Nonetheless, the effects on culture and traditions of people in a particular place generally translate into changes.

6.4. Physical environment

For most indigenous societies, forests and land are the basis of an integral ethno-spiritual and medicinal paradigm. For example, the Maasai in Tanzania and Kenya believe that the earth is the source of their whole life. The earth provides “grass, other plants and water on which their livestock depend on” (Msafiri 2007: 105). For centuries, survival of indigenous societies has depended on what their land has provided.

Before I began my fieldwork, I hypothesized that my respondents might mention *climate change*, explicitly or implicitly, as a factor that is responsible for cultural change. Especially, as a society that lives and sustains itself on what the physical environment provides. However, I decided it was not a good idea to ask directly about *climate change* in the interviews since the term might be hard for my respondents to understand (a decision based mostly on the elders I planned to interview as most of them did not attend school). Instead, I tried to investigate what changes in their physical environment the Hadza perceive and then transcribe

their responses to issues related to effects of *climate change*. During the interviews and focus group discussions I conducted, respondents revealed that they are experiencing changes in their physical environment and mentioned several aspects of *climate change* that have led to socio-cultural changes in the Hadza community. These are discussed in the next sections.

6.4.1. Impacts on Rainfall and Temperature

Interviews conducted with both male and female Hadza respondents affirmed that rainfall and temperature patterns are changing. Respondents pointed out that precipitation has decreased in recent years, in turn causing temperatures to increase in the Hadza lands. I managed to visit Kisimangeda, which held the rainfall record in the Mang'ola area (longitude 35.22° E; latitude 3.30° S) for seventeen consecutive years (1995-2011). Its meteorological station registers a mean annual rainfall 916 mm while Mbulu has a mean annual rainfall of about 827 mm (see also Mabulla 2012); both show a decrease in rainfall in the area.

This study about the socio-Cultural change of the life style of the Hadza noted that the rain season in Eyasi starts in December and ends in April or early May, and the dry season is from June to November. The Eyasi Basin rainy season is very important to hunter-foragers, nomads, and agriculturalists alike, as one of the respondents explained:

“These rains are of much importance for crop recovery, supporting the regeneration of pasture for both domestic animals and wild game as well as thriving of plant resources utilized by Hadza hunter-foragers” (Bwandi, interview, 2017).

The questionnaires further indicated that during the dry season the area received very little or no precipitation at all. This is quite different from past years, when even in the dry season the Hadza lands were relatively green. One respondents lamented:

“We are experiencing a prolonged period of dry season quite different from the past. During the dry season water supply is so scarce. Also ... eyes are filled up with dust” (Keno, questionnaire, 2017).

These statements from the respondents are contrary to those of Marlowe (2010) who wrote that the average temperatures in the Eyasi Basin range between a low of 14°C and a high of 35°C yearly. From the responses I received in the field, it is clear that rainfall season has shifted from high to low during a very small period of time. Apart from the year 2007 where by people experienced chaos of ‘El Niño’ where by crops and animals were carried by flood

away, the quantity of rain in current years became minimal and in sometimes not enough for supporting crops like maize, potatoes and rice to harvesting time. Kisalung'a (interview 2017) state that:

“there is reduction of rain...the streams are dried, we have only one located from far away which one needs like a whole day walking to fetch water and come back. Such distance has discourage us to get enough water and now when we get money we buy water and some people water to our camps” (Kisalung'a, interview 2017).

The levels, the circulation, and the timing of rainfall have become less predictable and their intensity more unstable. The questionnaires also revealed that the respondents note a decline in the rain periods over the past years: long rains have changed to short rains. The decrease in rainfall has resulted in water scarcity and the depletion of vegetation to support both game and human life, thus impacting the Hadza as well as other the societies around them that keep animals, specifically the Sukuma, Datooga, and Iraqw, also known as Wambulu (URL 4).

In the focus group discussions, the respondents reported that the area is nowadays experiencing higher temperatures than ever. They also reported that these higher temperatures have led to an increase in dryness, causing the natural springs to completely dry out. Further, human economic activities were cited as potential causes for the decreased rainfall. According to Bürgi (2014: 139), impacts of human beings on the physical environment (use of natural resources and pollution) are increasing dramatically. During my fieldwork, the respondents mentioned cutting down trees for agricultural activities, which leads to warmer temperatures in the Hadza lands due to the emission of carbon dioxide gas and the destruction of ozone layers. The destruction of natural physical environment is ongoing; *climate change* is progressively driven by global warming and other effects. Both human and industrial activities can be blamed for all the effects of *climate change* through the destruction of the natural environment. According to Bürgi, (2014: 140), companies have varying quotas in the process of harming and destroying the physical environment depending on their specific activities. Not only mining, chemical, heavy, or large industries produce harmful effects but also service industries, like tour operators and forwarders, on account of their oil consumption, carbon dioxide output, consumption of other resources, and generation of wastes.

This is in line with a report from the United Republic of Tanzania, Vice President's Office - Division of Environment, as noted by Msafiri (2016: 19). In the context of Tanzania's biodiversity and eco-systems', the report details that observations indicate massive destruction

of natural habitats, wild life, wetlands, forests, and land. Unsustainable agricultural activities - e.g. cultivation of rice and maize - are largely contributing to water shortages and waste around great rivers and river basins, including the Great Ruaha River and Eco-system in Katavi National Park. Changes of the physical environment and misuse of the environment are a product of human activities that destroys ecosystem, and the outcomes are visible in a variety of different species, including human beings.

In the case of the Hadza lands, as the population of non-hunter-foragers grows so do their needs and the associated environmental risks. In the lake Eyasi Basin, the rise in temperatures is expected to further grow beyond the normal average, risking the ecosystem of the inhabitants, including the availability of water in the region. It should be noted that non-Hadza people, like farmers and pastoralists, use the physical environment for economic purposes, such as agricultural activities. They end up clearing forests for cultivation or sometimes cultivate their crops nearby water streams, which leads to a scarcity of water or, even worse, dries out the water systems. During my research one of the respondents stated:

“The streams have no water. This is a very big challenge to us. We have to go very far searching for water during the dry season. The situation becomes so bad for all of us and it is worse when we, wild animals, the immigrant people like the Sukuma and Maasai with their castles compete for water.” (Musa, FGD, 2017)



Figure 6: Onion farm at Yaeda Chini. Photo taken by author during field research in September 2017

While some people experience difficulties to get water, a basic need, others have more than enough water and try to direct it to their farms. So, the availability of water is a very important aspect to consider in relation to *climate change*. My respondents revealed that the natural

springs cease to supply water during the dry season. Mabulla (2012: 6) noted that, the depletion of Eyasi Basin environment and ecosystem has led to the disappearance of some vegetation types and habitats. The Hadza used to accrue a variety of plant foods and animals therefore these changes impact their daily eating customs (ibid). Similarly, during Mabula's fieldwork in the Hadza land in the year 2012, one of his respondents stated:

“Water is the serious problem we have in this country. Most of our ancient springs have completely disappeared due to drought. We are spending up to five hours looking for water. We usually get water from the ravine when only heavy rains fell” (Interview with Berita Gambay held at Madagau on January 29, 2012, by Mabula).

This shows that in some years, water scarcity has been such a problem that it disrupts the Hadza's daily schedules as they spend considerable time searching for water. Scarcity of water has changed the ecosystem the Hadza live in, especially in terms of natural resources. Trees, for instance, which are the basic source of bee keeping among the Hadza have begun to disappear. This means that draught persistence will have particularly adverse effects on the Hadza since they are highly natural resource dependent.

During the fieldwork, I was very interested to learn in which years the Hadza people experienced higher rainfall. I surmised that the Hadza would recognize the year as well as whether those rainfalls were beneficial or disadvantageous. In the focus group discussions, the respondents acknowledged and mentioned the years 1997-1998. This was a time reported to have had heavy rains and consequent flooding known as “El Nino”. From November 1997 it caused many problems for Tanzanians, like disruption of railways and road systems in the country, generating serious inconveniences for transportation. It also destroyed agricultural lands and produce (URL 4). However, “El Nino” appeared to affect the Hadza less than other Tanzanian societies. After the prolonged period of rainfall, they experienced plenty of fruits, berries, and tubers, as one of the respondents noted:

“In the highland areas, the heavy rains created an opportunity for better vegetation regeneration and in fact, we enjoyed much because we were able to generate plenty of our food necessities” (Ndusupo, FGD, 2017).

Similarly, another respondent added:

“The rains were heavy and very important to us. For the first time, we were now engaging in fishing activities and we were able to sell fish to neighboring regions hence increasing our income” (Lingusondeki, FGD, 2017).

The above assertions show that these heavy rains of 1997-1998 had some effects on the Hadza. First, on account of the rain, the Hadza shifted from hunting and foraging activities to fishing, which increased the Hadza’s income. This is similar to Marlowe’s (2002: 14) report that some Hadza engaged in catching fish in Yaeda valley by whacking them with their arrows several years after the rains. Second, the abundance of food following the rain led to a boom in terms of their foraging activities.

All in all, the changing weather conditions in the Hadza lands are a great concern. This research shows that the comparisons made by the Hadza on their understanding of weather conditions in the past and present points towards the fact that *climate change* has occurred. However, Hadza hunter-foragers were not aware of changes in temperature and rainfall patterns. To them, the climate conditions in Lake Eyasi Basin are described in terms of hotter and drier climate as compared to past years.

Generally, Lyimo, and Kangalawe (2013: 266) noted that *climate change* is already taking place and though the impacts are perceived by most of the country’s population, it is mostly felt by those who depend on natural resources and live in depending on what the land can produce. Currently, the Eyasi area has experienced a reduction in its wild animals. For instance, according to Mabulla (1996), big-game animals have completely vanished from the area, leaving only medium-sized and small-sized animals, which are rarely found in the area. Thus, meat, an important element of the Hadza’s hunter-forager diet, is becoming increasingly scarce. As is, *climate change* is causing changes to the natural environments that people have relied on for their livelihood for centuries. This is also true for the Hadza. They are now forced to change their ways of life, especially with regards to food consumption and the search for other foods to sustain themselves.

The relationship between man and environment is a historical phenomenon due to direct connection and interaction of the living and non-living organisms with the whole ecosystem. Human beings live in the kingdom of nature and interact with it constantly. Nature has much influence in the livelihood of human being. The air man breathes, the water he drinks, the food man eats and the flows of energy and information all this has a lot do to with environment. Thus, any change in the environment can as well pose a threat to the human race (UNEP 2014:

19). Furthermore, failure to protect the physical environment, according to IPCC (2007: 672), is in most cases threatening specific communities, leading to forced relocations as well as shifts or declines in natural resources, resulting in changing subsistence and rapid, long-term cultural changes and loss of traditions. Overall, preserving the physical environment is crucial to guarantee continued life in this region. This could help the Hadza maintain their ways of life and their livelihood.

6.4.2. Impact on Hunting Activities

The decline of rainfall in Yaeda Chini has also caused disappearance of some species. The prolonged drought has caused streams and natural springs, which were important water sources for wild animals, to disappear. In addition, the shortage of pastures for wild animals forced their migration to nearby reserve areas in which the Hadza are prohibited from carrying out their activities for survival.

Interviews with Hadza males and females revealed that through the increase in large-scale farming and mining in the Eyasi basin traditional hunting has become impossible. Big game hunting has declined and even blind hunting at water holes is no longer performed. As a respondent argued:

“You may use a lot of time searching for wild animals but you might end with nothing. Wild animals are not easy to be found. Nowadays we are facing a problem of conducting traditional hunting because nowhere animals could be found” (Pius, interview, 2017).

During my research, I noticed that even solitary hunting was no longer the norm for Hadza. Instead cooperative hunting has increased. The reason for this is that small game moves fast and requires cooperative hunting. The respondents explained that keeping dogs for small game hunting has become inevitable.

“Because of hunting dik-dik, gazelles, monkeys, baboons, and velvets hunting using a dog is our culture. I have about four dogs for that purposes helping me and my community to catch wild animals easily” (Munday, interview, 2017).

I also observed that, today, dogs are very important to the Hadza, a new development in their traditions. This was once noted by Obst, who described the Hadza strictly as foragers who kept no animals, not even dogs (Woodburn 1997). The use of dogs for hunting small animals

and birds is now accepted by the Hadza, and they considered it as a part of their new way of life.



Figure 7: The Hadza people with their hunting dogs. Photo taken by author during field research in September 2017

For me as a researcher, this is another challenge for the Hadza since they additionally have to feed the dogs from their hunting prey. Dogs have become a part of their daily concerns and it is an additional responsibility to protect them since they are very important for hunting. Nevertheless, the decline in traditional hunting has led the Hadza to rely on farm products. Traditionally, the Hadza used to trade meat with non-Hadza communities, especially agriculturalists. However, due to a lack of big game the barter trade has declined or even collapsed.

6.4.3. Impact on foraging activities

As Blurton (2016) pointed out, ecosystems play a vital role for the survival of living organisms. The long-term, stable ecology of Eyasi, according to Lovett et al. (2005), is mostly needed for consistence production of fauna and flora species which are consumed by the Hadza and non-Hadza living at the Hadza land. The Hadza used tree branches and grasses for the construction of huts to live in, for local medicines, and for their food consumption as well.

Honey and fruits are important for the Hadza's meals. According to Campbell (1995), gathering foods is a very important aspect of the life of the Hadza in terms of nutrition. Over 80% of the Hadza's diet consists of plants obtained in the forest. Furthermore, Woodburn (1968a) noted that the task of gathering for the overall group falls upon women and children.

They go out each day and collect plant products at a leisurely pace, satisfying their own hunger first and bringing back the remainder to camp. The plants brought in consist of four types of roots, five different berries, and a fruit pulp and kernel. Included in this gathering are such treats as honey and bee grubs as well (Woodburn 1968a).

Blurton (2016) noted that, for instance, the *Grewia* fruits have a wide range in Hadza lands, growing nearly everywhere but open grasslands, while *Salvadora* and *Cordia* are more patchily distributed across ‘berry flats’, which are low, flat areas, like those along lakeshore plains. However, lack of enough rainfall in the Lake Eyasi basin due to *climate change* affected the availability and distribution of plant resources utilized by the Hadza. As the slight rainfall cannot support the vegetation in the area, foraging activities have become minimal. In interviews conducted with male and female Hadza respondents, they remarked:

“At present, we Hadza women spend 9-10 hours searching for tubers, berries and fruits. This was not experienced in the past when we were young. There were plenty of those necessities” (Fyusa, interview, 2017).

In fact, gathering of fruits and other food products varies, also on account of their specific growing seasons. For instance, in the Hadza lands, McDowell (1981) found the availability of *Salvadora* fruits is limited to a shorter period, October to November, as compared to *Cordia*, which grows November through March. It should be noted that for centuries the Hadza did not traditionally preserve food. They could collect enough provisions to satisfy their families. However, life has changed and it is no longer as easy to collect fruits and tubers for their daily meals as it used to be. In an interview, a Hadza man stated:

“Our wives now are suffering a lot in terms of foraging. They now spend time in non-Hadza harvested farms collecting for maize, beans and sometimes sweet potatoes” (Pembo, interview, 2017).

This is a departure from Hadza tradition. The Hadza women are now foraging food products that do not belong to their traditional meals.



Figure 8: The Hadza man showing some grewia fruits on the left and on the right salvadore fruits. Photo taken by author during field research in 2017

Mabulla (1996), classifies plant resources of the Eyasi basin in four major categories, namely bush fruits, tubers and roots, fruits and nuts, and gums and resins. Bush fruits that are consumed by the Hadza include *Cordia gharaf*, *Cordia sinensis*, *Salvadora persica* and *Dobera lorathifolia*, *Grewia villosa* and others (Mabulla 1996). Tubers and plant roots utilised by the Hadza include *Vigna frutescens*, *Coccinea aurantiaca*, *ipomea*, *Vatovaea pseudolablab*, *Vigna sps* and others (Vincent 1985 as cited in Mabulla 2012: 29). The above-mentioned fruits and nuts, like baobab, used to be widely distributed across the Eyasi basin and were considered ‘a staple food’ of the Hadza, used to sustain their livelihoods. The situation in current years has changed. During my fieldwork, a Hadza woman stated:

“We have no option currently; we have no enough food to survive. This makes us to go and offer labour in non-Hadza farms for example harvesting maize, onions and earn some money, which enable us to buy foods” (Daina, interview, 2017).

Delays of rainfall or inadequate rainfall over the Hadza lands, the result of *climate change*, have also affected the collection of honey. The prolonged drought cannot support flowers and water sources. According to Berbesque and Marlowe (2009: 756), honey is a favorite food of Hadza women and men. In focus group discussions, I was told that honey was a natural food for the Hadza and that it was also sometimes used as a good for barter trades with neighbouring communities, like the Iraqw and the Datooga. Accordingly, the scarcity of honey not only affects the Hadza but also the neighboring societies that traded with the Hadza.

Furthermore, a shortage of foraged species and water in the Hadza lands has made life more difficult for the women. Finding water sources was often cited as a big challenge by Hadza

women as it takes up a lot of time which could be used for foraging activities. As is, Hadza women walk a distance of up to 8 kilometres searching for water sources, as one of the respondents revealed:

“I wake up at 4:00 a.m. and spend six to seven hours searching for water for domestic use. It is so dangerous because sometimes you might meet with wild animals like snakes, which may injure you” (Prisca, interview, 2017).

Similarly to Mabulla (2012: 60) state that due to effects of *climate change*, rainfall cannot support the ecosystem goods and services production, thus, there are less foraging goods in the Hadza camps. Currently, the Hadza women spend 7 - 8 hours searching for fruits, tubers and berries and the non-Hadza harvested farms have become their foraging area (they collect maize, potatoes and other left over crops).

Climate conditions have not only affected the group of elders and women, as far as foraging is concerned, but also the children. The focus group discussions made me recognize that the children who used to forage nearby could no longer do that. The tubers and other fruits are no longer found in their immediate surroundings and hence, they have to go farther in search of food. However, their parents do not allow them to travel far for fear of getting lost. One respondent had the following to say:

“We have stopped our children to go foraging because frequently they lost and some become injured. There are no clear roads so it is easy for children to get injured by dangerous animals or due to long distance and unfriendly environment for children with no clear roads and full of stones and broken trees as food can't be accessed nearby areas as it was during the past” (Lusia, interview, 2017).

The implications of the above statement are that Hadza children no longer contribute to family income, as had been the case in the past. This issue is now left only to the parents who face these problems concerning hunting and foraging activities.

To conclude this discussion, the physical environment has a great impact on the life of an individual, a family, and the community at large. The challenges of the physical environment, in most cases, do not strike equally. That is to say, based on different gender roles in families and in societies, some groups can be more affected. Referring to the Hadza, women can be considered as the group that is the most affected by the changes occurring in their physical environment. This may justify the notion that the physical environmental crises and the

currents changes in the climate mostly results in women suffering. As mentioned previously, Woodburn (1968a) noted that the Hadza neither have nor recognize any need for conservation or preservation of food resources. Thus, this society is directly at risk of experiencing any effects as a result of changes of their physical environment. Women spend a lot of time and energy tending for their family's basic needs, like water and food and, finally, adopting new ways of life as solution for their survival.

7. The Effects of Socio-cultural Changes of the Life Style of the Hadza Society

With respect to this issue, I was interested in discovering the effects brought about by socio-cultural changes in the life of the Hadza. I considered two sides of the effects, positive and negative. Data for this objective were obtained through interviews, questionnaires, and focus group discussions. The respondents mentioned the effects based on adjustment mechanisms, as discussed below.

7.1. Hadza Engaging in Livestock Keeping

Around the Hadza people, it was common to find the Datooga, Iraqw, and the Sukuma who engage in livestock keeping or herding as a means of survival. It is a definitive part of their practises. The Hadza had no tradition of keeping animals. This was noted by Obst (as cited in Woodburn 1997) during his research on the Hadza. The Hadza had words for some domestic animals, and Obst felt those words were not borrowed words. He speculated that the Hadza might have once been pastoralists. However, Obst noted that the Hadza had no memory or stories of having ever been farmers or pastoralists (Woodburn 1997). Only archaeological / zoo-archaeological research on Hadza lands could address this issue.

Currently, some of the Hadza have adopted the practice of keeping livestock, which supplies them with meat and milk. Hadza may have five to ten cows, goats, and sheep, and they are very proud of this new cultural practice. Though at the beginning many Hadza were reluctant because they were not used to engaging in such activities. One respondents explained:

“Currently, I have three cows. I started with just one cow in the year 2010 and I'm proud of this livestock keeping culture because I can get milk and meat. Also I have five goats and I keep them for meat” (Saqrach, interview, 2017).

However, in a focus group discussion with the respondents it came out that many Hadza have only a very small area for livestock grazing because their lands are occupied by other livestock keeping societies, particularly the Sukuma, Datooga (Tatoga), and Iraqw (Iraqwi), who have occupied a large portion of the Hadza lands. This was revealed when I wanted to know why the Hadza only kept a small number of livestock. The responses were as follows:

“...It is not easy for our community to have so big number of livestock like cows, goats etc. For we do not have the animal keeping practices. We also do not have enough land/space for feeding animals because of our places been taken by immigrants like the Sukuma who use our land for feed their livestock. This situation makes us not been able to compete with them in livestock keeping” (Sundi, FGD, 2017).

Furthermore, a report from the Indigenous Peoples of Africa Co-ordinating Committee (IPACC 2007: 12), made the same observation on what is happening in the Hadza lands. It stated: “The Iraqw who have run short of grazing land for their livestock in the highlands drove their herds to Iraqw relatives in the Eyasi Basin worsening an already fragile and tight livestock niche”). Additionally, the Iraqw have moved down into the Hadza country clearing the vegetation that essentially supported wildlife for the cultivation of maize, potatoes, and onions (ibid).

The voices above reveal that the engagement of Hadza in livestock keeping was a very important step in enhancing their daily life in a challenging physical environment, which does not provide enough resources for their daily meals. Additionally, this entails that, in some cases, adoption of new cultural practices remains an important aspect for a community’s survival; regardless of the loss of cultural values in such transformation process.

Moreover, the respondents pointed out that even though they have adjusted to keeping livestock they cannot afford to buy livestock, specifically cows, goats, and sheep. This is because most of the families live in strict poverty. Through the focus group discussions I held, I was able to recognize that those Hadza families who owned cattle were also those who managed to send their children to school. They were employed and hence, able to support their families (with economic capital), as one of the respondents narrated:

“My son who is a teacher in Arusha sent me money so that I can buy cattle. That is what I did. This could be impossible for me to buy because I have no money, not even a

business which I do to generate income and as you see I have nothing in my hut. These two cattle I bought from the Datooga” (Anney, FGD, 2017).

Interviews also revealed that some of the Hadza were given cows by a Lutheran pastor as a form of grant. After a cow gave birth the calf was given to another person while the owner of the cow kept the mother. The intention of this grant was, therefore, to ensure that every individual had at least one cow to supply milk as well as manure for agricultural activities. However, only members of said church received a cow, as one respondent mentioned:

“Our Lutheran church at Yaenda Chini had a programme of lifting our lives for thirty years now. They provided a cow to the selected families and every product was supplied to an individual. This program has made most of us to possess at least a cow except to those who are not among the church members” (Ponglay, interview, 2017).

The above statement reveals that there are very important intervention programs, set by the church, to help the Hadza. Although, certain restrictions are enforced or, simply, religious conversion and affiliation are forced. This has changed the Hadza culturally. Nevertheless, it is very important for the survival of the Hadza.

7.2. Hadza Engaging in Bee Keeping

As I have mentioned in previous chapters and as cited by different ethnographers, honey is one of the most important and favourite food of the Hadza. However, through the changes in the climate and other associated factors, honey has become scarce. This has led the Hadza to change their cultural practise of foraging for honey and look for alternatives to provide them with honey. During my fieldwork, I learned through interviews with respondents that the Hadza have started to engage in deliberate bee keeping by using traditional (apicultural) methods. This activity supplies the Hadza with food (honey). One respondent told me:

... We used to harvest honey on the trees and from the forests near to our living area there were plenty of honey. The situation nowadays it is not the same. This current situation is not good and it has made us thinking of our lives. We thought keeping bees on trees near by our camps could be the only solution and therefore, we now get enough honey and surplus (Drinoy, interview, 2017).



Figure 9 Bee keeping by the Hadza. Source: URL 10

I was very curious to understand what the Hadza do with the extra / surplus honey. In a focus group discussion with respondents, it was revealed that the Hadza normally tend to sell the honey to tourists and to other communities, like the Sukuma. Therefore, it is a source of income, as one of the respondents asserted:

“I always get money by selling honey at Yaeda Chini market. Sometimes tourists buy honey and at good harvesting season we get a lot of money from selling honey which helps us to take care of our family” (Lukoy, FGD, 2017).

This shows that apart from the fact that honey provides food to the community, it is also a source of income. Mabulla (2012: 81) noted that about 17% of the respondents he interviewed adopted bee keeping instead of traditionally foraging for honey. Thus, the sale of honey became a major economic activity of the Hadza to enhance their livelihood.

However, though the Hadza are earning money through engaging in bee keeping activities, their livelihood remains very precarious. I wanted to know why the Hadza do not ‘improve’ their standards of living and understand their reasons. I was able to recognize that the Hadza wanted to maintain their cultural practices and wanted to maintain their culture’s uniqueness. As one respondent revealed in an interview:

“...building a good house? Good house for what? This hut fits me better than the house you think for. I am proud living in this hut in which it is easy for me to move with my family as I wish to do so” (Sopino, interview, 2017).

My interview with this respondent indicated that Hadza were not willing to ‘change’, as traditionally they used to move from one place to another. Therefore, finding ways of obtaining money or giving importance to money they earn to build permanent settlements is not a priority.

7.3. Hadza Engaging in Tourism Industry

Increased interest in the Hadza community and improved access to their homeland has created new challenges for them. The influx of tourist groups in some parts of the Hadza lands has been overwhelming and threatens to change their way of life forever (URL – Hadza Fund)¹⁴. In focus group discussion, it was revealed that the Hadza community engages in the tourism industry as an alternative method for survival. Since hunting and foraging has been affected by farmers, pastoralist (occupying and cleaning their land for other purposes like agriculture), and *climate change*, and its associated factors, these activities can no longer provide enough for their livelihood. Nevertheless, there is a problem of uninformed or irresponsible tour and safari companies, who bring well-meaning tourists to Hadza camps but invest little or nothing in the Hadza community in return. One of the respondents lamented:

“Many tourists came here frequently especially during the high season. Though we benefit little, much effect are seen when they brought new culture here. For example alcoholism to the camps. This has much effect to our daily life and for the future of our youth” (Daudi, FGD, 2017).

Mabulla (2012) noted that the way of life of the Hadza is in one way or another forced and exposed to socio-cultural changes because of the hard situation in their land. Now, the Hadza depend on revenues generated from cultural tourism, food and clothes support from the government, aid from non-government organizations, researchers, and farmers (Mabulla 2012: 88). Mabulla further notes that cultural tourism at Mang’ola and Domanga areas has become very popular. It has appeared as an important breadwinner socio-economic activity for the Hadza where the Hadza performs some traditional dances and sell traditional products like necklace and honey to tourists when visiting to their camps. Per tourist group visit, the Hadza receive 20,000-45,000 shillings equivalent to 9-20 Euros (Mabulla 2012: 86-87).

¹⁴ Hadza Fund: <http://www.hadzafund.org/Tourism.htm>

Also, in a questionnaire a respondent wrote that engagement in the tourism industry had a great importance to them. This is because through tourism involvement the Hadza are able to earn money. Some Hadza engage in hunting games with the tourists and some of them stay in camps with the tourists as guides or watchmen. Also, when participating in hunting-foraging activities, tourists normally pay some money to the Hadza. This was revealed by the respondents. One wrote:

“Every activity that the tourists involve us we are paid. Though normally many prefer to see real life of the Hadza at natural settings. They want to see our food, dances, foraging and hunting. To show all these activities as it cost time, the tourists normally pay us through those tour program organizers company” (Sovery, questionnaire, 2017)

Another respondent remarked in an interview:

“Tourism are as beneficial to us as through them we earn money. Some of them provide us alcohol and other stuffs. We wish they could come the whole season of the year but they normally come here during the high season” (Mongu, interview, 2017)

The above voices, show that the tourism industry has some importance to the Hadza economically. Nevertheless, their ways of life get transformed. In most cases, the Hadza act as ‘third person’. That is, the companies organise all tours with tourists and the Hadza receive orders from those companies, which pay them however the company wishes. In these cases, the Hadza do not benefit a lot economically in comparison to the safari tours that operate in the area. In addition, it is in fact that the government of the United Republic of Tanzania no longer acting to protect and ensure that the Hadza people are not used as a source of income for tour companies and individuals while remaining poor. The government failed to set a policy, which can be used to safeguard the interests of the Hadza, as exemplified by the tour companies: they operate with very minimal regulations and most of the benefits go to their side, not to the Hadza.

7.4. Hadza Employed by Farmers and Pastoralists

For several centuries, many non-Hadza farmers and pastoralists have moved into the Hadza homeland, where they have lived and settled for social and economic activities (Woodburn 1962). Their settlements have affected the livelihoods of the Hadza people in different ways. These non-Hadza societies destroyed the natural Hadza lands by clearing the land for

agricultural activities and over-grazing. According to Mabulla (2012), the socio-economic activities of the non-Hadza, non-hunter-foragers in the Eyasi basin are clearing large tracts of land for farming and, therefore, destroying the environment and the plant foods eaten by the Hadza (Mabulla 2012: 67). Due to the destruction of the natural land the livelihood of the Hadza was negatively affected and their survival became endangered, as they lacked enough resources to feed themselves. This forced the Hadza people to work on farms that belong to the 'Swahili'. Farms on which they cultivated onions, maize, rice, and potatoes, all of which are non-African imported crops.

According to Ishige (1971) and Tomita (1971), the Hadza were at times working by their neighbours like the Sukuma, Datooga and Isanzu as day labourers for agricultural activities, constructing houses and fetching water. This was kind of barter trade, thus, in return were given food products like maize or sweet potatoes. The Hadza had no means of surviving rather than looking for an alternative to keep life going. The Isanzu who are living in south of the Hadza land, are mostly interacting with the Hadza especially by employing them to work in their farms. Several respondents declared that situation stating that:

"We work in our neighbouring communities as a day labourers for cultivating land belongs to the Isanzu, Sukuma and Nyiramba. We also make houses and drawing water and in return, we are given maize or sweet potatoes" (Hongongoscha, FGD, 2017)

Meanwhile, the interviews I conducted revealed that the Datooga and Sukuma, who possess large amounts of cattle, normally employ the Hadza to graze livestock. In return they receive meat and maize. This was mentioned by a respondent:

"I myself being employed as a day worker to the Datooga, I used to take livestock to feed them during the morning from 10:00 a.m. and return at 5:00 p.m. Then the Datooga gives me meat and maize as per agreement. I took it home and by this I run my family" (Sengani, interview, 2017).

However, through my observations I noted great differences between the activities the Hadza performed on farms that belong to the Swahili, Isanzu, Sukuma, and Nyiramba as well as when it came to livestock grazing for the Datooga.

Moreover, different scholars have acknowledged Hadza hunter-foragers working for farmers by guarding maize fields from animals, especially vervets and baboons (Marlowe 2002; Mabulla 2007; Blurton 2011). Some Hadza are employed on the two large European farms in

the Mang'ola area (Marlowe, 2002). Furthermore, the Hadza reported that they were frequently hired by Iraqw and Datooga to construct cattle kraals and enclosures for farms and homesteads in exchange for food and tobacco. Regardless of the hard work done by the Hadza, they received wages in terms of small portions of maize and sweet potatoes. In addition, they could eat the meat of the monkeys and baboons they killed while guarding the farms (Mabulla 2012: 88).

Meanwhile, the amounts of maize and meat given to them by the Datooga is also a source of doubt. In a focus group discussion with the respondents it was revealed that there is no set amount given by the Datooga and that it is the Datooga, who decide the amounts of maize and meat paid the Hadza after their work is performed.

Generally, it can be said that the communities surrounding the Hadza take advantage of them and profit from the problems the Hadza face. In addition, the government has not actively sought to protect the Hadza from these injustices. Overall, these circumstances continue since the Hadza are still considered a barbaric, savage and primitive society by their government and their neighbouring societies.

7.5. Hadza Engaging in Exchange of Commodities

In society, people exchange things, goods, services, and information. Exchange lies at the heart of societies as it keeps social relation alive and distributes things of value within a society (Binde 2005: 445). A focus group discussion, several questionnaires, and an interview all declared that the Hadza people have adopted a culture of engaging in exchange of goods with their neighbouring communities. The Hadza exchange commodities, like honey, with the Iraqw, who live in the highlands, where rainfall is plentiful and where maize farmers primarily live. In addition, the Hadza barter honey with the Datooga, who are animal keepers and from whom they receive meat in turn.

According to Marlowe (2002), the Hadza have been trading with their neighbours all throughout the twentieth century. Just as they did during the time of Erich Obst's visit, the Hadza today trade meat, skins, and honey in exchange for tobacco, marijuana, maize, millet, clothes, beads, cooking pots, and scrap iron for forging their axes and arrowheads. They no longer get clay pots but rather metal pots and they no longer get brass neck rings. Nowadays, the Hadza also receive beer from their neighbours, sell some of their crafts to tourists, and

receive a variety of goods from researchers, especially clothes and nails for arrowheads (Marlowe 2002).

These interactions of the Hadza with other societies that have led to trade exchanges have sometimes caused problems for Hadza people. For instance, Marlowe noted that once the Hadza killed an elephant and in exchange for the ivory they received some goats from a native stranger. However, the next morning the goats strayed into the bush and no one bothered to follow them because they were feasting on the elephant's meat. Then the Datooga attacked, declaring the goats were stolen from them, and killed many of the Hadza (Marlowe 2002). This is an example of how the changes in the life style of the Hadza, which was to traditionally keep their distance to other societies, has sometimes caused them trouble since they were unfamiliar with others, and they did not know how to live with neighbours or how to protect themselves. As mentioned by Bagshawe (1924-1925), the Hadza used to hide from strangers. To them, this was like a weapon or shield, wielded against their enemies. In general, they have long adopted a low-key response to outsiders.

7.6. Hadza Engaging in Farming Activities

In order for the Hadza to survive, engaging in agricultural activities has become inevitable. According to Mehlman (1989), small-scale farming that uses traditional irrigation canals is not new in the Eyasi basin. It was introduced to the northern part of Lake Eyasi about 600 years ago. Based on my observations, the most common crops of irrigated farming included onions, maize, and rice. These products have become the most profitable for business in the Mang'ola region. Thus, many people migrate to that area in order to invest in large-scale irrigation farming. The market for the products produced at Mang'ola, especially onions, persuaded people to migrate from other places to the Hadza lands and invest in modern farming, wither using small-scale gravitational irrigation, for small farmers, or motor water pumps for large-scale irrigation. Some large-scale farmers have even drilled their own water wells for irrigation, and they produce onion throughout the year.

Due to cultivation of these agricultural products, movements of people and vehicles to the Hadza land are increasing in numbers day to day. Some go to Lake Eyasi to occupy the Hadza land for cultivation and others are buyers of those products. Thus, business has brought about an increase in changes of the natural lands of the Hadza as well as the Hadza themselves. The data collected through focus group discussion revealed that, as a way of adjusting to these

changes, the Hadza are participating in agricultural activities in addition to their foraging activities, though not to a large extent. Food crops such as maize, potatoes, and cassava have become a popular supplement to their diet among the Hadza. As one respondent explained:

“... slowly we are adapting farming activities in which we cultivate maize, potatoes and cassava so as to supplement the food which we normally forage. We also grow vegetables, which some time we sell at Yaeda Chini market” (Qorro, FGD, 2017)

These new cultural practises of engaging in agricultural activities, although they play an important role in providing supplementary foods for the Hadza, cannot sustain the community long-term because of the frequent weather changes in the area. These vary from prolonged dry seasons to prolonged and heavy rainfalls that destroy the crops. In an interview conducted with Hadza respondents, one of them lamented:

“We are trying to cultivate many products but sometimes due to bad weather, we are not harvesting enough crops. This is also a new practise for us but we hope it can be one way of reducing hunger” (Njipay, interview, 2017).

The above statement indicates that the adjustments the Hadza have made have changed their original practices, and the adoption of the ‘new cultural practice’ still face great challenges. During my fieldwork, I wanted to gain a deeper understanding of the extent to which the Hadza people engage in farming activities. In an interview, it came to light that quite a large number of Hadza people engage in farming activities. The reason behind this development was the changing ecology. One respondents contended:

“You ask how many people are engaging in agricultural activities? ...ha ha ha, I can say a good number of us. Though we have no enough experience from agricultural activities we are adapting this new practice from our neighbouring communities who are agricultural oriented communities” (Deemay, interview, 2017).

Another respondent added:

“Foraging and hunting is not on our side currently. If a person do not engage in farming activity, he will die of hunger because farming activities have become a substitute to our former activities of foraging and hunting” (Qwalay, interview, 2017).

These comments show that the Hadza have a ‘new cultural practice’, namely engaging in farming activities to chase away hunger. They are eating new diets which contrast their former

diets of tubers, meat, and fruits. This is slowly alienating the Hadza's in food culture. Nevertheless, it should be kept in mind that whenever hunting and foraging activities face challenges, so will the other sectors, like animal husbandry or agriculture. That means, the Hadza might find themselves in a transitional point in their cultural practices. As mentioned above, since the Hadza are not fully embracing agriculture as a new practice in their lives, it will not be easy for them to change completely. Still, they will need to engage in both sides, both new and old practices, to balance and handle their hunger problems.

This is in some ways contrary to the findings presented by Food and Agriculture Organization of the United Nations - FAO (2008: 41) asserted that vulnerable people involves adopting practices that enable them protect existence of their livelihood systems, diversify their sources of food and income, change their livelihood strategies and migrate if there is no other option for their survival. This is the same case to the Hadza people who are now in bad situation of poverty and hunger. They are trying to adopt the cultivation of crops as a prerequisite to survive and to ensure food stability. Since some factors that support agriculture (traditional agriculture as practiced by most African small farmers) are the same for hunting-and-gathering, it is clear that these are not permanent solutions for dealing with hunger in the Hadza lands. For the Hadza, adopting new practices is an advantageous alternative to the seasonal exploitation of particular species. Thus, adapting and practising farming for the Hadza as an alternative to deal with hunger will only be possible if only the reliable factors for supporting cultivation will not be a challenge; that means there is a need of enough rain for the whole cultivation season.

8. Climate Change

Climate change is an issue which is currently hitting and affecting almost all sectors in the world. The global effects of *climate change* have brought people from all continents to discuss what to do and how to act to make the world a better place for all living and non-living organisms. The term *climate change* in IPCC usage refers to any “change in climate over time, whether due to natural variability or as the result of human activities” (IPCC 2007). *Climate change* according to Crate & Nuttall (2009: 42) are “changes in global or regional climate patterns, attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels”. Generally and as also noted by IPCC, *climate change* can refer to changes of the natural atmosphere that are caused by natural or human factors.

Climate change is attracting ever day more attention from the social media, academic discourses, in politics and even in business arenas. This is evidence that mounts about its scale and seriousness, and the speed at which it is affecting the world. Nevertheless, rarely does it mentioned on how *climate change* impact on minorities and indigenous groups, even though they are among the worst affected (Baird 2008: 1). For instance, according to UNICEF (2014: 49) Indigenous people and are often among those most vulnerable to climate-related impacts because most of the are highly living on climate-sensitive ecosystems like on the Arctic areas. UNICEF is further predicting the loss of traditional species and land, which can in future impact identity of the children of the indigenous minority including their language and culture (ibid: 49).

Based on global community reports, like those of IPCC and the UN, both noted that “the world’s climate is changing and will continue to change at unprecedented rates”. According to the report of the URT (2012: 1), *climate change* is increasingly becoming a global concern as it poses a challenge to sustainable livelihoods, economic development, and global security. This concern is based on scientific findings and observations. Likewise, the Fourth Assessment Report of the Intergovernmental Panel on *Climate Change* (IPCC) shows an increase of global average air and ocean temperatures leading to wide spread melting of snow and ice as well as rising global average sea level (IPCC, 2007: 2). Furthermore, the same IPCC report shows that the estimated increase of global surface temperature by the end of the 21st Century could be anywhere between 1.1°C and 6.4°C.

It is noted that “there are different factors that operate on different time scales, and not all of those factors have been responsible for changes on Earth” (URL 12). Factors that cause *climate change* can be divided into two categories: “those related to natural processes and those related to human activity” (ibid). The natural factors of the earth which are related to the change or effects to the climate system include factors like “volcanic activity, solar output, and Earth's orbit around the sun” (ibid). And, on the other hand, human activities that causes effects to the earth climatic condition include activities like “burning fossil fuels and the conversion of land for forestry and agriculture activities” (ibid). According to Msafiri (2012: 105), the main reasons for deforestation include clearing for agriculture and settlement, overgrazing, wildfires, charcoal burning, and overexploitation of wood resources for commercial purposes. All these contribute immensely to the increase of CO₂ levels in the

atmosphere. As the carbon sink or the absorption of CO₂ by plant life is progressively reduced, *climate change* puts forests and wetlands in even greater danger (ibid: 105).

8.1. Historical Background of Climate Change in the World

Human activities have become a dominant driving force for *climate change*, caused, among others, due to high amount of pollution as a result of greenhouse gases in the atmosphere and over- and misuse of land. It is stated by the government of Canada that

“Human activity is the main cause of climate change. People burn fossil fuels and convert land from forests to agriculture. Since the beginning of the Industrial Revolution, people have burned more and more fossil fuels and changed vast areas of land from forests to farmland” (URL 25).

Throughout extant research, especially starting from the nineteenth and twentieth centuries, there is evidence of both warmer and colder climatic conditions than today. Furthermore, people’s actions have direct or indirect effects on environment. According to the report of the United Nations Framework Convention on Climate Change, “climate change attributed directly or indirectly to human activity” (IPCC 2007: 20). Environment and climatic condition influence human activities such as fishing, agriculture, livestock keeping, and hunting-and-gathering. Thus, all activities which are carried out by human beings are subject to the environment. However, humans can dynamically transform and adapt to the environment.

In accordance to the IPCC report, “scientists have pieced together a record of Earth’s climate, dating back hundreds of thousands of years, by analysing a number of indirect measures, such as ice cores, tree rings, glacier lengths, pollen remains, and ocean sediments, and by additionally studying changes in Earth’s orbit around the sun” (IPCC 2013: 67). However, recent changes in climate are mainly understood as results of human activities. For instance, global warming is the result of greenhouse gas increases from industrial activities (ibid: 68) as well as from natural factors.

According to McMichael (2003: 4), “the long-term good health of populations depends on the continued stability and functioning of the biosphere’s ecological and physical systems”, often referred to as a life-support system. Thus, global *climate change* becomes a significant addition to the range of environmental health hazards faced by human beings. Global change has led to climatic cycles leaving great scars on the history of human kind (McMichael 2004:

65). Civilizations of Ancient Egypt, Mesopotamia, the Mayans, and Vikings no longer exist. For McMichael, the perishing of these civilizations was caused by nature's great climatic cycles (ibid).

Though this view of past civilizations collapsing due to natural *climate change* may be contested, current local and regional crises related to climate are certain, and the threat of a future global collapse from anthropogenic causes could be seen as veritable. But the climate crisis is making new forms of climate determinism more fashionable, especially among scientists outside the social sciences. And at the same time, climate and environmental degradation are so strong and powerful that one cannot deny that climate is directing future history. The same way as we can talk now of the Anthropocene, since human history also directs the climate and the future of Earth.

Some efforts are being made to rescue communities from the problems associated with global climatic change to enable societies to live comfortably. Yet, in this critical condition of extreme changes of weather more efforts are needed to rescue vulnerable societies. According to Aidan Msafiri (2012: 44), there is little research activity on the impact of global warming and *climate change*. This is a direct call for more researchers to keep investigating and searching for alternative solutions to make the world better place to live in for all creatures.

8.2. Cultural Aspects and Climate Change in Society

Climate change affects human well-being in all aspect of daily life. Signs of these effects occur in basic human needs (food, clothes and shelter) poor food production, low economy, and instability in governance plans. Increasingly, anthropologists come across and take note of the local effects and broader socio-cultural, economic, and political issues of *climate change* (Lange 2005: 92). As these are very serious issues, which led Barnett and McCormik (2003: 63) to argue that despite the fact that *climate change* is the most profound problem related to global environmental changes, it has received little systematic attention as a security issue.

Crate and NuHall (2009: 4) argued that from an anthropological perspective, *climate change* is ultimately about culture. *Climate change* always brings different kinds of risks and opportunities, threatens cultural survival, and undermines indigenous human rights. *Climate change* leads to the relocation of human beings, and leaves animal and plant populations

adjusting, changing, and coping with its implications. According to IPCC (2007: 68), the world's poor, already struggling to secure their basic needs of food, health, and water, will suffer the worst effects of *climate change*. For one, because their adaptive capacities are more limited. For another, they are more dependent on climate-sensitive resources, especially local water sources and food supplies.

Women in their roles tend to be very affected by this phenomenon. Women, as the managers of family, food, water, and health, are hit directly by *climate changes* (Wisner et al. 2007: 106). Likewise, the United Nations Framework Convention on *Climate Change* (UNFCCC 2007: 43) state that “Women and girls are typically the ones to care for the home and fetch water, fodder, firewood, and often food. During times of climate stress, they must cope with fewer resources and a greater workload” thus, the *climate change* brings additional vulnerabilities to developing countries and mostly to indigenous people who are politically and economically marginalized but foremost to women who are entitled for so many tasks in the family in comparison to men

8.3. Studies Conducted in Developed Countries Concerning Climate Change

Crate (2011: 175) conducted an overview of foundational climate and culture studies in anthropology, particularly on anthropological engagements with contemporary global *climate change*. He found that there was a need for anthropologists to adopt cross-scale, multi-stakeholder, and interdisciplinary approaches in research and practice. To him, the adoption of climate ethnography was very important.

According to Boff (1995: 15) the report of the U.S Worldwatch Institute published a detailed annual account of the world's situation in the year 1984 with special reference to progress made toward achieving a sustainable society. The prediction of their report is as follows: “between 1500 and 1850 one species were eliminated every ten years. Between 1850 and 1950, the rate was one a year. In 1990, ten species a day were disappearing. By the year 2000, one species will be vanishing every hour. The species mortality rate is speeding up constantly. Between 1975 and 2000, 20 percent of all species will have disappeared” (Boff [1995: 15] cited U.S Worldwatch). This is a very high speed of change for the ecological system that affects more than just the environment, it affects the livelihoods and survival of society, as well.

Furthermore, Boff stated that since 1950 the world has lost a fifth of the cultivatable surface and of the tropical rain forest. Every year, twenty-five million tons of humus are lost through erosion, salinization, and desertification. The forests of the world are vanishing at a rate of twenty million hectares a year (Boff 1995: 15).

Similarly, the report of the Brazilian Institute of Geography and Statistics IBGE (1988, cited in Boff 1995: 16) states that 5 percent of the Amazonian forests have already disappeared. Up to the year of 1970, five million hectares were deforested. From 1970 to 1988, a period of eighteen years, twenty million hectares were deforested (IBGE 1988). The environment is deteriorating day by day. Boff (1995: 16) stated that there is a global danger that needs a global solution and salvation.

Following Boff's research - set up a research on the human dimensions of *climate change*: the vulnerability are small farmers in the Amazon. In his research, Boff discovered that small farmers in the Amazon are susceptible to *climate change* associated with drought, flooding, and accidental fire. Moreover, because of *climate change* their cultural traditions and aspects of their culture had drastically changed. If in the long-term human culture is adaptive then whenever climatic conditions on Earth are unstable and unreliable there could not be stable culture and traditions (ibid). Especially for those peoples and societies whose livelihoods depend directly on what the land produces since all their cultures and traditions, norms, rituals, and other practises are a part of human life as well a result of their physical environment. Although this work doesn't necessarily spouse any form of geographical determinism over culture, the importance of the physical environment for the livelihood and cultural survival of indigenous peoples around the world cannot be diminished and their 'climate security' should be increasingly promoted, even prioritised.

8.4. Impacts of Climate Change on Culture and Tradition of Societies in Tanzania

Boff views as noted above are widely experienced today and people feel the real effects of *climate change*. For years, Tanzania like other countries in the world has experienced the impact of *climate change*. According to IPCC (2007: 293) report, the risks associated with *climate change* are already evident in various economic sectors that are essential for Tanzania's income and sustenance, including water resources, energy generation, food security, ecosystems / biodiversity, and human health. Based on the report from the field, many respondents admitted to the new feeling of the current environment they live today in

comparison to some years back. According to Eliya (a tour quod at Lake Eyasi), the life situation has changed. During my field at Lake Eyasi, Eliya stated that:

“...when I was young, this place was full of trees. It was real a thick forest, you could not see someone on the other side just in a short distance. We could get wild fruits and people us to plant maize on this area. Nowadays, nothing grows up rather than the wild species that you see aloe-vera and sisal” (Eliya, Interview 2017).

Climate change is already showing significant impacts on developing countries and will affect their ability to achieve the Millennium Development Goals (MDGs). Recent studies project that the frequency of weather change and intensity of extreme weather events will increase. This situation has and will still cause high magnitude of socio-economic consequences, particularly for any marginalized groups in society. Developing countries, like most of the African countries, including Tanzania, are particularly vulnerable because of their high dependence on climate sensitive livelihood activities and their low adaptive capacities. Therefore, the impacts of *climate change* pose a direct threat to the most vulnerable community's survival (URT 2012: 2).

According to Baird (2008: 4) Indigenous and minorities peoples are more affected with *climate change* because this group tend to live close to nature, in relatively natural environments, rather than in cities, growing and making much of the food and other products that they need to survive. They have been relaying on their local knowledge of weather and plant and animal life. Furthermore, their traditional wisdom on matters like when to plant crops or where to hunt for food has been accumulated over many generations, nonetheless, now that the climate is shifting, some of those understandings are proving to be no longer valid. *Climate change*, and the rapidly increasing amount of land being converted into plantations of biofuel crops, threatens the very existence of some cultures (ibid).

Further report from the field particularly from the Hadza, *climate change* has hit their ways of life. This was noted when trying to research if the Hadza people real understand the issue of *climate change* and whether they have experiences unusual changes in their daily life. One respondent had this to say:

“I understand that there are changes of the climate because there is a time at night you feel very hot or sometimes you wake up in the morning and find it is very cold to the

extent that the whole body trembling. The sun is not appearing and the sky is full of clouds” (Panda, interview 2017).

This situation for him is not common and people feel uncomfortable when there is prolonged or extreme cold or hot especially for people who used to sleep in huts, no cloths, blankets for their whole life like the Hadza and now they find importance of such things. Another respondent had this to say:

“The change of climate has also affected us because like in rain season where fruits products are supposed to be easy accessible but they are not. ... you find the baobab trees have no fruits,... so many fruits and berries are not easily found. Also wind becomes too strong and it blows with so much dust. When we look to the west direction, we see a lot of red dust blowing from Karatu to our direction like flood. You might think that rain is about to drop but not, just a heavy dust on the sky” (Kisalunga, interview 2017).

According to a URT (2012: ii) report from the vice president’s office, “Tanzania is vulnerable to increasing climate variability and *climate change*. The development of an effective strategic and institutional framework is crucial to enhance the country’s expertise, governance, technological, and infrastructural capacities”. Furthermore, various parts of the country are already facing frequent and prolonged droughts, declining crop yields, loss of livestock, inadequate water availability and poor water quality, severe floods, sea level rise, and an increase in vector and water borne diseases (ibid: 40).

Based on the case of this study, a very good part of Lake Eyasi has dried. So many water streams which used to provide water to people, wild animals and cattle around Lake Eyasi are now dried. One respondent during the interview stated that:

“Before there were no problem of water. Even here where we are now was a water source. ... Because of drought, we got a donor who brought us a water tank and he used to supply us water but nowadays he is not doing it anymore. No water and we have to search water for our daily use from far away.” (Panda, interview 2017)



Figure 9: Dried part of Lake Eyasi covered with salt. From far it looks like covered with water but looking closely that is a thick layer of dried salt. Photo taken by author during field research in September, 2017.

The change in climate has become a big problem, causing people not to be able to get their basic need like water and food. It has accelerated the decline in agricultural production, forcing people who were formerly agriculturalists to look for other alternatives to survive like engaging in charcoal making. The prevalence of crop pest and diseases has increased, posing more challenges not just to agriculturalists but also to Tanzanian societies as a whole (URT 26). The livestock sector is affected by various effects of *climate change*, drought being the most serious that lead cattle to death because of hunger and thirsty. The literature showed that in 2009 some areas in northern Tanzania were hit by severe drought that resulted in shortages of water and pasture and ultimately led to the death of 735,929 livestock animals (ibid). On the other hand, pastoralists tend to raise the number of livestock to a maximum, thereby causing overuse of their lands and through that forcing grounds to dry out and erosions. Keeping animals is good, nevertheless, too much cattle can be harmful to the environment and can cause suffering to all living organisms including human beings. For instance, during the interview Panda Mlekwa directed his claim to immigrants and their cattle for drought and kill of most water sources as he stated:

“Before there were no problem of water. Even here where we are now was a water source. The immigrants brought changes and they have affected our environment because of their cattle which walk on the water stream and lead them to dry” (Panda, interview 2017).

Rising temperature and uncertainties in rainfall associated with global warming have also resulted in ecological shifts where changes in plants and pasture species have been evident in many parts of the country. As a result according to the report of the United Republic of Tanzania, “non-palatable, toxic plant species have replaced the palatable and nutritious plant species, thus also affecting the livestock industry” (URT 2012: 17).

Any country strives hard to enable the well-being of its people. However, with *climate change*, Tanzania, as a country, experiences the heavy burdens of climate sensitive diseases like Malaria, Rift Valley fever, trypanosomiasis, and plague. This reduces labour forces in the affected areas by forcing people to move to other places looking for relief (ibid).

The culture of any society is the identity of that society. Since *climate change* is not just about climate but is tied up with broader environmental changes and the global transformation of place, in Tanzania the issues of gender equality and gender roles have been also affected. For example, the pastoralists, who had a clear division of labour, have experienced cultural and social transformations due to *climate change*. The gender-based division of labour puts men and women at different levels of exposure to climate risks and opportunities (Rossi and Lambrou 2008: 9). Among the Maasai, Sukuma, and Gogo in Tanzania, the range of livelihood options open to households has disappeared, making every man and woman participate fully in economic activities, as compared to their division of labour in the past.

With this situation, a good number of men and women have changed their ways of life. Most of them by moving to towns to seek employment. For instance, it is normal to find Maasai people in town engaging in minor businesses, like selling local medicine or working as house guides leaving their families back home starving. They survive by taking on minimal economic activities and live in marginal poverty. To Msafiri (2012: 99), “*climate change* and global warming are potential disasters and calamities with far-reaching environmental, health, economic, thermal, agricultural, and cultural consequences, both locally and globally. The threats posed by *climate change* and global warming in Tanzania and the entire world cannot be exaggerated”. Implementation of local and global strategies are needed to secure the survival of vulnerable communities and the world at large.

8.5. Environmental Stresses and their Impact on Cultures

All around the world, cultures are experiencing change simply because of environmental stresses and the whole problems of *climate change*. The most vulnerable are people who their living mostly depend on what the land can produce – people who live from hand to mouth. According to Crate (2008: 572) “many indigenous groups are actively expressing their concern that the local effects of global *climate change* may exceed their adaptive capacity and threaten the survival of their communities and cultures”. Furthermore, the UNDP (2007-2008: 3) stated that the poorest and most vulnerable communities around the world now being

affected by of *climate change*. *Climate change* is still going to affect the poorest countries mostly referable to African, third worlds countries (non-industrial states) significantly even if serious efforts to reduce emissions start immediately. UNDP sees that there is a need for Countries (poor and vulnerable countries) to develop their own adaptation plans which could include traditional way of dealing with environment but the international community will need to support them (ibid: 4).

It is noted by UNDP that “across developing countries, millions of the world’s poorest people are already being forced to cope with the impacts of *climate change*” (UNDP 2007-2008: 7 and 2015: 5). This is directly forcing changes on people’s daily life, for instance with the Hadza, eating maize, potatoes, rice breads and other none of their traditional foods has changed their ways of hunting and gathering. Now most of their time they stay at the camp and wait to entertaining tourists and take them around and show them how they do hunting.

Globalization and growing consumerism increase environmental stress by contributing to deforestation (Jensen and Draffan 2004: 20). Deforestation has a number of reasons, it can be due to the use of wood for cooking, the need of space and materials for building and construction, for agricultural cultivation, and in some cases, for lumbering. Furthermore, deforestation can also leads to the introduction of harmful foreign species, which can in one way or another impact the ecological system.

Akande (2002: 40) argued that globalization had negative impacts in the sense that cultural imperialism left the colonized in a state of what is called cultural disorientation, which is vulnerable to cultural invasion. Due to globalization, there has been a commercialization of culture, especially in production, distribution, and consumption of cultural goods and services. They have become commodities along with the essentials of life. Music, food, clothes, art, sports, as well as images are now sold on the market and exported (Nwegbu et al. 2011: 105).

This shows that globalization has largely contributed to cultural assimilation. Advancement of technology always dissolves national as well as international boundaries and opens up cultures and traditional practises to new areas (Smith and Ward 2000: 116). As commented by Moahi (2007: 86), on the one hand, globalization is an empowering entity which connects the world, supports economic activities performed by members of societies, and provides information to assist global village. Nevertheless on the other hand, globalization puts the world into stress as all economies look to satisfy markets all around the world. According to

Jeppesen et al. (2012) and as quoted by Bürgi (2014: 137), the developing market challenges small and medium sized enterprises (so called SMEs) to expand their activities regionally, nationally, and even globally. Though this development is strongly related to the industries the SMEs belong to. Bürgi further noted that even traditional industries operating locally or regionally (e.g. construction) have had to enlarge their geographical spread because of market pressures and competition, accompanied by additional cost for logistics (Bürgi 2014: 137).

9. Strategies to Employ Cultural Preservation

UNESCO (1994: 16) advocated environmental preservation with the aim of promoting eco-cultural space. Culture today is increasingly viewed as an essential component of sustainable development. Policies and projects building on cultural heritage must inevitably be devised to bring about sustainable development to society (Rowe 2011: 39). Managing sustainability is one way of meeting the UN Sustainable Development Goals of 2015, mainly for poverty reduction. The UN noted that culture contributes to poverty reduction and paves the way for a human-centred, inclusive, and equitable development. No development can be sustainable without it (UNESCO 2015). That is, culture and traditions of societies are useful in maintaining and bring sustainable development.

Local and regional authorities play a vital and significant role in the preservation and enhancement of cultural heritage. The Euro-Mediterranean space is an example of this (Rowe 2011: 39). The level of government authority with primary responsibility for the protection of tangible heritage, as well as local and regional actors, have a strong understanding of cultural protection. Their responsibilities for social welfare and for educational issues has led local and regional authorities to develop a sophisticated understanding and toolkit for managing and protecting their heritage (UNESCO 1994: 16).

In some cases, cultural preservation encounters hurdles. Local and regional authorities are under constant pressure because of financing models and the social and economic realities of the day. Although there are interesting schemes for cultural protection and preservation in some societies, surprisingly awareness of these programs does not reach target audience. Government authorities sometimes do not involve local communities to participate fully in the formulation of laws and rules that govern cultural preservation (see Akande 2002). However, UNESCO (1994) argues that local and regional authorities are both actors and policy-makers. They are likely to be involved primarily in the preservation of local cultural

wealth, yet at the same time they provide the policy framework for exploiting the artefacts for commercial purposes, especially in the tourism industry, and for promoting and sustaining cultural projects, which preserve non-tangible cultural heritage in the area.

Cultural preservation possesses different, often competing values and significances. As pointed out by English (1986), the preservation of cultural heritage is at risk either through natural deterioration, human-induced deterioration, and over-exploitation of cultural artefacts. Too often, both community residents and planners do not dedicate sufficient attention and resources to preserving spaces and objects as well as facilitating contemporary cultural practices. Therefore, to solve that problem Minerbi (1992) calls upon the involvement of trusted community-based organizations such as churches, schools, art centres, ethnic associations, and community social service agencies. These institutions are key for the advancement and preservation of culture.

Based on the research modal described above (see pg. 26) various issues have been discussed throughout this paper. Most Tanzanian government officials and the Tanzanian people understand the rights of the Hadza as a ‘minority indigenous society’ including their right to their physical environment. Nevertheless, the future of the Hadza is more or less determined by issues and different factors of *climate change*, including the destruction of the natural environment in turn leading to changes in cultures and traditions. So, with this in mind, the future of the Hadza can be protected by reconsidering cultural preservation. The next discussion in this study presents some strategies that focus on rescuing the cultures and traditions of the Hadza society.

10. Strategies to be Employed to Prevent the Socio-Cultural Changes of the Hadza

Different researchers have pointed out that the Hadza’s cultural values are in danger of disappearing. For instance, according to Woodburn (1979) “The Hadza have...few rules in general, and what few there are often go ignored with little consequence, except for the rules about eating the men’s special *epeme* meat”. This statement says a lot about the livelihood of the Hadza. Ignoring smaller more insignificant rules and regulation is, in my opinion, a sign that indicates that the same behavior will extend to very serious and important matters. Furthermore, it should be noted that due to interaction with other communities, tourists, researcher, government, social NGOs, and so on, the Hadza have adopted various new cultural practices, traits, norms, and traditions, even showing signs of assimilation.

The previous chapters have detailed some of the socio-cultural changes in the lives of the Hadza, like traditional education versus modern education, religious practices, traditional ways of hunting and gathering and the stone tools they used for it, marriages, traditional medicine, and burring and birth rituals, as well as other many changes. All this cannot be ignored and it is clear that the Hadza of today are not the same Hadza society that existed 100 years ago. Also, previous chapters have described some of the factors that have led to such socio-cultural changes of the Hadza's ways of life. In any given society, a history exists, whether their history is portrayed in a positive or negative light depends on individual perception. Not every single cultural practice can be preserved and maintained and performed the same forever. Nevertheless, since most socio-cultural practices are primarily for teaching purposes and they play a big role in uniting people, there is a need to preserve them in societies. In the case of the Hadza, there is a need to implement suitable strategies to preserve their cultures and traditions. Below are some recommended strategies to preserve the social and cultural practices and traditions of the Hadza as indigenous hunters and foragers of Tanzania.

10.1. Protecting Indigenous Lands

If you want to know who is a Hadza, is land. Why? Because if there is no land, there is no a Hadza (a quote from the Hadza book, stated by Nyanzome)

The importance of land and territories to indigenous cultural identity according to Young (2000) has not been stressed enough. The survival and development of indigenous peoples' particular ways of their daily life, their traditional knowledge, their handicrafts and other cultural expressions have, for centuries depended on their access and rights to their traditional lands, territories and natural resources. Land as for indigenous people is not only the basis of their economy, it is more than that of economy (ibid: 57). Land is where their fore fathers are buried and so such places are considered to be valuable and sacred, therefore, they sometimes need to visit and pay respect to their ancestors. Thus, Indigenous peoples have a deep spiritual relationship with the land; they feel at one with their ancestral territory and feel responsible for the healthy maintenance of the land—its waters and soils, its plants and animals—for both themselves and future generations (ibid).

Land is a big issue for most of the indigenous societies worldwide. In particular as it affects the mobility of those societies. Nevertheless, it should be kept in mind that no matter how indigenous foragers people move from one place to another, they never forget their land.

According to Zips-Mairitsch (2009: 23), indigenous land frequently seemed not to belong to anyone and was therefore taken by the state or appropriated by private farmers.

During my fieldwork, respondents expressed their concerns with regards to their land resources. In the discussions and interviews I conducted, they stated that protecting Hadza land from external encroachment could be a possible solution to protecting the Hadza from cultural loss. There is evidence of land grabs by neighboring communities, like the Sukuma, Nyiramba, Isanzu, and Datooga, as well as by the government who took land from the Hadza and sold it to the UAE royal family for game hunting. The Tanzanian government rents nearly 2,500 square miles of the sprawling, yellow-green valley near the storied Serengeti Plain to members of the royal family through the UAE Safaris Ltd., who chose it after a helicopter tour (URL 6).

Remarkably, the Hadza secured only about 20,000 hectares remaining from their ancestral land. Over the past 50 years, however, the Hadza have lost approximately 90% of their lands (URL 5). So, the return of about 20,000 hectares came after the formation of the REDD¹⁵ (Reducing Emissions from Deforestation and forest Degradation) program in Tanzania. Before Carbon Tanzania developed the REDD project, nobody had any land rights and land was frequently lost to encroaching agricultures and activities such as charcoal burning. Also, another project known as “plan vivo” (living plan) emerged. It is a plan that stands for balancing emissions, protecting forests, and supporting front line communities from *climate change*. The respondents mentioned that organizations like National Geographic Travel and Kloeber and Bridge Partnership are working with the Hadza to protect their valuable forests.

Evidently, sizeable efforts to protect the Hadza society have been initiated by non-governmental organizations. Meanwhile, the Tanzanian government has made little to no efforts to protect the Hadza as an indigenous forager society. Rather, they have invested more into transforming the Hadza’s former ways of life. Giving Hadza lands to the royal family of the UAE effectively made the Hadza trespassers on their own land, the land they have subsisted on successfully for “thousands of years” (URL 7). This also reduces the available

¹⁵ Reducing Emissions from Deforestation and forest Degradation (REDD) in Tanzania. This projects have different purposes including poverty reduction, rural development, improved governance and the protection of the nation’s forest biodiversity and water sources

land for hunting and gathering. So, as a result the Hadza will have to remain in one place, as becomes clear when looking into the changes of how they secure their livelihoods.

To protect indigenous lands, non-governmental organizations have established various projects that enable the Hadza to manage carbon emissions and protect forests, which will protect the ozone layer and hence the amounts and frequency of rainfall. In order to restore forests, a forestation campaign was conducted by non-governmental organization, as a respondent through an interview explained:

“Recently, there is a campaign for planting trees after deforestation has been conducted for time now. The non-government organizations have replant trees so as we could have forests as before and we could conduct our activities as previous” (Baalo, interview, 2017).

The Hadza have experienced for some time now the effects of deforestation and how it has changed their ways of life. Therefore, they are now cooperating with environmental stakeholders, planting trees and conserving their environment, which will help them enjoy their cultures and traditions and return to lifestyles they had before though there could be no assurance that the Hadza will be able to be back to their centuries ways of life hundred percent. Intervention measures by individuals, non-profit organizations and the government are very important in maintaining and protecting the Hadza lands and hence making these lands a better place for Hadza and non-Hadza societies to live on.

10.2. Maintenance of their Cultures and Traditions

After land protection, other dimensions can be implemented slowly. Zips-Mairitsch (2009: 83) insisted on the protection of indigenous culture. She remarked that it is important to regularly associate indigenous groups with social minorities. However, cultural aspects are also very important points of consideration. She further stated that protection of cultural diversity is very relevant since history and culture are crucial for the pride and self-awareness of indigenous people and because these are up to this day often commercially exploited by the modern state (ibid: 29, 184).

In a focus group discussion, it was revealed that the Hadza people used to consume a huge amount of fibre since throughout the year they ate fibre rich tubers and the fruit of baobab trees. These staples gave them about 100 to 150 grams of fibre each day (URL 8). This has

become history. Currently, the Hadza no longer consume these foods in large quantities. Instead, they eat maize, sweet potatoes, and cassava, which are new foods for them. The respondents pointed out that they wished their traditional diet could be maintained as a way of maintaining their culture. They preferred to eat tubers, berries, honey and other fruits as their ancestors did. In addition, they believe that through their traditional diet people would remain free from diseases, as pointed out by a respondent:

“We need our traditional food... we need to eat tubers, berries and honey. These new foods like maize, sweet potatoes and cassava always makes us suffer from diseases. Diseases are increasing nowadays because of these foods we eat” (Sakafo, FGD, 2017)

The above quote corresponds to the belief of the Hadza that by eating traditional foods they are able to get enough nutrients. This was also confirmed by Ndagala (1988: 66), who stated that although the Hadza take in four times the minimum in daily protein requirements, they, nevertheless, remain nutritionally well balanced. The Hadza believe that their traditional foods were and still are the most nutritious, especially in comparison to new non-African food sources. They treat any and all diseases they suffer from as the results of what they are currently consuming. Thus, despite having alternative foods, like maize, rice, breads, and others, for their survival, the Hadza people are not happy consuming such foods rather than their traditional meals.

10.3. Recognizing Hadza's (Indigenous) Rights

The Hadza are regarded as a hunter-gatherer group in Tanzania. They have been categorized as one of the most vulnerable monitored groups, subject to flagrant violations against communal and individual rights in East Africa. Currently, the Hadza are internationally recognized as indigenous people.

Hadza lands have been treated as if they were unoccupied and both agriculturalists and pastoralists have been encouraged to settle there, even though aridity makes the lands unsuitable for crops and the tsetse fly makes them unsuitable for cattle. Moreover, the government has retained rights for hunting, subsequently leasing the lands out to commercial companies. The political weakness of the Hadza makes it impossible for them to resist settlement, even in a land where their rights are recognized. There is a need for the Hadza to have representatives in laws and decision making. This will present their voices on what is right for them and what not.

Another threat to the Hadza comes from the nature of the education system. Education is one of the fundamental rights enshrined in Tanzania's constitution. In an interview with the respondents, it was, however, revealed that the Hadza face the problem of having to send their children off to school as most of the children are forced to stay in boarding schools for nine months and up to a year. So, from the age of six they are taught only in Swahili by non-Hadza teachers, a process that amounts to forced changes of culture and tradition of the Hadza future generation or even force assimilation of the Hadza children in a very young age. This is the Tanzanian government's strategy. As described by Ndagala (1988: 65), the Tanzanian administration regards the traditional ways of the Hadza as archaic or primitive and as disgusting to the nation. Therefore, they exert pressure on the Hadza in terms of education and settlement. This makes it very clear why Hadzane could be lost, among other problems of forced assimilation, like the loss of traditional knowledge and work culture. It is not wrong to provide the Hadza with education, just like other Tanzanians. However, there should be good strategies in place, like using a special curriculum and teachers with traditional and modern knowledge, to balance and ensure that the Hadza children do not lose their right to learn about their society.

11. Conclusion and Recommendations

a) Conclusion

The purpose of this study was to investigate the causes and effects of socio-cultural changes of the life style of the Hadza in north-eastern Tanzania. Based on the discussions and the arguments in this thesis, the lifestyle of the Hadza society has obviously changed. According to Zips-Mairitsch (2009)¹⁶, culture is always dynamic and should therefore not be frozen, neither for scientific reasons of conservation nor for touristic reasons of economization (Zips-Mairitsch 2009: 193). That is to say, culture grows, and in this case changes are inevitable. There can be adoptions of new practices and traditions as well as loss of traits. Some customs and traditions may die, new ones may be born and some may be maintained. Though in some cases, the maintained custom and traditions appear not as the 'original' ones. This brings the risk of some 'purists' calling them 'inauthentic', disregarding the dynamic character and

¹⁶ Originally, the quotation by Zips-Mairitsch is in German: "Kultur ist immer dynamisch und sollte daher auch nicht aus wissenschaftlichen Gründen der Konservierung oder aus touristischen Gründen der Ökonomisierung eingefroren werden" (Zips-Mairitsch 2009: 193). This is also cited by Stephan Hochleithner in his thesis 2012.

historicity of culture, while nevertheless soundly maintaining and encouraging a valued and even proud cultural identity.

This study had four objectives (i) to identify the indicators of socio-cultural changes among the Hadza, (ii) to explore the causes of socio-cultural changes of the way of life of the Hadza, (iii) to investigate the effects of socio-cultural changes of the way of life of the Hadza, and (iv) to identify the strategies that can be used to solve the problems associated with the socio-cultural changes among the Hadza.

Cultural identity is a source of pride for many societies in the world. As such it should be maintained and preserved. The literature shows that although there are many efforts undertaken by the Hadza to maintain their ways of life, they still face many challenges and they are already experiencing some socio-cultural changes in the ways they live their lives. Data from the field and from the literature cited present some indicators of changes in the lives of the Hadza. In this research, I have mentioned some indicators like changes in language, changes in food consumption, changes in marriage customs, changes in religious practices, building social infrastructure systems, presence of schools and presence of health facilities.

According to Marlowe (2002), there is a difference between the Hadza of the earlier 1900s and the Hadza of today. Today's Hadza people are considered "less shy" than those of the 1900s. This conclusion by Marlowe is measured by observing how the Hadza are day by day coming closer to other societies and also by the fact that they may even approach a visitor - at least a foreign visitor - rather than hide and shunning contact. As I have mentioned in my discussions, the new traits of begging for food, clothes, and other things like cigarettes and alcohol, are all examples of acts that demonstrate less "shyness". Furthermore, Mabulla (2012: 77, 88-89) states that "The Hadza have been spending much time along roads and in villages than staying in camps or going out hunting and foraging in the bush. During the tourist low season, this tendency has caused people in most of camps visited by tourists to starve and mainly to depend on begging off maize from neighbouring tribes... Apart from food, the Hadza also begged money, clothes and shoes from visitors who came to their camps during tourism and/or academic researches" During my fieldwork, I observed some of the Hadza people going from one restaurant to another playing "zeze"¹⁷ as a way of begging for money

¹⁷ Zeze is an African musical instrument that is played with a bow, a small wooden stick, or plucked with the fingers. <https://www.musicinafrica.net/directory/zeze-african-music-instrument>. The zeze is a stringed instrument from Sub-Saharan Africa. It is also known by the names *tzetze* and *dzendze*, and on Madagascar is

or some cloth materials and foodstuffs. Therefore it is obvious, that some of the Hadza people have changed their ways of life.

As I have mentioned in the research modal (see p. 26) there are various common factors involved in changing people's cultures and traditions, including interactions with other societies, authorities, tourism, changes of the physical environment, and the current issues of *climate change*. The extant literature also shows that socio-cultural changes among the Hadza in Tanzania have been caused by external encroachment into the Hadza land *climate change* (URT 2012). As such, some environmental practitioners have seen the importance of establishing strong measures to protect the Hadza community from disappearing from Earth.

In this study, I have focused on investigating the effects of *climate change* in the life of Hadza. This study has revealed that *climate change* has put stress on the environment and affected the ecosystem of the Eyasi basin. The effects of *climate change* are not just experienced by the Hadza society, but also by other neighbouring societies, like the pastoralists and agriculturalists at Mang'ola and Yaeda Chini, who also claim that changes in climate have affected their daily lives. Some of the Hadza people condemn non-Hadza societies and their socio-economic activities, arguing that they have greatly contributed to the changes in climate. This is because of activities like clearing the lands for cultivation and overgrazing. The situation has made the environment unfriendly and hard for the Hadza to live in as the environment cannot provide enough resources to satisfy their daily basic needs. Nevertheless, wild food remains a culturally and traditionally more valuable food in the eyes of the Hadza, than agricultural food, as admitted by several respondents in the field.

b) Recommendations

Based on the findings of this study, the following recommendations are made for further actions. This study strongly recommends:

- that the Ministry of Tourism establishes strategies to rescue the cultural disappearance of the Hadza . This means, the governmental dealing with tourism should not allow the Hadza ways of life be practised just for entertaining tourists to generate income,

called lokanga voatavo or lokango voatavo. It has one or two strings, made of steel or bicycle brake wire. <https://ipfs.io/ipfs/QmXoyvizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Zeze.html>

thus, there should be strategies to help the Hadza people live and practise their real daily life.

- that the government recognizes the Hadza's rights as special citizens of the country of Tanzania, rather than treat them as primitive. This has been declared by the ACHPR and IWGIA (2015: 89) that one of the challenge facing indigenous peoples in Tanzania politically is lack of representative on policy making issues. The ACHPR and IWGIA further state that while some other Tanzanian communities have a few policy makers at the national level, the Hadza have none to raise issues affecting them at the policy-making levels. This is a problem because such minority society will be always forced to follow policies which are not in favor of life style.
- to supplement the minimal efforts made to protect the Hadza lands from external encroachment. More efforts are needed to protect the Hadza lands to ensure the people's survival. Also the Government should act quickly on the Hadza land claims and give back what really belongs to them.
- that more social services, such as hospitals and schools, should be constructed to ensure the Hadza's access to such services. In addition, the schools should have a special curriculum for Hadza children (intercultural education), and not a general curriculum. It is further recommended to investigate traditional medicines of the Hadza and to try and protect these medical practices by, for instance, involving the Hadza in providing health services where necessary (intercultural health services).
- that the Tanzanian government intervenes in educating or assisting the Hadza so they can adapt to the challenges associated with socio-cultural change.

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12.3. From the Field: Interviews, Questionnaires and Group Discussion

Anna

10.09.2017, interview at Yaeda Chini

Anney

07.09.2017, group discussion in Domanga village

Baalo

13.09.2017, interview at Domanga village

Binsa

11.09.2017, interview at Tl'iicka

Bwandi

10.09.2017, interview at Yaeda Chini

Daudi

07.09.2017, group discussion in Domanga village

Deemay

13.09.2017, interview at Domanga village

Daina

15.09.2017, Interview at Tl'iicka

Drinoy

10.09.2017, interview at Yaeda Chini

Fyusa

14.09.2017, interview at Mang'ola Village

Hannah

14.09.2017, interview at Mang'ola Village

Hongongoscha

11.09.2017, Focus Group Discussion, Yaeda Chini.

Isaka

09.2017, Questionnaires

Jaco

10.09.2017, interview at Yaeda Chini

Kanrau

12.09.2017, group discussion at Tl'iicka

Kanzai

13.09.2017, interview at Domanga Village

Kapnoy

14.09.2017, interview at Mang'ola Village

Keno

09.2017, Questionnaires

Kisalunga

10.09.2017, Interview at Yaeda Chini

Lingusondeki

11.09.2017, Focus Group Discussion, Yaeda Chini

Lukoy

11.09.2017, Focus Group Discussion, Yaeda Chini

Lusia

12.09.2017, interview at Mang'ola Village

Mkambu

13.09.2017, interview at Domanga Village

Mundoy

13.09.2017, interview at Domanga Village

Musa

15.09.2017, group discussion at Tl'iicka

Mongu

14.09.2017, interview at Mang'ola Village

Muhiya

15.09.2017, interview at Tl'iicka

Ndusupo

11.09.2017, Focus Group Discussion, Yaeda Chini

Njipay

14.09.2017, interview at Mang'ola Village

Pembo

15.09.2017, interview at Tl'iicka

Pinseu

15.09.2017, interview at Tl'iicka

Pius

10.09.2017, interview at Yaeda Chini

Ponglay

15.09.2017, interview at Tl'iicka

Prisca

12.09.2017, interview at Mang'ola Village

Pugai

10.09.2017, interview at Yaeda Chini

Qorro

07.09.2017, Focus Group Discussion, Domanga Village

Qwalay

12.09.2017, interview at Mang'ola Village

Safari

12.09.2017, group discussion at Mang'ola Village

Sakafo

12.09.2017, group discussion at Mang'ola Village

Samwel

12.09.2017, group discussion at Mang'ola Village

Saqrah

14.09.2017, interview at Mang'ola Village

Sengani

12.09.2017, interview at Mang'ola Village

Sety

10.09.2017, interview at Yaeda Chini

Sopino

15.09.2017, interview at Tl'iicka

Sovery

09.2017, Questionnaires

Sundaye

15.09.2017, group discussion at Tliicka

Sundi

11.09.2017, Focus Group Discussion, Yaeda Chini

Swakara

12.09.2017, group discussion at Mang'ola Village

Yusufu

12.09.2017, interview at Mang'ola Village

Mpanda Mlekwa,

10.09.2017, Interview at Yaeda Chini

13. Appendixes

13.1. List of Abbreviations

ACHPR	African Commission on Human and Peoples' Rights
CIPHGO	Coalition of Indigenous Pastoralist and Hunter Gatherer Organizations
CURT	The Constitution of the United Republic of Tanzania.
IBGE	Instituto Brasileiro de Geografia e Estatística
ILO	International Labour Organization
I PAC C	Indigenous Peoples of Africa Co-ordinating Committee
IPCC	Intergovernmental Panel on Climate Change
IWGIA	International Work Group for Indigenous Affairs
FAO	Food and Agriculture Organization
NGOs	Non-Governmental Organizations
OAU	Organization of African Unity
REDD	Reducing Emissions from Deforestation and forest Degradation
UN	United Nations
UNCESCR	United Nations Covenant on Economic, Social and Cultural Rights
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
URT	United Republic of Tanzania

13.2. Abstract/ Zusammenfassung

Abstract

This master thesis focuses on socio-culture changes in the livelihoods of the Hadza in Tanzania. The Hadza are located around Lake Eyasi in north-eastern Tanzania. They are among the few hunter-gatherer ethnic groups remaining in Africa today and the only one in Tanzania. The Hadza people are an indigenous population – a minority ethnic group that faces a lot of challenges, like the loss of their land which has led to changes in their daily lives. The Hadza still practice hunting and foraging traditions, though to a very low percentage and in a different manner. For instance, in the case of hunting, the Hadza men remain at their camps and wait for tourist to take them out for paid hunting trips. This, of course, is not their natural way of hunting, thus, they have change their traditional way of life into source of income. The same goes for foraging, women spend minimal time on foraging and even when they do go out to collect food it is often not for traditional provisions but rather to collect leftover maize, potatoes, and beans from their neighboring farmers. Today, Hadza women spend most of their time at their camps, waiting to entertain tourists through traditional dances or to sell them necklace and other traditional decorations.

In general, the subsistence of the Hadza hunter-gatherers ethnic group in Tanzania has changed. This study presents various factors that have contributed to the changes in the life style of the Hadza. To mention a few, these factors include interactions with other societies, encroachment of Hadza land, tourism activities on Hadza land, and the influence of the Tanzania government and its social institutions, for instance the health and education systems, which does not encourage the Hadza's traditional ways of life. However, a factor that is acutely affecting not only the Hadza but also other Tanzanian ethnic groups and people worldwide is climate change. The effects of climate change are observable in the livelihood of farmers, pastoralists, and hunter-gatherers alike. Changes in climate affect the whole ecosystem and physical environment at large, which alter the normal everyday life of all organisms, including human beings. This is the focus of the following thesis. The data for the findings of this study “Socio-Cultural Changes of the Life Style of the Hadza” are collected from different ethnographers and from field research conducted in September 2016 and September 2017.

Zusammenfassung

Diese Masterarbeit analysiert die soziokulturellen Veränderungen und Anpassungen in den Lebensgrundlagen der in Tansania lebenden Hadza. Die Hadza sind eine der einzigen verbleibenden Jäger- und Sammlergesellschaften in Afrika und die einzig noch vorhandene dieser Gesellschaften in Tansania, wo sie im Nordosten des Landes am Eyasi See leben. Als indigene Bevölkerungsgruppe und ethnische Minderheit sehen sie sich mit unzähligen Herausforderungen konfrontiert, wie etwa den Verlust ihres Landes, welches drastische Veränderungen in ihrem täglichen Leben herbeigeführt hat. Dennoch praktizieren die Hadza noch ihre traditionellen Jagd- und Sammelaktivitäten, wenn auch in beschränktem Ausmaß und in veränderter Art und Weise. Zum Beispiel bieten die Hadza Männer heutzutage traditionelle Jagdtouren für Touristen an und haben somit ihr kulturelles Erbe in eine Einkommensquelle umgewandelt. Auch die Sammelaktivitäten der Hadza Frauen entsprechen nicht mehr ihrer Tradition. Die Frauen verbringen nur wenig Zeit mit Nahrungssuche und wenn sie unterwegs sind, dann sammeln sie oft nicht traditionelle Grundnahrungsmittel, sondern von benachbarten Landwirtschaften übrig gebliebenen Mais, Kartoffel oder Bohnen. Heutzutage verbringen die Hadza Frauen den größten Teil ihrer Zeit in ihren Camps um Touristen traditionelle Tänze vorzuführen und Schmuck oder ähnliche Dekorationen zu verkaufen.

Im Allgemeinen hat die Existenzsicherung der Hadza Bevölkerung sich verändert. Diese Masterarbeit stellt unterschiedliche Faktoren, welche zu diesen Veränderungen beigetragen haben, vor, dazu zählen Interaktionen mit anderen Gesellschaften, Beanspruchung und Beeinträchtigung ihres Landes, Tourismusaktivitäten auf ihrem Land wie auch der Einfluss der Landesregierung und ihrer sozialen Einrichtungen und Institutionen, wie zum Beispiel das Gesundheits- oder Schulsystem, welches die traditionellen Lebensweisen der Hadza nicht fördert. Ein Faktor, der akut für gravierende Veränderungen, nicht nur bei den Hadza, sondern auch bei anderen in Tansania lebenden Bevölkerungsgruppen und Menschen weltweit sorgt, ist der Klimawandel. Die Effekte des Klimawandels sind gleichermaßen erkennbar in der Existenzsicherung von Landwirten, Hirtenvölkern und Jäger-Sammlergruppen. Klimatische Veränderungen beeinflussen das gesamte Ökosystem und die physische Umgebung insgesamt, welche das normale, alltägliche Leben aller Organismen, so auch der Menschen, verändern. Obengenannte Punkte sind zentrale Themen dieser Masterarbeit. Die zugrundeliegenden Forschungsdaten wurden von unterschiedlichen ethnografischen Quellen und zwei Feldforschungen im September 2016 und September 2017 zusammengeführt.

13.3. Curriculum Vitae - CV

Personal Data

Name: Grace E. Mosha
City: Vienna
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Address: Ditscheinergasse 2/11, 1030 Wien
Marital status: Married
Sex: Female
Nationality: Tanzanian
Date of Birth: 14.02.1985



Professional Experience

- 2014 to date** House attendant
Youth Association Centre (Verein Jugendzentren).
Ditscheinergasse 2/11, 1030 Vienna
- 6-8/2017** Volunteer – care of victims of trafficking women
LEFÖ-IBL Interventionsstelle für Betroffene des
Frauenhandels
Lederergasse 35
1080 Vienna
- 01/08/2014 – 12/2017:** Custodian Personnel
LEFÖ-IBF Interventionsstelle für Betroffene des
Frauenhandels
Lederergasse 35
1080 Vienna
- 04/2014 – 11/2014:** Childcare
- 10/2011 - 2013:** **Typesetter Personnel**
Dealing with the set-ups of different printing documents based on the
standards of the required document
Typing different documents
Scanning, Photocopying and printing different documents
- Inter Press of Tanzania Ltd**, Printing and Stationary Industry
Mbezi beach, Salasala Road, Dar es Salam (Tanzania)
- 07/2009 - 10/2009** **Customer care personnel - CRDB Bank PLC**
Tracking of transfers of the customers in and outside countries (TT)
Receiving deposit cheques
Providing balance of the accounts to customers
CRDB Bank PLC- Azikiwe Branch, Dar es Salam (Tanzania)

Education:	
Period	2015-2017
Description of education	MA in Cultural and Social Anthropology Completion MA-Dissertation end 2017
Name and form of educational institution	University of Vienna, Austria
Period	2007 - 2010
Description of education	Bachelor of Arts
Main subjects	Mass Communication
Name and form of educational institution	St. Augustine University of Tanzania
Period	2005 - 2007
Description of education	Advanced Certificate of Secondary Examination Education – ACSE
Name and form of educational institution	St. Mary Goreti Secondary School, Tanzania
Period	2000 - 2003
Description of education	Certificate of Secondary Examination Education – CSE
Name and form of educational institution	Weruweru Secondary School, Tanzania
Period	1993 - 2000
Description of education	Certificate of Primary Education
Name and form of educational institution	Mkyashi Primary School, Tanzania

Personal Abilities and Competences	
Knowledge of Languages	
Swahili	First language
English	Fluent in spoken and written
German	B2 (*) European language levels - Self Assessment Grid
Social Abilities and Competences	Ability to work in a team, empathy, operational readiness
Computer-Knowledge	Word , Excel und Power Point
Objective	To work in a more challenging position so as to utilize my skills and capabilities.