The role of Sacred Natural Sites (SNS) and related traditional ecological governance systems and their legal recognition to enhance community wellbeing and resilience

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Thesis presented in partial fulfilment of the requirements for the degree of Master of Philosophy in Sustainable Development in the Faculty of Economic and Management Sciences at Stellenbosch University

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Abstract

Sacred Natural Sites (SNS) are natural areas on land or water bodies having special spiritual and cultural significance for local and indigenous communities that conserve them. They are places where nature and humanity get connected in a deeper and abstractly meaningful way to those who accord reverence to the places. As such, SNS are often considered as expressions of the intricate relationship between nature and humanity and also show the dedicated efforts of traditional belief systems and cultures that have specifically, if not always consciously, cared for nature in various ways.

Because of the spirituality and special reverence attached to them, SNS have been well protected over long time periods and have seen low levels of disturbance. Local and indigenous communities have established complex traditional governance and cultural belief systems via norms, myths, taboos, totems and closed seasons to preserve, conserve and manage their SNS. Because of this, many SNS are considered as the world's oldest conservation areas playing a key role of conserving important biodiversity, ecosystems and habitats. In light of the increasing trend of extinction as a result of the degradation of habitats and ecosystems, SNS are serving as reservoirs of rare plant and animal species.

Even though traditional communities conserve SNS primarily for their spiritual and cultural purposes, the areas also play a significant role in the provision of social, economic and ecological functions, which combined with the spiritual and cultural functions, form the important pillars in the construction of stable, peaceful, happy and resilient communities.

The important roles of SNS and related traditional ecological governance systems in the conservation of biodiversity, ecosystems and habitats that underlie the wellbeing and resilience to shocks of traditional communities are, however, being undermined by modern conservation approaches that focus on the material value of nature and government land and natural resource management policies dictated by these approaches, mainstream religions and the idea of western civilization. As a result, SNS in many parts of the world are facing threats of human intervention causing degradation of the sites at an alarming rate. Traditional governance and belief systems relating to SNS are being considered by the modern approaches and dominant mainstream religions as backward and demonized.

This study is thus intended to add to the body of knowledge that analyses the significance of SNS and related traditional ecological governance and belief systems for efficient management and sustainable conservation of nature thereby contributing to enhancement of the wellbeing and resilience of the traditional communities. Discussions with community

members who had close links to SNS as well as participant observation made in the community selected for the study has revealed that SNS were places for deep spiritual connections, sources of water and healings and at the centre of the their social cohesion and stability.

Hence there is a need to revisit, particularly in the African context, the role of SNS in the management, preservation and conservation of natural resources needed to address the wellbeing and resilience of traditional communities and accord them the required legal and policy recognition.

Opsomming

Heilige Natuurgebiede (HNG) is liggings hetsy land of water met unieke spirituele en kulturele belang vir die plaaslike en inheemse gemeenskappe wat hierdie gebiede bewaar. Dit is waar die natuur en die mensdom met mekaar verbind word op 'n wyse wat diep en betekenisvol is vir diegene wat die gebied eerbiedig. HNG word dus dikwels as 'n voorbeeld voorgehou van die ingewikkelde verhouding tussen die natuur en die mensdom, en dien as bewys van doelgerigte pogings deur tradisionele waardesisteme en kulture wat deurentyd die belang van die natuur op verskillende maniere handhaaf en eerbiedig; alhoewel nie altyd noukeurig nie.

HNG word oor die eeue heen en, as gevolg van geestelike eienskappe en eerbied wat getoon word, goed bewaar en selde versteur. Plaaslike en inheemse gemeenskappe behou komplekse kulturele bestuurs- en bewarings- sisteme deur middel van norme, mites, taboos, totems en geslote seisoene ten einde hulle HNG te beskerm, bewaar en bestuur. As gevolg hiervan, word baie HNG getel onder die wereld se oudste bewaringsgebiede, wat sleutelrolle in die bewaring van ekosisteme, biodiversiteit en habitat speel. In lig van 'n groeiende tendens van spesies uitwissing as gevolg van die afgradering van habitat en ekosisteme, dien HNG as plekke van bewaring en van rare plant en dier spesies.

Ten spyte van die feit dat inheemse mense HNG hoofsaaklik vir geestelike en kulturele doeleindes bewaar, speel die gebiede 'n aparte belangrike rol in die voorsiening van sosiale, ekonomiese en ekologiese funksies. Tesame met hul geestelike en kulturele funksie, bly hulle steun pilare in die daarstelling van stabiele, gelukkige en selfstandige gemeenskappe.

Die belangrike rol van HNG en verwante tradisionele bestuursisteme in die bewaring van biodiversiteit, ekosisteme en habitat, wat die welstand en weerstand van tradisionele gemeenskappe ondersteun, word deur sekere moderne bewaringsneigings ondermyn. Hierdie bewarings-tendense plaas klem op die materiële waarde van die natuur en staatsgrond, en ondersteun hulpbronbestuursbeleid gebaseer op en beinvloed deur Westerse beskawing en godsdiens. As gevolg van hierdie tendense, word HNG in vele gedeeltes van die wereld deur menslike indringing bedreig wat lei na die kommerwekkende skending van die terreine. Tradisionele bestuurs- en bewarings- metodes word deur moderne wereldsiening en godsdienste beskou as agterlik en selfs as boos.

Die doel van hierdie studie is om die bestaande kennis ten opsigte van die waarde en belang van tradisionele bestuurs- en waarde- sisteme, spesifiek rakend hul bydrae tot doeltreffende bestuur en volbehoubare bewaring van die natuur, wat tot die welvaart en selfstandigheid van tradisonele gemeenskappe lei, te ondersoek. Besprekings met gemeenskapsleiers nouliks betrokke met hul HNG, asook deelnemende waarnemings in die geselekteerde gemeenskappe, lei tot 'n gevolgtrekking dat HNG diep geestelike bande bewerkstellig, bronne van water bewaar, genesing daarstel, asook sosiale stabiliteit en samehang bevorder.

Daar word dus aanbeveel dat die rol van HNG in Afrika, en meer spesifiek met betrekking tot die bestuur, beskerming en bewaring van natuurlike hulpbronne, heroorweeg word, ten einde die welsyn en selfstandigheid van tradisionele gemeenskappe te verbeter, en om vir die terreine regs- en beleids- beskerming te voorsien.

Acknowledgements

First of all I would like to thank the Almighty GOD for giving me the opportunity to do this study abroad. All the exposures and experiences I passed through and the lessons I learned make it different and special and these would not have happened without his will. Then my sincere gratitude also goes to the TRECCAfrica mobility Scholarship arrangement, which I belonged to and is making a big contribution to Africans with respect to developing their knowledge and skills in various disciplines so as to enable them play good role in the development endeavours of their respective African states. In relation to this, my special thanks go to Mrs Norma Derby, the TRECCAfrica coordinator, who has been so open to understand the various situations and interests of different scholarship grantees and try to be inclusive as much as possible.

I would like to also express my sincere thanks to Professor Mark Swilling who has been my supervisor in writing this thesis and supported me complete the study through his encouraging words as well as constructive comments and advises. Professor Mark has been by my side not only during the writing of this thesis but also from the beginning of the process of my application for the scholarship. Mark and Beatrix were people in Sustainability Institute (SI) who supported me to pass the hurdles I faced in the process to get this scholarship award and join the SI. Their generous support was also so unreserved throughout the study. Hence, their kindness always remains in my heart. I would like to also extend my thanks to Eve Annecke and others in the SI for their kindness and the supports they provided me.

Last but not least, my thanks go to my family, my wife Bethelhem Taye and all my children, for not only being so patient of my not being able to give them the time they deserve while I was working on this thesis but also kept supporting and encouraging me throughout the study.

Mersha Yilma

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List of Acronyms and Abbreviations

ABN African Biodiversity Network

AEJP African Earth Jurisprudence Practitioners
ANRO Agriculture and Natural Resource Office

BMNP Bale Mountains National Park

CBD Convention on Biological Diversity
CCCS Community Conserved Cultural Sites

CTO Culture and Tourism Office

EFCCO Environment, Forest and Climate Change Office

FGDs Focus Group Discussions

FDRE Federal Democratic Republic of Ethiopia

IUCN International Union for Conservation of nature

MASL Meters Above sea Level

MEA Millennium Ecosystem Assessment

MELCA Movement for Ecological Learning and Community Action

NGO Non-Governmental Organization
ONRS Oromia National Regional State
PCM Participatory Community Mapping

RLAEPO Rural Land Administration and Environmental Protection Office

SES Socio-ecological system

SNS Sacred Natural Sites

TEK Traditional Ecological Knowledge
TGS Traditional Governance Systems

TK Traditional Knowledge

UNESCO United Nations Education, Science and Culture Organization

UN United Nations

WBG World Bank Group

USAID United States Aid for International Development

Chapter 1 – Introduction

1.1 Introduction

I was born in a small rural village in the Eastern part of Ethiopia. One of my childhood memories that frequently come to my mind since I recently joined a group that has named itself 'African Earth Jurisprudence Practitioners (AEJP), which is part of the African Biodiversity Network (ABN) is a ritual ceremony that the elders and community members in my little village conduct under a big fig tree, surrounded by bushes and smaller trees just on the outskirts of the village. A small stream flows from under the big fig tree. It flows down stream crossing the farmlands and the wetland until it joins a big river a few miles away from my village. This place where the community conducts the ritual ceremony is locally called 'Ujuba' meaning a revered or respected place.

The regular ritual ceremony takes place annually after completion of the harvest season. For the ritual each household contributes a small portion of the harvest collected during the season and women prepare food from the contribution. Sacrificing a bull is also part of the ceremony. On the day of the ritual ceremony elders conduct a prayer standing round the big trunk of the fig tree and then all members of the community, including women and children, would gather at a special place prepared for this near the 'Ujuba' and share the festive. After everyone has eaten and drank from the local brew, the remaining food and drink would be left there as it is a taboo to take food and drink prepared for the ritual indoors.

In addition to the annual ritual, the community would gather and do a similar ritual whenever a natural shock such as draught, too much rain (flooding), epidemic, pest infestation and crop or animal disease is encountered. The elders would gather under the 'Ujuba' and pray to 'Waaqa' (God) to protect the village from the catastrophe. I also know that the traditional belief system gives due respect for all forms of life, including the trees, birds, insects, wild animals and even the rivers and rocks. I do not remember people talking of miseries in life like they do now.

After I joined the non-governmental organization (NGO) that I am working for now and which is a member of the ABN and I personally joined the AEJP, I learned that the practice that I experienced in the little rural village where I grew up is the African traditional way of life embedded in the traditional ecological knowledge and value system that fostered life in harmony with nature. As rightly stated by Kelbessa (2002) the world view of many African societies has included an environmental ethic that can serve as the basis for modern environmental ethics.

An observation and examination of way of life of many African traditional communities tells us that their philosophy of life is aimed at the perpetuation of all subjects, both animate and inanimate. Their collective environmental wisdom and ethics are expressed through religious beliefs and a range of sacred and cultural practices (Aniah, Aasoglenang & Bonye. 2014). African traditional communities believe that human life exists within the broader context of a living and conscious cosmos, which is maintained through the conscious and responsible actions of different forms of life (Kelbessa 2002). As part of the cosmos, humans' responsibility lies in actions that nurture and enhance the life of both humans and non-humans and the relationships among humans and between humans and others. The San community in southern Africa, for example, regarded themselves as one with the other flora and fauna and practiced a policy of living in harmony with their non-human neighbours (Kelbessa 2002) while the Akans in Ghana believe that the human being is simply part of the whole, a responsible part and not owner of the other parts (Yaw 2011). This is what arises from the African conception of the environment as a community of kin rather than as mere resources to be used to satisfy human needs.

Sacred Natural Sites (SNS) are an attribute of the traditional governance and belief systems of local and indigenous communities featuring their way of life, philosophy and connection with their natural environment. According to Studley and Bleisch (2018) the belief that there is a spirit in all life forms and they all contribute, in one way or the other, to the normal functioning of the cosmos, is the most ancient, geographically widespread and diverse of all belief systems, adhered to even today by some 300 million local and indigenous communities. Studley & Bleisch (2018) further contend that such spiritual endowment is ascribed to not only life forms but also to a place (mountain, forest, spring, river, rock cave). A spiritual power ascribed to a place is referred to as a 'Numen' in ancient Rome, gzhi bdag in Tibet and Huacas in the Andes (Studley & Bleisch 2018). This implies that SNS are recognized by all local and indigenous communities in all parts of the world (Adam 2012) as an attribute of the traditional ecological governance and belief systems of local and indigenous communities. In Africa, almost all traditional communities have sacred natural sites with diverse local names: 'Zwifho' by Venda community in South Africa, 'Kaya' by Giraiama, Irii, Tharaka, Mathemba and Kamba communities in Kenya, 'Ihangiro' by Banyoro, bataro and kiggw communities in Uganda and 'Awulia, Ujuba and Arda-jilaa by Oromo community in central Ethiopia (Doyo 2015).

Sacred Natural Sites take a central place in the traditional ecological governance systems of local and indigenous communities. The customary governance systems recognize Sacred Natural Sites as places where the laws of Earth can be read, and from which customs, spiritual

practices and governance systems are derived to protect the territory as a whole (Adam 2012). As stated by Oviedo, Jeanrenaud and Otegui (2005) in many local and indigenous communities, it is difficult to separate their cultural identity, kin and social relations, livelihoods, and traditional environmental knowledge and governance systems from the ritualistic use of the land and protection of biodiversity: they are all intricately interconnected. As such, they are places of ecological, socio-cultural and spiritual importance for the communities that embrace them (Verschuuren & Wild 2011).

Sacred natural sites are natural places, which are the source of life and have a special role in nurturing the planet's ecosystems. In support of this assertion, Studley & Bleisch (2018) state that SNS are features of traditional knowledge and ecological governance systems of local and indigenous communities around the world who have protected much of the world's biodiversity outside of the formal protected areas. According to these authors, when aggregated, the SNS protected by traditional communities may constitute 12 million km2 or at least 8 percent of the world's land surface. And in these, we find forests or mountains which are sources of rivers and rain, breeding grounds for certain species, springs and waterfalls which oxygenate water, or salt licks for animals. As such, one can boldly contend that SNS are at the heart of conservation of biodiversity and healthy ecosystems that form the basis for human wellbeing and fostering resilient communities. As contended by Adam (2012) SNS are places where customary laws, norms and taboos that maintain the health and integrity of the ecosystems, the wellbeing of local communities, and a respectful relationship between human beings and their territories are fostered. The use of the traditional governance and belief systems was generally geared toward protecting and promoting communal wellbeing that includes the other than humans, rather than accumulation of material wealth and promotion of individual interests (Diawuo & Issifu 2015).

Despite their many values and functions, however, SNS and related traditional governance systems are undermined by the conventional natural resource conservation approach. According to Infield and Mugisha (2013) the anthropocentric modern conservation approach that focuses on the material value of natural resources is inherently antagonistic to the traditional ecological governance and belief systems that accord intrinsic value to the other than humans. By way of reinforcing the same line of argument, Kelbessa (2002) also state that, except a few of them, majority of the theories of morality after the enlightenment period, whether virtue based, utilitarian, religious or rights based, have not paid sufficient attention to the fact that things other than human beings have a place in our moral thinking in their own right. For this reason, attention to non-material values of natural subjects has vanished from discussions of conservation policy and practice, resulting in the marginalization of the

traditional ecological governance and belief systems as well as indigenous knowledge of communities (Kelbessa 2002).

Marginalization of the traditional ecological governance and belief systems of local and indigenous communities that was instigated by the enlightenment period and the industrial revolution was intensified during colonization by the West of traditional communities in Africa and elsewhere. A common feature of the colonial period was the control under state monopoly of forests that had previously been managed under various types of traditional governance and belief systems (FAO 2016). Regarding the negative impact of the colonial rules on the traditional governance and belief systems of communities, FAO further elaborate:

...forest management in most colonized countries became characterized by the imposition of "scientific forestry" where central governments assumed all rights over forest access and management and attempted to manage forests to maximize timber production for the benefit of the colonizing power and/or the State. These rights were generally embedded in new laws which often resulted in the alienation of local communities from lands and resources that had previously been part of their traditional estate (FAO 2016:23)

FAO (2016) also state that marginalization of the traditional ecological governance and belief systems of local and indigenous communities persisted even after independence as the postcolonial governments that took over the ruling from the colonial governments had adopted the natural resource management approaches (as well as laws and policies) of the colonial governments.

The western conservation approaches introduced by the colonial governments and then perpetuated by the postcolonial governments has, however, failed to protect the forests from being destructed. One of the reasons for the failure as contended by Hartmann (2004) is the lack of participation of the communities in resource management and even a violation of indigenous institutional rights that has led to great tensions among the different groups with varying interest in the natural resources. Such tension has actually resulted in deforestation of a significant area of forestlands including forests in sacred natural forests. According to Doyo (2015) the worldwide forest loss from 1990 to 2005 was 3% each year while the global forest loss at present has reached about 200 km² each day. And Verschuuren and Wild (2011) claim that a significant portion of the forest lost in the past 50 years belong to sacred forests.

My childhood memories of the little village where I grew up and my recent visits to the same

place are also my personal experiences supporting the forgoing argument. The place where there was the big fig tree and smaller trees surrounding it is changed to a farmland; there is no sign of the spring and the wetland is changed to a yellowish dry land. I can only see traces of sandy soil in the gully where the big river used to flow and the village is in a transition to a small dry town in which there are more young people who look confused of what to do and how to live.

Recently, it seems there is a growing realization of the consequences of loss of biodiversity and ecosystem services (Studley & Bleisch 2018). There is a need to foster an integrated approach to conservation of biodiversity that places people and supportive institutions at the centre of the management and development process, sustaining and enhancing both human and natural capital (Bass, Scherr, Renard & Shames 2009). Part of the growing interest in an integrated approach is recognition of the important role of Sacred Natural Sites in enhancing the resilience of ecosystems; conserving biodiversity and mitigating crisis that follow the effects of climate change (Adam 2012). According to this author, international organizations and governance frameworks such as the International Union for the Conservation of Nature (IUCN), the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the Convention on Biological Diversity (CBD), recognize Sacred Natural Sites as culturebased approaches to protecting biodiversity and ecosystems. These international legal and institutional arrangements also give emphasis to the recognition of the rights and responsibilities of the custodial communities to protect their Sacred Natural Sites according to their customary laws and practices (Adam 2012). In support of the same assertion, FAO (2016) also state that, these days, the interest in promoting the fundamental rights of local and indigenous communities to exercise control over their land and natural resources including conservation of SNS has come to prominence as a justification for community based forests. (FAO 2016)

1.2 Background context-Ethiopia

Ethiopia is a country located in the horn of Africa stretching from 30N to 150N latitude and from 330E to 480E longitude (FDRE 2014). The country covers a total area of 1,127,127km2 (FDRE 2005). It is the second most populous country in Africa next to Nigeria with a population of more than 95 million and an annual population growth rate of 2% (FDRE 2012, FDRE 2014). The country is home to about 80 ethnic groups with their own language and cultures.

Around 83% of the total population of the country is a rural agrarian population living on smallholding subsistence farming (FDRE 2014, World Bank Group (WBG) 2016). Cultural

diversity is also a peculiar feature of the country owing to its being home to diverse ethnic groups. The farming and life style of the rural community is characterized by traditional farming largely based on traditional knowledge (TK) and customary practices of the various communities.

Ethiopia is a country of great geographic diversity with wide altitudinal and physiographic variations. The altitude ranges from 116 meters below sea level in the Danakil Depression in Afar national regional state to the highest peak of 4,620 meters above sea level on Mount Ras Dashen in Amhara national regional state (FDRE 2014). This range of altitude has endowed the country with diverse agro-ecological zones and topographies with a wide range of ecosystem diversity. The diverse ecosystems, have endowed the country with a wealth of biological diversity including 6000 species of higher plants out of which 12% are endemic as well as 284 species of wild mammals and 861 species of birds (FDRE 2005, FDRE 2014, Amente 2005). According to the FDRE fifth national report to the Convention on Biological Diversity (CBD) (2014) the country is one of the countries in the world known to be rich in biodiversity since it hosts two of the world's 34 biodiversity hotspots, namely: the Eastern Afromontane and the Horn of Africa biodiversity hotspots. The forest resource of Ethiopia, as it stands now, is estimated to be 12,499,000 hectares (11.4% of the total land area) (FAO 2015). This, however, is according to FAO's definition of 'forest', which includes forest, high woodlands and other plantations.

There are research findings arguing that the current biological diversity of the country is just a remnant of the past wealth of biodiversity that used to be conserved largely through the customary laws and traditional governance systems of the communities. Million (2012) states that the coming in to power, in 1974, of the socialist inspired military Derg regime and the subsequent nationalization of land, denunciation of customary laws and dissolution of traditional institutions and corresponding governance systems of communities have led to the demise of natural resources in Ethiopia. Admitting that the main threats to biodiversity conservation in the country since the change of government and political ideology in 1974 have been habitat conversion mainly as a result of expansion of agriculture, illegal logging and lack of awareness, the National Biodiversity Strategy and Action Plan states that different types of protected areas have been legally established to reduce the rate of deforestation (FDRE 2005). As a result, significant improvements in the status of some biodiversity resources have been achieved especially in the past one and half decade after the downfall of the military Derg regime (FDRE 2014). Amente (2005), however, argues that the natural resource governance system after 1974 has been taking place with little or no participation of the local community and this has contributed to aggravation of the loss of biodiversity and

land degradation. According to Amente (2005) the measures taken to conserve and manage the national forest resources so far have not brought the expected results.

While Ethiopia is a federal country with nine national regional states, Oromia National Regional State is the largest and most populous regional state. According to the regional census conducted in 2012, the population of the region is 31,179,947 (ONRS 2012). While the average estimated area of the region is 363,375km2, it is subdivided into 18 zones, 309 districts (locally called Weredas) and more than 6889 peasant and urban dwellers associations (Kebeles), which are the smallest government administrative structures in Ethiopia (ONRS 2014). The region shares borders with all other regions in Ethiopia except Tigray. Although almost all the other ethnic groups are also found in the region, the dominant ethnic group in Oromiya is the Oromo. This study focuses on two districts found in Bale zone, which is one of the 18 zones in Oromiya regional state.

1.3. Problem Statement

Preliminary investigation in to this research area suggest that SNS are the oldest forms of conservation that are still demonstrating their huge potential of serving as nodes for habitat restoration, ecosystem conservation, refuges of rare species and living manifestations of biocultural diversity. These places are considered remnants of traditional institutions that show the intricate relationship between humans and nature.

Investigations in the research area also reveal that there is lack of legal and policy support for the continued existence of these traditional institutions and related governance systems of indigenous communities. Rather their existence is being threatened by the dominant conventional legal and policy arrangements, mainstream religions and western civilization. Traditional belief and governance systems relating to conservation of nature are being displaced and substituted by conventional systems that regard the interests, aspirations, norms and taboos of the traditional communities as backward and useless.

On the other hand, research evidences are showing that formal institutional structures for natural resource management are inadequate. A significant body of literatures are showing that human beings have negatively affected the global biodiversity and ecosystem services in the past half century than ever before. And there is a growing consensus among environmental scholars and practitioners that one of the factors contributing to such drastic change is the disregard for the role of local and indigenous communities in sustainable conservation of nature and marginalization of their traditional governance and belief systems.

Hence there is a need to revisit, particularly in the African context, the role of SNS as a traditional belief and related governance systems that promote the management, preservation and conservation of natural resources to enhance the wellbeing and resilience of traditional communities. The voice, interest, aspirations and influence of those currently marginalized from key decision-making processes in the governance of nature need to be strengthened so that they can participate equally and negotiate trade-offs where interests diverge.

1.4. Research Objective(s) and Questions

The major objective of this research is to add to the researches and body of knowledge discussing the significance of traditional ecological governance and belief systems in Ethiopia and Africa at large for efficient management and sustainable conservation of natural resources thereby contributing to enhancement of the wellbeing and resilience of the traditional communities. Its specific objectives are:

- To explore the role of SNS and traditional governance systems in sustainable conservation of bio-cultural diversity and ecosystems
- To analyze the gaps in the coordination between the conventional approach to natural resource management and traditional governance systems
- To examine the contribution of recognition of SNS and traditional governance systems as alternative ways for better management of natural resources and enhancement of community wellbeing and resilience.

Research questions associated with the foregoing objectives are:

- 1 How are SNS and related traditional ecological governance systems perceived by those promoting the modern conventional conservation approach and corresponding institutional and legal arrangements as well as the mainstream religions?
- 2. What are the gaps existing in national and regional legal arrangements in recognizing the role of SNS and traditional governance systems for sustainable conservation of biocultural diversity and ecosystems?
- 3. How can SNS and traditional ecological governance systems contribute to enhancement of community wellbeing and resilience?
- 4. How can sufficient legal recognition of SNS and traditional governance systems contribute to the enhancement of the wellbeing and resilience of traditional communities?

1.5. Rationale for the Study

Sacred Natural Sites (SNS) are areas on land or water bodies having special spiritual and cultural significance to the people and communities that hold them sacred (Wild & McLeod 2008). Doffana (2017) also describes SNS as socially constructed natural or built places serving as epicentres of socio-ecological links, community life, livelihoods and belief. There is a growing informal recognition, recently, that SNS are part of a broader set of cultural values and traditional practices of local and indigenous communities (Verschuuren, Wild, McNeely & Oviedo 2010) and as such, they are manifestations of the inextricable link between human cultural systems and nature (Doffana 2017). As contended by Adam (2012) as well, SNS are part of the wider traditional ecological governance systems of local and indigenous communities having spiritual, social and cultural significance for the community that embrace them and ecological significance for humanity in general.

Guided by their traditional ecological knowledge (TEK) indigenous and local communities have maintained, for time immemorial, the order and health of ecosystems through their customary governance systems, derived from the laws of Earth where Sacred Natural Sites are at the centre. SNS are seen as nodes that connect and mediate the larger ecological network and an integral part of the social fabric that permeates the whole landscape or territory (Studley & Bleisch 2018).

Since the past half a century, however, sustainable conservation of SNS is under high pressure due to factors such as shift in belief systems, development projects, commercial forestry, various encroachments and weak legal and policy protections (Wild & McLeod 2008). It is also stated in the Millennium Ecosystem Assessment (MEA) that cultural services of ecosystems are among the most threatened ecosystem services at global level (MEA 2005). Among other factors, alienation of traditional institutions (Infield & Mugisha 2013) and monopoly of state control over natural resources account for failure of their management in most parts of the third world (Aniah, Aasoglenang & Bonye 2014)

There are research evidences indicating that, despite their being highly valued by traditional communities, SNS in Ethiopia are suffering widespread losses. Doffana (2017) argues that SNS and related ancestral knowledge and governance systems are being seriously eroded as a result of cultural influences, introduction of new belief systems and domination of the conventional governance system over the local traditional systems. In another related research, Belay (2012) discusses the formal modern education system that sidelines the value of TEK as well as lack of recognition of the value of TEK and governance systems pertaining to the environment by the state as the main factors contributing to the loss of biodiversity in

general and SNS in particular. By way of supporting the same argument, Tolla and Traynor (2015) also argue that socio-political changes in the past four decades, introduction of new religious doctrines, unfavourable government policy and land tenure systems were the main factors that have influenced deterioration and loss of SNS.

According to Doffana (2017), in addition to their cultural and spiritual significance for the local communities, SNS all over Ethiopia are serving as important refuges for rare flora and fauna of the country. He also argues that hundreds of forests protected by traditional communities and religious institutions are considered to be havens for hundreds of medicinal plants. As such, it seems we need to revisit the importance of cultural beliefs and related traditional governance systems that promote effective management, preservation and conservation of natural resources and contribute to sustainable development (Aniah et al. 2014). As contended by Infield and Mugisha (2013:1) 'adopting a cultural approach to conservation is not about simply adding a set of prescriptions. Rather, it is about viewing the world through a cultural lens; through the eyes of those whose values informed relationships with land and resources for centuries and whom we wish to support our conservation endeavours.' Hence, it seems of paramount importance to take the role of traditional governance systems, perspectives, values and needs of local communities in to account, where appropriate, for a better and sustainable management of natural resources.

1.6. Delimitations of the Study

The first potential limitation of this study is the lack of finance that has limited me from expanding my data collection methods and informants which would have widened the source data and the frame of findings to be reached at through the data analysis. Secondly, turnover of government officials that were engaged in the community awareness raising and mobilization project for revival and conservation of SNS and traditional governance systems may limit the information to be generated during data collection. And finally my own bias resulting from my being part of the project that supports the community initiative for rehabilitation and conservation of their abandoned SNS and related traditional governance systems could be a factor limiting the objectivity of the study to some extent.

1.7. Research Methodology and Design

This research focuses on examining the effects of the subversion by the western ideologies and worldviews of traditional beliefs and natural resource governance systems in Africa in general and Ethiopia in particular on sustainable conservation of bio-cultural diversity and

ecosystems as well as the wellbeing and resilience of the indigenous communities. It also explores whether supporting revival of the traditional beliefs and natural resource governance systems and giving them due recognition by the conventional legal and policy frameworks would help improve sustainable conservation of natural resources thereby enhancing the wellbeing and resilience of the indigenous traditional communities. As such, the research methodology to be employed for this study would be a qualitative research approach. And data required for the study will be collected through focus group discussions (FGDs) and interviews to be arranged with community members and relevant government officials in the two districts as well as participant observation and secondary data from relevant institutions.

The community to be studied is the Bale community in Ethiopia. The study area will cover two Weredas (districts) in Bale zone, namely Dinsho and Goba districts.

Focus group discussions (FGDs) with community members (both men and women), preferably aged more than 50 years and those who used to be, and in some places still are, custodians of SNS will be organized. The FGDs are expected to elicit information regarding the perception of the participants in relation to their SNS and traditional governance systems. Participants of the FGDs are expected to discuss about the values they attach to SNS, how the SNS are related to their TEK and governance systems, how the loss of the SNS and subversion of their traditional institutions and governance systems have impacted their living, about their desired ways of living and what is expected from whom to realize their desired future.

In addition, interviews will be arranged with concerned local government administration officials. The information expected to be solicited through the interviews will be how the conventional natural resource management structures are interacting with the traditional institutions and governance systems and how the traditional institutions and governance systems are perceived by the formal institutions in relation to sustainable conservation of natural resources.

Participant observation will also be one of the data collection techniques used to triangulate the data collected through the FGDs and interviews.

Then the collected data will be analysed to generate information and knowledge that may contribute to showing a direction on alternative better ways for sustainable conservation of bio-cultural diversity and healthy ecosystems that would in turn contribute to enhancement of the wellbeing and resilience of the traditional communities.

Through analysis of the data collected this study is interested in examining not only the changes that occurred in the interest and attitude of the community members in the study area, but also if there are changes that have occurred in the environment and life of the community as a result of the initiative. The study will also examine the implication of this change for the wellbeing and resilience of the community.

1.8. Chapter Outline

The first chapter of the study consists of an introduction that describes inspiration of the author of the study in the issues that are examined in the study through a combination of childhood memories that have come back as a subject of learning and engagement at the stage of adulthood. The introduction also discusses the idea of traditional ecological governance and belief systems as the cornerstones of biodiversity and ecosystems conservation before the advent of modern conservation approaches and the resulting ecological crisis. This is then followed by the background information that describes the country where the study area is located as well as a brief description of the study sites. The statements that describe the problem that the study tries to address, its objectives and significance, description of the research methodology and design as well as its limitations are also included in this chapter.

The second chapter is a chapter where related literatures are researched and reviewed. These include the meaning and conceptual understanding of sacred natural sites, the history of sacred natural sites and their significance for the local and indigenous communities that embrace them as well as the role they play in sustainable conservation of biodiversity and ecosystems thereby contributing to enhancement of the wellbeing and resilience of the communities. This chapter also explores the relationship between traditional governance and belief systems and modern conservation as well as between the traditional governance and belief systems and mainstream religions.

In the third chapter I will discuss and clarify the concepts relating to the study. The concepts to be discussed in this chapter include bio-cultural diversity as a critical component of the connection between culture and biodiversity, the theory and practice of environmental governance, traditional ecological governance and belief systems and the conventional environmental governance approaches.

Then the fourth chapter explains the context of the study sites including the location, population, geography, culture and socio-economic activities. This chapter also discusses the research methodology, design and methods processes used for data collection.

The fifth chapter would present description of the data collected and the analysis. It explains and analyses the data collected from the study areas vis a vis theories and concepts described in the previous chapters, and reflects on the data presented and the results that come out through the analysis from the perspective of its implication for wellbeing and resilience of the communities.

The six and final chapter concludes the study by providing summative perspectives, recommendations and conclusions.

Chapter 2 – Literature Review

2.1 Introduction

The history of humans' relationships with their natural environment tells us that, the interaction between humans and their environment was guided by patterns of necessity, morality and mutual co-existence rather than a sense of hierarchy, control, manipulation and exploitation. In relation to this, Infield and Mugisha (2013) further state that, during those days, traditional communities around the world had varying social, spiritual and cultural conditions, that create different reasons across different cultures and societies that shape their relationship with their natural environment. And a close examination in to the various reasons across different cultures is likely to show that they are all conditioned with a common denominator of conserving biodiversity and ecosystems (Kelbessa 2002, Aniah et al. 2014, Obiora & Emeka 2015). Such environmental ethics and wisdom employed for systematic way of managing social, cultural and spiritual values that are significant to human life have existed for time immemorial till the advent of the enlightenment period and the consequent era of modernization (Jopela, Mouayini, Abugnu, G., Boko, Mapesa, Abugnu, P., Katana & Gebremichael 2016).

These local and indigenous communities had cultural values, belief systems and practices that guided their interactions with their natural environment. These are expressed in the form of taboos, norms, totems and areas designated as sacred (Infield & Mugisha 2013, Diauwo & Issifu 2015, Yaw 2011), which are all embedded in the traditional ecological knowledge and governance systems of the communities. Regarding traditional ecological knowledge and governance systems, Adam (2012:14) says:

Indigenous knowledge and related traditional ecological governance systems tells us how people conserve trees, revere wild animals and transmit knowledge from one generation to another generation. Indigenous knowledge is embedded in community practices, culturally based value systems, systems of production and consumption, institutions, relationships and rituals. Indigenous knowledge is the body of knowledge acquired by local people through the accumulation of experiences, informal experiments, and intimate understanding of their environment in a given culture.

The time tested traditional ecological knowledge of local and indigenous communities provides the foundation for the multifaceted traditional resource management system that has sustained their harmonious coexistence with nature for millennia (Sobervila 2008). This author further contends that for indigenous peoples, conservation of biodiversity is not an isolated, compartmentalized concept but an integrated part of their lives.

A further investigation into the various domains of traditional ecological governance system of local and indigenous communities would reveal that Sacred Natural Sites, which are the attribute of their traditional belief systems, constitute the central part. While they may occur in various forms depending on the culture and location of the community that constitute them (Verschuuren et al. n.d., Shen, Zhi, Li and Chen 2012, Premauer 2013) SNS are humanity's important heritages built beginning from ancient times and they are manifestations of an inextricable link between human cultural systems and nature (Aniah et al. 2014, Doffana 2017). Adam (2012) further state that SNS are the central features of traditional governance systems of local and indigenous communities as they are places where the laws of Earth can be read, and from which customs, spiritual practices and governance systems are derived to protect the territory as a whole. Whereas there are research documents asserting that the existence of SNS may date back to several thousands of years when human society was in the primitive stage of development (Kumar n.d.) it is also believed that they are the world's oldest conservation areas and still form a large and mainly unrecognized network of biodiversity hot spot areas around the world (Infield & Mugisha 2013).

A significant body of literature relating to SNS shows that, in addition to their spiritual values, they have ecological, socio-cultural and also economic significance for the communities. The spiritual or sacred value of sacred natural places is often related to beliefs and traditions, such as mythology, tribute to ancestors, access to supernatural dimensions, and residence of spiritual entities and gods (Premauer 2013). Even though they are not originally intended for conservation of biodiversity and ecosystems, SNS are also being recognized as constituting a significant part of the biodiversity rich areas around the world and are refuge for endangered animal and plant species including rare herbs and medicinal plants (Rim-

Rukeh & Agbozu 2013). In addition, they are sources of rivers, springs, holy waters and breeding grounds for rare species (Doffana 2017, Yaw 2011).

SNS are also considered to be manifestations of the cultural identity of the local and indigenous communities that constitute them. According to Bhagwat (2009) the annual/seasonal rituals that are held in SNS provide opportunities for community gatherings and practice their cultural foods, songs, costumes and dances. Besides, they are places where intergenerational learning of traditional management systems takes place and disputes and potential conflicts as well as other social problems of the community are resolved through the mediations and arbitrations of elders and custodians (Verschuuren & Wild 2012, Emma 2014). Jopela et al. (2016) further elaborate the socio-cultural significance of SNS by stating that they are places where the customary laws fostering the sharing of natural and other resources, control and distribution of the means of production, graduation from one age group to the other, relations between different age groups, gender relations, roles and responsibilities as well as reward and punishment are enacted.

Their peculiar characteristics of nurturing social and ecological capitals of the communities also make SNS a critical factor contributing to the enhancement of wellbeing and resilience of the local and indigenous communities. The idea that SNS play a pivotal role in fostering the link between humans and nature and its contribution to conservation of biological diversity and ecosystems which are the main components that contribute to human wellbeing is supported by scholars in the field (MEA 2005, Agulanna 2010, Verschuuren et al. n.d., Bizikova 2011, Wali, Alvira, Tallman, Ravikumar & Macedo 2017). It is highly likely that the coming together of people in SNS for ritual and other gatherings, which create the opportunity for sharing information, strengthening of relationships, community cohesion and a sense of place strongly contribute to fostering social capital thereby contributing also to the wellbeing of the community (Ensor & Berger 2009, Watene & Yap 2015, Wali et al. 2017). As contended by Wali et al. (2017) the assets-based approach to environmental conservation and human wellbeing that operates within a bio-cultural framework leads to more effective strategies for sustainable and adaptive management of natural resources by communities which also plays a significant role in strengthening resilience of the community to internal and external shocks.

Despite their pivotal contribution to conservation of biodiversity and ecosystems which are considered to be the life support systems and cornerstones of sustainable development as well as their contribution to social, cultural and spiritual development of communities which are all key factors in the construction of quality life and resilience of communities, traditional

ecological governance and belief systems of local and indigenous communities are being highly suppressed by the conventional conservation approach and the policies and laws supporting same. The loss of global biodiversity at an alarming rate and the consequent degradation of ecosystems in the past half a century, which is partially attributable to the erosion of traditional governance and belief systems and the undermined interest and aspirations in relation to conservation of nature of local and indigenous communities is urging for rethinking of the nature of governance and governance of nature.

2.2 What are Sacred Natural Sites (SNS)?

The different bodies of literatures on Sacred Natural Sites (SNS) indicate that there is no one agreed up on and universal definition of SNS. But the widely used definition states that SNS are areas on land or water bodies having special spiritual significance for the communities considering them as Sacred (Wild & Mcleod 2008, Verschuuren, Wild, McNeely & Oviedo 2010, Oviedo et al. 2005). While most scholars who dealt with SNS argue that SNS are strictly natural areas (Wild & Mcleod 2008, Verschuuren et al. 2010), others state that human made structures and items can also be considered parts constituting SNS (Doffana 2017, Samakov & Berkes 2017, Wild & Mcleod 2008). Hughes and Chandran (1998) in Kumar (n.d.: 2) defined SNS in a similar manner as:

...segments of landscape containing vegetation, life forms and geographical features delimited and protected by human societies under the belief that to keep them in a relatively undisturbed state is expression of an important relationship of humans with the divine or with nature.

According to Wild and Mcleod (2008) SNS can be considered as sub set of the wider range of Sacred Sites, which could be human built or monumental, where people conduct religious worships. For these scholars, the component of nature in the naming of SNS distinguishes them from other Sacred Sites (Tolla & Traynor 2015). Whereas all SNS share a common characteristic of having natural elements, they appear in diverse scales and forms ranging from a single tree or rock to patches of forest lands to an entire mountain, a significant part of river or a lake (Wild &Mcleod 2008, Verschuuren et al. 2010, Oviedo et al. 2005). By way of reinforcing same argument, Verschuuren et al. (2010) also contend that SNS may consist of all types of natural features including mountains, hills, forests, groves, rivers, lakes, lagoons, caves, islands and springs.

The term 'holy' implies that these sites are places that are set aside for spiritual purposes (Verschuuren et al. 2010, Lee & Schaff 2003). According to Premauer (2013:29) 'the sacred

significance of a particular natural place is often related to beliefs and traditions, such as mythology, tribute to ancestors, access to supernatural dimensions and residence of spiritual entities and gods'. Veruschuuren and Wild (2012) also contend that SNS may include natural areas designated as 'sacred' by local and indigenous societies because of their connection to ancestral beliefs, traditional deities or sacred histories as well as natural areas designated by mainstream religions as places for worship and spirituality. There are traditional communities in Africa and other parts of the world who even considered specific plants, animals or rivers and mountains as their ancestors and protected them (Kumar n.d.). They can also be temple sites, historical burial grounds of the ancestors or sites associated with special spiritual powers (Oviedo et al. 2005). Putney also defined SNS as follows:

Sacred natural sites are part of a broader set of cultural values that different social groups, traditions, beliefs or value systems attach to places and which fulfil their aspirations to understand, and connect in meaningful ways, to the environment of their origin and to nature (Putney, 2005:132 in Verschuuren et al. 2010: 2).

As such, SNS are one of the different social settings where belief systems are closely connected and interact with nature. By way of reinforcing the same argument, Doffana (2017) also contends that SNS are manifestations of an inalienable bond between human cultural belief systems and nature. According to Tolla and Traynor (2015) SNS are often considered places where members of a community interact with nature in a meaningful way either individually or as a group. Because of the strong link between SNS and communities that designate them as sacred, SNS are considered to be the oldest forms of protected natural areas in human history (Shen et al. 2012) and still form a large and mainly unrecognized network of sanctuaries around the world (Doffana 2017). According to Bhagwat (2009) the designation and conservation of SNS is strongly rooted in the traditional belief of indigenous and local communities that humans are integral part of the natural beings in the surrounding environment. This is a philosophy that resides with most of African traditional communities and it is aimed at the perpetuation of all natural beings for the wellbeing of both humans and non-humans constituting the natural environment (Aniahet al. 2014).

2.3 The history of Sacred Natural Sites

When dealing with the history of SNS, Wild and MCLeod (2008) state that knowledge about when and how SNS and the traditional practices associated with them started to exist, can be traced within the stories and myths of the communities that hold them sacred. For these authors, the history of SNS is a component of the complex relationship between traditional communities and nature.

In their book entitled *Culture*, *values and conservation: a review of perspectives*, *policies and practices*, Infield and Mugisha (2013) state that the history of SNS can date up to 2000 years back when groves, forests, springs, rivers, reefs and mountains were considered by Indian royal decrees as places where the ancestors resided, spirits lived or rituals and ceremonies were performed and so designated as sacred and protected. Kumar (n.d.) on the other hand argues that, in India, nature worship further dates back to the Vedic period (5000 B.C.) and is based on the premise that all creations of nature have to be protected. As cited in Kumar (n.d.: 2) 'Gadgil and Vartak (1975) have traced the historical link of the sacred groves to the preagricultural, hunting and gathering stage of societies. Hence the concept of virgin forest is believed to be of pre-Vedic period, i.e, about 3000 to 5000 years BC.' He further contends that there are research evidences indicating that sacred groves or sanctuaries were the first temples of God in Europe and Greek. In Greek, sacred groves and forests were fenced with stone walls and called 'Temenos', meaning a demarcated and protected place (Kumar n.d).

Others who have tried to explore the origin of SNS argue that the origin of SNS can be traced back up to six millennia from now (Veruschuuren et al. 2010). According to these authors, Paleo-anthropological evidence indicates that earlier humans such as Neanderthals have practiced the cult of ancestors in burial sites over 60,000 years ago, and this is arguably considered to be one of the origins of sacred sites. To substantiate their argument with evidence, these authors have cited Australian SNS, which are considered to be up to 50 thousand years old. In the same line of argument, Emma (2014) also states that a study about the origin of SNS conducted in India estimated that sacred groves found in the Western Ghats of India originated during the hunter gatherer Era 600 AD. Emma (2014) contends that these sacred grooves have been protected due to their spiritual significance for the local communities ever since

Some scholars who have dealt with the subject matter of SNS have also tried to have a look in to how the ancient people understand the universe through their traditional practice of designating a natural area as SNS and protecting it. According to Alokwu and Ezenwaji (2015) before the advent of modern ideology of the Anthroposcene, most traditional people including those in Europe and America, understand the universe as having two components: the visible and the invisible world. The visible world comprising of the trees, mountains, rivers, rocks, and humans animals, which constantly interact with the invisible world that consists of the heavenly part inhabited by the creator and deities, the ancestors and spirits. And for these traditional people, humans are not separate; they are, instead, just part of both the visible and invisible world. There was a strong belief that human life is inseparably bound to nature, and both human life and the life of other creatures are one with the divine (Alokwu

& Ezenwaji 2015). Even after the colonization of Africa and the expansion of the mainstream religions that discouraged traditional belief systems, the socio-cultural institutions and practices supporting protection and maintenance of sacred sites have existed, defying the onslaughts of various militating factors (Doffana 2017). This shows that the construction of culture and traditional practices by local and indigenous communities is often shaped by the effort to interact, understand and relate with nature (Obiora & Emeka 2015).

2.4 Sacred Natural Sites as manifestations of harmony with nature of traditional communities

Sacred Natural Sites are places where traditional communities in Africa and elsewhere connect and interact with nature in a way they understand and attach meaning to it (Veruschuuren et al. 2010, Doffana 2017, Yaw 2011). Even though SNS can have diversified uses depending on the meanings attached to them by the communities that designate them as sacred (Wild & McLeod 2008, Doffana 2017), in most cases they are manifestations of traditional spiritual beliefs and practices embedded in landscapes or natural areas (Premauer 2013, Aniah et al. 2014, Infield & Mugisha 2013). According to Aniah et al. (2014) the collective environmental wisdom and ethics of traditional communities are expressed through cultural beliefs that are linked to a range of sacred natural sites and cultural practices. As described by Oviedo et al (2005), to the communities of Orissa in India, for example, a natural sacred site is not a mere mini-nature reserve. It is rather considered a crucial guide for their way of life. It is both locus and sign of the regeneration of body, land and community. It stands for the integration of the human community with the natural environment.

Besides being natural areas having special spiritual significance for the communities (Wild & Mcleod 2008, Verschuuren et al. 2010, Oviedo et al. 2005) SNS for most communities are focal points for social and cultural celebrations, establishing social cohesion and solidarity within communities as well as places of respect, love, peace and sources of holy water and medicinal plants and healing (Doffana 2017, Obiora & Emeka 2015, Oviedo et al. 2005, Tolla & Traynor 2015, Veruschuuren et al. 2010). According to Doffana (2017) traditional communities nowadays consider their SNS as important havens for hundreds of plant and wild life species that they regard are crucial for their wellbeing. Due to the fact that the traditional belief system ascribes certain powers to the sacred sites and the communities attach special importance to them, SNS in most parts of the world have stayed relatively immune to resource extraction and exploitation (Byers, Cunliffe & Hudak 2001, Diawuo & Issifu 2015, Yaw 2011). These are sacred places and hence 'no axe may be laid to any tree, no

branch broken, no firewood gathered, no grass burnt; and wild animals which have taken refuge there may not be molested' (Rim-Rukeh et al. 2013: 429).

In most traditional communities, there are norms, taboos and totems that are used for the enforcement of the traditional governance of SNS. As boldly asserted by Yaw (2011), in traditional communities, particularly the African local and indigenous peoples, traditional norms and taboos are the cornerstone of the whole social order, including management and governance of SNS. In this regard, Diawuo and Issifu (2015) and Yaw (2011) state that taboos are unwritten social rules provided by traditional communities to inhibit or ban members from being engaged in acts that are declared as messing with the sacred and forbidden. In addition to the protection of sacred natural sites and totemic animals believed to have special spiritual values (Diawuo & Issifu 2015, Negara & Mangizvo 2013) taboos are used to regulate members of communities from being engaged in acts detrimental to the environment and wellbeing of the community. As described by Yaw (2011) in the journal article entitled *Indigenous Beliefs and Practices in Ecosystem Conservation: Response of the Church*, the taboos prescribed by the Akan communities in Ghana, for example, include:

Clearing of sacred forest or bushes, felling of forbidden timber species, hunting of animals or fishing during forbidden seasons and sacred days, eating of totem animal such as tortoise, parrots and eagles, eating of sacred animals or fish, digging of graves for burial without due authorization from the chief or other traditional authorities and washing clothes in streams and fetching water with silverware. (Yaw 2011: 147)

In a similar manner, Negara & Mangizvo (2013:22) state, 'It is taboo to hunt or poach animals within or running into a sacred forest because they belong to Mwari and the ancestral spirits. Amongst traditional communities such as the Ndebele, where totem is practiced, it is taboo for clan members to kill animals which serve as the revered symbol of their families.'

In most traditional communities, violation of the taboos and norms set by the customary laws will result in harsh social and/or economic consequences. In a study of traditional governance systems of Gamo community in south eastern part of Ethiopia conducted by Gandile, Tessema and Nake (2015) for instance, it is discussed that the traditional leaders called 'Maga' would undertake proactive protective measures that involve erecting totemic items around sacred sites to prevent people from cutting trees or killing wild animals in the area. It is believed that anyone who trespasses such signals would be condemned and cursed by the elders, which will bring wrath to the person, his property and family members.

As such, even though traditional communities have not created SNS to conserve biodiversity, their complex interconnection with socio-cultural elements such as deities and ancestral spirits have contributed to the conservation of significant forests and healthy ecosystems around the world (Boadi, Nsor, Yakubu, Acquah & Antobre 2017).

2.5 Ecological, Socio-cultural and spiritual values of SNS

2.5.1. Ecological Values

Even though local and indigenous communities have not created them for the purpose of biodiversity conservation (Emma 2014, Boadi et al. 2017), the spiritual values, taboos and norms attached to SNS have made them critical biodiversity hotspots and in some cases important havens of threatened or rare species (Doffana 2017, Veruschuuren et al. 2010, Oviedo et al. 2005). As stated by Rim-Rukeh, et al. (2013) in their journal article entitled Traditional beliefs and conservation of natural resources: Evidences from selected communities in Delta State, Nigeria because of the socio-cultural and spiritual values associated with them, SNS are regarded as among the few places where the flora and fauna live freely without interference by humans. This is because there is a general belief among the local and indigenous communities keeping SNS that disturbing the plants and animals in the sacred areas results in annoying the spirits that may bring wrath to the community (Desisa & Healey 2012). Desisa and Healey (2015) have further discussed that taboos set by customary laws to protect SNS are highly observed by members of the community because the consequences of non-observance would be far reaching. According to these researchers if any person or group violates the rule and cuts trees or kills wild animals in SNS he and/or a member of his family may get sick or die, his livestock may be eaten by lions and his crops attacked by an army of locusts. For this reason, SNS are highly respected and the 'traditional respect for the environment and access restrictions to sacred sites had often led to wellconserved areas with high biological diversity within otherwise degraded environments' Boadi et al. (2017:5).

According to Verschuuren and Wild (2012), in addition to the socio-cultural and spiritual values attached to them, traditional communities often encode, through their associated traditional ecological governance systems, norms as well as unwritten rules and regulations that shape the behaviour of members of the community on how to live in harmony with nature. As such, it seems that SNS are among the few areas that have survived the relentless deforestation and ecosystem degradation that has happened especially over the past half a century. Research findings relating to SNS are also showing that SNS are increasingly being considered critical nodes of biodiversity conservation including aquatic life and fragile

ecosystems (Doffana 2017, Yaw 2011, Premauer 2013). By way of reinforcing the same line of argument, Oviedo et al. (2005) state that sacred sites play an important role in safeguarding critical sites in watersheds, or contribute to preserving the ecological integrity of ecosystems in a given landscape. To substantiate this argument with evidence, Yaw (2011) state that about 1.5% of the total land area of Ghana is covered by about 2000 sacred forests and rivers and the forests serve as watersheds for catchment areas where they provide important ecosystem services such as provision of drinking water and fishery. The author further elaborates that in areas where the livelihood of the local community depend mostly on fishery, the sacred sections of the rivers serves as breeding grounds for fishes found elsewhere in the rivers. Similarly, 'where the entire river or stream is sacred, the river or stream becomes a breeding ground for the population of fish in the tributaries of these sacred rivers (Yaw 2011:149).'

A significant number of research findings are supporting the argument that SNS are serving as some of the few areas over the world playing an important role in conservation of biological diversity including plant and wild life species recognized as rare and endangered. In this regard, Fabrizio (2013) has stated in his PhD thesis entitled Sacred sites for the Conservation of Biodiversity that a research report commissioned by World Wide Fund for Nature (WWF) and Alliance of Religions and Conservation (ARC) and which described the relation between sacred sites and conservation, reported that a significant number of sacred sites around the world fall within the borders of biodiversity-rich protected areas. In a similar line of argument Lee and Schaff (2003) have also reported in the Proceedings of the International Workshop on the Importance of Sacred Natural Sites for Biodiversity Conservation, a workshop on which a number of scholars from around the world presented their research findings relating to SNS, that botanical surveys conducted in sacred coastal forests in Kenya have proved that these sacred forests are the only known location of certain rare and interesting plant species in Kaya. In another research document, Desisa and Healey (2012) describe how a study conducted in Gamo area of Southwest Ethiopia revealed SNS as having the highest diversity of plants as compared to other areas:

A botanical survey of six sacred groves recorded 152 plant species in a sample area of 2.24 ha, of which 19 species were endemic to Ethiopia. Two of these were tree species (Cordiaafricana and Hageniaabyssinica) listed as priority species for national conservation and one tree species (Prunusafricana) is included in the IUCN red list of threatened species. The biodiversity of the six sacred groves was higher than the four non-sacred forests with which they were compared. (Desisa & Healey 2012:46)

A similar study conducted in Northern Ethiopia also revealed that sacred church forests, which are often located at hill tops mountain slopes, helped to prevent soil erosion and are reservoirs of biodiversity in significantly altered landscapes (Emma 2014). As such, SNS serve not only as biodiversity hotspot areas and habitats for rare species, but also as important sources of genetic materials needed for reproduction of species used for rehabilitating degraded ecosystems (Oviedo et al. 2005). On this basis, the recognition being accorded to SNS by modern conservation movement is increasing in the second half of the 21st century when ecosystem degradation and extinction of animal and plant species is happening at an alarming rate (Verschuuren et al. 2010).

As boldly asserted by Fabrizio (2013:28), SNS seem to conform to the increasing conventional biological conservation paradigms for at least two additional reasons: 'Firstly they confirm the effectiveness and resilience of local drivers and forms of knowledge in bringing about effective conservation; and, secondly, in doing so, they offer a somewhat more democratic view of conservation practice, being grounded on systemic understandings and valuations, rather than on the top-down imposition of an exogenous set of values.'

2.5.2 Socio-cultural values

Besides their conservation value, SNS serve as traditional social institutions that create sense of place and healthy social relations among community members, which have strong implications for the wellbeing of the community. According to MEA (2005) good social relations refer to the presence of social cohesion, mutual respect, and the ability to help each other. And people having an emotional and spiritual connection to nature do have increased cohesion, lower crime rates and experience more happiness (Buttke, Allen, & Higgins 2014). The traditional belief system associated with SNS is likely to provide them with areas where custodians and community members who hold the places sacred gather for prayers, worships and ritual ceremonies. There is a general consensus among anthropologists that such gatherings for spiritual purposes, especially in natural areas, have a dual purpose of strengthening the connection with nature (Verschuuren & Wild 2012) and creation of a conducive environment for culturally crucial social interactions and social cooperation (Kumar n.d., Fabrizio 2013). According to Infield and Mugisha (2013) such coming together of members of the community is likely to enhance people's feelings of belonging through language, sayings, place names, history, legends, and folk customs, which all derive from the heritage.

Ritual ceremonies and related traditional practices held in SNS also serve as institutional arrangements where custodians and elders discuss, develop, ratify, and announce their

customary laws and norms that guide the behaviour of community members, reprimand and/or punish those who misbehave and deviate from the set customary rules and regulations and resolve conflicts thereby maintaining the social integrity (Tolla & Traynor 2015, Oviedo et al. 2005). In addition, they are the embodiment of traditional knowledge, values and belief systems and serve as a forum for transfer of traditional ecological knowledge to the younger generation (Emma 2014, Dilts 2012). These are places where knowledge is often shared through storytelling, songs, riddles and nature based games (Dilts 2012).

In the majority of SNS around the world, the communities conduct seasonal ritual ceremonies. These ritual ceremonies create opportunities for the community to practice their cultural foods, songs, costumes and dances (Bhagwat 2009). The combination of continuing to actively participate in worship, ceremonies and rituals in the SNS, and that these activities are composed of a variety of cultural aspects and activities, performed in the local language, means that the local culture is not only sustained but also remain vibrant and developing (Tolla &Traynor 2015). According to these authors, the use of cultural musical instruments, such as drums, whistle and clapboards, which are crafted by community members using local materials, along with the traditional musical arrangements and performances, play an important role in sustaining community identity, inheritance and art. Regarding the contribution of ritual ceremonies to sustain the culture of local and indigenous communities, Dilts (2012:4) state:

...songs in ceremony are most often in the original language, passed down through countless generations. Sometimes this is the only place left where the original languages are still spoken. These songs hold great meaning, and hold the world view of the original culture intact.

In addition to being sites for the creation and perpetuation of cultural values, as well as customary laws and traditional knowledge, SNS are also considered to be places where the community gets solution for health problems through the medicinal plants and holy waters (Doffana 2017, Tolla & Traynor 2015). According to Doffana (2017), the Sidama community in Southern Ethiopia rarely visit public health institutions as they get the solution for almost all health related problems, not only for humans, but also for their livestock, from their SNS. The author discussed in his research article that even communities from a distance come to visit the SNS in Sidama since important traditional medicinal plants that have disappeared from other areas are found only in these SNS. As stated by Dilts (2012) the sharing and exchange of medicines among the neighbouring communities establishes a theme of reciprocity through sharing of resources thereby creating an opportunity to strengthen the

bond between them. As such, this community has a better health status as compared to other communities where SNS have completely vanished.

2.5.3. Spiritual values

Traditional communities in Africa and other parts of the world perceive the universe in its visible and invisible or the tangible and intangible forms. The visible or tangible world is the one which is populated by humans, animals, plants, mountains and rivers, while the invisible or intangible is the heavenly part (sky) inhabited by the ancestral spirits and the creator (God) (Alokwu & Ezenwaji 2015, Lacy & Shackelton 2017). According to these authors, for the traditional people, both the visible and invisible elements of nature exist in an interlinked manner rather than as separate entities. In other words the life of both humans and nonhumans is inseparably bound to the spiritual world and this connection with the divine should be taken care of and nurtured (Obiora & Emeka 2015). Regarding the spiritual value of SNS, Dilts (2012) assert that prayers in ritual ceremonies in SNS open the way for a compassionate earth based perspective.

An opening prayer for instance, gives thanks to the ancestral spirits for the life and abundance of biodiversity around and wishing the wellbeing of all in the future. According to Dilts (2012) events like ritual ceremonies and prayers in SNS bring communities together with a sense of purpose. When a community comes together with a united purpose and intent, love, prayer and thankfulness, it generates 'spirit' that nourishes each person on their return journey home into their daily lives.

Through this cultural belief system, traditional communities designate some parts of the environment as abodes of the gods and ascribe certain powers to them (Aniah et al. 2014). Such places are then regarded as SNS or sacred groves (Boadi et al. 2005, Negara & Mangizvo 2013) and they are visited by the custodians and the community, mostly on a seasonal basis, to conduct ritual ceremonies and communicate with the more than human for the wellbeing of both human and non-human beings in their area (Oviedo et al. 2005). They are places where they go to pray for rain, protection of humans, crops and domestic and wild animals against disease outbreak, fertility of humans and the land as well as peace and stability in their area (Emma 2014, Desisa & Healey 2012). An elder in the Gamo community in the Southern part of Ethiopia, who was interviewed by Desisa and Healey (2012) in their journal article entitled *Sacred groves in the Gamo highlands of Southern Ethiopia: Biocultural value and threats in Sacred Natural Sites*, about the spiritual values of SNS stated:

You can see many people dying each year due to the wrath of the spirit. Marriage is not fruitful, rain is unpredictable, and untreatable disease is killing our people. Before [when sacred groves were respected] if something went wrong, we went and prayed to the sacred grove and got an answer immediately. Today, when we pray to the sacred grove, it takes longer to get a response or we get nothing at all. (Desisa and Healey 2012:45)

Regarding the invisible or spiritual values of SNS, Emma (2014) contends that they are equally or more important as the tangible benefits and values that people may benefit from the natural areas and so should be accorded due recognition in conservation endeavours. According to Tolla and Traynor (2015) an increase in the number of wild animals and the health of the ecosystems within the SNS, is always considered by custodians and the community as a sign of good fortune and acceptance of their prayers by God. As such, it seems evident that the reason for the strong connection of traditional communities with their land and natural environment and the sustainable use and management of their natural resources is embedded in their spiritual beliefs and values (Emma 2014).

2.6 Traditional governance and belief systems, religion and modern conservation approaches

Spirituality and belief systems, whether traditional or mainstream, are regarded as among the few influential things that shape the attitudes, motivations, decisions and behaviour of individuals, group of people and societies in a certain way prescribed by such belief systems and associated norms (Emma 2014, Fabrizio 2013). People tend to conserve, care for and protect whatever is regarded as sacred and spiritual in their belief systems. According to Emma (2014) traditional belief systems are important components of the cultures of communities that shape the way people interact with nature. In other words, the sustainable use and management of natural resources by local and indigenous communities is often underpinned and dictated by their spiritual beliefs and values. As stated by Verschuuren et al. (n.d.) in local and indigenous communities in Africa and other parts of the world, spirituality is typically invoked by and experienced in relationship with nature.

Before the advent of the mainstream religions and modern anthropocentric thinking, people used to attach certain spiritual importance to a section of their natural environment and put aside and protect that particular area as sacred (Yaw 2011). In relation to this, Oviedo et al. (2005) states that such reverence for nature reflects the world view of local and indigenous communities in some parts of the world even today, which is rooted in the belief that nature is inherently sacred and humans are integral parts of the sacred nature (Bhagwat 2009). By

treating animals, plants and features of landscape as a community of subjects that humans can interact with, rather than material objects, local and indigenous communities establish deeper, meaningful and more satisfying relationships with the natural world (Snodgrass & Tiedje 2008).

In this regard, Snodgrass and Tiedje (2008) further contend that in the context of the animistic philosophy of local and indigenous communities, the natural environment connotes an ecosocial sphere of a 'community-of-beings' where human and non-human persons co-exist and interact perpetually. This is further reinforced by Emma (2014) who contends that the traditional belief that spirits dwell in natural resources such as trees, hills, rivers, rocks and certain animals is tantamount to attaching intrinsic value to the natural elements in the environment.

A significant body of literature relating to traditional belief systems and conservation are recognizing that conservation of SNS is a deeper manifestation of the traditional belief system that considers nature as sacred and humans as an integral part of the natural world (Bhagwat 2009). SNS were among the traditional belief systems that show the traditional African way of life and how such communities relate themselves to their land and natural environment. According to Wild & Mcleod (2008) SNS are places that have mediated the connection of local and indigenous people with nature for time immemorial. As such, it seems that traditional belief systems, social customs and taboos are indeed the cornerstones upon which indigenous systems of resource management are based (Fabrizio 2013).

Expansion of the mainstream religions (like Christianity and Islam), and western world views that have invaded the continent along with the colonization (Obiora & Emeka 2015, Diawuo & Issifu 2015) and the recent western civilization and globalization, which are considered to be the modern form of colonization (Aniah et al. 2014) however, have resulted in the sidelining of many of the traditional governance and related belief systems, taboos, customs and practices (Yaw 2011). According to Yaw, though they played a key role in conservation of biodiversity and protection of healthy ecosystems, the traditional belief systems and related taboos and practices that are strongly linked to reverence for nature are regarded by many, especially Christians, as fetishes and useless, demonic and satanic. The underlying reason for this is that the mainstream religions in general and western Christianity, in particular, regard the earth as temporary and disposable matter and pays little attention to natural resources or the other than human life forms (Yaw 2011).

In a similar line of argument, Aniah et al. (2014) states that Christianity is among the major structures that have seriously eroded the traditional belief systems of local and indigenous communities, particularly in Africa. According to these authors, places and areas that were regarded as sacred and protected through the traditional belief systems of the local and indigenous communities have been destroyed and the association of spiritual powers to the environment discarded. Building on the same argument, Oviedo et al. (2005) also assert that many SNS in Africa and elsewhere have been appropriated or destroyed because they were considered pagan or idolatrous by the newly introduced mainstream religions. In some instances religious buildings were forcefully superimposed upon traditional sites.

The discussion about the displacement of the African cultural belief systems and their connection with nature has been well supported by the Kenyan Nobel Prize winner environmentalist Wangari Maathai in the expression she has once stated saying:

That tree inspired awe, it was protected, it was the place of God. But in the 60s, after I had gone far away, I went back to where I grew up, and I found God has been relocated to a little stone building called a church. The tree was no longer sacred. It had been cut down. I mourned for that tree. (Hari 2010 in Yaw 2011:152)

According to Yaw (2011) the displacement of African traditional belief systems by the western Christian missionaries is still persisting in many African countries. To substantiate this claim by evidence, it is stated in Yaw (2011:151) that 'In Ghana the missionaries separated their converts from their local communities to distant places called Salemsor quarters. In the name of formal education, these converts were taught to frown upon their cultural beliefs and practices, including the observance of sacred days and adherence to the taboos.'

Based on the foregoing arguments, it is safe to deduce that the African perspective of conserving nature through the traditional belief systems for its non-material values (Infield & Mugisha 2013) has been threatened by the Western view that considers all things, other than humans, as mere commodities to be controlled, manipulated and exploited for human needs (Obiora & Emeka 2015).

The philosophy of modern conservation approach is also grounded in the Western thought that treats mind and matter, reason and emotion, spiritual and material as independent and separate entities (Yaw 2011). This is a worldview that assumes one of the components as superior to and more important than the other, and frequently leads to domination of the one by the other. As such, the conventional conservation approach seems to have undermined the

non-material and intangible values of nature that are revered by traditional communities (Fabrizio 2013). According to this author, this is because the modern conservation approach finds it difficult to translate the intangible values of nature into tangible and measurable benefits, in accordance to the tenets of cost-benefit analysis and the utilitarian views that dictate the current approaches to conservation.

According to Emma (2014) unlike the traditional way of setting customary rules, norms and taboos that shape the behaviour of people regarding the way they interact with nature and value it, modern conservation approach tend to work on the general attitude of people toward conservation. Emma argues that, general attitudes, however, may fail to have control over specific behaviours. It is likely that people may hold a general attitude towards conservation (it is good), or a behaviour (deforestation is bad); but they may partake in specific activities, which contradict these attitudes (cutting wood from local forests for charcoal). Hence, modern conservation approaches are failing to meet their purposes for two main reasons: first they undermine the intangible values that traditional communities associate to their natural environment (Fabrizio 2013) and secondly because they tend to ignore the interest and social norms of the local people and impose an external worldview (Obiora & Emeka 2015).

Based on the foregoing argument, Emma (2014) argues that modern conservation approaches should shift their focus to supporting the processes that support sustainable conservation of nature rather than on mere mitigation of loss of biodiversity. According to Emma (2014) any conservation endeavour that increases the separation of people and nature will tend to increase vulnerability of both nature and the society. Emma further argues that the modern conservation approach should depart from promotion of mere science and modernity and try to hold a societal goal of appreciating voices other than that of scientists. Hence, conservationists have the responsibility to limit the increase of separation of traditional communities from their natural environment and where possible strengthen the ties of people and their natural environment alongside development. A conservation approach that integrates the culture, values, attitudes and aspirations of local communities will ultimately lead to a better and more sustainable protection of biodiversity (Emma 2014). In this respect SNS appear of great relevance to current debates, as they confirm the prominence of the intangible both as a source of value in nature, and as a primary driver of conservation (Fabrizio 2013). According to Fabrizio, as they rely on local meanings, understandings, and participation, and minimize the imposition of values and priorities from external agencies, SNS represent an instance of a democratic way to conservation.

2.7 The need to Re-define Governance of Nature

The concept of governance deals with power relations among different classes of society whereby those holding power often influence decisions, whether it is financial or political (Swiderska, Roe, Siegele & Grieg-Gran n.d.). According to Swiderska et al. (n.d.:18) governance is defined as 'the interactions among structures, processes and traditions that determine how power is exercised, how decisions are taken on issues of public concern, and how citizens or other stakeholders have their say'. Feyerabend & Hill (2015) also state that governance is one of the key factors that determine the coherence, integrity and robustness of social units and how well they interact and co-exist with each other.

Further elaborating the concept of governance and connecting it with the social and ecological history of communities, Feyerabend & Hill (2015) contend that governance deals with how decisions made by certain actors relate to the interests, aspirations and decisions of other actors in a society and how these processes of decision making evolve through time shaping the social, ecological, political and economic history of the concerned society. Yet, the focus of this study would be on how the nature of governance plays a critical role in shaping the governance of nature and the relationship between humans and their natural environment.

When discussing about the governance of nature, we can generally classify it in to two major categories: the traditional governance system by local and indigenous peoples that existed before the enlightenment period and industrial revolution in most parts of the global north starting from the 18th century (Negara & Mangizvo 2013) and still existing in some parts of the world but scanty, and the conventional environmental governance approach that is currently dominating the governance of nature (Diawuo & Issifu 2015).

Traditional ecological governance system is a systematic way of managing natural resources that are significant to human life. It is the oldest form of governance (Feyerabend & Hill 2015) that is characterized by belief systems, cultural orientations and codes of conduct that define practices, assign roles and guide interactions between members of the community and their natural environment (Kajembe, Luoga, Kijazi & Mwaipopo 2003). As contended by Diawuo and Issifu (2015), the traditional ecological governance systems that were widely known before the advent of the modern conventional conservation approach was based on complex cultural values, belief systems and practices that operated through oral norms, myths, taboos, totems and closed seasons to preserve, conserve and manage natural resources. According to these authors, the use of these cultural values, belief systems and traditional practices was geared toward protecting and promoting the common wellbeing of the entire community, including the non-human beings rather than the interests of individuals.

In their journal article entitled *The role of traditional institutions in the conservation of forest resources in East Usambara, Tanzania*, Kajambe et al. (2003) have discussed three distinct features that characterize traditional ecological governance systems. These are the traditional social institution that controls access to natural resources in a given territory, the customary rules, regulations norms as well as their enforcement procedures that would enable members of the community acquire, control, maintain and transfer land and natural resources and the social norms set for conservation of the resources under the control and management of an individual or family (Mogende & Kolawle 2016). In such a context, utilization actions like cutting down of trees, hunting, fishing, grazing and gathering of other resources from the environment were regulated by the customary laws, traditional belief systems, norms and taboos enshrined in indigenous knowledge systems (Mawere 2013). These show that the traditional ecological governance approaches focus on maintaining the local ecological conditions, that is, trying to use, manage, conserve and enrich nature without altering such conditions in substantial ways (Feyerabend & Hill 2015).

A significant body of literature in the field of governance of nature argues that the effectiveness of traditional ecological governance systems that prevailed before the advent of the modern conventional conservation approach lies in the observance of the customary rules, regulations, norms and taboos, which include the dos' and the don'ts that govern the behaviour of members of the community and ensure responsible utilization of resources and harmonious co-existence with nature (Jopela et al. 2016). And enforcement of the customary rules, regulations and norms is ensured through institutional arrangements such as chiefs and their councils of elders, custodians, clan heads, sectional heads, household heads, women leaders, and other community leaders (Watene & Yap 2015). According to these authors such traditional institutions often embody historical and lineage alliance with their territory that empowers them with important rights and obligations. As such, they played key roles in ensuring that those who broke natural resource management rules and norms were sanctioned (Diawuo & Issifu 2015). Moreover, inter-group dynamics create a reputation effect, whereby one group would not want to be seen by another group to be breaking the rules already in place (Mogende & Kolawle 2016).

Regarding the role of traditional institutions in the governance of nature, Premauer (2013) further discuss that besides enforcement of the rules and regulations, the traditional institutions play a crucial role of resolving disputes, enforcing widely agreed standards of behaviour, and uniting people within bonds of community solidarity and mutual assistance, which give them a prominent status in the community dynamics. As such, they embody important forms of social capital, representing forums (festivals) wherein local communities

can come together and act collectively in the management of natural resources. These strategies arranged by local and indigenous communities had the merit that communities had a strong sense of ownership with the powers to conserve, manage and administer their own environment and all the resources existed therein (Mawere 2013). Based on the foregoing arguments, Swiderska et al. (n.d.) contend that strong and equitable traditional governance institutions, secure resource rights and active community participation are key governance attributes for effective community-based sustainable conservation of nature.

With the rise of the western scientific knowledge and the change in the ideology toward nature and natural resource conservation since the 18th century, however, the traditional governance systems of local and indigenous communities have mostly been displaced by the modern conservation approaches. The various national and international natural resource management policies, laws, programs and strategies that followed the introduction of the modern conservation approach have increasingly marginalized the involvement of traditional institutions and related ecological knowledge systems in to conservation of nature (Aniah et al. 2014). This resulted in the erosion of the 'holistic' understanding of nature that used to be pursued by local and indigenous communities and their related governance systems (Mawere 2013). By way of reinforcing the same line of argument, Infield & Mugisha (2013) state that following the introduction and promotion of the western scientific knowledge and conservation approach, the non-economic values, both western and non-western, that underpin mutual co-existence and harmonious relationship between peoples, place and nature were steadily lost from conservation policy and practice.

Regarding the erosion of traditional governance systems, Oviedo et al. (2005) contend that the unequal power relationship between the local and indigenous communities and the western world soaring with the political and economic power played a key role for the rapid decline of the traditional governance systems and the newly introduced western approach to conservation. According to these authors, the unequal power relationship resulted in disempowering local and indigenous communities from asserting their rights and responsibilities as stewards of their land and natural resources. Consequently, governments tend to exclude them from decision-making processes that affect their land, natural resources and livelihoods.

As such, despite the key role it used to play in promoting harmonious co-existence of communities with their natural environment and among members of the community, the traditional governance systems of local and indigenous communities have continued to be considered as backward, irrational and against the western idea of economic growth. As a

result of this perceived "superiority" of western science and the corresponding conservation approach over traditional governance systems and the corresponding knowledge, insights and practices that originate outside of the institutionalized Western science are regarded as unacceptable fallacy (Obiora & Emeka 2015). As contended by Infield and Mugisha (2013) a sole focus on scientific and economic rationales has led to the alienation of those that value nature differently and have other motivations for its protection. As a result of the influence of the western approach to conservation, most developing countries around the world are currently striving to institute the western-style conservation programs on lands and territories inhabited by local and indigenous communities (Snodgrass & Tiedje 2008). Consequently, for the last century or more, biodiversity governance has continued to be dictated top-down and centralized, and has focused primarily on global conservation goals, often at the expense of local and indigenous communities interests, aspirations and livelihoods (Swiderska et al n.d.).

In addition to the dominance and monopoly of the conventional conservation approaches, the displacement and marginalization of traditional ecological governance systems is also attributed, as some say, to the erosion of cultural values and norms that are considered the cornerstones of the traditional institutions that make the governance operational. According to Emma (2014) the loss of cultural values and norms is mainly related to the changes in the social structure and how the communities function, with children going to schools promoting the western world views and undermining the traditional life style which led to development of the perception that elders and the traditional institutions they represent no longer being the respected social figures they once were. Consequently, the cohesion within the society and the respect for values and traditional social norms has been degraded.

Despite its being backed and promoted by powerful western economic and political structures, the conventional conservation approach, however, is not proving itself to be the right approach to conservation of nature that support sustainable development and human wellbeing. A considerable number research evidences are showing that worldwide ecosystem degradation is happening at an alarming rate after the advent of the conventional western conservation approaches in general and in the past half a century in particular. The Millennium Ecosystem Assessment (MEA 2005) states this finding in the following manner:

Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history, largely to meet rapidly growing demands for food, fresh water, timber, fiber, and fuel. This has resulted in a substantial and largely irreversible loss in the diversity of life on Earth.

...The degradation of ecosystem services could grow significantly worse during the first half of this century and is a barrier to achieving the Millennium Development Goals (MEA 2005:1).

Regarding the failure of the conventional conservation approach to avoid exploitation of nature beyond its regenerative capacity, Kajembe et al. (2003) have argued that policy studies regarding governance of nature have indicated that poor natural resource management is attributed to a large extent to intrusive state policies which are alleged to have displaced and/or marginalized the local traditional institutions and their governance systems, thereby preventing them from playing their role in regulating the interaction between the people and their natural environment as per the cultural values, belief systems and norms that guide their interests and aspirations. In a similar argument, Mogende and Kolawle (2016:94) also state that 'African governments that tried to nationalize and control common pool resources that were formerly under the custody of traditional communities have failed to manage natural resources effectively because the rules in place are often in conflict with the needs and perceived rights of local residents.' As Infield and Mugisha (2013:1) also rightly state it '...an intervention that ignores social norms and imposes a view of the world that is external to the target group can be particularly ineffective'. Based on the foregoing assertions, Obiora and Emmeka (2015) strongly argue that the loss of traditional way of life, mostly in the global south, and with it of cultural identity is the root cause of social, ecological, economic and political problems in Africa and developing nations in other parts of the world.

A significant body of literatures relating to the governance of nature argue that failure of the modern conventional conservation approach to avoid wanton resource exploitation and the resultant ecosystem degradation is embedded in the western anthropocentric philosophy that considers nature as a commodity that is created to serve human interests (Diawuo & Issifu 2015). While the modern western knowledge considers the other than human creatures as objects that can be controlled, manipulated and used for human needs, traditional communities see them as communicative subjects with which human beings should create a harmonious coexistence (Snodgrass & Tiedje 2008). According to these authors, in the western ideology humans exist separately from their surrounding environment as exceptional whereas traditional communities consider themselves as part and parcel of the community of subjects in their environment. Regarding the relationship between local and indigenous communities and their natural environment Feyerabend and Hill (2015) further argue that indigenous cultures see their interaction with nature as arising from the spiritual and ancestral beings that are part of nature, home for the spiritual powers and can affect them much more than they are able to affect it. As such, resource conservation in the conventional conservation

approach is guided by the material value of natural resources while on the other hand cultural and spiritual values are the major guiding principles in the traditional way (Infield & Mugisha 2013). By way of reinforcing same argument Swiderska et al. (n.d.) also state that, while the conventional conservation approach is designed to support the western economic model of promoting private accumulation of wealth and property for profit, the traditional approach often promote social equity and ecological sustainability based on principles of reciprocity and collective custodianship.

Based on the foregoing arguments, the number of scholars engaged in the field of governance of nature, urging the need for rethinking and redefining the governance of nature is increasing from time to time. These scholars argue that an effective governance of nature that would bring about rehabilitation of ecosystems and conservation of biodiversity that would support sustainable development require a more transparent, inclusive and decentralized forms of governance, that consider the cultural values, norms and belief systems of local and indigenous communities along with secure property rights (Swiderska et al. n.d.). According to Infield and Mugisha (2010) arguments for the need to redefine governance of nature focus mainly on the concerns over the narrowness of perspectives expressed in current conservation theory and practice and try to clarify the non-material objectives of conservation, and contribute to the evolution of new conservation approaches. In the same line of argument, Infield and Mugisha (2013) further state that ignoring the local cultural values is tantamount to undermining local peoples' abilities to help protect their environment and is likely to increase conflicts with local groups thereby contributing to failures to conserve biodiversity. By giving space and recognition to cultural values, norms, belief systems and ideologies of local and indigenous communities into governance of nature, governments and policy makers can make conservation to have more value to local communities thereby contributing to a more effective, valuable, and sustainable biodiversity conservation (Emma 2014).

According to Swiderska et al. (n.d.) the argument that governance of nature would be more effective when based on local initiatives rather than centralized top down rules and regulations is based on more practical experiences than theoretical concepts. These authors argue that a significant number of case studies relating to natural resource governance have shown that decisions dealing with land and natural resource management are most effective when they engage a range of stakeholders, including local resource users/managers, use diverse information sources (eg. Local as well as expert knowledge), and learn from experience on the ground. Building on the same line of argument Premauer (2013:34) also state that '...empirical evidence and theoretical work by 'pioneer' commons scholars demonstrated that small-scale social groups with the appropriate conditions would have the

capacity to regulate their resource use and overcome common-pool resources dilemmas through collective action.' According to this author, the despair with the current conservation approach would be best relieved if local and indigenous communities are given more space and recognition to practice their traditional governance systems, maintain local traditional ecological knowledge that informs their land use and is attuned to the natural dynamics of the local ecosystems as a result of long term interaction, and revitalize their traditional institutions for regulating access to, use and control of resources. Revitalizing the traditional governance systems underpinned by cultural values and institutions would help strengthen relationships between people and nature that have been weakened by the forces of modernization and the conventional conservation approaches (Infield & Mugisha 2013). Further elaborating their argument in relation to the value of incorporating local cultural values in to conservation initiatives, these authors state it as follows:

Many local communities and indigenous peoples, however, have values systems that link them to the natural world. If incorporated into conservation initiatives, these have the power to imbue protected areas or resource management regimes with relevance for local cultures. Furthermore, the enforcement of protection rules, such as taboos, based on local values and cultural institutions are generally more acceptable to indigenous communities, and less expensive to implement than externally imposed, poorly understood laws and regulations and may thus offer local but effective protection, including to threatened species. (Infield & Mugisha 2010:5)

Confronting the environmental challenges of our time requires an interdisciplinary and even multi-dimensional approach including recognizing and giving more space to the traditional governance systems (Obiora & Emeka 2015). To state the idea more elaborately in the words of Swiderska et al. (n.d.:17)

Biodiversity governance regimes need to shift from the current dominant focus on state-run protected areas and legal enforcement to support a greater diversity of governance approaches, such as sustainable use, community conserved areas (CCAs) and co-management, all of which recognize and build on existing governance arrangements at local level.

Hence, the solutions to environmental degradation must be envisaged within such context of learning from and integrating traditional governance systems of indigenous and local communities, which are all underpinned by traditional ecological knowledge and experience acquired for centuries with modern conservation approaches (Emma 2014, Infield & Mugisha 2013).

2.8 Looking at Community Wellbeing through the Lens of Traditional ecological Governance and Belief Systems

Human wellbeing is multidimensional. It is influenced by multiple factors that affect the life of a person or group of people. A research document published by the United States Environmental Program (UNEP 2006:10) defines human wellbeing as '...the ability of all people to determine and meet their needs and to have a range of choices and opportunities to fulfil their potential. It includes tackling a diverse range of challenges: environmental, social and economic, and widening the options available to people to make a living and to participate actively in society.' In a similar manner, Wiseman and Brasher (2007) contend that human wellbeing deals with the integration and balanced existence of the different components contributing to a full and meaningful life. These include being physically and mentally healthy, spiritually contented and being able to realize the standards and expectations by the group of people that form the society one belongs to.

According to the Millennium Ecosystem Assessment (MEA) (2005), there are five elements that constitute human wellbeing. These are availability of basic materials needed for good life, physical and mental health, existence of good social relations among members of a community and freedom to pursue ones choices in life and take action. The MEA also further discusses that these constituents of wellbeing are interrelated and interdependent rather than stand-alone entities. A deprivation of one of the constituent elements would negatively affect the others thereby affecting human wellbeing. Ensor & Berger (2009), on the other hand, argue that the wellbeing of an individual should be assessed in a social context as it depends to a large extent on success a person achieves in socially defined and determined pursuits and activities. Thus, to be considered an individual with a good life, a person should have a comprehensive goal and attempt to achieve part or all of it based on norms and forms of behaviour that are accepted and widely practiced in the society that he/she belongs to. This would require us to broaden the concept of wellbeing from personal wellbeing to community wellbeing and explore it through the lens of social, ecological, economic, cultural and spiritual domains, which maximize opportunities for individuals, communities and societies to flourish and fulfil their potential (Wiseman & Brasher 2007). Building on the same line of argument, Jacobs, Swilling, Nagan, Gills & Morgan (2017:30) describe human welfare and wellbeing as:

...products of the whole society, of which security, governance, economy, and culture are inseparable parts. They are the product of both monetarized and non-monetarized activities. They are also closely related to the distribution of social power. Social power widely distributed is prosperity.

As these domains are increasingly understood as interrelated and mutually interdependent aspects of human wellbeing, there is an increasing consensus among scholars engaged in wellbeing assessment that interdisciplinary approaches need to be developed across all governance levels and spatial scales (Verschuuren et al. 2010).

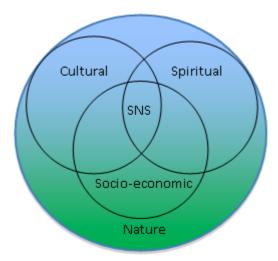


Figure 1. Value domains of human wellbeing

Source: Verschuuren et al. 2010

According to Verschuuren et al. (2010) the three human value domains, i.e the cultural, spiritual and socio-economic, are part of nature that constitutes human wellbeing. These authors argue that the cultural values, which include inspirational values and a sense of place spirituality, which is a unique value domain that constitute wellbeing, are both strongly attached to Sacred Natural Sites, while the socio-economic value domain is related to the ecosystem services that the community derives from their natural environment. Building on the same line of argument, Wiseman and Brasher (2007) also assert that the ecological and cultural domains of human wellbeing are the basic elements that play a key role in affecting community wellbeing either positively or negatively.

Growing bodies of literature are showing that a mere accumulation of wealth does not guarantee wellbeing. In the Stockholm declaration (2016), which was issued by renowned scientists concerned of the current economic growth, it is affirmed that economic growth that ignores social and ecological aspects of development could be a threat to social wellbeing and ecological health unless harnessed through appropriate policies. In this regard, Castells and Himannen (2014) also argue that the capitalist one-dimensional development approach of economic growth and material wealth has failed to address human wellbeing and quality of life. Increased output in material wealth entails expansion of labour input and market, compromise spaces of care, social life and reciprocity leading inevitably to the disintegration of relationships and engendering negative consequences on wellbeing (D'alisa, Demaria &

Kallis 2015). The Stockholm statement (2016) further affirms that increased material wealth in isolation does not indicate status of wellbeing.

Based on the foregoing arguments, there is a broad consensus that measurements of human wellbeing must go beyond the traditional economic indices of gross domestic product and per capita income (Wali et al. 2017). According to these authors, this more multidimensional approach to measuring wellbeing is gaining wider acceptance in the conservation community because it offers the potential to show how highly intense, extractive-dependent growth strategies are not the only way for nations with high biodiversity to address the needs of their citizens. Regarding the need for multidimensional approach to wellbeing, D'alisa et al. (2015) also contend that the world needs a new economic theory that fosters human wellbeing through care, hospitality, love, public duty, nature conservation, spiritual contemplation and appreciation of traditional values. As such, it seems evident that the situation is urging for a new way of production and consumption systems leading to sustainable living. The world needs a more inclusive and integrated development framework that appreciates life as a complex system, perceives humans as social beings and geared toward maximizing wellbeing and quality of life rather than material wealth (Castells & Himannen 2014, Eisenstein 2002, Jacobs et al. 2017).

The skepticism on the link between economic growth and community wellbeing allows us to explore the distinct cultural values, traditional practices and belief systems of local and indigenous communities who maintain subsistence oriented livelihood but are better off in terms of wellbeing (Wali et al. 2017). According to these authors, for such communities, wellbeing is measured in a more integrated way that places economic satisfaction within a broader context of social relations, cultural practices and peoples' relationship with their natural environment. As such, the inclusion of relationships, culture and spirituality reframes how wellbeing and poverty might be understood. In such a context, wellbeing includes not just material wealth, but also the content and quality of our relationships with other people, and our connections to nature and expressions of culture (Watene & Yap 2015).

Regarding disconnection of humans from nature and its effect on the wellbeing of communities, Eisenestein (2002) contend that the effect of modernization and focus on accumulation of material wealth as loosened community cohesion and peoples' bonds to nature and place. And the loss of these bonds is more than a reduction of material wealth; it is a reduction of the very being of humans.

Regarding the role of connection with nature for construction of wellbeing, Wali et al. (2017) posit the lifestyle of Amazonian forest dwellers as an example. According to these authors, the lifestyle of Amazonian forest dwellers, which is built on and sustaining existing subsistence oriented livelihoods, is in contrast to the more conventional "integrated conservation and development" approach, which assumes that wellbeing will depend on providing more access to market resources. For the indigenous peoples in Amazon wellbeing includes assessment of the balance between humans, other life forms, and supernatural beings, and a moral dimension that regulates relationships, especially across generations (Wali et al. 2017). Building on the same line of argument, Folke et al. (n.d.) explain that in many places occupied by local and indigenous communities, wellbeing is spiritually defined through people's relationship with mountains and natural landscapes which are regarded as Sacred. 'Protecting the deities of mountains and lakes, and respecting all forms of life is believed to benefit the wellbeing of local people, their farmlands, and livestock and accumulate merits for individuals in pursuit of eternal happiness' (Shen, Lu, Li & Chen 2012:13). Based on the assertion that there is a strong link between traditional ecological governance systems and related practices of local and indigenous communities, Wali et al. (2017) argue that the value-based approach to environmental conservation that operates within a bio-cultural framework leads to more effective strategies for sustainable and adaptive management of natural resources thereby ensuring wellbeing of the community.

Apart from the cultural values and spirituality that local and indigenous communities attach to natural landscapes, a significant number of scientific research findings are also showing that connection with nature improves cognitive function and self-esteem, relieves stress and enhances immune function (Buttke, Allen & Higgins 2014). According to these authors people who have conserved traditional ecological governance systems and practice their cultural values and belief systems have higher sense of connection with nature, increased community cohesion, happier and experience lower rates of crime.

Although significant bodies of literature are showing the strong connection between traditional ecological governances, related belief systems and conservation of healthy ecosystems and the contribution of this to a better community wellbeing (Bizikova 2011), this is not getting due attention by policy makers and conventional conservation approaches (Bizikova 2011). As a result, degradation of ecosystems affecting the wellbeing of local and indigenous communities is happening at an alarming rate in many parts of the world. Regarding this assertion, the MEA (2005) state that approximately 60% of the ecosystem services examined during the Millennium ecosystem assessment have been degraded and most of these have happened in the past 50 years. According to the MEA (2005:54) 'there are

clear examples of declining ecosystem services disrupting social relations or resulting in conflicts. Indigenous societies whose cultural identities are tied closely to particular habitats or wildlife suffer if habitats are destroyed or wildlife populations decline.'

The ecosystem degradation happening at a fast rate in the past half a century is resulting in change in ecosystem services which is likely to affect the wellbeing of communities (MEA 2005). Regarding the impact of ecosystem degradation on human wellbeing, Wali et al. (2017:2) state that 'pervasive drivers of environmental degradation, such as extractive enterprises and industrial-scale agriculture, can threaten local peoples' livelihoods and erode social assets and local cultural norms over time thereby being detrimental to their wellbeing.' Regarding this issue, MEA (2005) also state that changes in ecosystem services influence all components of human wellbeing, including the basic material needs for a good life, health, good social relations, security, and freedom of choice and action. The MEA (2005) further contend that changes in provisioning and regulating services of ecosystems can be mediated by socioeconomic factors; whereas changes in cultural services, however, are not likely to be redressed as they cannot be translated to material or money value.

The other important factors that determine community wellbeing and can be considered as components of the traditional ecological governance systems of local and indigenous communities are their cultural values, traditional practices and belief systems. Traditional governance systems of communities are manifested in the form of unwritten rules and regulations (norms, taboos and totems) that guide the behaviour of members of the community regarding relationship with each other as well as with the natural environment (Diawuo & Issifu 2015). Such rules and regulations determine the choice and importance of individual's actions, as those actions have relevance and meaning if only accepted by the community and have cultural significance (Ensor & Berger 2009). According to Wali et al. (2017) social relations and ecosystem managements entrenched in the customary rules and regulations of local and indigenous communities have demonstrated the strength of customary forms of social coexistence and other systems of reciprocity based on kinship or friendship networks as well as living in harmony with nature. These function as social assets that increase group productivity and wellbeing while protecting the natural environment against overexploitation.

Such customary governance systems and the supporting traditional institutional arrangements are the foundations for building social capital, which is the basis for mutual trust, concern for one's associates, a willingness to live by the norms of one's community and to punish those who do not abide by the set customary rules and regulations (Bowels & Gintis 2002). There

also exists a broad consensus among scholars engaged in the study of customary governance systems that the unwritten rules and regulations have a positive effect of creating community stability, lesser crime rates and better livelihoods, all of which contribute to community wellbeing (Jopela et al. 2016).

The following is one of the research findings supporting the foregoing assertion:

Social anthropologists and other scholars who have studied the patterns of life among the pre-colonial Igbo society recount that it was rare to find cases of individuals who starve in the society simply because they lacked food or personal weal. Apart from helping to give the individual the needed sense of security, "it enables economic life to be more efficiently organized; it helps promote national unity, and allows for inequalities to be countered". In other worlds, society (i.e. community) exists to further individual interests and social wellbeing (Agulanna 2010: 293).

Another way in which community wellbeing is manifested through their traditional belief systems and practices is the cultural festivals, ritual ceremonies, celebrations and arts that allow the community to come together and share (Wali et al. 2017). The government of New Zealand, for instance, uses the concept of "cultural wellbeing", which it defines as the vitality that communities and individuals enjoy through participation in community celebrations, rituals, creative and cultural activities and the freedom to retain, interpret and express their arts, history, heritage and traditions (Galloway 2005). In this regard, SNS play a significant role, as they are places where communities gather to conduct their regular ritual ceremonies. According to Verschuuren et al. (2010) in addition to their spiritual and ecological values, SNS play a crucial role of contributing to the community wellbeing by creating a sense of place, community cohesion and cultural identity. In the words of McMillen, Campbell, Svendsen and Reynolds (2016:5):

...the process of working together in creating and maintaining the sites helped to foster and reinforce a sense of shared identity. Being in that location brought a sense of community and friendship and that sense of building something together ... a sense of purpose together.' Stewardship, as a form of engagement in protecting a site, facilitates interactions among diverse groups, allowing for opportunities to develop relationships, share information and expand their social networks.

Regarding the contribution of SNS to enhancing the community wellbeing, Agulanna (2010) also state that the traditional belief system that regards the ancestral sprit as enshrined in SNS and watchful of the behaviour and actions of members of the community serve as motivation

for people to lead socially responsible lives that contribute to the enhancement of the wellbeing of the community. According to Agulanna (2010) such traditional belief systems also embody the belief to continue to exist 'afterlife' in the form of ancestral spirit, which has a strong influence on how people should behave. To put it in the words of the author:

The belief in an 'afterlife' has both social as well as moral functions. For one, the expectation of an 'other life' in which people will be rewarded for virtuous living is an encouragement for good conduct and social responsibility among those who make up the community. For another, the hope of attaining the enviable status of an ancestor could inspire people with the spirit of hard work, industry and integrity in the community. In other words, apart from whatever spiritual values it may have, the belief in an afterlife has its social significance as well. And far from being a mere illusory wish that life should go on forever, such beliefs served as vehicles for social reconstruction and building of social capital traditional communities. (Agulanna 2010:292)

As such, SNS and related traditional belief systems positively contribute to the wellbeing of both nature and humans and encompass the complex intangible and spiritual relationships between people and our originating web of life (Verschuuren et al. 2010).

2.9 Community Resilience in the Context of Traditional Ecological Governance and Belief Systems

The idea of resilience as related to social development is a relatively newly emerging concept. According to Hiwasaki, Luna, Syamsidik and Shaw (2014) the concept of resilience was first introduced in the field of systems ecology and emerged in the climate and disaster literature in the 1970s before spreading widely in the 1990s. Because of its being a newly emerging concept and application to diverse disciplines resilience is being conceptualized by social scientists, ecologists, economists and politicians in various ways (Kais & Islam 2016). According to Kais and Islam (2016) there are two ideas encompassed in the basic concept of resilience: the happening of a shock that can potentially disrupt the way a system normally exists and the system's ability to withstand, adapt to or recover from the disturbances. In other words, it can be described as the ability of a system, whether a person, community, ecological system or a business, to cope with an adverse event and maintain a state of equilibrium and a normal state of functioning or reinstate itself in time to the state of normal functioning (Meichenbaum n.d., The Young Foundation 2012). In this regard, The Young Foundation (2012) describes internal or external shock that affect the normal functioning of a system as continual process that happens over a period of time rather than a onetime abrupt incidence.

Correspondingly, resilience also needs to be seen as a constant and continual process of reinvention, not simply a response to a specific event in time. As further contended by Kais and Islam (2016:5) 'resilience is not a fixed property of the system; rather, it incorporates the idea that a resilient system has flexibility in responding to hazards in that the system's initial structure or function might undergo some necessary changes. As such, resilience is viewed as a quality, characteristic or result that is generated or developed by the process that foster or initiate it.

As has been already mentioned, the concept of resilience can be understood and described differently depending on the perspective we try to look at it, say whether we look at it from the economical, ecological, socio-cultural or political perspective. For the purpose of this piece of research paper, the concept of resilience shall be narrowed down and seen from the social and ecological perspective and try to explore the various ideas, experiences and research findings by scholars in relation to what community resilience would tend to look like in the context of traditional ecological governance and related belief systems. In fact, community resilience cannot be analyzed without looking at the social, economic and ecological components of a community, which are considered as the key components that have influence on community resilience (The Young Foundation 2012).

According to Salvia & Quaranta (2017) the concept of community resilience is rooted in socio-ecological systems (SES) approach where community resilience is most commonly defined as the ability of a social system to sustain or absorb external shocks and maintain the same social form and functions. The SES approach is based on the assumption that social and ecological systems cannot be considered as separate entities and takes a non-linear approach to systems development (Salvia & Quaranta 2017). Promoting a similar idea, Fabrizio (2013) also state that the concept of socio-ecological systems was introduced as a way to ecologically think of humans as part of the ecosystem. Building on the same line of argument, Summers, Smith, Harwell and Buck (2017) also state that any discussion of community resilience should address both natural ecosystems and human communities in tandem since both are intrinsically connected to people and their wellbeing. According to these authors, the services that ecosystems provide are invaluable for reducing vulnerability or improving recoverability. A truly holistic measure of community resilience accounts for the status of integrated socio-ecological systems that considers conservation of nature as its indispensable component (Summers et al. 2017).

In this context, resilience in communities requires that members of communities are aware of the possibility of being affected by shocks, are willing and, crucially, able to influence their local situation and build their capacity to respond to internal or external shocks such as economic recession, natural disaster, modernity, cultural invasion, conflict or other threats to the normal existence of the community (Salvia & Quaranta 2017). This is termed by The Young Foundation (2012) as proactive resilience that accepts the inevitability of change and tries to create a system that is capable of absorbing shocks or adapting to new conditions and imperatives.

In socio-ecological systems approach, community resilience stands on three pillars, namely the ecological, social and economic capitals (Salvia & Quaranta 2017). In relation to the three capitals that constitute community resilience to shocks, Kais and Islam state:

A community's resilience depends on how rich the community is in terms of its social, ecological and economic capitals; how quickly and how well it recovers from the losses through effective use of resources and capitals; how the whole community works as a united team; how committed and persevering its members are; how well it identifies its barriers and facilitators; how well it is horizontally and vertically connected to other groups and institutions, and how well it uses these connections; and how dynamic and strategic are its community leaders. We can term all of the above characteristics of a community as its resilience dimensions (Kais & Islam 2016:11).

In terms of prioritizing the importance of the three capitals required for community resilience, Kais and Islam (2016) contend that a balanced combination of all the three capitals is required to make up resilient communities. According to these authors, a community is strongly resilient when all three capitals are well developed in it, while it would be vulnerable to shocks when only one or no capital is well developed in it. The Young Foundation (2012), on the other hand, argue that, while each of the three capitals that contribute to effective community resilience are crucial, social capital can be considered as the most critical one. According to The Young Foundation (2012), social capital gets to the core of how a community functions and so is at the centre of any understanding of community process and change. It is the key determinant factor of how people in a community get along with each other, including questions of trust and understanding; who makes rules and regulations binding the community and how they are observed and the relationship between community members and their social organizations and institutions. Cultural values, which determine the way people "know the world" and how they act within it, what voices are heard and listened to, which voices have influence in what areas, and how creativity, innovation, and influence emerge and are nurtured are also the central components of social capital. If we look at social capital in the context of local and indigenous communities, traditional institutions such as

indigenous clan chiefdoms, councils of elders and the customary laws and mediators that are applied for resolving disputes, enforcing widely agreed standards of behaviour, and uniting people within bonds of community solidarity and mutual assistance are important structures that embody values promoting social capital (Samakov & Berkes 2017).

By way of building on the assertion by the Young Foundation, Salvia & Quaranta (2017) also state that social capital can be seen as a capital that mediates between the economic and ecological components of community resilience. It includes levels of trust, learning and communication pathways, cooperation, strength of networks, bonding and bridging capitals, and community cohesiveness. These authors further explain that social capital is a component of community resilience that can be most affected by the current trends of modernization and globalization as it is likely to be weakened significantly by out-migration and population ageing in communities because of the lack in intergenerational learning and transfer of traditional ecological knowledge between the generations.

Adding to the foregoing discussions about social capital as the core component of community resilience, McMillen et al. (2016) further elaborate that place attachment, collective identity, social cohesion, social networks and knowledge sharing and diversity are components of social capital that play a vital role in enhancing community resilience. According to these authors, the existence of strong collective identity and attachment to a place facilitate active dialogue among community members thereby contributing to developing creative and adaptive responses to disturbance that strengthen social resilience. In this regard, McMillen et al. (2016) further explain that there are multiple experiences and research findings showing how relationships among community members and relationships between people and places established through local governance systems became social resources that were drawn upon in response to multiple disturbances. Communities that attach special meanings to places and have special attachment to such places are likely to be more resilient and adaptable to social change. Regarding this, McMillen says:

Place attachment is a concept that describes the degree to which people have an emotional or social connection with others and environments where they live as well as the sense of pride associated with belonging to that place. It includes the cognitive, emotional, and spiritual connections to places and has been suggested as an indicator of community sustainability and important for identity development, place making, perception, and practice. (McMillen et al. 2016:5)

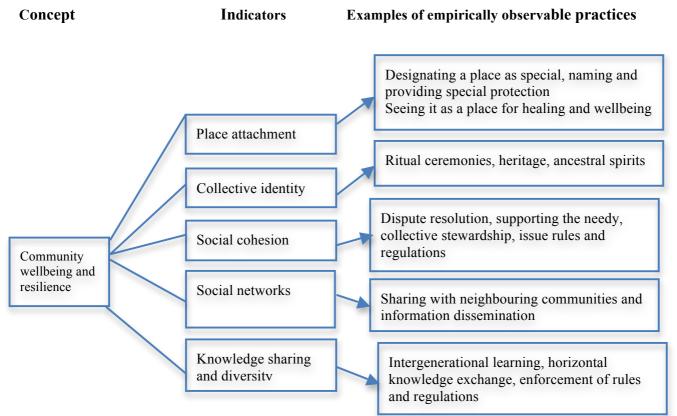


Figure 2. Community wellbeing and resilience in the context of traditional governance systems

Source: Adapted from McMillen et al. 2016

According to McMillen et al. (2012) designation of a natural area as a special place and giving it a meaning fosters a sense of stewardship. And the stronger the sense of stewardship there would be strong acts of claiming territory and managing it over time despite changing external conditions and changing internal group dynamics. Such attachment to a place is likely to strengthen group identity and social cohesion that facilitates interactions among diverse groups, allowing for opportunities to develop relationships and expand their social networks. Social cohesion can be understood by degree to which the group makes joint decisions about the site and its use, individuals engage in shared stewardship activities together, and individuals engage in acts of reciprocity on and off site.

McMillen et al. (2012) further explains that places designated as special (having spiritual and cultural values) also serve as sites that promote intergenerational learning and transmission of diverse kinds of knowledge. As with biological diversity, a diversity of ways of knowing is a resource to draw upon in developing creative and adaptive responses to disturbances. In addition to the informal sharing of information that happens among them, stewards also involve the youth at the sites so that they learn about history, ethics, environmental disciplines, spirituality and knowing and remembering the ancestors. 'Stewards referred to

their sites as a "keeper of history" and a way to "keep the memory alive" (McMillen et al. 2012:11).

Viewed through this lens, it is imperative to assert that resilient communities can be built through supporting the social and institutional arrangements existing in traditional communities, such as social networks, rules, and norms, and traditional belief systems that embody stewardship and help them to sustain these such that they may be responsive and resilient to disturbances that threaten the viability of the systems within which they operate (Salvia & Quaranta 2017).

2.10 An overview of Sacred Natural sites and Traditional Ecological Governance Systems in Ethiopia

Although economic, demographic, socio-cultural and technological changes happening around the world are having negative impacts on conservation of SNS and related traditional governance systems in Ethiopia, as is the case elsewhere in the world where there are local and indigenous communities practicing their traditional ecological governance and belief systems (Diawuo & Issifu 2015, Infield & Mugisha 2013), they are still being significantly practiced by various traditional ethnic groups in the country and playing a crucial role in sustaining some ecosystem services, which would, otherwise, have disappeared.

In their journal article entitled Sacred natural sites provide ecological libraries for landscape restoration and institutional models for biodiversity conservation Reynolds, Sisay, Eshete & Lowman (2015) report that the Ethiopian Orthodox Church, which is one of the oldest Christian churches in Africa, has a long history of protecting and preserving indigenous forest as sanctuaries for prayer and burial grounds for church followers. There is a traditional practice mixed up with the religious doctrine of the church that considers the forests surrounding churches as sacred, with the trees symbolic of angels guarding the church. For this reason, in Amhara region of Northern Ethiopia where 95% of the total area is cleared for agriculture (Lowman & Sinu 2017) and centuries of deforestation has resulted in radical alteration and degradation of the natural landscape, the sacred church forests are the only areas that have shown remarkable resilience in the face of land use land cover change (Cardelus, Scull, Heir, George, Lawman & Eshete 2013). According to Reynolds et al. (2015), a recent study conducted in Amhara regional state has confirmed that there are more than 8,000 Orthodox Church forests ranging from less than a hectare to more than 100 hectares. As discussed by these authors, a sample survey conducted in 28 church forests has revealed existence of 168 tree species out of which 160 are indigenous to Ethiopia.

In another research conducted by Cardelus et al. (2013) on sacred church forests in Northern Ethiopia, a total of 1,488 church forests covering a total area of about 84,466 hectares have been recorded in an area of 30,000km². According to the authors, these cover about 0.53% of the total area of the region and more than 93% of the forest cover of the region.

Adding to the same line of argument, Bongers, Wassie, Sterck, Bekele and Teketay (2006) state that Church forests in Northern Ethiopia are still sanctuaries of many plant and animal species that have almost disappeared in most parts of northern Ethiopia. Ongoing research also provides evidence that church forests harbour vast insect biodiversity, provide pollination and hydrological services for nearby farmland, and serve as seed banks for native plants that have otherwise vanished from the region (Reynolds et al. 2015). By way of reinforcing the same assertion, Emma (2014) state that these church forests, which are often located at the top of hills, where the landscapes are vulnerable to soil erosion and degradation, help to prevent soil erosion and are being reservoirs of biodiversity. Reynolds et al. (2015) further assert that, besides their immediate ecological conservation value, the Ethiopian church forests that are designated as Sacred by the church are also examples of powerful social institutions that have ensured the provision of cultural and ecological ecosystem services for generations.

In another study in Gamo area in South-eastern part of Ethiopia, Desisa & Healey (2012) have conducted a comparative land use land cover change analysis of two types of forest areas, sacred and non-sacred over a period of 15 years from 1995-2010. This study has revealed that a decrease in a mean patch size of only 5.8% has been recorded in the sacred forests while a decrease in a mean patch size of 43.2% has been recorded in the non-sacred forests during the period of 15 years. According to these researchers, the results of the study indicate that forests in the Gamo highlands which are not under the cultural protection of sacred status have suffered a high level of habitat loss and fragmentation as compared to the sacred forests during the period 1995-2010. In addition, Desisa & Healey (2012) assert that SNS preserve the highest diversity of plant species recorded in the area. The authors discussed that 152 plant species have been recorded through a botanical survey conducted in six sacred groves covering an area of 2.24 hectares. Out of the total plant species recorded 19 were endemic to Ethiopia while two of these (Cordiaafricana and Hageniaabyssinica) were tree species listed as priority species for national conservation and one tree species (Prunusafricana) is included in the IUCN red list of threatened species. As such, in addition to lower reduction in area size, it is found that the biodiversity of the sacred groves was higher than the non-sacred forests with which they were compared (Desisa & Healey 2012). The researchers further state that the SNS are not only reservoirs of diverse plant species but also refuges for various wildlife species as hunting in the sacred sites is also forbidden because

eating meat of animals from sacred groves is considered taboo. The Gamo people believe that not only plants and animals, but also natural subjects such as mountains, pasture lands, rocks, rivers, streams, trees, animals, footpaths, the sun and the moon, are potentially sacred and inhabited by spirits; and as such should be revered (Desisa & Healey 2012).

In another journal article on TEG and belief systems in Gamo community of South-eastern Ethiopia entitled 'Biodiversity conservation using the indigenous knowledge system: The priority agenda in the case of Zeyse, Zergula and Ganta communities in Gamo Gofa Zone (Southern Ethiopia)' Gandile, Tessema and Nake (2015) state that the Zeyse community in Gamo, for example, has a strong traditional law/ custom to protect forests and wild animals which was performed and guided by the active involvement of traditional leaders called 'Mega' and 'Chima' (elders) of the community. The customary law of this community provides that cutting trees from the burial area (tomb sites) as taboos because these places were considered as sacred sites where the spirit of ancestors rest. The community leader and elders are responsible for making sure the laws are observed and abided by and forests, grasses and wildlife, and the land in general are protected. The community led by the elders and their 'Maga' slaughter a sheep or a goat once a year at the sacred site as a sacrifice for the ancestral spirits (Gandile et al. 2015). According to Gandile et al. (2015) as per the customary laws of Gamo community relating to conservation of nature, the 'Maga' (the traditional leader) has the power to punish a person who cuts trees or being disobedient against traditional law/custom. Furthermore, if the individuals were suspected of being disobedient against traditional law/ custom, he/she would be condemned and cursed by elders.

In Gamo community, if someone, violating the custom, cuts trees or kills animals in the sacred sites, the spirit will bring wrath to the whole village in general and to the offender and his/her family in particular. This can be in the form of epidemic disease or death of children and milking cows. To avoid such wrath, offenders confess whenever they break the rules and then perform a ritual in the presence of ritual leaders to receive a pardon for the wrong action (Desisa & Healey 2012).

In a similar research finding, Dandi (2014) explain about the traditional ecological governance system of Shekacho community in South-western part of Ethiopia that imposes sanction through taboos and norms for conservation of their forest. According to Dandi, the taboos, sanctions and curses imposed by the customary laws of the Shekachos ban cutting down trees without getting permission from a clan leader for good cause. Anyone who violates these norms and cut trees without permission would suffer disease or loss of harvest. The Shekacho traditional laws, which are enforced by clan leaders, are among the central

tools for the protection of biodiversity. Regarding the Shekacho traditional ecological governance system (TEG), Dandi (2014) further explains that the TEG divides the forest into two types: cultural forests and kobo forests. Forests that are found around villages and on hilly or mountainous areas are regarded as cultural forests while those that are found relatively far from settlement areas are 'kobo' forests. Cultural forests are predominantly designated as sacred and so governed by taboo systems. In addition, wetlands, riverine forests and waterfalls are also considered as sacred and protected by taboo systems. 'Kobo' forests on the other hand are forestlands where the community gets their livelihood by collecting forest honey, coffee, spices and other non-timber products. Whereas most Shekacho households hold portion of the forest that they inherited through family lineage, a household/family is responsible for conservation of part of the forest it holds through strict customary laws. In relation to this, Dandi (2014) state that the TEG of Shekachos dictate that utilization of biodiversity involves respect for nature, not with the consideration of biodiversity as a mere resource. Reinforcing the results claimed by the researches Infield and Mugisha (2013) say such customary laws and occasional and regular/seasonal rituals have the potential to foster respect for the sacred sites' cultural history thereby decreasing pressure on the biodiversity.

In Ethiopia, where about 80 per cent of the population is rural and depend on traditional medicine, sacred sites are also serving as places where people usually go to for healing (Doffana 2017). In his journal article *Sacred natural sites, herbal medicine, medicinal plants and their conservation in Sidama, Ethiopia* Doffana (2017) discuss that for Sidama community in Southern Ethiopia and other rural communities across Ethiopia, SNS provide crucial protection for medicinal plants and some critically threatened native trees.

In Ethiopia, studies documenting the role of SNS in conserving medicinal plants are emerging. While these studies indicate that SNS, especially forest areas where ancestral religious traditions are maintained, are serving as important refuges for the flora of the country, hundreds of species in such areas have been more specifically selected out and utilized for meeting a range of health and paramedical needs of the communities (Doffana 2017). Doffana further contends that, except a few trees that were found elsewhere, all of the species from the sample inventoried were harboured in sacred sites. In Sidama, it is common to find some trees that were locally reported as "fast disappearing" or "already lost" at other places, being conserved in sacred forests. It is also not surprising to learn that medicinal plants for mysterious and difficult-to-manage health problems are more likely to be harvested from wild areas, including sacred forests.

The case of SNS being reservoirs of medicinal and rare plant species in Ethiopia is further described by Doffana as follows:

In general, such study results clearly demonstrate that in Sidama and Ethiopia at large, the maintenance of sacred groves and other informal tree conservation areas has some veritable, tangible conservation outcomes for medicinal plants. Local people also recognize this, indicating the fact that while relentless deforestation processes and other tree-biodiversity-harming factors have caused decline of tree species, existing sacred forests and some other informal protection contexts have proved to be key repositories for medicinal plants, endangered or not (Doffana 2017:10).

The Oromo ethnic groups, constituting about 35% of the Ethiopian population and occupy majority of the central, eastern and western parts of the country, are also known for their traditional governance and belief systems that have played a vital role in conservation of nature in their areas. Regarding the traditional governance and belief system of Oromos, Kelbessa (2002) state that the bonds between the environment and the rural Oromos are not only material but also spiritual and moral. Kelbessa (2002) further explains that in the Oromo traditional governance and belief system, norm (Safuu) is the central guiding principle that fosters the material need, moral and spiritual behaviour of members of the community. Kelbessa describes 'Safuu' in the Oromo culture as follows:

Safuu is an important concept in the beliefs and practices of the Oromo people. Safuu is a moral concept that serves as the ethical basis that helps individuals to avoid morally wrong actions. Safuu is about knowing how to relate natural laws that are given by Waaqa (God) and to act according to them. The Oromo believe that Safuu involves not only respecting nature and natural laws but also avoiding embarrassment, bad conversations, lying, stealing, working on holidays, and so forth. Safuu is respecting one another and respecting one's own ancestral spirits (Ayyaana) and other's Ayyaana.

...Safuu implies that all things have a place of their own in the cosmic and social order, and that they should keep this place. Their place is conditioned by the specific Ayyaana each of them has received from Waaqa (God)... (Kelbessa 2002:54).

This description shows that the Oromo conception of 'Safuu' is a manifestation that the Oromo traditional governance and belief system pay due attention to the moral status of both humans and non-humans. Violation of 'Safuu' will affect the positive relation between humans and the natural environment. Kelbessa (2002) further state that in the Oromo culture

the laws of nature are the central aspect that guides the link between humans and their natural environment and their harmonious coexistence.

As stated by Kelbessa (2002:53):

The Oromos consider the cycles of nature, the coming of the rainy season, the movement of the stars, lunar and solar cycles, the movement and the cries of birds, the nature of entrails, the behaviour of domestic and wild animals and the condition of trees in order to grapple with practical problems of everyday life and problems that they might face in the future.

Regarding the traditional governance and belief system of the Oromo people, Doyo (2015) also explain that SNS are areas that are accorded special respect as they are considered places where the Godly (Waaqa) and ancestral spirits reside. According to Doyo, SNS in the Oromo culture have much respect and prestige and the plants and animals in SNS are locally referred to as 'Woyoma' (untouchable). Anyone who violates the law and tries to degrade 'woyoma' would be cursed and marginalized from all community social activities and interactions. In Oromo culture, there are also trees that are considered sacred because of the different functions they provide even though they are not in SNS. Such trees are locally called 'Mukafalaa' (Sacred trees) (Doyo 2015) and are used by the community for cleansing of the family, livestock and their barn from different diseases (bad spirits). As such it is a taboo to cut and use such trees for other purposes such as fuel wood or construction (Doyo 2015).

It is interesting to reiterate that for the Oromos, Waaqa (God) is the guardian of all things, and nobody is free to destroy natural things to satisfy his/her needs (Kelbessa 2002). Although this has been significantly eroded in the past four decades, such traditional governance and belief systems of the Oromos expressed through cultural values and norms have fostered a responsible attitude of the people towards nature, plants and animals.

It is also worth noting that the thousands of church forests across Northern Ethiopian highlands can be understood not only as precious islands of biodiversity and culture in need of preservation, but also as invaluable experiments in "what works" for protected areas management in Ethiopia across a variety of social, economic and environmental contexts (Reynolds et al. 2015). As further contended by these authors:

...curbing the global biodiversity crisis will require learning from any and all successful conservation institutions, including traditional and religious institutions. Sacred sites in the midst of human-dominated agro-ecosystems in low-income countries can have a particularly profound impact on conservation outcomes, as much

of the remaining land in biodiversity-rich areas is used by rural farmers and pastoralists (Reynolds et al. 2015:3).

2.11 Challenges to Conservation of SNS and Traditional Governance Systems in Ethiopia

The traditional governance and belief systems of local and indigenous communities in Ethiopia are by no means immune to the internal and external factors that are negatively affecting the continued existence of such traditional practices around the world. While internal factors such as population pressure that has up surged the demand for agricultural and grazing lands cannot be denied (Reynolds et al. 2015), external threats such as modernization, globalization and acculturation are considered the main threats to the conservation of traditional governance and belief systems in Ethiopia (Tolla & Traynor 2015). According to Tolla and Traynor (2015), the lack of formal recognition or protection for SNS within Ethiopian law is another external political factor contributing to the erosion of traditional governance and belief systems. Regardless of the contribution they make to conservation of biodiversity, ecosystem services provision, and the nation's cultural heritages, SNS are not formally recognized in the Ethiopian policy and legal frameworks. The traditional knowledge system that is related to SNS and the customs and traditions that maintain them are often regarded as backward (Tolla & Traynor 2015).

Tolla and Traynor (2015) further contend that political developments in Ethiopia in the past three decades had a major impact on conservation of SNS and related traditional governance system. One of the negative impacts is the resettlement program that was conducted by the military Dergue regime in the 1970's. According to Tolla and Traynor (2015) the resettlement program had the effect of moving the communities away from the SNS they had close connection with and conserved for time immemorial and leaving the SNS devoid of the spiritual power and respect they were accorded by the community. This had the negative effect of disconnecting the communities from their SNS thereby depriving them of the spiritual, social, cultural and ecological benefits they used to get from them (Tolla & Traynor 2015).

In the Gamo highlands, where the community has been relatively more resilient to the internal and external influences and the traditional governance and belief systems are considered to be still stronger, the complex social, economic and cultural changes currently taking place in the area are being serious threat to the conservation of SNS (Desisa & Healey 2012). Regarding the threats to SNS in Gamo and the consequences, an elder from the area quoted in Desisa & Healey (2012:45) says:

Today some people, especially the youth are disregarding sacred places. As a result wrath came to our village as well as to the region as a whole. Consequently, there was no harvest, the harvest had no value. Milking cows have died and the ones alive are not giving milk as much as before when the sacred groves were respected by the whole village all together.

Table 1. Threats to SNS in Ethiopia and implications for biodiversity conservation

Source: Adopted from Reynoldset al. (2015)

Threats to sacred natural sites	Description and implications for
	biodiversity conservation
Economic drivers of forest/SNS	Ancient church forests face threats from
degradation	livestock grazing, but also from
	communities converting bio-diverse forest
	patches to more economically rewarding
	Eucalyptus plantations.
Environmental drivers of forest/SNS	Low species population densities and low
degradation	natural regeneration, combined with climate
	change and associated threshold effects,
	threaten the long-term viability of
	indigenous groves.
Cultural/social shifts and changing	Institutions that have protected forests for
demographics challenging SNS	centuries may be changing, shifting
	community norms away from conservation.
	Some church communities now prioritize
	economic rewards from planting exotic tree
	crops over traditional values from
	indigenous trees.

According to Reynolds et al. (2015), in spite of their enormous ecological, cultural and spiritual benefits, the church forests in Northern Ethiopia are being challenged by a combination of economic, environmental and cultural factors, just like many other sacred natural sites in Ethiopia and elsewhere. These authors argue that shifts in economic incentives and cultural norms have compelled the communities and custodians of the church forests to cut the indigenous natural trees in the church forests and plant cash crop trees such as Eucalyptus tree rather than maintaining the traditional nurturing of indigenous seedlings. This trend has led to leaving the church forests even more impoverished in terms of species availability and diversity (Reynolds et al. 2015) and because of the differences in species performance both the composition and structure of these forests is under transition (Bongers et al. 2006).

2.12 Survey of Ethiopian Laws on SNS and Related Traditional Ecological Governance Systems

In Ethiopia there is no legal or policy framework that deals with SNS and related traditional ecological governance systems as separate subjects of law. There are, however, provisions scattered in various laws and can be broadly interpreted so as SNS could be included within

that framework. While such laws are found at both federal and regional levels, the ones the researcher will try to examine in this study are the federal laws and that of Oromia National Regional State. That is so because the districts selected for this study are found in Oromia National Regional State and trying to explore the laws of all the nine regional states in the country would expand the scope of the study. As such, the relevant federal and Oromia National Regional State laws and policies are briefly explored in the following sub sections.

2.12.1. Federal laws and policies

I. The 1995 FDRE Constitution

Constitutions are general legal instruments and are not expected to give detailed rules on specific issues. However, constitutional provisions can be applied to specific issues in two ways. One is by enacting a specific law that follows the general constitutional provision and provides detailed implementation provisions for that specific issue and the other option, that can be applied in the absence of such law dealing with the specific issue, is to interpret a relevant constitutional provision widely so as it can be applied to the specific issue. Since there is no provision in the constitution that deals specifically with SNS and related traditional ecological governance systems, one has to look for relevant provisions that can be broadly interpreted and applied to SNS and related traditional ecological governance systems.

When seen from the approach of interpretation, the first provision in the Ethiopian constitution that can be broadly interpreted to deal with SNS is article 39 (2). This article states that 'Every nation, nationality and people in Ethiopia has the right to speak, to write and to develop its own language; to express, to develop and to promote its culture and to preserve its history (FDRE Constitution 1995)'. SNS are considered in a significant body of literatures as important human heritages built from time immemorial and through which the history, culture, spirituality and connection with environment of origin of a local and traditional communities are manifested (Verschuuren et al. 2010, Doffana 2017, Emma 2014). As such, since SNS are cultural and spiritual sites that can also be considered as manifestations of the history of communities this constitutional provision can be broadly interpreted as applicable to SNS. Hence the concerned people have the right to claim maintenance of SNS and related governance systems as their cultural and historical rights. Besides the Ethiopian constitution imposes on the state the duty to protect and preserve historical and cultural legacies of the people and the duty to support the growth and enrichment of cultures and traditions that are compatible with fundamental human rights under its Article 41 (9) and 91 (1) respectively. These duties of the state may then include enacting specific laws for the purpose of respecting and protecting these cultural rights of the people and facilitate conditions for the full enjoyment of the rights. Furthermore, article 9(4)

of the FDRE Constitution (1995) provides that 'all international agreements ratified by Ethiopia are an integral part of the law of the land'. Since Ethiopia is a signatory to the 1992 Convention on Biological Diversity (CBD), the convention can be sited as the law of the country to deal with issues. One of the calls to state parties provided under article 10 (c) of the CBD (1992) is 'to protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use practices'. It is also worth mentioning here the resolution passed by the African Commission (ACHPR/Res. 372 (LX) 2017) on the protection of SNS and territories. The resolution 'calls on states parties to recognise sacred natural sites and territories, and their customary governance systems, as contributing to the protection of human and peoples' rights' and also reminds state parties to 'uphold their obligations and commitments under regional and international laws on sacred natural sites and territories and their customary governance systems, and the rights of custodian communities.' Based on these, it seems legitimate to claim the Ethiopian government should protect and support conservation of SNS and revival of related traditional ecological governance systems as SNS are customary use of biological resources governed by traditional practices that strongly support conservation of nature.

II. Proclamation No. 1065/2018

This is the Federal Forest Development, Conservation and Utilization Proclamation. This law also does not specifically mention SNS and related traditional ecological governance systems. Yet there are is a provision in this law that can be broadly interpreted to be applied to the issue of SNS and related governance systems.

This FDRE forest proclamation recognizes community forests as one type of forest ownership under article 4 (2). It is further provided under article 7:1 (b) of this proclamation that community forest developers can get a certificate of title deed for the forest they are developing. It is also provided under sub article (g) of same article that the community can share any benefits generated from the forest as per their own by-laws. Since the primary purposes for which local and indigenous communities conserve SNS are their spiritual and cultural significances that can also reflect the history of the community and their relationship with their natural environment (Verschuuren et al. 2010, Oviedo et al. 2005, Yaw 2011), we can say that this federal forest law recognizes conservation of SNS and related traditional governance systems for their spiritual and cultural purposes and in accordance with the preferred governance systems of the community.

III. Proclamation No. 839/2014

This is a federal proclamation enacted with the purpose of classifying cultural heritages in the country in to national and regional cultural heritages so as to facilitate their efficient

administration. Cultural heritage is defined by Rouhi (2017) as monuments, architectural works, traditions or living expressions performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe which are accorded special historical value and passed from generation to generation.

Although this law also does not mention SNS as one of the cultural heritages of communities, it has incorporated definitions that can be broadly interpreted to apply to SNS and related traditional practices. Article 2 (2) of the FDRE Proclamation No. 839 (2014) defines Oral Tradition as 'Traditional knowledge such as folklore, narration or song that is transmitted from individuals to individuals and from generations to generations by means of oral communication and manifest the culture, history, ideology, philosophy and identity of the community who created it. Since rituals and other traditional practices conducted in SNS can fit in to this definition of oral tradition, one can assert that SNS and related oral traditions are recognized by the law.

Another definition in the same law that can be attributed to SNS and related traditional practices is the definition about knowledge about nature and its practices set under article 2(5) of the proclamation. This definition state that 'Knowledge about nature and its practices means an indigenous knowledge and skill created shared and transmitted from generation to generations as the result of the interactions between humans and nature.' Since SNS are manifestations of the inextricable interaction between humans and their natural environment (Doffana 2017, Aniah et al. 2014) as well as institutions where traditional knowledge is embodied and transferred to generations through the oral traditions and cultural practices relating to SNS (Mawere 2013, Negara & Mangizvo 2013), this definition in the law can also be sited as referring to SNS and related traditional practices.

Regarding natural and cultural heritages, the FDRE Environmental Policy also state that although the country has natural and cultural heritages that permeate every facet of daily life of the people and provide powerful and socially cohesive force in the national consciousness, much of these heritages are under threat through neglect, decay, removal or destruction as well as through the less visible and tangible impacts of changing socio-cultural values, foreign ideas and imported technologies (FDRE Environmental Policy 1997). Although the policy has not specifically mentioned SNS as one of the natural cultural heritages, one can assert that SNS can also be seen through the lens of such policy statements.

2.12.2. Regional laws

The most relevant regional law of Oromia National Regional State that can be broadly interpreted to be applicable to SNS and related ecological governance systems is Proclamation No. 72/2003 of Oromia National Regional State. This is a regional law enacted for sustainable development, conservation and utilization of forest resources in the region. While there are different categories of forest ownerships recognized by this law, one of them is communal forest ownership. According to articles 2(6) and 6(1) of this proclamation, communal forest is a state forest that user right and management responsibility is transferred to organized local community or forest developed by organized community on communal lands. Communal forests can also be established when the government believes that certain forests, especially those which are outside designated state forests, can better be administered if transferred to and managed by community. Since majority of the SNS in the region are found outside of forests designated as state forest and are found on communal lands, though most of them are deforested and degraded, it is most likely that SNS can be labeled under the communal forest category recognized in the regional law.

Another regional law of Oromia regional state that can be sited in relation to SNS is Proclamation No. 163/2011enacted to reorganize the executive organs in the region and redefine their powers and duties. Article 28 (15) of this proclamation gives the mandate to demarcate, provide legal recognition and protection to attractive historical, cultural, religious places and natural sites in the region to the Culture and Tourism Bureau of the region. Since SNS can be regarded as historical and cultural sites found in almost all areas of the region, it seems that they are among the historical, cultural and natural sites that the bureau is mandated to demarcate and accord legal recognition and protection.

2.13. Conclusion

Sacred Natural Sites are generally understood as the oldest forms of traditional conservation approaches that manifest the complex and inalienable link between human cultural systems and their natural environment. While local and indigenous communities around the world had cultural values, traditional practices and belief systems that guide the relationship among members of the community as well as the way members of the community interact with their natural environment SNS are part of the broader set of the cultural values, traditional governance and belief systems that different local and indigenous communities attach to places. Such cultural values and traditional practice and belief systems oftentimes result in reverence for and close connection with the natural world in general and places designated as sacred in particular.

Historically, Sacred Natural Sites have existed as natural places having special cultural and spiritual significance since the time when humans were at primitive stage of development and they are embedded in the founding histories of many local and indigenous communities around the world. While the natural places that are designated as Sacred and so respected and protected as a special place may vary depending on the socio-ecological landscape of the particular area, the underlying belief that the natural world has both physical and spiritual manifestations to which humans should relate themselves accordingly is a common denominator shared by all. The intangible or spiritual understanding of nature, as opposed to the modern anthropocentric approach, is the central aspect of traditional ecological governance systems that shape the way people relate with each other as well as other forms of life.

Local and indigenous communities protect and conserve SNS mainly for their spiritual and cultural purposes. They consider SNS as places where the ancestral spirits reside and so endowed with special spiritual powers. For this reason, they are regarded as places set aside to conduct the traditional rituals, prayers and other ceremonies relating to the traditional belief system. As the seasonal rituals held in SNS also provide opportunities for community gatherings and practice their cultural foods, songs, costumes and dances, they also bear cultural significance to the communities who regard them as sacred.

In addition to their spiritual and cultural values, SNS also serve as places where harmony and peaceful co-existence among community members are forged. That is so because in many traditional communities where traditional governance and belief systems form part of their way of life, SNS are the centres of traditional institutions that are important for resolving disputes, enforcing widely agreed standards of behaviour, and uniting people within bonds of community solidarity and mutual assistance. As such, they embody important forms of social capital, representing forums wherein local communities can unite together and act collectively in the management of natural resources. This in turn, is believed to lay the foundation for peaceful and stable communities that generate sustainable livelihood from a healthy ecosystem.

Furthermore, as part of the natural environment having special spiritual and cultural values, SNS are accorded reverence and special protection through norms, taboos, totems and closed seasons forming the unwritten customary laws for governance of nature. As a result of the access restrictions imposed through the customary laws, many SNS around the world have served as reservoirs of important biodiversity and ecosystem areas including preservation of rare plant and animal species. As such, SNS can be considered as manifestations of the close

interaction of traditional communities with their natural environment that demonstrate their sense of ecology.

Hence, SNS can be seen as part of the wider traditional ecological governance systems having a significant contribution in the making of socio-cultural, ecological and economic capitals that are considered to be the cornerstones in the construction of happy and resilient communities.

Despite their contribution to fostering harmonious co-existence between communities and their natural environment thereby contributing to enhancement of community wellbeing and resilience by way of forging the foundation for the conception and development of socio-cultural, ecological and economic capitals, recent developments are showing that SNS and related traditional ecological governance systems are being undermined by the conventional conservation approaches as well as mainstream religions. In terms of the conventional conservation approaches, most developing states including African nations are currently striving to institute Western-style conservation programs that do not embody the interests, aspirations and worldviews of local and indigenous communities while mainstream religions are denouncing SNS and related traditional governance and belief systems as fetishism and demonic. As a result, SNS and related traditional ecological governance and belief systems are being eroded and diminishing. The erosion of SNS and related traditional ecological governance and belief systems is not only compromising the interests of millions of local and indigenous communities around the world but it is also being a threat to conservation of biodiversity and healthy ecosystems.

The shift in the global trend of nature conservation that has resulted in disregard for the interest and aspirations of local and indigenous communities as well as conservation of life support systems has therefore necessitated rethinking and redefining the nature of governance and governance of nature. There is a general consensus among scholars engaged in the field of nature conservation and environmental practitioners that environmental governance should be shifted from the current state centred conventional approach to community centred governance that allows local and indigenous communities to have full control over their land and natural environment and fully apply their traditional ecological governance and belief systems.

Chapter 3 – Conceptual Framework

3.1 Introduction

This chapter deals with the exploration of the concepts imbedded in the ideas and expressions such as culture, biodiversity, traditional ecological knowledge (TEK) and traditional ecological governance systems (TEGS) as well as the idea of commons and communing that is recently evolving as the other viable way of resource governance and the interconnection between and among these ideas and expressions.

While the idea of culture is about the lifestyles, the knowledge, practices, language, beliefs, worldviews, values, mode of interaction with each other and with the natural environment and social institutions for regulating these, biodiversity deals with the variation among species, genes and ecosystems. Hence the term bio-cultural diversity denotes the link and interconnection between cultural and biological diversity (Cocks 2006). The interconnection between the two is so important because the way people perceive their natural environment and their modes of interaction with it (cultural values) is largely shaped by the kind and diversity of biological resources and ecosystems available. Such cultural values and practices that dictate peoples' mode of interaction with nature in turn have the effect of shaping the availability and diversity of biological resources (Maffy 2010). As the two have co-evolved and interdependent, there is an inextricable link between them whereby a shift in one often leads to a change in the other (Gandile et al. 2015). As contended by these authors, when this inextricable link between people and their natural environment begins to be eroded or break resulting in a shift of their place or way of life, then the peoples' values, behaviours and knowledge linked to the place lose significance.

Such interconnection and interaction between people and their natural environment leads to the development of traditional ecological knowledge (TEK) that comes as a result of accumulation of experiences of and insights into how the biological resources should be managed and utilized for various purposes. Such knowledge would then be maintained by being passed on from generation to generation, through language as well as practical teachings.

Then the idea of traditional ecological governance encompasses formation of traditional governance systems and institutions that would manage the interaction between people and nature and related knowledge and belief systems. Traditional ecological governance systems guide the behaviour of people through unwritten rules and regulations enshrined in to the traditional belief systems expressed in the forms of taboos, norms and totems (Mensah 2007).

Traditional ecological governance system can be viewed as the oldest form of governing shared resources for the common benefit and wellbeing of members constituting the community that relates itself with such resources (Bauwens & Ramos 2018)

3.2. The Concepts of Bio-cultural diversity and Traditional Ecological Knowledge (TEK) as embedded in Traditional Ecological Governance and Belief Systems

Bio-cultural diversity denotes the connection between biological diversity and human cultural diversity. Biological diversity or biodiversity in its short form can simply be understood as the variety and abundance of life on earth. But we need to have a more elaborative definition of the term in order to understand its conceptual meaning. Biodiversity is defined in Maffi (2014) as the total variety of living organisms found in a given ecosystem, biome, or the whole biosphere. Although different scholars have defined biodiversity in various ways, the most widely accepted technical definition of the term is the one stated in the Convention on Biological Diversity (CBD) in 1992 in Rio. It is stated as:

... the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems. (CBD: 6)

Culture is the other constituting component in the idea of bio-cultural diversity. It can be defined as the system of shared symbols, behaviours, beliefs, world views, values, norms, artefacts and institutions that members of a society use to interact with their natural environment and with each other, and that are transmitted from generation to generation through learning (Pretty 2009:101). Embarking on this definition of culture, cultural diversity can then be understood as the variety of worldviews, lifestyles, knowledge and value systems, practices and forms of expression reflected in the various cultures of different human societies (Maffi 2014). According to Maffi, some have even stated that the total diversity of the world's cultures can form an "ethno-sphere": a global web of human cultures.

Biodiversity is the source of everything that humans need for sustenance: air, water, food, medicine, clothing, shelter, and all other material needs, as well as of physical, psychological, and spiritual wellbeing (Maffi 2014). As such, there has been a close and uninterrupted interaction between humans and their natural environment since the dawn of human history. The way people interact with their natural environment, however, differs depending up on their cultures and experience, and in doing so develop different relations with their local environment. The natural environment provides a setting for processes leading to cultural practices, activities and belief systems and subsequently a diverse cultural archive of human endeavours are formed in a given landscape. In each place, the local environment provides

people with what they need for living and in turn, people develop different knowledge, values and practices embedded in their cultures and languages so as to sustain their natural environment (Maffi 2014). As a result of these interconnections and interactions, a feedback system exists whereby a shift in one of the two components often leads to a change in the other as well (Pretty 2009).

The coinage of the term 'bio-cultural diversity' is based on the increased understanding and appreciation of such intricate relationship between biodiversity and cultural diversity. Such understanding and development of the idea of bio-cultural diversity seems to be a relatively recent development. According to Maffi (2010) the idea of an inextricable connection between biological and cultural diversity was expressed for the first time in the 1988 declaration of Belém of the International Society of Ethno-biology. Maffi (2010) further elaborates that the idea of bio-cultural diversity is also based on the conception of the idea of biodiversity in 1980 and emergence of related concepts such as ecosystems, history of the environment and its conservation, traditional ecological governance systems and related knowledge.

The concept of bio-cultural diversity describes the total variety exhibited by the world's natural and cultural systems (IUCN 2008). As stated in this literature by IUCN, bio-cultural diversity includes all the levels of biodiversity, from species to ecosystems, and all the manifestations of cultural diversity, from ideas to cultures as well as linguistic diversity and the traditional ecological knowledge embedded in the various languages. By way of reinforcing the foregoing explanation, Vierikko, Elands, Szaraz and Niemela (2015) contend that the concept of bio-cultural diversity builds upon the idea that nature is not just something that exists 'out there', but is socially constructed. This contrasts with the modernist idea of services as a bridge between humans and nature. Bio-cultural diversity gives expression to the idea that biological diversity and cultural diversity are intertwined; they are inseparable, imply each other and are inextricably linked. Such an explanation seems to imply that the idea of bio-cultural diversity mainly emanates from recognition of the connection between biodiversity and the cultural diversity of local and indigenous communities. The recognition of close links between the cultural practices and traditional governance systems of local and indigenous communities and biodiversity is seen as crucial because it is believed that the survival of biological diversity is inherently linked to the sustenance of such traditional ecological governance systems and cultural practices and the very same processes of global socioeconomic development that destroy biodiversity is also a threat to the culture of local and indigenous communities (Cocks 2006).

According to Pretty (2009) there are four bridges that link the cultural values and traditional practices of local and indigenous people with their natural environment. These are beliefs and worldviews, livelihoods and practices, knowledge base and language and norms and institutions. Human cultures are built around and attribute meaning to natural systems and processes in various ways, including cosmologies, worldviews, and religious and spiritual beliefs. These understandings fundamentally govern both individual and collective actions towards nature, connecting knowledge and understandings with how individuals or a group should interact with their natural environment for their basic needs (Million 2012).

Pretty (2009) emphasize that such understanding of the environment can not only give rise to sustainable management practices, but also to in depth knowledge about species requirements, ecosystem dynamics, sustainable harvesting levels and ecological interactions. Pretty further elaborate those languages are tools used to encode collective knowledge bases in a way that is often non-translatable but links its speakers to their landscape inextricably. That is what has commonly been termed as traditional ecological knowledge (TEK) that has shaped ways of life, worldviews, and sense of place, serving material as well as psychological and spiritual needs of local and indigenous communities. Such TEK is accumulated and transferred through cultural modes of transmission, such as stories and narratives, practical experiences and observation (Million 2012). According to Million (2012) such knowledge of local and indigenous communities encoded in their languages comprises a compilation of observations and understandings contained within social memory that make sense of the way the world behave. Regarding the significance of TEK in shaping bio-cultural diversity, Zent (2009) in Million (2012:34) says:

Local and traditional ecological knowledge provides a key window for viewing at close range how the natural environment shapes, penetrates or even permeates human cultural expression and vice versa. Such knowledge is often intimately tied, on one hand, to local language, social organisation, economic goals, religious beliefs, aesthetics, ritual observances and material culture, and on the other hand, to re-source appropriation and management practices, environmental impacts, variety and distribution of natural species, the structure and functioning of biotic communities and long-term landscape modifications.

As such, bio-cultural diversity comprises the diversity of life in all of its manifestations: biological, cultural, and linguistic, manifested in TEK, which are interrelated, and possibly coevolved, within a complex socio-ecological adaptive system (Maffi 2010). As further

contended by Maffi, the definition of bio-cultural diversity can be better explained through the following key components:

- The diversity of life is made up not only of the diversity of plants and animal species, habitats, and ecosystems found on the planet, but also of the diversity of human cultures and languages.
- These diversities do not exist in separate and parallel realms, but rather they interact with and affect one another in complex ways, and
- The links among these diversities have developed over time through mutual adaptation between humans and the environment at the local level, possibly of a co-evolutionary nature. (Maffi 20110:269)

As illustrated in the figure below interdependence of language/TEK, culture, and the biodiversity translates into strong correlations between linguistic diversity, cultural diversity and biodiversity at both local and global levels.

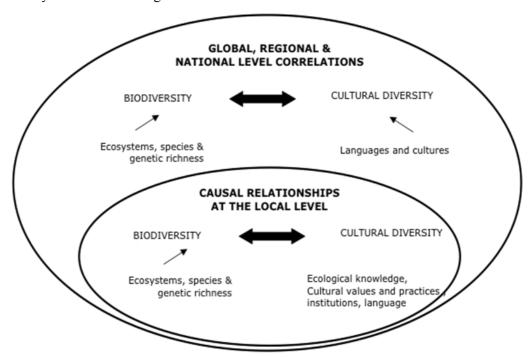


Figure 3: Relationship between global/ regional/ national correlations of cultural and biological diversity and causal relationships between cultures and biodiversity at the local level.

(Source: original work by Ellen Woodley for Terralingua, modified from Maffi, 2007)

As contended by Maffi (2010) while the correlations in the distribution of biological and linguistic/cultural diversity show clear patterns at the national and global levels, analysis of

their correlation at local level reveals that it is more causal and shows variation from place to place and sometimes presents a mixed picture in terms of the patterning of these diversities.

The links between cultural and biological diversity at local, national, regional and global levels are also reflected in physical convergence. Many of the world's biodiversity hot spot areas are also known for their ethnic diversity and corresponding cultural and linguistic diversity (Pretty 2009) and this is evidenced by 'Pioneering global cross-mappings of the distributions of biodiversity and linguistic diversity (taken as a proxy for cultural diversity as a whole) which provided independent support for this conclusion (Maffi 2010: 268)'. Biocultural diversity at the local level can also be understood as '... the causal relationship between ecosystem, species and genetics on the one hand and the richness and ecological knowledge, cultural values and practices, institutions, and language on the other hand (Belay 2012:43).' Further emphasizing the assertion of causal relationship among the elements of bio-cultural diversity at local level, Vierikko et al. (2015) also state that, in many places inhabited by local and indigenous communities, a positive correlation between the diversity of flora and fauna and the number of cultural and linguistic groups has been observed. Several studies have also identified common threats to both biodiversity and cultural diversity.

For these reasons, greater attention is now being paid to the relationship between biodiversity and human diversity largely because many of the planet's areas of highest biological diversity are inhabited by local and indigenous communities, providing what the Declaration of Belém (1999) calls an 'inextricable link' between biological and cultural diversity (Cocks 2006).

It is worth concluding this discussion on the significance of bio-cultural diversity and TEK in the context of traditional governance and belief systems by a saying of Kenneth Wilson in IUCN (2008:6)

'It is very unlikely that we will manage to maintain the biological diversity of the planet if we destroy and do not respect the cultural diversity, the traditional knowledge, the linguistic diversity. We are going to need all of these diversities to stick together if we are to maintain the richness of the world.'

3.3. Conceptualizing governance and governance of nature

3.3.1. On the idea of governance

Stating it broadly, governance is all about who decides on a given issue, how the decision is made and the source of authority for making the decision. According to Swiderska et al. (n.d.), governance deals with the interactions among institutional structures, processes and

traditions that determine how power is exercised, how decisions are made on issues of public concern, and how communities, citizens or other stakeholders express their say on a matter to be decided and the extent to which that is taken in to consideration. These authors further contend that such process of decision-making in governance structures may encompass policies, institutions, processes and power relations. Decisions are often influenced by those institutions holding the power (political, financial or socio-cultural) as well as the capacity of other stakeholders to participate in decision-making processes that affect them (Swiderska et al. n.d.). In this regard, Feyerabend and Hill (2015) emphasize that governance is also about the harmony, integrity and robustness that exists within social units, and the capacity of these to interact, connect and fit with other social units and governing authorities.

Institutions holding decision making power can generally be categorized as formal or informal (Koku & Gustafsson 2003). Formal institutions are often political structures comprising policies, laws and regulations backed up and enforced through formally constructed state structures, while informal institutions are often social organs consisting of collective management of the land, natural resources and the social order through commonly agreed up on and shared sanctions, taboos, traditions and codes of conduct that are often enacted and administered through traditional informal institutions (Mowo et al. 2013). According to these authors, informal institutions tend to solicit more recognition and support at the grassroots level and as such likely to prevail over the formal at such lower and traditional levels. Such informal local institutions usually include councils of elders, traditional midwives, rainmakers, as well as some spiritually significant parts of the landscape, such as sacred forests and trees (Mowo et al. 2013).

Whereas governance can be applied to manage issues in the political, social, cultural, economic and ecological sectors, governance in relation to environment can be understood as the whole range of rules, practices and institutions related to the management of the environment in its different forms, be it conservation, protection or exploitation of natural resources (Fontaine 2007). As elaborated by Ojeda (2005), environmental governance constitutes all the decision making processes both in the formal and informal institutions, that encompass the standards, values, behaviour and organizing mechanisms used by citizens, organizations and social movements as well as the different interest groups as a basis for linking up their interests, defending their differences and exercising their rights and obligations in terms of accessing and using natural resources. In either case, however, there seems a general consensus among scholars and environmental practitioners that effective environmental governance requires different forms of partnership and collaboration between

and among the various parties having stake in the land and natural resources (Swiderska et al. n.d.).

In this regard, Damtie and Kebede (2012) emphasize that, whether it is in the formal or informal setting, effective environmental governance should be underpinned by the following key principles:

- Incorporation of environment concerns in all levels of decision-making and actions.
- Conceptualization of various social groups and communities, economic, social, cultural and political life as a subset of the environment.
- Emphasizing the connection of people to the ecosystems in which they live.
- Promotion of circular systems such as non-polluting and zero waste economic activities.

Embarking on the foregoing key environmental governance principles, these days, it seems there is a growing interest in shifting the dominant formal environmental governance approach from government to collective governance (Damtie & Kebede 2012). These authors contend that the interest in the shift reflects the fact that centralized environmental governance under monopoly of the state no longer is, and in many cases cannot be, the sole source and effective way of environmental decision making authority.

The growing importance of non-state actors in environmental governance reflects considerations including limitations on the capacity of government agencies to effectively conserve biodiversity and halt ecosystem degradation. This should also emanate from acknowledgement of the increasing complexity of environmental management, and the need for consideration of more minds and different kinds of knowledge, interests and nature related world views. In other words, a shift toward an efficient and effective environmental governance requires a decentralized, more transparent and inclusive forms of governance that accords due consideration to ensuring secure tenure rights for local and indigenous communities (Swiderska et al. n.d.). Hence, horizontal and vertical linkages among the various actors at different scales and levels are essential for effective and sustainable environmental governance (Damtie & Kebede 2012).

3.3.2. Conceptualizing governance of nature in the context of Traditional Ecological Governance Systems and Conventional Conservation Approaches

Governance of nature and the immense resources it provides to sustain life, including that of humans, can generally be categorized as the formal and informal governance systems. The formal governance system is the modernized system based on the western approach of

enforcing, through centralized state structures, of mostly codified policies, rules, regulations, declarations, conventions and protocols that could be applied from local to international levels while the informal governance system is the traditional one based on the various cultural values, traditional practices, belief systems and ecological knowledge of local and indigenous communities (Negi 2010).

Indigenous communities are defined in Cocks (2006:5) as:

...those who have historical continuity with pre-invasion and pre-colonial societies that have developed on their own territories, and who consider themselves distinct from other sectors of society now prevailing in those territories, or part of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems.

In the same research document Cocks (2006) has also referred to local communities as traditional communities representing a socially and geographically defined group of people, living close to natural resources and protected areas. According to Cocks, local communities may not necessarily be homogeneous in terms of ethnicity, but they practice same customary rights of use, traditional practices, distinctive ecological knowledge and skills and are directly dependent on the natural resources as individuals or groups of individuals.

The history of traditional ecological governance systems practiced by local and indigenous communities could be traced back to when humans started to interact with their natural environment as hunter gatherers and they represent established local systems of natural resource management as derived from the socio-cultural and historical processes of a given society (Negi 2010). They are governance systems that have originated from the cultural values, belief systems and TEK of the communities and have firm roots in the past and are diverse depending on the type of local natural environment (Mensah 2007).

While traditional ecological governance systems are enforced through community based informal institutions, these institutions often consist of customary laws in the form of norms, taboos, totems and codes of conduct that define practices, assign roles and guide interactions with the natural environment (Kajembe et al. 2003). In relation to this, Mawere (2013) emphasize that the unwritten customary laws establish a mutual understanding among community members regarding how, when, by what means and by whom resources should be

harvested and used. Although the customary laws have no backing of the conventional laws, the beliefs and senses of trust have been strong enough to make people abide by them. In areas traditional governance systems operate, traditional institutions managed by elders, chiefs, custodians and other forms of traditional leadership play the key role of ensuring customary laws regulating the governance system are observed (Diauwo & Issifu 2015). According to Mawere (2013), in the context of local and indigenous communities, natural environment is considered as an endowment having not only material use value but also spiritual and cultural values, and as such was sustainably managed through the wise application of traditional ecological knowledge. According to Mawere (2013) such traditional governance strategies have proved that local and indigenous communities have a strong sense of ownership with the capacity and power required to effectively conserve, manage and administer their own environment and all the resources existed therein.

Conventional conservation approaches, on the other hand, are based on the anthropocentric view that all the other than humans in the natural environment are just resources to be exploited and used for fulfilment of human needs (Diauwo & Issifu 2015). Maffi also builds on the same argument by stating that, for the conventional conservation approach based on the western views, the purpose of conservation of nature is to support economic development and it should be guided by the demands in the economic sector. Because of the ever increasing demand for economic development and material wealth arising from the dominant western views, the industrial societies are in a continuous urge to expand the range of ecosystems and natural resources to be exploited for the economic development, and if supplies from one source are exhausted or destroyed, they turn to another, and consequently are less likely to feel the need to protect any one resource or ecosystem (Cocks 2006). As contested by Swilling and Annecke (2012), unlimited exploitation of nature to satisfy human needs is one of the characteristic features of modernist society. According to Swilling and Annecke, for the modernist society, nature and ecosystems are regarded as sources of unlimited resources, which will always be extractible by modern scientific technologies.

Such notion of exploiting nature, mostly beyond its regenerative capacity, which began with the western scientific revolution in the seventeenth century and the subsequent enlightenment period in the eighteenth century continued till the 1970s when scholars and environmental practitioners concerned with the alarming loss of biodiversity and ecosystem degradation started to advocate for reconsideration of the trend for unlimited material economic growth and payment of due attention for conservation of nature (Swilling & Annecke 2012). The 1987 World Commission on Environment and Development, which is commonly known as the Brundtland Commission (Swilling & Annecke 2012) was actually a development of the

movement that marked the beginning of the proliferation of agreements, declarations, conventions and protocols both at regional and international levels as well as subsequent environmental policies, laws and regulations at national levels.

These codifications at various levels constitute the conventional conservation approaches founded on the dominant western modernist worldview based on ecological modernization. As contested by Swilling and Annecke (2012), ecological modernization is an approach to conservation of nature, which believes that it is possible to lessen the pressure on natural resources by attaching monetary value to ecosystem services as opposed to the non-material values that traditional communities attach to nature (Infield & Mugisha 2013).

In a similar trend, most of the conventional approaches to governance of nature fail to consider the interests, norms, cultural values and aspirations of local and indigenous communities in to consideration (Swiderska et al. n.d.). As contended by these authors, they rather tend to consider the role of traditional communities as backward and inefficient. As such, the actual and potential role of communities in conservation has received little or no support, despite their time tested TEK and experiences, innovations and practices relating to conservation of biodiversity. The intentionally designed dominance of the conventional conservation approach has resulted in the marginalization and relegation of the traditional ecological governance systems of local and indigenous communities (Infield & Mugisha 2013). The erosion and breakdown of such informal, self-initiated governance systems that have evolved and developed through time is threatening biodiversity, species and habitats that were once afforded protection by traditions (Negara & Mangizvo 2013).

A significant body of literature regarding the role of the dominant formal and the informal approaches to governance of nature have, however, showed that the poor natural resource management that has resulted in the alarming ecosystem degradation in the past half a century is attributed to a large extent to intrusive state policies which are alleged to have interfered too much with local requirements and have undermined the traditional governance systems (MEA 2005, Kajembe et al. 2003). As contended by Premauer (2013:30):

'...the likelihood for conservation is increased if local people have close personal relationships with the land and one another, maintain local traditional ecological knowledge that informs their land use and is attuned to the natural dynamics of the local ecosystems as a result of long term interaction, and they possess effective local institutions for regulating access to, use and control of resources.

3.4. Viewing the emerging idea of Commons and Shared Resource Governance in Light of Traditional Ecological Governance Systems

The idea of commons and communing is attributable to the management of resources commonly shared or is intended to be shared by a group of people, society or communities. Commons are generally defined by Bauwens and Ramos (2018:6) as 'shared resources, governed by their users and stakeholders, according to their own rules and norms'. According to these authors, the idea of commons is a third way of property ownership and governance that does not belong to the commonly known private or public property and it emanates from a critique relating to the neo-liberal capitalist ideology that promotes private accumulation of material wealth on the one side and excessively state controlled development on the other side. This conception of property ownership and management seems to conform to the idea of new resource governance arrangements initiated by group of people who promote non-state governance and are committed to shape the present and future status of such resources by virtue of their location and shared identity or worldviews that is discussed by Swiderska et al. (n.d.).

In a context where resource is commonly shared and managed by a group of people, the control, management, sharing and utilization of such resource is determined by commonly agreed and shared terms and conditions (Jopela et al. 2016). As such, communing requires a conducive ground for the active involvement of all stakeholders in any decision relating to and affecting their common resource (Bauwens & Ramos 2018). By way of giving emphasis to the same line of argument, Bollier and Helfrich (2015) also state that the knowledge about the commonly shared resource and active participation of the people in shaping their own way of living and meeting their needs is an indispensable condition for commons and communing.

In the context of local and indigenous communities, commons is an old and common practice of governing a commonly shared land and natural resource by communities who have shared identity and settled in the same area or mobile. According to Feyerabend and Hill (2015) governance of common property by local and indigenous communities is the oldest form of resource governance and is still prevalent in areas inhabited by traditional communities. In relation to traditional ecological governance by local and indigenous communities, the vast majority of natural environment apart from small plots of farmlands and the property on such lands is considered a common property (Mawere 2013) and is sustainably managed through collective environmental wisdom and ethics that are expressed through religious beliefs and a range of sacred and cultural practices as well as related traditional knowledge systems designed to govern such resources (Aniah et al. 2014). The collective environmental wisdom and related traditional ecological knowledge embedded in the cultural values, traditional

practices and belief systems of the local and indigenous communities are proved to be effective in terms of making sure that the utilization, conservation and management of common natural resources is done with respect and guided by conservation requirements of never using more than what is required (Jopela et al. 2016). This is what appears to be the original format of the commons that existed during both the pre agrarian and pre-capitalist class formations (Bauwens & Ramos 2018). As contended by these authors, this is the oldest form of natural resource commons that has been maintained by traditional communities around the world since time immemorial and that served to connect the people with their land and natural resources.

A closer look in to the way local and indigenous communities govern their commonly shared resources would reveal that the underlying principles in their ecological governance systems are enhancing the connection between people and their natural environment and fostering social relations among community members (Bollier & Helfrich 2015). According to these authors, this is done with the aim of promoting respect for ecological boundaries, social harmony and unity among community members and stable community which are all important components in the construction of resilient and happy communities. Bollier & Helfrich (2015) further contend that the traditional governance of common property that promotes connection between people and nature helps modern humanity to realize that humans are part of nature and because of that whatever would negatively affect nature would also affect them. By way of applying more emphasis to the same line of argument, Weber (2015) in Bollier & Helfrich (2015:447) state:

The concepts of the commons helps bridge – and transcend – the dualities that otherwise structure our self-awareness. It bridges the connection between the "natural" – the world of beings and species – and the "social" or "cultural" – the sphere of human-made symbolic systems, discourses and practices – by generating an interdependent, organic whole. For this reason, conceiving of "nature" as a commons of living entities is also a way of understanding ourselves anew. It helps us see and name our biological and our social aliveness as an indivisible whole conjoined to the rest of the world.

Hence it is likely that the emerging idea of commons and communing is based on the oldest but seriously eroded governance of common resource pools by local and indigenous communities. When viewed from the perspective of natural resource governance, it also seems that the emerging idea of commons and communing is intended to counter the dominant market oriented trend of resource enclosure for the benefit of few individuals at the cost of the

interest of many people including local and indigenous communities and the centralized top-down conservation approach that is proved to be inefficient (Emma 2014, Swiderska et al. n.d.). According to Kajembe et al. (2003) relevant research findings have confirmed that the currently prevailing poor natural resource management and the consequent environmental degradation are attributable to a large extent to intrusive state policies that have deprived local and indigenous communities of their right to have control over their land and natural resources and to practice their traditional governance systems. Many developing states, including Africans, are striving to abolish the traditional resource governance system based on collective management of shared resources and replace it with the imported western conservation approach (Infield & Mugisha 2013).

According to Premauer (2013) the imposition of state centred western conservation approach on resources that used to be controlled and managed by local and indigenous communities is based on the notion of the 'Tragedy of the Commons' asserted by Hardin in 1968. In the 'Tragedy of the Commons' Hardin contended that collective action for management of common-pool resources will invariably cause over exploitation and resource depletion because rational individuals will always prefer short-term individual gain over the collective good. In the words of Hardin, 'freedom in the commons brings ruin to all, unless the commons is privatized or put under strict outside control' (Hardin 1968:1244 in Premauer 2013:34). Thus, the widely applied solution since the second half of the 21st century has been to convert resources controlled and managed by local and indigenous communities into state managed public or private property (Premauer 2013).

In response to the 'Tragedy of the Commons' Premauer (2013) has, however, argued that what Hardin was actually describing was an open access regime, with no rules, rights and responsibilities that does not represent the widely known governance of shared resources by local and indigenous communities. According to Premauer (2013:35) 'practical evidences as well as research findings by commons scholars have clearly shown that local and indigenous communities are capable of properly managing their common resources through their customary laws applied in the form of norms, taboos, cultural values, closed seasons traditional practices and belief systems.' Any member who violates such self-imposed rules is subject to sanction as per the customary laws and regulations of the community. This is further stressed by Wilson (2015) in Bollier & Helfrich (2015:426) who contended that some selfish members of a community managing common resource might have an advantage over others for a while, but a community that has overcome the tragedy of the commons through strict application of its customary laws would have a decisive advantage in the long run.

Chapter 4 – Research Methodology, Methods and Process

4.1. Description of the Study Area

4.1.1. A Brief Description of Bale Zone

Bale zone is one of the 18 zones in Oromia National Regional State (ONRS). While the zone is found in the South-eastern part of the country, the centre of the zone, Robe town, is found at 430 kms from the capital Addis Ababa. The zone borders with Somalia National Regional State in East, East Hararghe in Northeast, West Hararghe and Arsi zone in North, West Arsis in west and Guji in South (Bale zone Finance and Economic Development Department (BZFEDD) 2007). While Bale zone is the second largest zone in Oromia National Regional State next to Borena zone with a total area of 63,555 km², it covers about 17.50 % of the total land area of the region (363,156 km²) and is sub-divided in to 18 districts and 3 urban administrations (BZFEDD 2007).

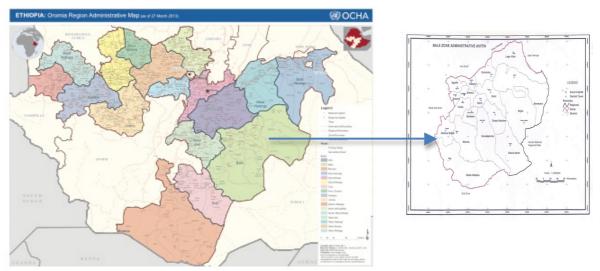


Figure 4: Bale Zone Administrative map Source: Office for the Coordination of Humanitarian Affairs (OCHA Ethiopia) website (https://www.unocha.org/ethiopia) and BZFEDD

According to the 2012 regional census, the population of Bale zone stands at 1,616,016 (Oromia Bureau of Finance and Economic Development 2012). Following the national trend of population distribution, smallholder traditional farmers constitute majority (87.5%) of the population. Regarding religious orientation and ethnic distribution, majority of the population in Bale zone, 78% and 70%, are Oromos following Muslim religion respectively (BZFEDD 2007).

Bale zone has a great relief or physiographic diversity. Highlands, lowlands and rugged areas, incised river valleys, deep gorges and flat-topped plateaus, characterize it. The zone has

altitudes ranging from about less than 300 meters above sea level (masl) (in the southeast direction) to a high ranges culminating into mountain Tulu Dimtu (4377 masl), which is the highest peak in the zone and second highest in the country next to Ras Dashen in Amhara region (BZFEDD 2007). Variation in the altitude and physical features of the zone has resulted in a diversified micro climatic condition, soil and vegetation. According to Tolla & Traynor (2015) Bale zone is one of the areas in Oromiya region as well as in Ethiopia endowed with varying physiographic landscape and bio-cultural diversity.

The Bale Mountains National Park (BMNP), which is considered to be the biggest and oldest parks in Ethiopia, is found in Bale zone. The Bale Mountains Eco-region, which forms part of the Bale-Arsi massif, is home to the largest population of the endangered endemic species of the Ethiopian wolf (Canis simensis) and Mountain Nyala (Tragelaphus buxtoni) (Belay 2012, Tolla & Traynor 2015). According to Tolla & Traynor (2015) the Bale Mountains also have national and cross bordering significance as they harbour the hydrological system of the Bale Mountains which provides fresh water and economic benefits to more than 12 million downstream users in southeast Ethiopia, northern Kenya, and Somalia. In addition 'the BMNP is a UNESCO worldwide Bio-Region, a potential world heritage site, one of the 34 recognized conservation international biodiversity hotspots and an important bird area' (Kidane et al. 2012 in Tolla & Traynor 2015: 4). The rainforests covering the plain land at the foot of the mountains are among the few habitats of wild coffee in Ethiopia and represent the second largest moist tropical forest in the country (Tolla & Traynor 2015).

The dominant economic activity in Bale is smallholder subsistence farming accompanied by livestock rearing. The communities in Bale are also known for their traditional ecological knowledge (TEK) and natural resource governance systems. According to Amente (2005) the communities in Bale have long tradition and deep knowledge of sustainably managing their natural environment. He contends that 'they have good knowledge of the species diversity of their forests, their formations along the altitudinal gradients and respective uses' (Amente 2005:36). Tolla & Traynor (2015) on the other hand argue that, even though the Bale community has been known for their immense TEK and customary governance systems that helped to relatively better conserve their natural resources, these values are being gradually eroded due to factors like globalization, modern education and population growth. According to Tolla & Traynor (2015), the annual average deforestation rate in Bale zone between 1986 and 2009 is recorded to be 3.7%, which suggests that it is happening at an alarming rate in light of the cultural values and customary governance systems of the community that promotes conservation.

4.1.2. Dinsho District

Dinsho district is one of the 18 districts in Bale zone. It is found at a distance of 400 kms from the capital Addis Ababa and at 30 kms from Robe town, which is the centre of Bale zone. The district has a total land area of 636 km² (9% of the total area of Bale zone) sub divided in to 9 villages locally called kebeles (the smallest administrative unit). While the district is found in the north-western extreme part of Bale zone, it borders with Sinana district in the east, west Arsi zone in the west, Goba district in the south and Agarfa district in the north (Dinsho District Administration Office 2018).

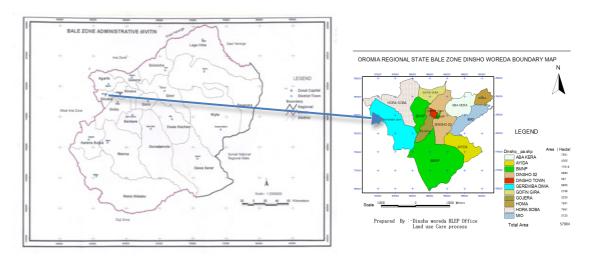


Figure 5: Dinsho District administrative map Source: Dinsho District Rural Land and Environmental Protection Office

According to the information obtained from the Finance and Economic Development Office (2018) of the district, the total population of the district as of the year 2015 is 62,154, out of these 30,683 or 49.3 % male and the remaining 31,471 or 50.6% are females. Information obtained from the office also shows that out of the total population of the district, the rural population constitutes 97.5% while only 2.5% of the population is urban.

Information obtained from Bale Mountains National Park (BMNP) head quarter found in Dinsho district indicates that Dinsho district constitutes about 20% of the total land area of the national park (BMNP 2015). The landscape of Dinsho district is composed of gentle slopes and high mountain massifs, which include plains and undulating areas as well as more hilly parts. The altitude ranges between 2800 masl at the plain land lying at the foot of Bale Mountain massifs and 4000 masl as one goes up the mountains and deeper in to the area of BMNP (Tolla & Traynor 2015). While 90% of the district landscape is categorized as highland and the remaining 5% is mid land (Dinsho District Agriculture and Natural Resource Office 2017), it has a mean annual temperature of 12.5 °C and gets a mean annual rainfall of 1200mm (Doyo 2015).

While Dinsho district is one of the areas in Bale zone with a relatively better forest cover, most of the un-fragmented forestlands in the district are found in areas falling within the BMNP (BMNP 2010). Forest types in the district include afro and sub afro-alpine vegetation cover limited to areas above 3400 masl of massif prominent mountain peaks and coniferous forest dominated by juniperous procera and podocarpous gracilior as well as hagenia abissynica and olean trees which are mostly found at altitudes ranging from 2300-3100 masl with mean annual rain fall of 800-1000mm (BMNP 2010). Same document also indicates that most of the wildlife commonly known in the area such as Mountain Nyala, Bushbuck, Sprinkler, Warthog, Ethiopian wolf and different Birds are also found in these parts of the district.

Since majority of the population in the district is rural, the major economic activity is mixed farming that constitutes crop production and livestock rearing. Agricultural activities in the area can mainly be described as rain fed smallholder traditional farming system. While the district has two major cropping seasons, which are known as Maher (June-September) and Belg (March-April), cereals, pulses, oilseed and vegetables are the known crop grown in the district (Dinsho District Agriculture and Natural Resource Office 2017). Farmers may produce crops twice in a year depending on the amount and distribution of the short rainy season that comes in March and April (Belg) and the long rainy season that runs from June to mid-September (Meher) (Dinsho District Agriculture and rural Development Office). While major types of crops produced in the area include vegetables, wheat, barley, beans, lentils, cabbage and garlic, cattle, sheep and horse are the main livestock of the area (Dinsho District Agriculture and Natural Resource Office 2017). According to the information obtained from the office, both the agricultural and animal husbandry systems are extensive production systems and for subsistence purposes.

4.1.3. Goba District

Goba district is another administrative area of Goba zone in Oromia National Regional State. Goba town, which is the centre of the district, is found at 445 kms from the capital Addis Ababa and 15 kms from the zonal town, Robe.

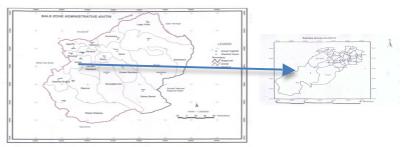


Figure 6: Goba district administrative map Source: Bale Zone Finance and Economic Development Office

While the district is located in the North Western extreme parts of the Bale Zone, it borders with west Arsi Zone in the west, Harena Buluk and Mena districts in the south, Sinana district in the east, and Dinsho district in the north. The district has a total area of 1,773.02 km² subdivided in to 15 villages, which makes it one of the largest districts in Bale zone (Goba District Finance and Economic Development Office 2016).

Information obtained from the office also indicates that population projection of the district as of 2015 is 49, 089. Out of the total population 24,827 (50.5%) are males and 24,262 (49.4%) are females. Information regarding distribution of the population in the district shows that 97% of the total population is rural while only 3% is urban (Goba District Finance and Economic Development Office 2016).

The district is generally highland and mountainous having gorges, terrains and mountains constituting part of the Bale mountains belt. The altitude ranges from the lowest 1500 masl at around Goba town and 4377 masl at the highest tip of Tulu Dimtu mountain, which is the second highest tip next to Ras Dashen in the Northern part of the country, and is part of the BMNP (Goba District Environment Forest and Climate Change Office (GDEFCCO) 2017). While 93% of the district landscape is categorized as highland and the remaining 7% is mid land, it has a mean annual temperature of 11.5 °C and gets a mean annual rainfall of 1000mm (Goba District Agriculture and Natural Resource Office (GDANRO) 2017).

As a result of its wide altitudinal ranges, Goba district is characterized by diversity of agroecological zones that can be classified as frost (Wurch) (10%), temperate (Degas) (78%) subtropical (Woina Degas) (10%) and tropical (Kola) (2%) (GDANRO 2017). Goba district is also another district where part of the BMNP is found. As such the district is known for the diversity of its plant and wild animal species (BMNP 2010). Since majority of the physical landscape of the district is similar with that of its neighbouring district Dinsho, forest types found in the district include afro and sub afro-alpine vegetation cover limited to areas above 3400 masl of Senatea plateau and coniferous forest dominated by juniperous procera and podocarpous gracilior as well as hagenia abissynica and olean trees which are mostly found at altitudes ranging from 2300-3100 masl with mean annual rain fall of 800-1000mm. Harena forest, which is one of the largest natural wet forests in the country, is also found in this district (BMNP 2010). Some of the wild animals found in the district include the endemic Ethiopian wolf (Red fox), mountain Nyala, warthog, giant forest hop, menilik bushbuck, wild dog, olive baboon, colobus monkey, lion and leopard (BMNP 2010).

Like the other districts in the zone, smallholder subsistence farming is the dominant economic sector of the district. According to information obtained from the Agriculture and Natural Resource Office of the district (2016) majority of the rural population practice mixed farming (crop production and livestock rearing) while few populations in the lowland areas are pure pastoralists. While the district has two major cropping seasons, which are known as Maher and Belg, cereals, pulses, oilseed, fruit, vegetables and spices are the types of crops grown in the district (GDANRO 2017).

4.2. Research Approaches, Methods and Sampling Techniques

4.2.1. The research Approach

The research approach used in this study is a qualitative approach. The qualitative approach is preferred because the study deals with understanding the perceptions, experiences, views, people's attachment to places and the ways they interpret and understand life based on these perceptions. It has been confirmed by a number of social researchers that a qualitative research approach is best suited to reach at a reliable finding and conclusion in such study of peoples' lives and social contexts.

As contended by Yin (2011) qualitative research approach is most appropriate to identify problems in social settings and recommend proper solutions because of its ability to deeply excavate the views and perspectives of the participants in the study regarding a given social issue, thereby contributing insight in to existing or emerging ideas, concepts, processes and meanings that may guide the behavior of some or all members of the society in a certain way. It allows looking in to events and the social world through the eye of the people being studied by probing beneath surface appearances (Bryman & Bell 2011). Thus, the events and ideas generated through qualitative research are more likely to represent the meanings given to real-life events by the people who live them, not the values, preconceptions, or meanings held by researchers (Yin 2011).

Another reason for the use of the qualitative approach by researcher is his interest in describing a process that is emerging in few communities at some localities but may lead to a considerable change in the way those and other communities in a similar context live (Bryman & Bell 2011). Dirksen (n.d.) emphasize that a qualitative research is most appropriate when the researcher wants to focus on a process that has emerged and is occurring in a given social setting rather than on the products or outcomes of the process. According to Dirksen, a qualitative approach is good to describe the social, institutional, cultural, ecological and economic conditions underlying the emerging changes, which is likely to have

a wider influence. As such, the attempt is to understand multiple realities through a through description of some or a particular event.

In addition to the reasons discussed above, for researches focusing on social changes and developments like this one, a qualitative research approach provides an opportunity to thoroughly discover how people thrive to relate themselves to their social and ecological environment and the way they make sense of their lives. As discussed by Berg (2001) a qualitative research approach is also best in allowing the researcher to describe a socioecological landscape and how inhabitants of such landscape make sense of their surroundings through symbols, rituals, social structures, social roles, and so forth. In other words, it deals with the different methods of how social reality is constructed (Bryman & Bell 2011). Besides, it broadens the ways leading to comprehending complex human behaviours that may not be attained through the commonly known qualitative approaches (Berg 2001). In this regard, Berg contends that if humans are studied in the usual approach of symbolically reduced, physically manipulated and statistically aggregated fashion, there is a danger that conclusions to be reached at through the research, although arithmetically correct, may fail to fit reality on the ground. Thus the underlying objective of using a qualitative research approach is to promote better understanding of the complex human behaviour in a social setting and increase insight in to the betterment of human condition (Garbers 1996).

And finally, as the researcher is involved in the socio-ecological development being studied, a qualitative approach is the appropriate research approach to conduct a study under such contexts (Garbers 1996). As contended by Garbers, a researcher involved in qualitative approach becomes an active member of the community being studied while the subject being researched simultaneously becomes an active member of the research team. Sage (n.d) reinforces this argument of Garbers by stating that a researcher uses qualitative approach when he/she wants to empower individuals or group of people to share their stories, hear their voices, and minimize the power relationships that often exist between him/her and the participants in a study.

4.2.2. Research methods

4.2.2.1. Focus Group Discussions (FGDs)

A significant body of literatures focusing on research methodologies have indicated that focus group discussions are the common and most appropriate research methods to generate data for qualitative research. Murray & Andrasik (n.d) define FGDs as a group of individuals gathered to discuss and exchange ideas about a particular topic under the direction of a researcher or moderator.

As stated by Cameron (2005) a focus group is typically appropriate when a researcher wants to collect a qualitative data regarding the beliefs, perceptions, attitudes and experiences of a group of people who share a similar type of experience. As the researcher is interested in exploring in depth ideas from a group of people sharing similar experiences on a particular topic, participants in a focus group discussion are often those people who have exercised and are knowledgeable about the subject to be discussed (Escalada & Heong 2014).

Since participants in a focus group discussion are brought together based on their possession of similar experiences related to the subject under study, they can influence each other by reflecting on ideas and questions that may not otherwise be appropriate in measuring the quality and impact of a current or potential social development (Villard n.d.). According to (Kinalski, Paula, Padoin, Neves, Kleinubing and Cortes (2016) such group discussions provide direct evidence about similarities and differences in the participants' opinions and experiences regarding the subject discussed as opposed to reaching such conclusions based on opinions of individuals interviewed separately.

Focus groups are organized with the interest to collect information about people's opinions, attitudes, beliefs and perceptions through initiating discussion and exchange of ideas on the subject being studied (Kinalski et al. 2016) rather than the intention to build a consensus among the participants and reach at a certain decision (Gerritsen 2011). As such, in FGDs, the multiple meanings that people attribute to places, relationships, processes and events are expressed and negotiated, thereby providing important insights into the practice of knowledge production (Cameron 2005).

An added advantage of FGDs, as discussed by Onwuegbuzie, Dickinson, Leech and Zoran (2009) is that it enhances the sense of participants' belonging to a group and helps them to feel safe to share information. Furthermore, the interactions that occur among the participants are likely to generate important data that can create the possibility for more spontaneous responses.

Based on the discussion above, I organized one focus group discussion in each of the study districts, namely Dinsho and Goba. Participants to the focus group discussions held in both the districts were elders, SNS custodians and other community members who have been actively engaged in the rehabilitation and conservation of SNS and restoration of their traditional governance systems in their respective areas.

According to information obtained from Dinsho district Culture and Tourism Office (2017), while the district is constituted of nine rural and one urban kebeles about 72 SNS have been identified in the nine rural kebeles. Out of the 72 historical SNS found in the district, 18 have been rehabilitated and conserved by the community and legally certified as community conserved cultural sites (CCCSs) by the district Land Administration Office in the past five years.

The FGD organized in Dinsho district constituted seven participants from seven kebeles out of the nine in the district. Out of the seven participants, two are elders, two are SNS custodians and three are community members, all from different kebeles (villages) in the district. The FGD was held in one of the SNS selected by the participants because of its location at a relatively fair distance for all the participants.





Photo1: FGD conducted in Dinsho district in Ademonye SNS

Source: Own documentation from the field

A similar FGD constituting seven participants was also organized in Goba district. Goba district has 15 rural and one urban kebele (Goba District Administration Office 2018). According to the Culture and Tourism Office of the district, while there are more than 90 SNS in the 15 rural kebeles of the district, only 13 of them have been rehabilitated and being conserved by the communities. The information also shows that the district Land Administration Office has already legally certified the rehabilitated SNS as CCCSs.

The seven participants to the FGD held in Goba district are elders, SNS custodians and community members from seven different kebeles in which the well rehabilitated and legally certified SNS are found. Similar to the participants in the FGD organized in Dinsho district, participants to the FGD in Goba district are also those who have been actively participating in the initiation of the rehabilitation and conservation of SNS. The FGD in this district was also held in one of the Sacred Natural Sites selected by the participants.





Photo 2: FGD conducted in Goba district in Abu Koy SNS Source: Own documentation from the field

All focus group discussions were semi-structured. I prepared a few key questions that I used to probe the participants to engage in telling stories and sharing experiences. Yet the interviews were also 'discussions' in the sense that they were open ended, and allowed for indepth discussion related to the questions, and allowed for community members to take their time and express their beliefs, perceptions and opinions relating to aspects being raised in the focus group interviews.

4.2.2.2. Interviews

Interview with individuals is another method used to generate data in relation to the subject under the study. Interviews are also appropriate data collection tools recommended for qualitative research approaches by many research practitioners (Turner 2010). Interview is described by Jalil (2013) as an exchange of information arranged between two people to uncover perspectives, experiences, and insights on experiences relating to personal life or socio-cultural issues. According to Rosanna (2006), interview is a preferred data collection tool when the researcher thinks that it is better to probe individual experiences on issues that the interviewee could distort or withhold in a social setting.

I conducted interview with representatives of relevant government offices in the two districts as I thought the people in the government structure would better express their personal as well as organizational views regarding the subject under the study freely if they are not under the pressure of organizational command chains.

As such, I held a one to one interview with representatives of three relevant government offices from each of the districts. Here again while the district offices selected for the interview are those which are directly responsible, in one or another way, for monitoring of the overall community works relating to the subject under the study, the individuals assigned by the offices for the interview are ones who were actively involved in community social

development works in general and rehabilitation of SNS are revival of related traditional governance systems in particular. Accordingly, a total of six persons representing three district offices from each of the districts were interviewed.

I conducted a detailed interview with each of the individuals representing the government offices using semi-structured open-ended interviews. Semi-structured interviews are used to guide me on the key issues I should focus on while at the same time allowing me a level of flexibility to ask the interviewees different questions depending on their experiences as well as interest to give diverse information on the subject being studied. I also used open ended questions to allow me ask probing questions as a means of follow up. Open-ended questions also provide a good environment for the interviewees to fully express their viewpoints and experiences (Turner 2010).

4.2.2.3. Secondary Data

Surveys, assessments, baseline studies and annual reports obtained from the relevant government offices in the two study districts were also used as sources of secondary data in the study.

4.2.2.4. Participant observation

The community development work in Bale region of Ethiopia that is being the subject of this study has been initiated, some eight years back, by a local Non-Governmental Organization (NGO) in Ethiopia called MELCA-Ethiopia. As a staff member of the same organization that has been working with the communities in Bale on the revival and conservation of SNS and related traditional ecological governance systems, I have been personally involved in the project. In fact I have been the coordinator of the project initiated by MELCA-Ethiopia to support communities in three districts (Dinsho, Sinana and Goba) of Bale Zone in Oromiya region to revive and conserve their SNS and related governance systems for a period of four years from 2013-2016. Accordingly, I have been travelling to the area frequently and interacting with the community and relevant government offices in the three districts regarding implementation of the project and its progress.

During that period, I have been observing the passion, beliefs, hopes, events and experiences that motivated the community to be actively engaged in the initiative and led to the unfolding of the project. I have been listening to the stories told by elders, taking notes and relating them to my own childhood experiences. So I would say I have been immersed in the subject being studied for a relatively long time. I have also visited the community recently after a year, though I went this time to collect data as a researcher, and saw that the initiative is

taking more momentum and spreading to other villages. I have also visited some of the rehabilitated SNS and the surrounding ecosystem during the visit.

As such, relevant notes from my observation during my participation in the project as well as my recent visits to the communities and some of the rehabilitated SNS would be used as source of data for this study to triangulate the information obtained through the FGDs, interviews and secondary data.

4.2.3. Sampling Design and procedures for sample size determination

The sampling design used to select participants to the FGD is purposive sampling. Purposive sampling is a deliberate selection of participants based on their knowledge and experience relating to the subject being studied and thought to represent the broader public (Berg 2001). Bryman and Bell (2011) also state that a researcher uses purposive sampling with the aim to select participants who have relevant experiences that would enable them explain or respond to the research questions. As such, the goal of purposive sampling is to generate relevant data from participants who can provide data to the desired quality and quantity (Yin 2011).

As such, participants to the FGD in this study were selected from among community members in the area who were actively participating in the revival, rehabilitation and conservation of sacred natural sites and related traditional ecological governance systems. The elders and SNS custodians who participated in the FGD were purposely selected from among those who supported the initiative and contributed their time, energy and even money for its realization. Elders were targeted to be included in the discussion group as they are the ones to tell stories in the past that are relevant for today's initiative for revival and conservation of the Sacred Natural Sites and related traditional governance systems. Custodians of the SNS are also targeted because they are both elders and ones in the communities well versed with the knowledge of the cultural and spiritual values used to be attributed to SNS in the past and can also be relevant for the wellbeing of the present and future generations. Likewise, those who participated as community members were selected based on their active involvement during the dialogue meetings held with community members and strongly supported the initiative. Participants in this category are relatively younger in age.

The sampling procedure was done in such a way that seven SNS were selected in seven villages of each of the districts. Then MELCA's project office in Bale together with the district Culture and Tourism Office identified and selected two custodians from well conserved SNS, two elders who have been active participants in the rehabilitation and

conservation of SNS from two other kebeles and three community representatives from other three kebeles.

As regards participants to the interview, as a researcher I selected the three district offices that are most concerned with conservation of the environment, cultural as well as socio-economic issues. These are the Environment, Forest and Climate Change Authority (EFCCA), Culture and Tourism Office (CTO) and Agriculture and Natural Resource Office (ANRO) in each of the districts. I contacted heads of these district government offices and requested them to assign me experts from their offices, who are in charge of coordinating issues relating to conservation of natural resources and related cultural practices in the district. Accordingly, each office assigned one expert with whom I conducted the interviews.

Regarding the sample size determination, I decided to conduct one FGD consisting of seven participants per study district for two reasons. Firstly, I thought the data to be generated through the a focus group discussion that lasts from one and half to two hours would be too much and it would be difficult to properly manage data generated by more than two FGDs and secondly I found it difficult to afford the cost of conducting two FGDs in each district. As regards sample size determination for the interviews, the main determinant factor was the availability of experts in the selected government offices who have relevant experience to appropriately respond to the research questions.

Chapter 5-Results and discussion

5.1. Introduction

In this chapter, the researcher integrates and analyses the data collected through the different data collection methods. The chapter would basically try to explore the history and status of SNS and traditional governance systems in Bale during the socio-political variations in the past period of about half a century, the benefits the community used to get from their SNS and how these were supported by the traditional governance systems before they were abandoned and degraded and what they have lost as a result of the abandonment and degradation of the SNS. The challenges the communities are facing in relation to the initiative to the rehabilitation and conservation of the degraded SNS and the need for provision of legal support by the government will also be discussed in this section.

Bale is one of the parts of Ethiopia endowed with the beauty of nature and its attractions. The vast array of biodiversity and ecosystem is also accompanied by the impressive cultural values and traditional practices of the communities that reflect their close attachments with their natural environment.

Before the advent of the Dergue Military government and its communist ideology in 1974, SNS and related traditional governance systems were among the traditional practices and belief systems that were widely practiced and used to function as a strong bond that connects the community with their land and natural resources. Although the community used to conserve SNS mainly for their cultural and spiritual purposes, these sites used to provide multiple ecosystem services such as keeping the balance and integrity of the whole ecosystem, safe havens and special conservation sites for rare plant and wild animal species, sources of water and medicinal plants and regulating fertility and productivity of the soils.

The change in the political theory in 1974, which led to many changes in the country including the detachment of the community from their land and natural environment as well as dereliction of their traditional ecological governance systems, resulted in severe degradation of the environment including their SNS. Such changes in the socio-political and ecological landscape seemed to have considerable effects on the cultural values and traditional practices, social structure, life style and livelihoods of the community that led to a negative impact on their wellbeing and resilience.

Recently, however, there is a tendency, on the part of the community, to realize the negative effects of the loss of their SNS and related traditional ecological governance systems and an initiative to curb the situation. While this initiative is being strongly supported and promoted by NGOs working in the area, there is also a level of effort from the side of the local government administration to support it by providing legal recognition to rehabilitated and conserved SNS as well as related traditional governance systems.

5.2. The evolution and down-turn of SNS and related traditional governance systems in Bale

Sacred Natural Sites are natural landscapes having spiritual, ecological, social and also economic significances for local and indigenous communities all over the world (Verschuuren et al. 2010, Doffana 2017, Studley & Bleisch 2018). While SNS exist in various biological and physical forms, they are all accorded special reverence and protection by the custodians and community that designate them as sacred.

Despite the tangible and intangible benefits they provide to the communities, research findings (Verschuuren et al 2010, Adam 2012, Boadi et al. 2017, Diawuo & Issifu 2015) are showing that the number and size of SNS around the world is declining at a fast rate. Although Ethiopia is among the developing nations with vast proportion of the local and

indigenous communities still dwelling in the traditional way of living, it is not, and cannot be, an exception to the decreasing global trend of SNS both in number and size.

Even though it is very difficult to track how and when conservation of SNS was started in Bale, elders tell that the practice has existed for time immemorial. Elders tell that SNS have been managed by custodians as per the customary rules governing them and have served multiple purposes for generations. According to Tolla and Traynor (2015) the history of conservation of SNS in Bale, which can also be used as a lens to view the trend in Ethiopia in general, can be categorized in to four historical time periods. These are the pre-Dergue period (before 1974), the period during the Dergue regime (1974-1991), first decade of the Federal Democratic republic of Ethiopia (1991-2002) and 2002-present.

The discussion with the elders and custodians revealed that political situations in the country during these periods have been among the major factors having influence on conservation of SNS. The period before the coming to power of the Dergue regime was when they had close attachment with their land and natural resources in general and SNS in particular. As stated by the elders and other supporting documents, the land tenure system during Emperor Hailesillassie (before 1974) was classified as state land, private land and communal land (Tolla & Traynor 2015, Belay 2012). While ownership of forestlands also falls under same category, SNS, whether appearing in the form of forest, cave, water bodies, hills or a bunch of trees, can be found in the vicinity of any one of such categories. Whichever the category it may fall in, an area designated as SNS by the community used to be well respected and protected from any form of encroachment and intrusion.

A research conducted by Tolla & Traynor (2015) in three villages of one of the study districts, Dinsho, has revealed that there were more than 50 sacred natural sites in the three villages covering a total area of about 400 hectares before 1974. These authors have also discussed that all the sacred natural sites that existed during that time were covered by dense indigenous forests that also served as habitat for various wild animals. Both Tolla & Traynor (2015) and Doyo (2015) acknowledge that there is a radical change in the land use land cover status of the landscape since 1974. According to Tolla & Traynor (2015) only 25% of the SNS currently exist with an average 30% of their original land size.

Assessment of SNS conducted in the two study districts revealed that there were 72 SNS in the current 9 villages of Dinsho district (Dinsho District CTO 2014) and about 98 in 15 villages of Goba district (Goba District CTO 2014). According to these assessments, while majority of the SNS were forest areas, their area at the time ranged from 2-141hectares. Even

if the SNS or part of it is found within the vicinity of a privately owned forestland, the owner has the responsibility to protect and conserve the SNS in accordance with the traditional laws and taboos attached to it. Regarding this, one of the elders who participated in one of the FGDs said:

During those old days, it was a taboo to cut a tree or kill a wild animal in SNS except collecting medicinal plants. It is even prohibited to take a dead tree and use it for fire wood, fencing or anything else. If a man is hunting a wild animal and the wild animal runs in to the area of the SNS, he has to stop chasing the animal and go back. During the old days, SNS were not only simply protected areas but also safe refuge for those endangered. (Taken from FGD conducted on 27 August 2018)

As discussed by the elders, it is believed that anyone who deliberately violates the taboos set by the customary laws and make a trespass in SNS would be cursed by elders and the consequences of such curses would be suffering from health problems, loss of own life or that of family members or property. For this reason, taboos and norms set by customary laws are strictly observed by community members.

The discussion with the elders, SNS custodians and community members further revealed that while the coming to power of the Dergue military regime after the 1974 revolution changed so many things in the nation, one of such changes was their detachment from their land and SNS. In March 1974, the Military junta declared communism and abolition of private land ownership (Million 2012, Tolla & Traynor 2015). This declaration led to the monopolization of administration of all land and natural resources, including SNS areas, under the central government. According to the elders and SNS custodians, the Dergue not only controlled the land and natural resources but also abolished the traditional land and natural resource governance systems and related institutions. In addition, the communist ideology highly discouraged all sorts of religious dispositions, including traditional belief systems. As stated by one of the elders:

The Dergue officially prohibited community gathering in SNS and conducting ritual ceremonies. Then some officials started to cut trees from within SNS to discredit the spirituality connected to it and demonstrate that it is nothing and there is no danger of cutting a tree from there. Then some people also followed them in such acts, which was totally contrary to our culture and the way our fathers lived. (Taken from FGD conducted on 27 August 2018)

After stabilizing its power and disseminating its communist ideology somehow, the Dergue introduced a villagization and resettlement program during the early 1980's (Tolla & Trainor 2015). The program, according to the elders and custodians, had not only further reinforced their detachment from their SNS, but also had a devastating effect on the forests, including SNS. First, they were forced to be relocated away from their SNS, and secondly construction of the new houses in the rural area resulted in destruction of the forests including SNS. This period marked the beginning of the abandonment and severe destruction of areas, which were SNS.

Furthermore, through its literacy and modernization program, the Military government constructed elementary schools in majority of the rural villages and instructed parents to send their children to school. The curriculum in these schools was designed to teach the children about the backwardness of the culture and traditional practices of the community. This, coupled with the discouragement of community cultural events and gatherings, has resulted in interruption of the intergenerational learning and creation of a gap between the two generations. Regarding this issue, an elder explained saying:

...the Dergue snatched not only our land and natural resources but also our children. They taught the children that elders are uneducated and ignorant and there is nothing worth learning in our culture and traditional practices. So we have got children who do not appreciate the cultural values, traditional practices and related knowledge of their communities. They do not know about SNS and how we relate ourselves to these places. (Taken from FGD conducted on 28 August 2018)

These were some of the factors relating to the socio-political situations of the country that have contributed to the continued abandonment, degradation and destruction of SNS in Ethiopia in general and Bale zone in particular since the 1974 revolution. According to assessment results received from the study districts and other supporting documents, the number of SNS in Dinsho and Goba districts which was 72 and 98 respectively at the beginning of the 1970s has declined to 42 and 45 respectively by beginning of 1990s. This shows a 35% decline in Dinsho (Dinsho District CTO 2014, Tolla & Traynor 2015) and 45.9% decline in Goba (Goba District CTO 2014).

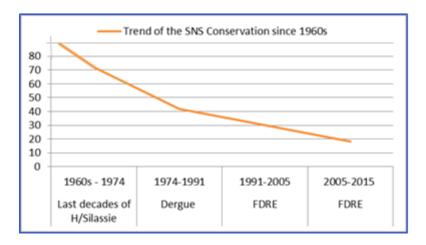


Figure 7: Trend of SNS conservation since the 1960s Source: Adapted from Tolla & Traynor 2015

Even though majority of the stringent rules and regulations imposed by the communist government were removed after the downfall of the Dergue regime in 1991, the land tenure system established by the Dergue was maintained by the succeeding government of the Federal Democratic Republic of Ethiopia (FDRE) (Million 2012, Doffana 2017). Besides, the instability and weak enforcement of laws during the first decade after the coming to power of the new government, which can be considered as the transition period, resulted in the persistence of destruction of forests in the country, including forests in SNS. As a result the number of SNS with a relatively low deforestation in the two districts still declined from 42 and 45 at the beginning of 1990s to 18 and 13 in 2010/11 in Dinsho and Goba respectively (Dinsho District CTO 2014, Goba District CTO 2014, Tolla & Traynor 2015, Doyo 2015). This again shows only 42.8% of the SNS in Dinsho and 28.8% of the SNS in Goba as compared to their status at the beginning of 1990s have been rehabilitated and being conserved.

Table 2: Comparison of the current and past land size of SNS currently rehabilitated and conserved in Dinsho district

0	Fenced and rehabilitated SNS	Name of Kebele	Nature of the SNS	Original land area (in hec.) As estimated by elders & custodians	Current land area (in hec.)
1	Asereda	Abekara	Forest	15	12
2	JersoHeto	Abakera	Forest & wetland	7	6
3	Jelde		Knoll covered by forest	10	6

4	Gedeb-gedela	Mio	Knoll covered by forest	15	11
5	Munamuno	Zallo Ababo	Knoll covered by forest	21	7
6	Kelbo	Hora-soba	Forest and wetland	5	2
7	Aseredino	Geremba Dima	Forets	12	7
8	Mekkena	Germba Dima	Forested hill	10	7
9	Ademogne	Kebira Shaya	Forest and wetland	14	5
10	Labeno	Kebira Shaya	Forested hill	25	18
11	Anejo	Mio	Forest	5	0.5
12	Nijato	Gofingira	Forest	8	2.5
13	Gas Usman	Abakera	Knoll covered by forest	5	2
14	Kun-nadira	Gofingira	Knoll covered by forest	1.5	5
15	Awude	Dinsho 02	Knoll covered with forest	9	4.5
16	Kogne	Z/Ababo	Knoll covered with forest	5	3
17	Fejfeje	Mio	Forest and wetland	8	3
18	Ujube zewde	Geremba	Forest	5	3
	Total		•	175	110 (62.8%)

Source: Dinsho District Culture and Tourism Office

Table 3: Comparison of the current and past land size of SNS currently rehabilitated and conserved in Goba district

S.N o	Name of fenced and rehabilitated SNS	Name of Kebele	Type of SNS	Original land area (in hecs) As estimated by elders & custodians	Current land area (in hecs)
1	Chikile	Ilansa	Knoll covered with forest	8	5
2	Haji Nurjawi	Wolte'i Wacho	Forested hill	11	5.1
3	Haji usman	Fasil Angessoo	Knoll covered with forest	10	4
4	Gerjo	Fesil Angesso	Forest	9	5
5	Aynarufa	Ilansa- Hegala	Forest	13	8
6	Aba-Fela	Ilansa- Hegala	Forest and wetland	8	4.5

7	Abukoy	Walte'i Misira	Knoll with forest	9	6.5
8	Ilasa	Ilansa	Forest	15	7
9	H. Adem Sado	Obora	Forest	8	3.5
10	Kebir	Kebir Temo	Knoll with forest	12	7.5
11	Shehguda	Rira	Forest & wetland	5	3
12	Dilbo	Weltei wocho	Forested hill	20	12
13	Gojera	Gojera	Forested hill	17	12
	Total			168	90.1 (53.6%)

Source: Goba District Culture and Tourism Office

The assessment results, other supporting documents as well as the discussions held with elders and custodians have also indicated that the SNS in the study districts not only declined in number but also almost all of them shrank in size. As discussed in Doyo (2015) and then confirmed by the document obtained from Dinsho District CTO (2014) and the elders and custodians who participated in the study, whereas only 25% of the SNS in Dinsho district have remained, the original total land size of the remaining SNS in Dinsho district which was estimated to be 175 hectares at the beginning of 1970s has decreased to 110 hectares in 2012/13. This shows that only 62.8% of the original size of the currently existing SNS in Dinsho district is remaining and being conserved. In Goba district, on the other hand, there is an assessment result showing that the size of currently existing and being conserved SNS has declined from the original 168 hectares at the beginning of 1970s to 90.1 hectares in 2012/13 (Goba District CTO 2014). This also shows that only 53.6% of the original size of the currently existing SNS is being rehabilitated and conserved. Major factors mentioned as reasons for the decline in the size of the SNS are expansion agricultural lands in to the area of the SNS and increasing demand for agricultural land that forced the current government to allocate part of SNS areas for youth farmers (FGD conducted on 27 August 2018, Dinsho District CTO 2014, Goba District CTO 2014)

There are evidences and signs indicating that, factors negatively affecting the existence and integrity of SNS is being tackled and reversed after 2012 when concerned local government agencies in collaboration with NGOs started to intervene and created series of forums to discuss on the past history, present status and future destiny of SNS. Information obtained from the Culture and Tourism Offices of the two districts show that 18 SNS with a total land area of 110 hectares in Dinsho district and 13 SNS with a total land area of 90.1 hectares in Goba district have been fully rehabilitated and being conserved since 2010. As a researcher

and also as a staff of the NGO supporting this initiative, I have also witnessed, through participant observation that rehabilitation and conservation of the said SNS is making a difference to the socio-ecological system in the area. In addition, I have also seen that the materials used to fence the rehabilitated SNS, especially in Goba district, is being changed from barbed wire to the traditional fencing by cactus trees, which is not only biological but also relatively more sustainable.



Photo 3: The SNS fenced with barbed wire and one changed to biological fencing with cactus tree

Source: Own documentation from the field

5.3. The past and current status of SNS and their interaction with the surrounding bio-physical ecosystems

SNS are seen separately from other natural areas and are considered special by many researchers and environmental practitioners because of the social, cultural and spiritual benefits they provide to the community as value added to their ecological benefits (Lacy & Shackelton 2017, Verschuuren et al 2010, Doffana 2017, Kumar n.d). SNS are also referred in a significant body of literature as the oldest conservation sites signifying the connection between human cultural practices and nature (Doffana 2017, Yaw 2011). Because of their being revered as sacred and accorded special protection, SNS can be regarded as areas playing special role of keeping integrity of the whole ecosystem, including maintenance of the provisioning and regulating services. This is made possible mostly through interaction of the SNS with their surrounding biophysical ecosystems.

An assessment of the historical trend of SNS in the two study districts as well as discussion of their history with the elders indicated that SNS in Bale area can mostly be described as knolls covered with forest and water sources appearing in the form of springs, streams or wetlands in or around the SNS. According to the stories discussed by the elders and SNS custodians in the study districts, before 1974 almost all of the SNS were covered with dense forests of indigenous trees. In addition, they were also known as habitats for various wild animal and bird species, including those endemic to Ethiopia.

Regarding their interaction with the surrounding biophysical ecosystems, SNS in the study districts were also described as sources of water. In this regard, elders and related supporting documents associate SNS with springs, streams and wetlands. According to the assessment conducted by Tolla and Traynor (2015) and that was confirmed during a discussion with elders and custodians, for instance, out of the 72 SNS found in Dinsho district during the pre-Dergue period, 60% of them are associated with water sources such as springs, streams or wetlands. The assessment reported that there were 63 springs, 12 streams and 19 wetlands in and/or around the SNS (Tolla & Traynor 2015). Although there is no written document describing the interaction of SNS in Goba district with their biophysical ecosystems before 1974, elders and custodians who participated in the study have explained that majority of the SNS that existed before the coming to power of the Dergue regime can be described as sources of water. They discussed that there were springs, streams and wetlands that existed in or around the SNS and also disappeared along with them. An assessment conducted on the SNS that have been rehabilitated a few years back and currently being conserved shows that there were 10 springs, 7 streams and 3 wetlands in and/or around the currently existing 13 SNS during the pre-Dergue period (Goba District CTO 2014).

Comparison of the foregoing information with status of the rehabilitated and currently existing SNS and their surrounding bio-physical ecosystems show that most of the water sources have disappeared during the past four decades after 1974. Assessment made some years after the initiative of rehabilitating and conserving some of the degraded SNS started in both the districts has revealed that some of the water sources in and around the rehabilitated SNS have revived. According to the assessment by Dinsho District CTO (2016), 12 springs, 7 streams and 4 wetlands have disappeared in the past four decades along with the degradation of the currently rehabilitated 18 SNS in the district. Currently however, 8 (66.6%) of the springs, 3 (42.8%) of the streams and 3(75%) of the wetlands have revived after the SNS are rehabilitated. A similar assessment made by Goba District CTO (2016) also shows that 10 springs, 7 streams and 3 wetlands were associated with the currently rehabilitated 13 SNS have disappeared in the past four decades, and currently 6 (60%) of the springs and 3(42.8%) of the streams have revived along with the rehabilitation of the SNS whereas none of the wetlands have come back so far.

The above information documented by the district CTOs has also been confirmed during the discussion with the elders and custodians as well as government representatives of the respective districts who participated in the research. Elders and custodians explained that the mentioned water sources have revived after disappearing for at least three decades. Participant observation by the researcher to some of the SNS in both districts has also confirmed that the

water sources mentioned in the documents and discussed by those who participated in the research are alive and being used by the surrounding community members.



Photo 4: Some of the SNS where the water sources have revived Source: Own documentation from the field

Another interaction of the SNS with the surrounding bio-physical ecosystems is their impact on the status of soil and its productivity in the surrounding farmlands. As has already been discussed above, most of the SNS used to be knolls covered with forest with grass underneath. Elders, custodians and community members who participated in the research and some of them having farmlands around the SNS have discussed that, before the SNS were rehabilitated, the runoff from the knolls during the rainy season would wash the top soils away or create water logging that makes the farmlands unsuitable for proper farming and hence make them less productive. This trend, however, is completely reversed after the SNS have been rehabilitated and conserved. Telling the change in this regard, an elder who participated in the research explained '... now there is no water flowing down to the farmlands. All the water is retained in the SNS by the plants and the grass cover. As such the farmlands adjacent to the SNS have become very good for the crops. The families are getting good harvest' (FGD conducted on 28 august 2018).

Hence, as has already been contended by Yaw (2011), it can be deduced from the foregoing discussion that SNS have played a significant role in the protection of wetlands, springs and streams in and around them as well as rare species of plants and animals thereby keeping the fragile ecosystems balanced and healthy.

5.4. Significance of SNS in the lives and livelihoods of the community: Review of the past and present trends

5.4.1. Spiritual and Socio-cultural significances

5.4.1.1. Spiritual significance

While conservation of biodiversity and ecosystems may have tangible and intangible purposes, the overarching goal of conservation of SNS by local and indigenous communities is their invisible or intangible values (Oviedo et al. 2005, Verschuuren et al. 2010, Emma 2014, Obiora & Emeka 2015, Aniah et al. 2014). According to Oviedo et al. (2005) local and indigenous communities perceive SNS as places endowed with special spiritual powers that should be revered and consulted for good life of individuals and the community as a whole.

In her PhD thesis entitled 'Culture and Conservation in the Sacred Sites of Coastal Kenya' Emma (2014:25) has stated 'it is very challenging to recognize the cultural and spiritual values of SNS in ways that are both meaningful for the values represented and that are compatible with assessment systems that emphasize quantification and objectivity'. Yet, the undeniable fact is that local and indigenous communities have been protecting and conserving SNS for their cultural and spiritual purposes, rather than for their material values, for time immemorial. Though very important, gaining tangible or material benefits as a result of conservation of the biodiversity and ecosystems are just unintended added values of protecting the sites when seen from the perspective of the communities that conserve them (Emma 2014).

In majority of the traditional communities around the world, their cultural practices and traditional beliefs are often interdependent and seem not complete if seen separately. That is so because the various cultural activities and practices are associated with the traditional belief systems that together form a structure that strengthens the relationships between the communities and nature (Emma 2014). According to Emma the connection between indigenous and local communities with nature and the sustainable use and management of their natural resources is underpinned and dictated by their cultural values that are often guided by their spiritual beliefs.

For communities in Bale, SNS are places where they conduct annual rituals designed to pray to their God to make the season favourable for humans as well as crops, other plants and animals by providing them with a balanced combination of rainy and sunny seasons as well as their optimum amount. As explained by the elders who participated in the study, the ritual is conducted annually at the end of every main harvest season and at each ritual the community,

led by the elders and custodians, first express their thanks to the creator for making the just ended season so favourable and the good harvest they collected and then pray for the next season to be same or better. Regarding this, an elder stated:

We gather here (in the SNS) and thank God for protecting every being: humans, crops, animals and birds and the trees, from bad things and blessing us with the good harvests during the year. We also pray for same to happen in the coming seasons. When we pray, we do not pray to the trees or animals like some people say today to degrade our SNS and related traditional belief system. We gather in such green and natural places and thank the creator of such beautiful place and also pray for the continuation of the beauty and peace in it. During those days, there were no many churches and mosques like now and followers of both Muslim and Christian religions used to gather here and participate on the seasonal prayers and rituals together. The SNS is not a religious place and so we share it and pray in it together. (FGD conducted on 28 August 2018)

In addition to the annual rituals, elders and custodians lead the community to gather and pray in SNS at any time when a natural calamity that is likely to harm the community happens or is about to happen. Such rituals are conducted when, for example, draught, excessive rain that affect the crops, human, animal or crop diseases or pest infestation happens, so that the catastrophe may stop and they survive it. Regarding this an elder who is 80 years old and who participated in the study stated:

Whenever a catastrophe like prolonged dry season or flooding, animal or crop disease outbreaks or pest infestation happens, we gather in the SNS and pray and often times we get immediate response from the creator. We get what we prayed for. When we pray for rains, for example, often the rains come while we are still in the SNS. This is not a story. It is what I have witnessed several times in my life. So the rituals and prayers that we used to conduct here were so powerful and meaningful for us. (FGD conducted on 28 August 2018)

As discussed by the elders who participated in the study, SNS were also places where people with health and other problems go to be healed and get their problems solved. An elder also explained this as follows:

Some sick people get traditional medicines collected from within the SNS and get cured without coming here. But others with serious health problems go to SNS with holy water and drink from the water and wash their body. Mostly this solves their health problems. If a woman who could not produce a baby comes here to tell her problems solved, she will come back during the next ritual ceremony with a baby on her back. (FGD conducted on 27 August 2018)

According to the culture of Bale community, children are critical components of the family and the social fabric of community. As such, there is a high probability that a woman that cannot produce children get divorced. And divorce mostly entails harsh social consequences for the woman as there is a tendency of marginalizing a divorced woman. As such, the practice of gaining the potency to produce offspring through rituals in SNS would save the women from suffering such harsh social consequences.

Analysis of the current trend of the social, cultural and spiritual practices in the rehabilitated and conserved SNS, however, shows that revival of these important components of the SNS is occurring at a slow rate. According to the information obtained from the Culture and Tourism Offices of the study districts, out of the 18 SNS rehabilitated in Dinsho district, annual rituals and traditional conflict management, including women's' 'Sinke' tradition are being conducted only in 4 (22.2%) of them in Dinsho district and out of the 13 SNS rehabilitated in Goba district similar social and spiritual events revived only in 3 (23%) of them (Dinsho District CTO 2016, Goba District CTO 2016). These figures show that so far the social movement is focusing more on rehabilitation and conservation of the SNS and the social, cultural and spiritual components are still lacking in most of the SNS.

5.4.1.2. Socio-cultural significance

Socio-cultural values of SNS are among the major intangible values of SNS to the communities. In this regard, Emma (2014:25) asserts that '...the so called imagined values that indigenous communities have for nature are as real as the tangible benefits and values that people may obtain; and therefore must be taken as seriously when considering the uses of sites that may be managed for conservation.' By way of reinforcing the same line of argument, Verschuuren et al. (2010) also state that SNS are manifestations of the social and cultural practices of the communities representing their aspirations to understand and connect themselves to a natural place in a meaningful way.

One of the things that has boldly come out during the discussions and interviews held with the participants to the study is that SNS used to be places where the unwritten customary laws as well as rules and procedures that shape the behaviour of members the community in a certain desired way were forged. While most of such customary laws and rules are taken from the

ancestors, there is a process of reviewing existing laws and governance systems to make them fit the existing reality of the time or making new laws when deemed necessary. Such customary laws and governance systems are then applied to maintain integrity of the ecosystem and the peace and stability of the community.

According to the elders and custodians who participated in the discussion, in addition to the annual ritual ceremonies they conduct in SNS, elders gather there whenever a social problem that needs to be managed arises in their community. Such social problems could be robbery, fighting between individuals, family or clans, disputes relating to farmland boundaries, theft or murder. Any of such problems that may arise in the community is handled and solved by elders in SNS as per the relevant customary laws and practices. While SNS served as the traditional institutions designated for conflict management, the social and cultural practices of conflict management served multiple purposes. Firstly, it provided the community with the opportunity to contain and solve their problems as per their own rules, approaches and procedures. Secondly, the mediation or conflict management approaches by the elders mostly focuses on reaching at a win-win solution rather than making one party a winner and the other a loser. It is believed that such approach has the positive impact of sustaining harmony among community members and peace and stability in the community. In addition, the practice of handling and solving their problems by their own develops the trust and confidence of community members as they are treated by their own laws and institutions. Furthermore, the practice relieves the conventional law enforcement organs from being burdened by too many cases.

The gathering of community members for the annual rituals can also be seen as one of the factors that support the existence of harmony among community members, which is the basis for peace and stability in the community. As explained by participants to the study, members of the same village as well as others from other areas gather in the SNS during the annual ritual ceremonies irrespective of their religious orientation, sex, race, social class and economic status. After conclusion of the ritual led by the custodians, the gathering also involves discussing on commonly shared problems and issues while sharing information and the food prepared for the ceremony. There are also some people who bring grains to the ritual as an expression of gratitude for a personal or family problem that they have got solved during the past season. These grains would be given to some poor people who need assistance. Such practices have helped the community build and maintain social capital that would in turn enhance the wellbeing of the community as a group.

Another social value discussed by the elders is the solution to health problems that they used to get from the SNS. According to the elders, SNS are sources of most of the medicinal plants that are provided by traditional healers in the communities. Doffana (2017) has also confirmed this assertion in his research entitled 'Sacred natural sites, herbal medicine, medicinal plants and their conservation in Sidama, Ethiopia'. In this study, the researcher stated that, in Ethiopia, forested SNS where ancestral traditional belief systems are maintained are the primary sources of traditional medicinal plants. Elders and custodians who participated in the study discussed that it is believed the medicines and holy waters from SNS are so effective in terms of healing because they are endowed with the potency to heal.

In the past, SNS have also played an important role of being places where the cultural identity of the community is manifested through the various traditional dressings, foods, songs, dances and musical instruments that are used during ritual ceremonies. As one elder stated during the discussion '...there were even special words and expressions in our language that were used particularly during rituals. Such words and expressions are now being forgotten and becoming obsolete as they have not been used for the past four decades. This is further emphasized by Dudley, Bhagwat, Higgins-Zogib, Lassen, Vershuuren and Wild (2010) who asserted that ritual ceremonies accompanied by, dance, songs, story and arts are the intangible companions to SNS and even while they are being strengthened in some sites, they are rapidly being lost in others.

Another social significance of SNS for Bale community is their being used as traditional institutions where women make their voices when their rights are violated. As discussed by the elders who participated in the study and one of the interviewees, 'Sinke' is a thin and long stick made of a sacred tree and provided to a girl by her mother on the day she gets married. After that, she may keep the stick at home or carry it along with her during special occasions and other times whenever she deems necessary. 'Sinke' is an expression of respect indicating that a woman carrying it is a married woman or one that has just delivered a baby. That is so because a woman carrying 'Sike' would be given priority and special treatment at any social service providing institution or gathering. If a woman is harassed or beaten by a man, even if he is her husband, she would go out to an open area in the village with her 'Sinke' and scream and ululate (a special kind of screaming and ululating). Then, up on hearing this, other women would immediately join her, all with their 'Sinke' as well, and they all walk to the nearest SNS screaming, singing and ululating. Elders would be notified of the event and join them to discuss the problem and solve it. The problem is mostly solved by sanctioning the offender as per the customary law. The sanction could be slaughtering a sheep to the elders

and buying new dresses to the victimized woman. If the man is her husband, then they should be reconciled after he is penalized and they should go back home together.



Photo 5: Bale women with their 'Sinke' Source: MELCA-Ethiopia archive

Regarding the power of 'Sinke', one of the interviewees who participated in the study and head of Goba District Culture and Tourism Office said,

In the culture of Bale community, 'Sinke' is an expression of respect for a woman. If a woman is carrying Sinke, she would be given way or priority at any place. If she is carrying something heavy for instance and someone comes along her way, he/she should take the burden off her and deliver it at wherever she may be going.

It is a taboo to fight while a woman with her 'Sinke' is around. If two individuals or groups are engaged in fighting with each other and a woman comes with her 'Sinke', they have to stop the fighting immediately. 'Sinke' is instrumental to the extent of stopping a war between two clans. The warriors immediately stop fighting if women come with their 'Sinke'.

'Sinke' is also a cultural instrument of supporting each other. If a poor or helpless woman gives birth to a new baby and there is no one to feed or support her after she delivered, her neighbor or friend would take the initiative of going out with her 'Sinke' to ululate and sing a song arranged for this purpose. Other women would also join her with their Sinke and they would call for a contribution from the villagers to support the poor mother. They collect the contribution and provide to the mother. So 'Sinke' is such a powerful and valuable cultural practice that we should not lose. (Interview conducted on 29 August 2018)

5.4.1.3. Ecological significance

Because of the access restrictions arranged through the taboos and norms attached to them, SNS around the world have served as important reservoirs of biological diversity, preserving unique and/or rare plants and animal species (Oviedo et al. 2005, Emma 2014, Doffana 2017, Fabrizio 2013). As contended by Oviedo et al. (2005:3) 'in some areas SNS are valuable genetic reservoirs, and can be useful indicator sites, which are helpful in assessing the potential natural vegetation of degraded ecosystems'. Significant bodies of literature have also mentioned that SNS are also useful sources of genetic material that can be used for rehabilitating degraded environments (Diawuo & Issifu 2015, Oviedo et al. 2005, Fabrizio 2013, Lee & Schaff 2003).

Elders and custodians in Bale, who participated in the study, have discussed that before the advent of Dergue regime, SNS were among areas that can be mentioned as biodiversity rich. The participants have mentioned that the SNS were not only areas rich in biodiversity, they were also sources of water and places where rare and/or endemic plant and wild animal species were found. The biodiversity in SNS in general and the rare/or endemic plant and wild animal species in particular are protected through the taboos attached to them. One of the participants to the FGD has stated that 'it is a taboo to cut a tree or kill a wild animal in SNS as it is believed doing that would bring wrath to the offender, his family members or the village as a whole'.

Documents obtained from relevant offices of the study districts indicate that while most of the SNS in the districts that were found in the 1960s were forested areas, most of these forested areas were covered with indigenous trees (Dinsho District CTO 2014, Goba District CTO 2014). This is further confirmed by, elders, custodians and government representatives who participated in the study. They stated that SNS were places where indigenous trees like Birbirsa (Podocarpus falcatus), Wedessa (Schefflera volkensii), Geremba (Hypericum revolutum), Heeto (Hagenia abyssinica), ejersa (Olea aficana) and Oda (Ficus sycomous) that have reached on the verge of disappearing from the area used to be found.

The initiative to rehabilitate and conserve abandoned and degraded SNS, that was started about eight years back in the two districts, is also indicating that SNS used to be important havens for rare indigenous tree species. That is so because the indigenous trees that have disappeared from other areas as well as areas that used to be SNS are regenerating in most of the SNS that have been rehabilitated and being conserved. An elder who participated in the study has explained this saying:

...the indigenous plants and wild animals that have disappeared from the SNS are coming back after more than thirty years. Even when we look back to the disappearance of our forests, the few remaining trees we had were found in areas that were SNS before 40 years while those in dense forests at other areas have totally gone. (FGD conducted on 27 August 2018)

The assertion that indigenous trees that have disappeared before three decades are regenerating in the rehabilitated SNS has also been triangulated and confirmed through participant observation. The researcher has visited most of the rehabilitated SNS in both the study districts and witnessed that the mentioned indigenous trees have regenerated and are in good condition.

The revival of indigenous trees in the rehabilitated SNS shows that the SNS could be considered as seed banks for rare indigenous tree species. This is further affirmed by Doffana (2017) in his research article entitled 'Sacred natural sites, herbal medicine, medicinal plants and their conservation in Sidama, Ethiopia'. In this article, the researcher states that, while relentless deforestation and other tree-biodiversity-harming factors have caused decline of tree species, the few remaining sacred forests have proved to be key repositories for rare medicinal plants and other endangered tree species. It has been further discussed in the article that, in Ethiopia, studies documenting the role of SNS in conservation have indicated that SNS, especially forest areas where ancestral religious traditions are maintained, are important refuges for the rare flora and fauna of the country (Doffana 2017).

Another ecological significance of the SNS that has been boldly reported by the elders and custodians as well as experts from relevant government offices who participated in the study is their role of flood control. As discussed by the participants, farmers who have farmlands around the degraded SNS used to be affected by the runoff that come down the SNS in to their farmlands. The runoff used to wash the topsoil from some of the farmlands or create water logging on the farmlands that made the farmlands unfavourable for ploughing and sowing the fields. Such a situation used to ultimately result in decline of productivity for the farmers living on those farmlands. After the SNS were rehabilitated, however, the situation has been completely reversed. The runoff has been prevented by the plantation and underneath growth covering the SNS, which resulted in increased moisture content of the agriculture fields around the SNS and their increased productivity. An elder who participated in the study and also has a farmland around one of the SNS gave his testimony saying:

...now there is no water flowing down from the SNS to our farmlands. All the water is retained there by the plants and the grass. As such the soils on our farmlands have become better for the crops. As a result, we are getting better harvest to feed our families. (FGD conducted on 27 August 2018)

5.4.1.4. Economic significance

Even though the communities are not rehabilitating and conserving the SNS for economic gains, they are obtaining some economic benefits from the conserved SNS. According to the elders and other community representatives who participated in the study, before the SNS were rehabilitated, people could hardly get fodder for their cows, especially during the dry seasons, and so they were experiencing an unprecedented scarcity of milk. But currently, community members around the conserved SNS are harvesting grass from within the SNS so as to store it as hey and feed their cows especially during dry seasons. Participants to the study have explained that plenty of grass can be harvested from one SNS at least twice per year. As a result, many families in the villages around SNS are now keeping cows and the supply of milk is increasing. Such a change may imply multiple advantages. Firstly, families can feed their children milk, which is crucial for the growth of healthy children that can become productive citizens. And secondly, families in the rural area can generate additional income by selling milk. Furthermore, when the supply of milk increases, families in the towns and those who do not have cows can get milk on the market for a fair price. This again has the positive impact of making milk available for increased number of children including those in towns.

Another economic significance of the conserved SNS is their contribution to enhancing the productivity of the surrounding farmlands. As discussed by the participants to the FGD and relevant experts who participated in the interview, the vegetation cover on the conserved SNS is controlling the runoff and/or water logging that used to affect productivity of the fields around them. After the SNS have been rehabilitated, however, there is no too much water flowing down in to the farms and this has helped in enhancing their productivity. Then it can be deduced from this discussion that SNS have been playing a significant role in the provision of the regulating services of ecosystems that might have positive impacts on the economy of community members. Such ecosystem service that has been hampered as a result of the degradation of SNS is being restored, to some extent, through the rehabilitated SNS.

Further economic significance of SNS that can be explored in relation to its socio-cultural significance is its contribution to the creation of a peaceful and stable community that can determine its preferred economic, social and political destiny. One can boldly assert that a

harmonious, peaceful and stable community is likely to be more productive and empowered. As such, the harmony and unity among community members resulting in the peacefulness and stability of the community that is created as a consequence of the various social and traditional events conducted in the SNS has much to contribute to enhancing the economic status of the community. In addition, the use of locally produced materials like traditional medicines and the traditional conflicts management approaches arranged in SNS is likely to reduce the ecological footprint of community members, thereby enhancing their livelihoods and resilience.

5.5. The traditional ecological governance systems (TEGS) in Bale and conservation of biodiversity

Traditional ecological governance systems are the oldest form of nature conservation that has been practiced by communities for time immemorial (Infield & Mugisha 2013, Swiderska et al. n.d). According to Infield and Mugisha (2013) conservation of nature by local and indigenous communities across the world can be attributed to diversity of reasons that create a strong bond between the communities and their natural environment.

A significant body of literature relating to conservation of nature stress that there is a direct relationship between conservation of nature and the power of people to decide on issues affecting their land and natural resources. The likelihood of conservation of nature increases if local people have close personal relationships with the land and one another, maintain local traditional ecological knowledge that informs their land use and is attuned to the natural dynamics of the local ecosystems as a result of long term interaction, and they possess effective local institutions for regulating access to, use and control of resources (Premauer 2013). As contended by Snodgrass and Tiedje (2008) sustainable conservation of nature by local and indigenous communities rely heavily on the norms, taboos, totems and belief systems that set the informal rules, related in this case to resource use, as well as to the sanctions that would be enforced if rules were broken.

In this regard, participants to the study through the FGDs and interviews discussed that Oromos in Ethiopia in general and the Bale community in particular are known by their cultural values and traditional practices designed to conserve nature. Such practice is referred in the local language as 'Safu'. 'Safu' is something one should abstain from or avoid doing or it is simply a taboo. As discussed by most of the participants to the study, it is a taboo in the Oromo culture to cut fresh and young trees. If someone wants to cut a tree or trees for whatever reason, he/she is supposed to know the kind of tree, when and how it should be cut and what to do to get a substitution. For this reason it is a taboo ('Safu') for persons younger

than 40 to cut any kind of tree. It is believed that if a person younger than 40 cuts a tree, it would affect his chance of getting his/her children grown up. As such, if anyone younger than 40 wants forest products for construction or any other purpose, he/she should be assisted by those who are mature enough to know the kind of tree to be cut, where, when and how it should be cut.

In relation to this, an elder lamented

During the old days, people do not go in to the forest, whether SNS or not, and cut trees arbitrarily. There are processes and procedures. First there should be good reason for cutting a tree and elders should know this. Then there is a type of tree one can cut and cannot. It is not allowed to cut young trees and those which are believed to be important because of their sacredness or medicinal value. (FGD conducted on 28 August 2018)

The elders explained that the community had a procedure for sanctioning those who violate the norms, taboos and belief systems arranged to protect their natural resources and cut trees or kill wild animals without consulting elders. This procedure is called 'Seddeta'. An elder who participated in the study described 'Seddeta' as follows:

In the Oromo culture, someone who wants to cut a tree or kill a wild animal should consult elders. Anyone who cuts a tree or kills wild animals without good reason and elders' approval is punished by elders. Such procedure for punishing a person who cuts a tree or kill wild animals without knowledge of elders is called 'Seddeta'. There were no police, courts, judges and prisons like today. But we used to live with our natural environment and each other harmoniously. (FGD conducted on 28 August 2018)

The elders also discussed that they had traditional practices called 'mogasa' and 'Galle'. 'Mogasa' is a tradition whereby people, especially, families who do not have children, plant a tree, give it a name and nurture and grow it in the back yard just like their child or a member of the family. While 'Galle' is a similar tradition of adopting a tree, in 'galle' people adopt a tree in the communal forest. If a person wants to adopt a tree in forest he ties a piece of cloth or creeper called 'galle' on the trunk and then may hang a beehive on it. Then no other person may cut that tree or use it for any other purpose as that is considered a trespass.

5.6. Consequences of the degradation and loss of SNS: Community perception

Before the advent of modernity and the introduction of conventional natural resource conservation approaches, local and indigenous communities had complex traditional ecological governance and belief systems that were geared toward sustainable conservation of

the resources through norms, myths, taboos, totems and closed seasons linked to the traditional ecological governance and belief systems (Diawuo & Issifu 2015, Yaw 2011, Aniah et al. 2014, Doffana 2017, Adam 2012). SNS are among the traditional institutions that played a central role in sustainable conservation of nature (Emma 2014, Verschuuren et al. 2010, Infield & Mugisha 2013). The complex socio-cultural associations of SNS with deities and spirits of dead ancestors have contributed to the protection of some important biodiversity hotspot areas and ecosystems (Boadi et al. 2017). As such, it has been asserted by various scholars who conducted research in relation to SNS that there is a direct correlation between biological and ecosystem diversity and traditional governance and belief systems (Emma 2014).

According to the elders, SNS custodians and other community members who participated in the study through the FGD, for the communities in Bale, the consequences of loss of SNS are far reaching beyond the loss of biodiversity that they used to harbour. While the SNS used to provide the community with all the ecosystem services, the spiritual (cultural) and provisioning services were the ones most valued by the community and so felt as loss of critical aspects in their lives when they are lost along with the SNS. An elder explained one of the problems the community is suffering because of the loss of SNS as follows:

After the SNS were deforested and degraded, the springs and wetlands as well as the streams that used to flow from the wetlands dried. Then we faced severe scarcity of water both for us and our livestock. We have to travel long distances to get water. This especially became additional burden to our women as they have to fetch the water that they need for the family from a long distance. Since many families from different villages started to share same water point, the community in general and children in particular have become vulnerable to water borne diseases. (FGD conducted on 27 August 2018)

As a country where rural traditional smallholder farmers constitute majority of the population, Ethiopia can be described as one of the countries where medicinal plants play a central role in the traditional health care system (Doffana 2017). According to this author, while various big and small plant species are selected and utilized for meeting a range of health and paramedical needs of the rural traditional communities, most of such medicinal plants are collected from within SNS. This is so not only because SNS are places where most of such plants are found but it is also believed that plants collected from within SNS are believed to be highly medicinal.

In relation to this, the elders and custodians who participated in the study have explained that one of the crucial things the community in the study area lost as a consequence of the degradation and loss of SNS is the medicinal plants. They explained that there were variety of medicinal plants that are gone as a result of the degradation and loss of the SNS. Some of these medicinal plants were found only in SNS. Some of the SNS were also sources of holy water that people use to get cured from various diseases. One of the participants to the FGD iterated:

Our community had better health status during the old days when our SNS existed. There were no serious health problems like we see today and our traditional medicines were sufficient to treat both human and animal health problems during that time. With the loss of the SNS we lost not only the medicinal plants but also the knowledge we inherited from our fathers. Most of our traditional healers are passing away with the knowledge as the conditions to transfer the knowledge have deteriorated. Now there are many health institutions and professionals. Yet, they are not solving our health problems. We are seeing that most of the patients who are treated in the modern health institutions are dying. And we are also witnessing that some of the diseases are new and incurable. (FGD conducted on 27 August 2018)

As further explained by participants to the study, most of the consequences of abandonment and loss of SNS that have negatively affected the living condition of the community relate to the social, cultural and spiritual values of the SNS. This assertion by the community members is also affirmed by Reynolds et al. (2015) who contended that in addition to their immediate ecological conservation value, sacred sites in Ethiopia are also examples of powerful social institutions that have ensured the provision of cultural and spiritual ecosystem services for generations.

As explained by the elders, custodians and other community members who participated in the FGD as well as the interviewed government representatives, SNS were at the centre of the social harmony and peaceful coexistence that used to exist in the community before four decades. They were places where elders and the community gather for various social events including the making of customary laws by which community members were governed. The norms and taboos that guided the relationship between people and nature and with each other were emanating from SNS.

Regarding this, an elder and custodian who participated in the study said:

People are quarrelling and killing each other for insignificant material benefits. We have lost love and respect for each other. Even we are seeing children killing their parents. We have lost all the norms, 'safu' (taboos) and customs that used to guide how we should live and relate with each other. This is a crisis we have never seen before and we believe it is because we have lost our SNS and our connection with nature. (FGD conducted on 27 August 2018)

Such social crisis are happening mainly due to the changes in how the communities function, with children going to state-run schools, elders no longer being the respected leaders they once were. The cohesion within the society and the respect for values and traditional social norms has been degraded, resulting in only a small number of individuals holding the knowledge and related practices (Emma 2014). By way of further reinforcing the foregoing statement, another participant iterated:

There are so many things we are suffering because of the loss of our SNS. We lost the forests our fathers and grandfathers conserved for thousands of years in just four decades. Because of the deforestation, we have even reached at a stage where we have difficulty getting the woods we use during burials. Along with the forests we also lost the love, respect and reverence we had for nature and each other as a community. We lost our unity and sense of togetherness. We do not meet to discuss on our issues like our fathers and we used to do when our SNS existed. Only politicians initiate our gatherings these days and we discuss only on the agendas they set for us. It is all about politics. (FGD conducted on 28 August 2018)

According to the participants to the study, SNS were also the centre of traditional institutional arrangement for conflict management. Any conflict that may arise between individuals, families or even to the extent of clashes between two clans, used to be managed in SNS as per the set customary laws and governance systems. When such conflicts or clashes happen, elders gather in SNS and mediate/solve the problems using the traditional laws and procedures and almost all of the cases are concluded reaching at win-win reconciliation. Such traditional conflict management procedures, however, have disappeared along with the loss of SNS and erosion of cultural values. Regarding this, one of the participants to the FGD stated '...we have lost our culture of conflict management and reconciliation through our elders. People are going to the police and courts for all sorts of issues. Yet conflicts and crimes are increasing at an alarming rate (FGD conducted on 28 August 2018).'

SNS were also regarded by the elders and custodians who participated in the study as repositories of plant species that were used to make materials that had special cultural significance in the community. According to the culture of Bale community, for instance, before getting married, a girl is supposed to make traditional baskets that she would take with het to her new home when she gets married. One of the areas where the type of grass used to make such baskets used to be collected were SNS and their territories. That culture of basket making before marriage is no more being practiced now. As such, the participants to the study have discussed loss of the culture of basket making before marriage and related traditional knowledge as a consequence of the degradation and/or loss of SNS.

The foregoing assertion is also supported by research documents. Emma (2014) has stated in her PhD thesis that the loss of SNS and erosion of cultural values of local and indigenous communities is oftentimes associated with loss of traditional knowledge and cultural identity of the communities.

5.7. The need to accord legal recognition for SNS and related TEGS

SNS are recognized as human cultural heritages (Doffana 2017) that have well demonstrated the inextricable link between humans and nature (Verschuurn et al. 2010, Emma 2014). Because of this, SNS around the world are considered as important reservoirs of critical ecosystems and biodiversity (Studley & Bleisch 2018, Doffana 2017, Emma 2014). Despite their cultural and ecological significance, however, majority of the SNS lack legal recognition accorded by states.

In the journal article entitled 'Juristic Personhood for Sacred Natural Sites: A Potential Means for Protecting Nature' Studley and Bleisch (2018) point out that historically, most legal systems have denied legal recognition to natural entities other than humans. These authors also contend that the current post human thinking advocates for a return to animism and a shift in the anthropocentric thinking toward addressing the basic unit of common reference for the relationship between humans and the other non-human inhabitants of the planet. In relation to this, Studley and Bleisch (2018:82) argue that 'SNS would be most effective as conservation areas if legal recognition was given to complement community based customary ritual protection that is already in place.'

According to Fabrizio (2013) according legal recognition to SNS is important because the fact remains that non-utilitarian but deeply rooted values have never ceased to act as fundamental drivers of conservation and their importance is getting progressively acknowledged also in ecological economic frameworks. In relation to this, Emma (2014) also contend that since the

application of centralized conventional conservation approach to all spheres of protection of the environment has proved to be ineffective, integrating community based conservation approaches such as SNS in to the conventional conservation approaches, where appropriate, will help to strengthen and better achieve both biodiversity conservation and human welfare goals. Examinations of the current environmental governance approaches suggest that more transparent, inclusive and decentralized forms of environmental governance are required to ensure conservation of biodiversity and healthy ecosystems that support the set sustainable development goals (Swiderska et al. n.d.).

In the two study districts, the Rural Land Administration and Environmental Protection Office (RLAEPO) of the respective district has demarcated and given legal recognition to the SNS (rehabilitated or planned to be rehabilitated by the community) in the district as Community Conserved Cultural Sites (CCCSs). According to the information obtained from representatives of the relevant district offices (Interview conducted on 29 August 2018) the demarcation and legal recognition is based on the request from the community and channelled through the Culture and Tourism Offices in each of the districts. It seems that the bold measure of demarcating and certifying the SNS as CCCSs taken by the offices is based on the regional forest law that recognizes communal forests (ONRS proclamation No. 72/2003) and proclamation No. 163/2011that gives the mandate to demarcate and provide legal recognition and protection to attractive historical, cultural, religious places and natural sites in the region to the Culture and Tourism Office (ONRS Proclamation No. 163/2011). Since there is no information recorded so far to that effect, it seems that the demarcation and legal recognition accorded to SNS as CCCSs in the two districts of Bale zone is the first of its kind in Ethiopia.

The administrative measure of demarcating and certifying the SNS as CCCSs taken by the relevant district offices has been very much appreciated by the elders and custodians who are interested in the rehabilitation and conservation of the sites. The elders and custodians who participated in the FGDs have expressed that demarcation of the boundaries of existing SNS and their being certified as CCCSs would ensure protection of the SNS from further encroachments and help gradual revival of their related cultural values and traditional practices. As one elder has stated:

We know all the sites have been by far larger than their current size. Their size has been shrinking from time to time as the farmers around have been expanding their farmlands in to the SNS areas. Besides, the forests in the sites have been destroyed and they were used as grazing areas. As a result, all the sites have been so degraded and all the springs and streams relating to the sites dried. Now the demarcation would

ensure the boundary of each SNS as it exists now and the legal certification would ensure protection of the sites from any further intrusion. Then gradually we will revive our cultural practices relating to the SNS and we believe that will bring us a better time. We have formed an elders' forum to work on the revival of our cultural values and traditional practices in general and those relating to SNS in particular. Besides, the springs and streams that we have lost are coming back along with rehabilitation of the SNS and we do not want to lose them again. (FGD conducted on 27 August 2018)

Regarding legal recognition of SNS as CCCSs by the district administration a government representative who was one of the interviewed participants iterated as follows:

Legal recognition of the sites serves the purpose of making sure the sites remains under the custody of the community and creates a sense of belonging. After the certification, no one would claim the site for other development purposes, like expansion of agriculture, and the custodians and elders develop a sense of confidence that the site will remain serving the purpose they intended for and they can remember the traditional practices they used to practice and want to handover to their children. We are now witnessing that the rehabilitation and reforestation works done through government programs for the past two decades have not achieved what has been achieved through rehabilitation of the SNS in such a relatively short time. The conserved sites are becoming biodiversity rich areas like they once used to be. So, one can imagine the extent of revival of our biodiversity if we can expand the practice of rehabilitating and conserving such cultural sites. (Interview conducted on 30 August 2018)

It seems the administrations in the two study districts have taken the courage of recognizing the rehabilitated and conserved SNS as CCCSs based on article 91 (1) of the FDRE constitution (1995) which states that 'Government shall have the duty to support, on the basis of equality, the growth and enrichment of cultures and traditions that are compatible with fundamental rights, human dignity, democratic norms and ideals, and the provisions of the Constitution' as well as sub article 2 of same article which states that 'Government and all Ethiopian citizens shall have the duty to protect the country's natural endowment, historical sites and objects'.

5.8. The contribution of SNS and related Traditional Ecological Governance Systems in enhancing wellbeing and resilience of the communities

A significant body of literature relating to the concept of wellbeing and resilience of communities indicate that the two concepts should be seen as interconnected and interdependent rather than as two separate entities. That is so because when we examine factors that determine the quality of life and resilience of communities, we find three components that serve as common denominators for both. These are social capital, ecological capital and economic capital (Wali et al. 2017, Salvia & Quaranta 2017, Summers et al. 2017, Bizikova 2011, The Young Foundation 2012, Kais & Islam 2016). These capitals are resources that underpin the collective wellbeing and resilience of any given community (Kais & Islam 2016). The more a community has these capitals, the more it would be happy, prosperous and resilient community.

Social capital relates to the cultural identity, social events that gather community members, spirituality, social bond and cohesiveness, trust, tolerance, respect for each other, existence of strong social network, attachment to a place, the culture of supporting each other, etc (Wali et al. 2017, The Young Foundation 2012, Salvia & Quaranta 2017). According to Salvia & Quaranta (2017) social capital is the central component of community wellbeing and resilience that mediate between the ecological and economic capitals.

In the context of local and indigenous communities, SNS can be considered as traditional social institutions where collective identity and mutual support, social relationships and networks, spirituality and attachment to a place are fostered. Elders and custodians who participated in the study have described SNS as places of love, peace, respect, tolerance and healings (blessings) (FGDs conducted on 27& 28 August 2018).

Describing the idea further, an elder stated:

SNS are places of love, respect, tolerance and equality where all irrespective of clan, religion, colour, economic or social status and gender differences gather and pray to God with one heart and mind and thank him for being blessed with what is needed. All community members, led by elders and custodians, pray in SNS for the wellbeing and good of the whole community, human and non-human inclusive. They pray for good rains and good harvests. Then they also come here for thanks giving when what has been prayed for happens. Such ritual ceremonies are also events when the needy get support and the sick get healed. (FGD conducted on 28 August 2018).

Such social events underlie the cultural identity of the community (Wali et al. 2017) that is a constitutive part of wellbeing and a constructive factor in how life is valued (Watene & Yap 2015).

Another important role played by SNS in the construction of social capital is the creation of a sense of attachment to a place. As contended by McMillen et al. (2016) attachment to a lace is a concept that describes the degree to which people have an emotional, spiritual or social connection with a place and others with whom they share the place. Attachment to a place creates the sense of pride associated with belonging to that place. It includes the cognitive, emotional, and spiritual connections to places and has been suggested as an indicator of healthy and resilient communities (McMillen 2016).

As related to this, participants to the study have discussed that SNS are places where the community use not only as spiritual places where to conduct annual rituals, but also as social institutions where they make their customary laws and manage conflicts and solve any other social problems. This is iterated by one of the participants to the FGDs as follows:

SNS are also where customary laws that shape the behaviour of members of the community, as to how they interact with each other and their natural environment, were forged and announced. They are also places where conflicts are managed as per the customary laws and procedures. Any conflict that may arise between individual, family or even clan is solved here. There were no problems elders could not solve in SNS. It is a place of refuge for those who are in danger, whether wild animals or humans. ...when natural disasters, likely to affect stability of the community like draught, epidemic, animal or crop diseases breakout happen, elders gather in the SNS and pray and the disaster will stop. (FGD Conducted on 27 August 2018)

Participants to the study have also discussed how erosion of their cultural values as a consequence of the abandonment and degradation of their SNS resulted in the decline of their social capital, which has negatively affected their wellbeing and resilience.

Since the advent of the communist government, we have lost our culture of living in harmony as a community and solving our problems in our own ways. Our cultural values, like respecting and supporting each other have been eroded extremely. We have lost our connection with nature and with each other and we are suffering from the wrath. We are suffering from many social problems including crimes, robbery, diseases and killing each other. (FGD Conducted on 28 August 2018)

Another participant added to this saying 'we have become vulnerable to natural calamities and diseases. It is like we have lost our shelter and are outside in the rains, wind, hail, flooding and all the harsh weather conditions you can tell' (FGD Conducted on 28 August 2018).

Ecological capital is another factor that is considered a key determinant of community wellbeing and resilience. In this regard, there are considerable amount of research evidences showing that changes in ecosystem services affect the wellbeing and resilience of communities through impacts on security, the necessary material for a good life, health, and social and cultural relations (Bizikova 2011, Wali et al. 2017, MEA 2005). According to Wali et al. (2017) drivers of environmental degradation, such as deforestation, extractive industries and expansion of agriculture can negatively affect the livelihoods and erode the social capital and cultural values of communities thereby being detrimental to their wellbeing and resilience.

In this regard, participants to the study have explained that the loss of forest cover in general, and the SNS in particular, has resulted in land degradation that resulted in decline of their farm productivity and scarcity of potable water in their area. Because of this, they have become vulnerable to the effects of climate change, food insecurity as well as human and animal diseases. One of the interviewees representing government office has explained that in the study district although the community conserved SNS for their cultural purposes, they used to play the role of providing the regulating and provisioning ecosystem services. He stated 'what we have witnessed from the rehabilitated SNS is that in the past they played the key role of keeping the soils healthy and generating water for the community and their domestic animals' (Interview dated 29 August 2018). By way of affirming this assertion, Salvia and Quaranta (2017) state that the availability of water and land in the desired quality and quantity as well as climate and geographical features of community, inevitably play a large role in shaping the wellbeing and resilience of a community.

McMillen et al. (2016) have emphasized on the role of community gatherings and active negotiation and dialogue among multiple identities as well as relationships among people and between people and places established through cultural norms, value systems and traditional practices in the creation of healthy and happy community who at the same time is resilient to external influences. According to these authors, such social and cultural elements are key factors for the creation of collective moral and spiritual social consciousness that are important in the wellbeing and resilience of communities. In this regard, participants to the

study have discussed that the erosion of cultural values, norms and the weakening of the social bond among community members in the past four decades have contributed much to the vulnerability of the community to external cultural influences. In relation to this, one of the participants to the study through the interviews explained the situation in the study area as follows:

The erosion of cultural values, norms and collective identity and the break of social events that facilitated intergenerational learning have resulted in the creation and gradual widening of generation gap in the past four decades. The youth are considering elders and their parents as illiterate and ignorant and tend to follow the western style. They are not interested to learn about the culture and traditional practices of their community and how these are related to the natural environment. They do not know and value the traditional knowledge that elders hold. They think the only way to learn is by going to the modern schools. (Interview conducted on 29 August 2018)

By way of reinforcing the foregoing assertion, Salvia and Quaranta (2017) contend that the weakening of intergenerational communication and knowledge transfer between the generations and erosion of cultural values is highly likely to result in the decline of social capital and resilience to external influences of communities. According to these authors, resilience in communities requires that members of the communities are willing and, crucially, able to influence their local situation and able to absorb or effectively respond to external shocks.

5.9. Challenges to Rehabilitation and Conservation of degraded SNS and Related Traditional Practices in the study districts

Although majority of community members are enthusiastic and contributing to that end, rehabilitation and conservation of SNS and revival of related traditional practices is not without challenges. According to the information obtained from participants to the study, the first and most prominent challenge is related to religious extremism. Participants to the study have discussed that in the past couple of decades, religious extremists who consider rituals in SNS as witchcraft or idol worshipping have been created in both Muslim and Christian religions, which are the dominant mainstream religions in the study districts. The participants have reported that these religious extremists are designing and doing various activities that may hamper the movement of rehabilitating SNS and revival of related traditional practices. Such activities, according to the informants, include harassing the elders and custodians who are leading the initiative and intrusion in the rehabilitated SNS.

Another challenge facing rehabilitation and conservation of SNS, as discussed by the participants to the study, is the growing population size that is resulting in increased demand for agricultural land. According to the participants to the study, the growing demand for land that has already reduced the original size of the currently existing degraded SNS is still persisting. Farmers who have farmlands around the degraded SNS try to object demarcation, legal recognition and rehabilitation of the SNS with the likely intent of expanding their farmlands. Besides, some unemployed youth in the rural areas claim to get farmlands in the degraded SNS areas that can potentially be rehabilitated.

Still another challenge, as discussed by the participants to the study, is the relatively slow revival of rituals and other traditional practices in the rehabilitated SNS. It has been reported that this can be partly attributed to the influence of extremists in the mainstream religions and partly to the suppression and deep erosion of the cultural values and related traditional practices in the past four decades, which require longer time for revival. Regarding this, an elder who participated in one of the FGDs stated:

We are facing some challenges from extremists who say that we are trying to bring back the old days of witchcraft. Some of these people are ones who have agricultural land adjacent to the SNS, and been expanding it in to the area of SNS and want to continue doing so. But we know that SNS have nothing to do with religion. Our fathers also used to worship in mosques and churches depending on their religious orientation but they all meet here for the annual ritual ceremonies. In this place, no one notices the different religions they follow outside. (FGD conducted on 27 August 2018)

The other factor that resulted in the slow revival of rituals in SNS and traditional practices could be the reluctance of young people to participate and learn about SNS and related traditional practices. That is so because majority of this sector of the community had gone to the modern schools and are likely to consider SNS as something belonging to the elders and from which they do not benefit.

As such, most participants to the study do have the concern that the slow revival of rituals and related traditional practices in the rehabilitated SNS may become a constraint to the expansion of the initiative and negatively affect sustainable conservation of the SNS through related norms and taboos as it used to work during the old days.

5.10. Conclusion

Bale is one of the areas in Ethiopia endowed with impressive natural landscape accompanied with biodiversity and rich culture and traditional practices of the community. It is an area where the first national park in the country, the Bale Mountains national Park, was established.

One of the bio-cultural significances of Bale is the close link between the local community and their natural environment. Among manifestations of such link between the culture of the community and their natural environment is conservation of SNS and related traditional ecological governance systems. Before the advent of the Dergue military regime in 1974, each village (consisting of 15-20 households) in Bale region had at least one SNS. For Bale community, SNS are natural areas, mostly densely forested knolls, endowed with spiritual powers. These are places strictly conserved for spiritual and cultural purposes. They are places where the community conducts their annual thanks giving rituals and also where members of the community gather to pray to their God when they face natural calamities threatening their stability and survival as a community. Community members strongly believe that they rarely face natural and manmade shocks during the old days and when they do, they continue to survive the shocks as they get immediate and positive responses to their prayers in SNS. They are also believed to be places of healing as the medicinal plants or holy water in SNS heals people with various health problems.

During the period before 1974, in addition to their spiritual values, SNS also served as places where conflicts are resolved, the community share information and experiences and cultural identities of the community are manifested. Any dispute between individuals, group of people or even two clans is solved in SNS through mediation of elders. A peculiar characteristic of such dispute resolution is its being concluded with win-win ends for both parties thereby contributing to sustainability of community stability. The traditional dressings, foods, songs, dances and other cultural performances during ritual ceremonies in SNS are also believed to have a significant contribution to the development and maintenance of the cultural identity of the community. Besides, they used to serve as places where women make their voices heard when their rights are violated.

Another important role of SNS in Bale is their contribution to conservation of important habitat areas and rare species of plants and wild animals. As discussed by participants to the study, while rare plant species that have disappeared from other areas are found in the few remaining SNS in the area, even those that have totally disappeared have started to appear in the recently rehabilitated and conserved SNS. This has a strong implication that areas that

were SNS can serve as gene banks for rare or disappeared plant species. The vegetation cover in the SNS areas also play an important role of controlling flood and soil erosion thereby contributing to the productivity of the surrounding farmlands.

The significant roles that SNS used to play in terms of contributing to the spiritual, ecological, socio-cultural and economic interests of the local community has, however, been undermined as a result of the change in the government and political ideology that happened in the country in 1974. The introduction of communist ideology by the Derg discouraged traditional belief and governance systems relating to SNS while the nationalization of land and natural resources monopolized the control over such resources under the central government. Detachment of the community from their land and natural environment as well as dereliction of their traditional ecological governance systems resulted in severe degradation of the environment including SNS and their territories. Besides, Globalisation, modernisation and acculturation have also been threats that contributed to the erosion of SNS and related traditional ecological governance systems. The traditional knowledge systems that gave rise to SNS and the customs and traditions that maintain them are often regarded as backward.

The abandonment and degradation of SNS and erosion of the traditional ecological governance systems of the community resulted in detachment of the connection between the community and their natural environment, sense of attachment to a place, erosion of the cultural values and traditional practices that ensured the harmony among community members as well as the customary rules and regulations that shaped the collective management of land and common property resource uses and social relations. In addition, the community lost important ecosystem services such as availability of water and medicinal plants as well as control of flood and erosion. Such negative effects resulting from the degradation of SNS and abandonment of related traditional ecological governance systems had a far-reaching consequence of negatively affecting the wellbeing and resilience of the community.

As such, decentralizing governance of nature so as to allow local and indigenous communities to freely practice their traditional governance and belief systems is believed to be a key factor that contributes to enhancement of the wellbeing and resilience of the communities. That is so because the empowerment to make decisions on issues relating to their land and natural environment, the freedom to determine their preferred governance system and way of life and collective capacity to respond to and influence change are conditions that determine the status of wellbeing and resilience of a given community. The discussions with participants to this study strongly imply that the first step toward contributing to enhancement of the wellbeing

and resilience of communities is according legal recognition to their traditional ecological governance and belief systems including SNS, which are at the centre of such traditional governance, and belief systems.

Chapter 6: Conclusion and Recommendations

6.1. Conclusion

Sacred Natural Sites can be considered as the oldest bio-cultural-physical formations that signify the interconnection, interdependence and interaction between nature and humanity as socio-ecological systems. This relationship between nature and humanity is based on the reverence that communities accord to nature through their traditional governance and belief systems. SNS are natural places given special protection by customary laws of local and indigenous communities because of their spiritual purposes. They are considered places where the deities or ancestral spirits reside.

What makes SNS different from other spiritual or religious institutions is that they are natural places as opposed to man made. SNS can be a single tree, a single rock formation, small spring or forested areas ranging from a few plots to a vast landscape consisting of hills and mountain ranges, caves, rivers, lakes, islands or wetlands that consist of geological formations, distinct landforms, specific ecosystems and natural habitats.

The practice of designating such natural places as SNS and protecting them as special through norms and taboos designed by the customary laws to restrict access to these places except for the intended spiritual purposes and culturally crucial social interactions has existed for time immemorial. Whereas the story of origin of SNS in various parts of the world may vary depending on the specific context of the area and the community and can be traced as embedded in the stories and myths of the communities that hold them sacred, understanding nature in both its visible and invisible forms can be considered as a common feature shared by all. This emanates from the belief that humans are inseparably linked to their natural environment not only physically, but also spiritually.

Examination in to the history of SNS around the world shows that the primary purpose for which local and traditional communities protect and conserve them is their invisible or intangible values. In most local and traditional communities, the traditional belief systems relating to SNS designate them as places to get connected with the more than human for thanks giving, places to pray for good seasonal rains and mercy during bad times, places of

healing as well as getting social and personal problems solved. As such, they can be considered as places where group of people representing a community or individuals connect to and interact with nature in a more meaningful way that goes beyond the utilitarian perception of nature.

For these reasons, SNS are accorded special protection through the unwritten customary laws enacted in the form of norms, values, taboos totems and closed seasons that restrict access to the sites except for purposes prescribed by the customary laws. Among such restrictions imposed by the customary laws are prohibition of cutting trees and killing wild animals in sacred forests. They are sacred and hence no axe may be laid to any tree, no branch broken, no firewood gathered, no grass burnt and wild animals which have taken refuge there may not be molested. Hence, nature in some parts of the ecosystem, labelled as sacred, is left untouched and preserved in its natural state.

Because of the access restrictions imposed by the customary governance systems, many sacred forests around the world have been well protected over long time periods and have seen low levels of disturbance. When compared with other areas under conventional conservation approach, the currently existing SNS are by far good by their biodiversity and other related bio-physical resources. Many SNS are also being considered as important havens as well as genetic reservoirs for rare plant and animal species, including medicinal plants. In this regard, there are research evidences that show SNS play positive roles in the conservation of medicinal plants and related traditional ecological knowledge. Because of their being biodiversity hotspot areas, sacred forests also play a significant role in safeguarding critical sites in watersheds, or helping to preserve the ecological integrity of entire landscape. In relation to efforts for rehabilitation, SNS are also serving as sites helpful in assessing the potential natural vegetation of degraded ecosystems. As such, SNS are considered among the world's oldest conservation area, perhaps signifying the socioecological wisdom of local and indigenous communities that have managed and coexisted with their natural environment before the advent of modern conservation approaches.

In addition, SNS are social institutions where important social assets and cultural values of the communities are fostered. SNS are places where customary laws, rules and regulations that shape the ethical and moral behaviour of community members and that often indicate to people how to live together and in harmony with their environment are enacted. They are also places where information is shared, conflicts are managed and all sorts of social problems are dealt with and solved as per the set customary laws and traditional governance systems. Besides, they are places where community members gather for regular rituals and cultural

celebrations. These are believed to be the core elements constituting cultural identity and attachment to a place that lead to social harmony and unity that are considered as indispensable in the construction of social capital that is the central component of community wellbeing and resilience.

By contributing to the ecological integrity of ecosystems, SNS also help in keeping fertile soils as well as balanced seasonal weather conditions that are required for agricultural productivity thereby contributing to the livelihoods and food security of agrarian communities. Furthermore, SNS are considered critical components of a given ecosystem as most of them are sources of water important in the lives and livelihoods of rural communities. The foregoing discussions show that SNS provide spiritual, socio-cultural, ecological and economic services that lead to the construction of social capital, ecological capital and economic capital that are considered as the cornerstones in the building blocks of happy and resilient communities. This matches with the idea that measurements of wellbeing should go beyond the traditional economic indices of per capita income and accumulation of material wealth and include assessment of the emotional, spiritual and psychological attachment of people with their natural environment as well as the value laden moral dimensions that regulate the relationship among community members and between people and nature. A significant body of literatures have indicated that communities who have control over their land and natural resources, have close relationship with nature, have culture of containing and solving their problems and values underlying mutual coexistence and value cultural identity are happier and less vulnerable to internal and external shocks.

Despite their spiritual, socio-cultural, ecological and economic significances, however, SNS and related traditional ecological governance systems have been undermined since the advent of modern (western) civilization that focuses more on the material value of nature as well as religious doctrines that have relegated traditional belief systems associated with SNS as fetish and demonic. Management of natural resources in many countries, including African states, have fallen under the control of central governments who tried to adopt and implement the so called 'modern' western conservation approaches. As a result, local and indigenous communities have been denied their right of governing their land and natural resources in accordance with their customary laws, cultural values and traditional governance systems and practices. This is a scenario that prevailed in Ethiopia after the 1974 communist revolution that resulted in drastic change in political ideology that had a lot of negative effects on the land tenure and governance systems.

The consequences of the centralization of land and natural resource governance has, however, been observed to be poor natural resource management that resulted in rapid ecosystem degradation that affected the lives and livelihoods of millions of local and traditional communities around the world. There is no question that change in ecosystem services would primarily affect those who directly depend on such services for living. It should be noted here that the negative impact of degradation of ecosystems on local and indigenous communities is not only on the material gains they get from the ecosystems for living but also on their spirituality, cultural identity, social values and traditional ecological knowledge that have been conserved for generations.

The implication of the foregoing argument is that governance of land and natural resources should be decentralized and governments should accord legal recognition to governance of land and natural environment by local and indigenous communities, where appropriate, in accordance with their customary laws and cultural values, traditional belief and governance systems. As the traditional knowledge and governance systems acquired by local and indigenous communities over a long period of time can provide an insight in ways for improving management of natural resources, curbing the current global biodiversity crisis will require learning from any and all successful conservation institutions, including traditional and religious institutions.

As SNS can be regarded as the central traditional institutions that connect communities with their natural environment in a meaningful way, they should be perceived by governments accordingly. I would boldly conclude then that allowing local and indigenous communities to perceive their land and natural environment in their own traditional way and govern them as per their customary laws, cultural values and traditional practices and freely use their local institutions for regulating access to, use and control of resources is the most viable way to enhance the wellbeing and resilience of such communities. At the same time, ways for effective application of the conventional approach or a combination of both should be devised where the traditional approach has totally vanished or is very weak to function by itself.

6.2. Recommendations

Based on the findings of the study that indicated SNS and related traditional ecological governance systems as important components in sustainable conservation of critical biodiversity hotspots and healthy ecosystems that underlie the wellbeing and resilience of communities, the researcher recommends the following actions to be taken by relevant governmental and non-governmental organs:

First of all, any initiative toward revitalizing the cultural values and traditional governance and belief systems of local and indigenous communities with the intent to contributing to the enhancement of the wellbeing and resilience of such communities should start with a review of national and regional legal and institutional arrangements so as to facilitate the conditions for decentralization of governance of nature and recognition of the rights of local and indigenous communities over their land and natural resources including their freedom to exercise their traditional ecological governance and belief systems including traditional practices relating to SNS. The major scenarios that such a decentralized approach to conservation of nature should recognize are:

- ✓ Allowing communities to exercise their traditional governance systems where such systems are still functioning or can be revitalized and become functional to support sustainable conservation of nature,
- ✓ Devising and application of conventional conservation approaches that fit the local context in areas where traditional governance systems have ceased to function and
- ✓ Identifying ways to learn from successful traditional conservation approaches in the past and how they can be adopted to address modern conservation challenges and dynamics

In this regard, the Ethiopian government should embark on such arrangement in accordance with article 10 (C) of the CBD to which it is one of the signatories and the African Commission Resolution on the Protection of SNS and Territories, which was basically initiated by SNS custodian communities from different African countries including Ethiopia. As part of such legal arrangements, the government needs to enact laws and regulations that specifically address conservation of SNS including the custodian governance system for the effective practice of cultural rights and proper protection of SNS thereby providing effective legal protection to the rights of elders and custodians to rehabilitate and conserve their abandoned SNS and related traditional governance systems with the view to transferring the heritage to the next generation. In other words, the rights of traditional communities to exercise their traditional governance systems over their land and natural resources should be duly recognized in the national environmental policy including payment of ecosystem services for all successful conservation approaches including SNS.

In order to establish effective and sustainable conservation of SNS, unlike the hitherto practice of considering violations against SNS as minor criminal offences against property, such legal arrangements dealing with SNS and related traditional governance systems should go further to include provisions that would regard trespasses in SNS as violation of cultural rights of the communities with harsh consequences applicable to those not belonging or willing to be governed by customary laws of the community. The relevant legal provisions

should also address development projects or settlements planned to be conducted in the rural areas by government, non-government or private entities. Such development projects should consider avoiding intrusion in to areas that are designated as SNS by the community and violation of taboos and norms set by their customary laws.

Then such legal and institutional arrangement should be followed by continuous awareness raising and support for the communities so that they become aware and assertive of exercising their rights relating to their land and natural environment including their right to govern the same in accordance with their traditional governance and belief systems including those related to conservation of SNS as provided in the relevant laws.

When communities are ready to engage in rehabilitation of their SNS and revival of their traditional ecological governance systems, relevant government organs and CSOs should collaborate to work closely with and support them for full revival of cultural and traditional practices that should complement the rehabilitated SNS for complete revival of the socioecological interaction that ensure sustainability of the wellbeing and resilience of the communities. Such collaborations should include working toward expansion of the practice to other villages, districts, zones and regions where there is potential for sustainable conservation of nature through sharing of experiences awareness raising and capacity development.

Government organs and NGOs working in and/or with the communities should also collaborate to document the history of environmental governance and the cultural values and traditional practices of the community with a particular focus on those linked to sustainable conservation of nature and have a potential to contribute to betterment of the wellbeing and resilience of the present and next generation and incorporate these in to the formal and/or informal school curriculums. This should however be done with proper consultation with relevant elders and custodians to identify information relating to SNS that should not be exposed to outsiders or communicated publicly.

The foregoing should also be accompanied by a continuous support provided by concerned governmental and non-governmental organizations to build the financial and technical capacity of the communities. This should be implemented with the intention of enabling the communities to create a network among the SNS custodians from different communities with periodic meetings so as to facilitate information and experience exchange among communities from different areas and plan community led strategies and activities for expansion of rehabilitation of SNS and revival of related traditional governance systems.

The capacity building support should also focus on creating a forum for sharing of relevant experiences of sustainable conservation of nature through cultural values, traditional governance and belief systems of local and indigenous communities that have contributed to the creation of happy and resilient communities. Such experiences should be explored with the view to learn from them and creating a connection among the different nodes of similar community movements at national, regional and international levels so as to lead to the creation of a community of action that is capable of ultimately bringing a fundamental shift in the current global trend of governance of nature.

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