The Social Practices of Cultivation and Gathering of Medicinal Plants

in Ebenhaezer, Matzikama,

Western Cape, South Africa

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Declaration:

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university degree.

Signature: ........................                                              Date: . March 2016....

Melissa Louw
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Abstract:

This study aims to investigate the extent to which the increasing demand for medicinal plant and the resulting pressure on local cultivators to meet the demand impact upon cultivation and gathering practices of such plants. The specific focus is on the social practices of cultivation and gathering of medicinal plants in Ebenhaezer, a small-scale peri-urban town in Matzikama in the Western Cape Province in South Africa. This study will utilize survey and in-depth interviews techniques complemented with a focus group discussion on observed cultivation and gathering practices.

Keywords: social practices, cultivation, gathering, medicinal plants, Matzikama, South Africa
**Abbreviations:**

- **RDP** - Reconstruction and Developing Program
- **DRC** - Dutch Reform Church / VGK (Afr.) – Verenigende Gereformeerde Kerk
- **SDF** - Spatial Draft Framework
- **WHO** - World Health Organisation
- **GACP** - Good Agriculture and Collection Practices
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1. **Chapter 1: Background**

1.1. **Introduction**

Medicinal plants contribute significantly to rural livelihoods. Indeed, they are considered a good source of livelihoods and as such their cultivation is vital. So also, is there conservation as many have pointed out? However, recent global demand seems to be exerting pressure on the cultivation of these plants. Such pressure does not seem to be new. Almost three decades ago Cunningham (1993) pointed to a WWF/UNESCO report which highlights the connection between urbanisation and the demand for medicinal plants, thus putting pressure on the rural inhabitants who cultivate medicinal plants to meet the demand, especially the demand by African medicinal practitioners for their therapeutic practice. This particular report noted by Cunningham (1993) was that “there is significant evidence to show that the supply of plants for traditional medicine is failing to satisfy demand”. The failure to satisfy demand is as a result of many factors among which is cultivation and gathering, especially the ‘method’ for these. With more and more people now making use of medicinal plants to treat their ailments in conjunction with biomedicine, it is arguable that the pressure to meet the demand will have significant impact on the ‘method’ of cultivation and gathering. As has been noted by Williams (1996) that there are there are approximately 400-550 species in South Africa, that are currently sold for the utilisation in traditional medicine; of which 99% of those originate from wild sources. It is not surprising that quite a number of plant species are used for medicines because South Africa has a unique natural environment and biological diversity. However, Van Wyk et al (1997) indicated that the nature and intensity of resource use in South Africa has not been spatially uniform and different social structures have been imposed on the environment in different areas.

Studies indicated that in rural areas, one of the most commonly listed reasons for gathering is, that it provides health benefits such as reducing mental and emotional stress and providing opportunities for keeping physically fit (Anderson et al, 2000; Carrol et al, 2003; Emery et al, 2006 & Love et al, 1998). Rural gathering highlights the important role gathering plays in helping individuals and households maintain cultural identities and strengthen social ties (Anderson et al, 2000; Carrol et al, 2003; Richards & Creasey, 1996). Long-term gatherers or pickers often have substantial ecological knowledge, and many gatherers report that they engage
in practices aimed at maintaining resource productivity over the long-term (Love et al, 1998; McLain, 2008; Richards & Creasey, 1996). Cultivation and gathering of these medicinal plants are therefore vital, as earlier mentioned. It offers income-earning opportunities for the large number of people now involved in this activity. If more people are involved in cultivation and gathering of medicinal plants because of the increased demand does it mean that the new generation of cultivators are coming in with less experience of the methods of cultivation and gathering? Does it mean that new methods are being introduced because of the demand? What does it mean for the social practices (in the Bourdean sense,) of cultivation and gathering? These issues formed the basis for this study, the problem of which is stated below.

1.2. **Problem statement**

Medicinal plants are not only used for making medicines by local indigenous people in Africa, Asia and Latin America, generally, but also are sources of drugs in biomedical health care. The fact of this, means that there are sustainability implications to the way that medicinal plants are treated. Local people derive their livelihood from the cultivation and gathering of medicinal plants and at the same time, as in many cases, live in surrounding areas where such plants form part of the biodiversity. As Berkes et al. (2000) noted diversity and traditional management practices exist. One cannot also rule out that such exist in the areas where medicinal plants grow in abundance. In Africa, it is known that some indigenous people possess local knowledge and traditional ecological knowledge developed through generations of living with the natural environment. This applies mostly to those who use medicinal plants for healing, the African medical practitioners. Several authors have noted the importance of traditional ecological knowledge in the conservation of biodiversity as identified by the UN Convention on Biological Diversity which calls for the recognition and protection of traditional Article 8 of the convention states:

As literature shows, there are several definitions of traditional ecological knowledge but of wide appeal is the definition by Berkes (1999) which view it as the cumulative body of knowledge, practice and belief involve by adapting processes and handed down through generations by cultural transmission. What this definition seems to imply is that those who cultivate and gather medicinal plants for use as medicines and for livelihood in terms of selling the, locally would at
least have ecological understanding of the medicinal plants they cultivate and gather. It also means that in terms of the management of such plants, they would have the skills to manage them especially within the context of biodiversity. As a means of livelihood, the demand for these plants becomes significant. Where there are low demands, one can expect what this means for the livelihood of those whose only source of income is the cultivation and gathering of the plants; the same applies where the demand is high. As is well known, there has been increased demand locally in South Africa and globally for South African medicinal plants.

Besides, the issue therefore becomes one of pressure to supply as a result of demands and the implications for cultivation and gathering. The question that arises for investigation is: Does the demand for medicinal plants and the pressure to meet the demand affect the cultivation and gathering of medicinal plants? This question requires that one establishes the demand and supply of medicinal plants as well as examine its implication for the cultivation and gathering practices of these plants, derived, from local ecological knowledge. But my main focus is the practice of cultivation and gathering of medicinal plants especially by those who are not wholly in the marketing chain of medicinal plants. This group of people do engage in cultivation of medicinal plants mostly for spiritual reasons and less for commercial purposes. They are, in effect, small-scale cultivators who have ecological understanding of their locality having had such knowledge transmitted of theirs from the generation before them. In this sense, does the cultivation and gathering of these plants derive from this passed-on knowledge? Are there changes, over time, in the manner of cultivation among these ecologically-aware small-scale farmers? Does the manner of cultivation and gathering of medicinal plants reflective of observed demand and supply of these plants? These are the crucial research questions. The study therefore is about the practices of cultivation and gathering of medicinal plants among small-scale farmers who are knowledgeable about these plants and cultivate less for commercial purposes.

1.3. **Aim**

This study aimed to examine the cultivation and gathering of medicinal plants as social practice in a community of ecologically aware locals against the backdrop of a general-national demand and supply of these plants.
Objectives:

To identify the method of cultivation and gathering in the agricultural system generally.

1. To determine the differences between cultivation and gathering of medicinal plants and non-medicinal plants.
2. To determine whether there has been changes in the cultivation and gathering of the medicinal plants in Ebenhaezer.

1.4. Guiding research Questions

In order to achieve the above stated aim and objectives, the following questions served as a guide. The framing of the questions derived from the issues as outlined in the background. These issues were discussed at length in the literature review chapter which, follows after this chapter.

Is there a global demand for medicinal plants altering the cultivation and gathering of medicinal plants?

Which species of medicinal plants are cultivated in Ebenhaezer?

Is medicinal plants cultivation the main activity or just an extra source of cash for the farmer?

Are famers growing what the market wants?

In your experience has there been any demand in relation to cultivation and gathering with regards to the global demand of medicinal plants.

How much income does the cultivation of medicinal plants generate for Ebenhaezer farmers?

How much could medicinal plant cultivation contribute to the household income?
2. **Chapter 2: Literature Review**

2.1. **Introduction**

This chapter reviews few of the literature pertinent to the research. What is reviewed provides an understanding of the issue broadly and allows the study to be located with others; it is by no means exhaustive but somehow captures the essence of the study. The chapter has two general sections: a section that focuses on the literature on social practices and the section that focuses on empirical literature on cultivation and gathering. Structuration theorists such as Anthony Giddens (1984, 1993) and Pierre Bourdieu (1992) see agents and social structure as existing in a dialectic relationship and focus on the product of that relationship—social practice.

In sociology, social practice is a widely-used concept. It is a concept that is associated within social theories to two approaches that conceptualises the interaction of agents, and their social context: structuration theory and activity theory.

The central problem in the work of French sociologist/anthropologist Pierre Bourdieu and the British sociologist Anthony Giddens is the relationship between agency (the capacity of human subjects to engage in social action). Both of these theorists share the insight that social structure as such has no reality apart from its instigation through the practices (Bourdieu) or actions (Giddens) of particular human beings. Those actions, in aggregate, create and produce the structure in which actions are embedded.

Bourdieu labels the key concepts for understanding the relationship between action and structure as habitus. Through practices, actors are socialised to particular dispositions (their habitus). What are habitus and dispositions to Bourdieu and how does it relate to this study? For Bourdieu habitus is part of everyday experience and common-sense understandings of one’s social world and how exactly to behave in it. Thus, habitus refers to the lifestyle, the dispositions, the values, certain expectations of particular social groups. Dispositions on the hand include habits, values, tastes, feelings, beliefs, thoughts and bodily postures that Bourdieu argued were socially produced. Therefore, dispositions are formed by history, they however, are not inherited in which it is inculcated from the past experience to the present, and they are made. Basically, it is the agent’s view/perspective of the world and how he or she move and act in it. For Giddens,
social structures, such as already existing workplace practices, shape the behaviour of workplace participants. However, Giddens also makes it clear, that these social practices act as both a resource and constraint for their users, and they can only exist if their users reproduce them, for example, as Giddens noted, that it is by acting as an agent, using the organised practices, associated with an organisation that one becomes both socialised and an agent capable of intervening in the social world.

Leakay & Izac (1997) examined that large-scale cultivation and suggested that a number of socio-economic impacts on rural people. Commercialisation is both necessary and potentially harmful to farmers. It is necessary in that without it the market for products, is small and the opportunity does not exist for rural people to generate income. On the other hand, commercialisation is potentially harmful to rural people if it expands to the point that outsiders with capital to invest come and develop large-scale mono-cultural plantations for export market. Rural people may benefit from plantations as a result of available employment and hence off-harm income. However, plantations may also distort market forces to their advantages, for example by imposing low wages which will restrict the social and economic development of local people. There are however, different cultivation practices and some of which are home grown gardens as noted by the author Agelet (2010) that it is more accessible, especially in a rural poor community.

Plants, whether wild or domesticated are fundamental components of our ecosystems on earth. They form the productive bases and the physical structures, and support diversity of supplies of material sources, such as housing, food, craft, fuel, construction material and medicines. How people utilise and manage wild plant resources will significantly influence the sustainability of their livelihoods and the conservation of their diversity. Collection is an important factor in the harvesting process of highly valued medicinal plants and which aim to create a new dimension in the field of agriculture in developing countries. Thus, as Van Wyk (2008) noted that medicinal plants play a significant role in many cultures.

The collection of medicinal plants is a time-consuming activity and people tend to walk long distance in the search for these plants. Vitkov a& Rousakova (1994) has noted several years ago that gathering of medicinal plants in protected areas is subject to special requirements for
example, it is prohibited to gather medicinal plants in the reserve areas like private lands, farms. Rehm & Espig (1991) stated that the majority of these collections are gathered from the wild, while only a few are cultivated to a significant extend. Cultivation of medicinal plants is very essential because it provides plants needed for medicinal purposes. Therefore, a practice like this is more preferable; whereby cultivation is basically the only way to supply material without further endangering the continuity of these species (i.e. if you take into context the rare, endangered and overexploited species). There are various cultivation practices which range from fertilisation, irrigation, harvesting methods, planting date and this will be later explored in this particular study.

Approximately two-thirds of the 50 000 different medicinal plant species in use are collected from the wild, and in Europe, only 10% of the medicinal species that are used commercially are being cultivated (Canter, 2005). However, Vines (2004) recognised the risks involved in collecting medicinal plants as. That is why commercial gathering of traditional medicines in large countries with small urban populations (e.g. Mozambique, Zambia and Zaire) are limited and cases of over exploitation are rare, for example, in African countries with high rural population densities and small cities (e.g. Rwanda), gathering is also expected to be small scale, whereby a species is popular and supplies are low due to habitat destruction and agricultural expansion. Schipmann et al (2002) stated that commercial gatherers of medicinal plant material, whether for national or international trade are normally poor people whose main aim is not resource management but earning money.

The gathering of wild and semi wild plants remains an important economic activity around the world, directly providing food and medicine for many, as well as raw materials for pharmaceutical, health and beauty products, food and craft industries. Rarely mentioned are the socio-cultural, psychological, and physical fitness benefits people derive from taking part in gathering activities, for example, gathering plants or wild mushrooms allows immigrants from many cultures to obtain medicinal plants and fruits that remind them of their homelands. Gathering also provides opportunities for humans to connect with nature, allowing them to develop long-term relationships with particular types of plants and gathering sites. Gathering frequently involves developing ecological knowledge about where and how particular kinds of
plants grow, and sharing information with family, friends and neighbours. Schippman et al (2002) noted that gathering has many health benefits, it gives people a reason to get outdoors and be physically active, and it also relieves stress and is a way for people to relax.

With regards to pollination, studies have documented that about two-thirds of the crop plants that feed the world, plus many plant-derived medicines, rely of pollination by insects or other animals to produce healthy fruits and seed. Klein et al (2007) indicated one of the essential ecosystem services that have received widespread attention is pollination. They continue by stating that some 87 out of the 115 leading global food crops depends upon animal pollination including cash crops such as coffee. Consecutively, animal pollinators rely on nectar and pollen from wild plants to survive. Gallia et al (2009) noted that on a global scale, it has been estimated that the services that insect pollinators provide are worth around US$200 billion, which is 9.5% of the total value of the world’s agricultural food production in 2005. Klein et al (2007) further states that insect pollination is estimated to increase the yields of 75% of globally important crops and is responsible for an estimated 35% of world crop production.

Richards (2001) and Steffan-Dewenter et al (2005) indicated how agriculture poses many threats to insect pollinators such as changes in land use, loss and fragmentation of habitat, modern agricultural practices, and pesticide use. Removal of weeds that provide forage for pollinators is a major factor in the decline of native pollinators in agro-ecosystems. Kremen et al (2002) noted how several features associated with modern agriculture make farms poor habitat for wild bees and other pollinators, and many agricultural practices impact directly or indirectly pollinator populations.

The social practice written in Bourdieu’s work applies more to this particular study as explained in chapter one, which is essentially about age-old practices of cultivation and gathering.

2.2. **Cultivation and Gathering**

Rural inhabitants make considerable use of wild resources from communal areas around their settlements, as well as from arable and residential plots. These wild resources compete with the main crops planted arable plots and home gardens, but play a significant economic and
nutritional role in rural livelihood. This includes formal and informal agricultural activities, as well as harvesting of wild resources from arable and non-arable areas. At the same time, there has been relatively little research attention in southern Africa on the value and use of the same resources from the more intensively impacted and managed areas within the rural settlements, for example, home gardens and so forth. According to McGregor (1995) it is known that resources such as wild fruits, edible herbs, medicinal plants and the like are harvested from such areas.

The gathering of wild and semi wild plants remains an important economic activity around the world, directly providing food and medicine for many, as well as raw materials for pharmaceutical, health and beauty products, food and craft industries. Rarely mentioned are the socio-cultural, psychological, and physical fitness benefits people derive from taking part in gathering activities, for example, gathering plants or wild mushrooms allows immigrants from many cultures to obtain medicinal plants and fruits that remind them of their homelands. As noted during my fieldwork, gathering also provides opportunities for humans to connect with nature, allowing them to develop long-term relationships with particular types of plants and gathering sites. Schipmann et al (2002) stated that gathering frequently involves developing ecological knowledge about where and how particular kinds of plants grow, and sharing information with family, friends and neighbours. Gathering of medicinal plants thus has many health benefits, it gives people a reason to get outdoors and be physically active, and it also relieves stress and is a way for people to relax. This being the case, not many know how to collect medicinal plants in a proper manner.

Despite the many advantages of medicinal plant cultivation, in certain circumstances it can be impractical. As noted by Loudou (2008) the biological and ecological requirements can be difficult to meet or circumvent, for example slow grow rates, and susceptibility to pest. However, Schippman et al (2003) pointed out that medicinal plant production through cultivation can reduce pressure on wild populations, but it may also lead to loss of genetic diversity and loss of incentives to conserve wild populations. Furthermore, cultivated plants sometimes considered qualitatively inferior when compared with wild gathered specimens, largely for cultural reasons, but also perceived differences in efficacy. In Botswana, for example, as Cunningham (1994) have observed over two decades ago, that traditional medicine practitioners claimed that
cultivated plants were unacceptable; as such material lacked the power of wild collected plants. Scientific studies partly support this argument, as the medicinal properties in plants support this argument, as the medicinal properties in plants are primarily due to the presence of secondary metabolites which the plants need in their natural environments.

Cultivation and gathering as is well known, is more an agricultural method. Therefore, plants and seeds products are planted and harvested on a seasonal base. The cultivation and gathering of medicinal plants has died out over the years, however, cultivators that still have ecological understanding of their locality and by having this knowledge that have been transmitted to them from the generation before them, enable them to still be active in the cultivation and gathering of medicinal plants. Karki et al (2003) has noted that it has been shown to be the case in developing countries where women are the most engaged in the activities of cultivating and gathering. During my in-depth interviews with the respondents I calculated that females are the most dominant party that engaged in these practices of cultivating and gathering.

With this being said, there is still a relevant amount of issues in relation to the extinction and scarcity of these plants and as Hamilton (2008) noted quite some time ago, that it has serious implications for people’s health and livelihoods. However, medicinal plants and wild fruits are likely to generate greater interest among rural communities in the sense that they will yield financial returns more quickly than would a forest tree crop. Therefore, collection practices in Ebenhaezer, (referring solely to Rastafarians) should aim to ensure the long-term survival of wild populations and their associated habitats, because than the production density of the target species at the collection site could be determined and species that are rare or scarce should not be collected. Protection and utilisation of medicinal plants is of great importance for the world flora. In the case of critically endangered plant species by excessive exploitation, Vitkova & Rousakova (1994) stated that the only method to stop their decline and to ensure their long-term survival is certainly cultivation and gathering.

2.3. **Theoretical Framework: Pierre Bourdieu**

Bourdieu’s contributions to social theory are both empirical and theoretical. At the centre of Bourdieu’s sociological work is logic of practice that emphasizes the importance of the body of
practices within social world. Bourdieu was an exemplary author and published three dozen books and hundreds of articles that were translated. His work has had a great impact on contemporary understanding not just in sociology but in other disciplines as well namely anthropology; and as noted by Webb et al (2002, p.1) philosophy, gender and ethics, cultural studies, as well as film and media studies.

His concept of habitus, field and capital, for instance constitute what is arguably the most significant and successful attempt to make sense of the relationship between objective social structures (institutions, discourses, fields ideologies) and everyday practices (what people do and when they do it).

Within fields, the agents struggle to acquire these forms of capital so as to advance their own position of their own fields, for example, traditional medicine struggles to keep “alternative” medical practices outside of the realm of its field and deny such practices any form of currency. Bourdieu (1985) also effectively conceptualise agency as “habitus”. He observes that “habitus” or individual socialisation is “structuring and structured structure” that issue out of the “historical work of succeeding generations” (p.139). This on-going structuring process affects both schemas of perception (and thus thought) and actual practices.

In practice theory subjects (or agents) are not viewed as prior to practices, but rather as the product of them, subjects ‘is’ essentially, even in his or her inner processes of reflection, feeling remembering, planning and so forth, the sequence of acts in which he or she participates in social practices in his or her everyday life. These acts (cultivation and gathering) “range from ephemeral doings to stable long term patterns of activity. They can require “relevant equipment and material culture”, or rely on vocabulary and other linguistic forms of performances” For the purpose of emotional practice it is important to note that these acts are not only habituated and automatically executed movements of the body, but also inner processes of thought, feeling, and perception. Depending on where we live. We learn to keep our thoughts to ourselves, and know also what we want and say. The reason why I focus on emotional practices as well, it due to the fact that everything in life we do has some type of feeling to it.

Bourdieu’s transitions across different surroundings have established a course in search of recognition, status, and affluence through education in new framework. What is relevant to this
study is how Bourdieu’s theory deals with this same method, mainly how everyday experiences interrelate with the context where these experiences are positioned. It flows from a steadier, less fluid period. Though, it is opportune to revisit the importance of a Bourdieusian framework in the first decade of the 21st century with new circumstances allowed by cultural flows (Marginson, 2008).

**Habitus:**

This concept, Bourdieu explains habitus as a set of acquired patterns of thought, behaviour, and taste. Bourdieu employs this expression to an amount to the relation among social structures and social practice (social action). This view offers a potential foundation for a cultural approach to structural inquiry and permits a focus on agency. He defines habitus as, “the past which survives in the present”, “immanent law...laid down in each agent by his earliest upbringing”, “The habitus...makes possible for achievement of infinitely diversified tasks”, “dominated by the earliest experiences” (Bourdieu, 1977: 81-83, 87).

Bourdieu’s theory of practice (1977) comprises three elements, namely field, capital and habitus. This concept of practice, seeks to explain what people do in their everyday lives. He refers to lasting disjunctions, beliefs and values acquired through the socialisation process (most notably from family, the education system and community) from a very young age. This habitus embodies learned attitudes towards various subject matters such as many, gender relations and nature and predisposes individuals to behave in a certain way, from context to context. The habitus is also manifested physically through bodily component gestures, accent and the way one carries oneself in the world.

Mayrhofer et al, 2007 stated that habitus is durable but evolving and it is continually adjusted to the current context and reinforced by future experiences. Bourdieu talks about primary and secondary habitus: the primary habitus is influence by our parents, values, norms, customs, how one behaves and feels. This habitus is the building blocks for the secondary habitus which is primarily influenced by our schooling, universities and other life experiences. The habitus link us to a certain position in the field (social space). The primary habitus is one’s past as you grow up you tend to forget certain things, as Bourdieu would say that it is embodied history which never
loses its impact and that this habitus always influence the secondary habitus. The latter part of the study will indicate how positions of people (agents) have in the society (field) leads to different lifestyles which ultimately results to different choices (tastes) interest among themselves. However, even though we grow and learn new things everyday from ongoing experiences that does not mean that our system of dispositions changes at every new life experience. Chudzikowski and Mayrhofer (2011) stated that Bourdieu believes that habitus to be “inertial”, basically motionless or that it remains unchanged or as Bourdieu and Wacquant (1992) stresses out that it is “durable, but not eternal” (p.133).

Bourdieu presents habitus as a conceptual framework in which there are varying degrees of explicitness of, and competition among, norms. Under this framework, there are three ways that people experience the norms of their social existence. They do so through (a) a set of materially predisposed practices that express a belief about the way the world works and that reproduce that worldview. There predisposed practices tend to produce doxa, situations in which “the natural and social world appears as self-evident” (Bourdieu 1994, p.160; 1976, p. 118); this is habitus, the unquestioned order of things. People also experience the norms of their social existence through (b) the contrasting situation of orthodoxy, in which “social classifications become the object and instrument of struggle” and in which the arbitrariness of the current system becomes evident, and through (c) heterodoxy, a situation of more or less equally “competing possibilities” (1994, pp.164-165). Bourdieu emphasises the “complicitous silence” of community members in the continuous reproduction of the “collective rhythms”, or habitus, of the community (1994, p.182).

Habitus possessed by agents (Rastafarians/ Eben members) whose concern with production and distributions created as long as collective historical series. In Bourdieu’s languages, habitus is a historical product which produced individual and collective practices conforming to schemes that in turn produced social and cultural practices in Ebenhaezer before the land exchange, were medicinal plants were cultivated for the first time. Those schemes have been produced and reproduced over generations.

Bourdieu (1987, 1985) puts habitus as primary thought of his theory of practice. By habitus, Bourdieu wishes to go beyond the oppositions between theories and practice. In which case, he
assumes theories which grasp practices wholly as constituted. Habitus includes two significant aspects structuring structures and structured structures. Both shapes are formed by social practice. Bourdieu (1985) uses habitus as a system of common generative schemes. They are durable and transposable from one field to another. In this sense, it is intersubjective which means it is the place of constitution of person in action. At the same time habitus is a system of disposition in time, which is objective and subjective. Thus, habitus is the dynamic intersection of structure (objectivity) and action (subjectivity). In other words, it has intermediary role between society and individual.

Alternatively, Bourdieu noted that individuals socially determined habitus is different from their individuality. An individual shares his/her habitus with the people who have been exposed to the same conditions of living. However, each individual passes through a unique interiorising process. This makes up his/her individual personality and vision of overall social habitus. According to Bourdieu, same living conditions, same position in society leads to the same habitus. Moreover, Bourdieu’s thinking of the habitus of social being brings together the interplay between agents, who are positioned and the symbolic realm of representations that can be termed as the exchange of meanings (1990: 131) “So the representations of agents vary with their position (and interest associated with it) and with their habitus, as a system of models of perception and appreciation, as cognitive and evaluative structures which are achieved through the lasting experience of a social position. The habitus is at once a system of models for the production of practices and a system of models of perception of practices”.

However, their decision is not based on either objective structure pressure or manifestation of his/her free will. In other words, this phenomenon can be explained theoretically that cultivators’ decision is a set of regulatory schemes of thoughts and actions, which are to some extents, a product of prior experiences. Habitus is thus not whole structured, though it still remains strongly influenced by historical, social and cultural contexts.

Field:

Bourdieu refers to a field as a ‘structure’ (Jenkins, 2002; Thomson, 2008) that operates by objective social rules. In Bourdieu’s terms, a field can be defined ‘as a network, or a configuration, of objective relations between positions’ (Bourdieu & Wacquant, 1992, p97). It is
a social space constituted and regulated by positions, from which social actors are able to mobilise actual and potential capital accessible to them from their positions (Bourdieu & Wacquant, 1992). Consequently, these social positions instruct admittance to power accessible in the field.

A field therefore, is the system of social positions structured internally in terms of power relationships. This relation separated from individual’s conscious and willingness (Bourdieu and Wacquant, 1992). Therefore, social practices (cultivation and gathering) of agents mostly are caused by competition (community members and Rastafarians) in the fields (mountain, veld/garden) to obtain specific capitals. In Bourdieu’s languages, the fields relate to a structure space of forces and struggles, consisting of an ordered system and an identifiable network of relationships that impact upon the habitus of individuals. Fields are illustrated as a place where various capitals are used, disseminated, and competed by agents. Position of the agents in the fields is determined by the amount and volume of capital they have. In social reality of Ebenhaezer community, Rastafarians, there are agents who concerns with the production and trading of medicinal plants.

Bourdieu (1998) uses this concept to analyse modern society as a space of conflict and competition. Field is an account of the multidimensional space of positions and the position taking of the agents whose position is the result of interplay between these people’s habitus and their place in a field of positions. Agent’s place in a field of position is defined by the distribution of the appropriate form of capital. This positions range and nature varies socially and historically. Thus, Bourdieu uses the idea of field to provide the frame for a ‘relational analyses’. Bourdieu distinguishes three fields in the social space in which praxis takes place and society is produced and reproduced. They are the social field, economic field, and cultural field. The social field is made up of groups, strata, and classes. The individuals belong to them according to their social origin, activity or dissociation and unfamiliarity with people. In this sense, the social production and reproduction of society is the production and reproduction of new relationships between people, associations, and dissociation, groups, strata, and classes. This field also includes distribution and redistribution of them (Bourdieu, 1998).
In the economic field, labour dealing with scarcity and competing for opportunities to acquire income, production and distribution of goods and services, and the exchange of goods and services. This is the process of building up wealth of society. Economic production and reproduction implies the distribution of the products among individuals, groups, strata, classes and society. The cultural field includes the acquisition of education, certificates, titles, worldviews, product of arts, mass culture, sports activities, way of consuming, dressing and so forth. In this sense, cultural production and reproduction of society are the production of the elements of culture. This field also includes distribution of them.

Each of these fields has their laws and each field guided by these laws, actors play specific games on a certain field. These three fields also have some common futures. All of them are the place of production and reproduction of society for the distribution of their products. They are also places of societal praxis where individuals, groups, strata, classes, and societies produce and reproduce culture, social association, and economical wealth. The agents from societal praxis are also in competition over distribution of these products. Bourdieu puts his social analysis on the center of the competition or struggle. Each field is semi-autonomous and determinant agents, accumulation of history, logic of action and forms of capital. On the other side, capital may be transferred to another field. These fields are immersed in an institutional field of power. In other words, they may be transferred into the field of class relations. Moreover, these fields are the side of struggles.

In addition, local people believed in their traditional shared values, norms and rules relating to the cultivation and gathering of medicinal plants in Ebenhaezer. According to their belief, their ancestors (family members that are dead) have created customary law and regulations purposely for maintaining and conserving the utilisation of medicinal plants. Besides, social networks play a crucial role in empowering one’s social status and position in the community. Ebenhaezer cultivators, gatherers and collectors, develop their own specific social networks in fulfilling their needs of maintaining or improving their positions. According to Bourdieu (1986), economic capital refers to income and other financial resources and assets. It is the most liquid and tangible capital in that it may be more readily converted into other capitals. It is, for example, manifest in the capacity of some individuals (Ebenhaezer cultivators), gatherers and collectors, and even
labourers (those people that are being send around, when the main cultivator cannot gather/collect medicinal plants) to purchase different types of resources. The Ebenhaezer cultivators, indeed, have worth capitals in the form of their home gardens. They also have potency of economic capital in the form of seasonal yields. From this potency, Ebenhaezer cultivators will be able to meet their household monumental needs in the form of financing higher formal education of their children, and so forth.

**Capital:**

Bourdieu (1972) takes the social field as the foundation that represent the playground where certain rules apply. According to Bourdieu & Waquant (1992) each of these fields possesses different types of resources, in which Bourdieu named capital. Bourdieu (1986) distinguished between four types of capital, namely economic, cultural, social and symbolic capital, which agents activate in turn to gain access as well as enter in social fields. Below I will give a brief description of each capital, so that a better understanding can derive from it, when reading this study.

Economic capital, Bourdieu (1986) states that this capital can be change into money as well as regulate into property rights. This form of capital can be transformed into other types of capital. So in retrospect this capital is someone’s wealth and income.

Cultural capital is basically one’s education you get from family and schools (e.g. educational qualifications). This capital in the field you can utilised as your primary status and position in the field. This capital can exist in three forms, namely this can represent one’s sum of intellectual qualification, which is a durable system of dispositions (Bourdieu, 1986) as well as one’s culture or cultivation that presuppose a process of embodiment as it implies a tedious effort of development and integration (Bourdieu, 1983).

Social capital- this capital is one’s network of potential resources, which can be warrant by class membership, group or family (Bourdieu, 1986) and according to Gretzinger, Hinz, & Matiaske, (2010), this capital also allows one to have access to information, material and immaterial resources as well as knowledge.
Lastly symbolic capital is related to recognition and honour. This capital on the social field, reflects on the usefulness of capital, thus depending on the rules of the field.

In summary Bourdieu, formulates a reflexive approach to social life. This social life uncovers the arbitrary conditions of the production of the social structure and those attitudes, which are related to it. His formulation bases on three conceptions: habitus, field and capital. In his analysis, he connects these three concepts and a notion of emancipation. Therefore, for Bourdieu, the study of human life must include meaning of human actions. He seeks to clarify the social and cultural reproduction of inequality by analysing process of misrecognition, and by investigating how the habitus of dominated groups can cover or mask the conditions of their subordination. Bourdieu uses reflexive approach. Thus, for him, there is no point, outside the system from which one can take a neutral and/or uninterested perspective.

Consequently, practice does not possess distinctive qualities such as its own structure that would not be an effect and cause of habitus’ relation to the field. If so, cognitive, emotional and habitual aspects of practice need to be understood as analytical categories inherent habitus acting is the field.

Thus, to understand the practice of those engaged in cultivation and gathering of medicinal plants (or practice itself), it is crucial to understand their habitus and nature of the fields they are active in. The challenge, though, is to account for the evolving ‘logics and histories’ of both habitus and a field (see Bourdieu, 1993) and their moral influences.

So, what is the field in this study? The context in which the ‘cultivators’ carry out their cultivation. This context structures their habitus while at the same time the habitus is the basis for (actors) cultivators’ understanding of their life as cultivators in the field which they carry out cultivation.

The immanently relational view on habitus is of key importance of the study, which wants to understand the social practice of cultivation and gathering of medicinal plants and how ‘farmers’ cultivate and gather medicinal plants.
In terms of the study, elaborating Bourdieu’s theory of practice in analysing human actions provides broader understanding of how actors (in this case Ebenhaezer cultivators, gatherers or traders) interact within their social world in obtaining and controlling various resources.
3. **Chapter 3: Methodology**

3.1. **Introduction**

This chapter describes the methodology and methods applied in this study. The chapter has two general sections. The first section focuses on the justification for the use of methods in the study, while second section discusses the procedure and how the data was collected in the field. The study as explained in chapter one aimed and examined the cultivation and gathering of medicinal plants as social practice in a community of ecological aware locals against the backdrop of a general national demand and supply of plants.

Specific focus is on the practices of cultivation and gathering of medicinal plants in Ebenhaezer, a small peri-urban town in Matzikama, Western Cape, South Africa. For this purpose, the method that was used to gather the appropriate data was survey and in-depth interviews. The survey was use precisely to elicit information on the type of medicinal plants that are being cultivated in that area and the demand and supply of medicinal plants.

There were interviews on whether or not other plants are part of the cultivation and gathering practices as well as in-depth interviews focused on cultivation and gathering. The design of the survey derived from the literature and all the questions that were asked were based on the method of cultivation and gathering and the wider agricultural system.

3.2. **Survey**

In social research surveys are widely used in quantitative research, but can also be used in qualitative research. Thus, survey method involves the collection of data from a sample of individuals through their responses to questions. This technique is efficient in that many variables can be measured without substantially increasing the time or cost. That is why this method was utilised in this study: data was able to be collected with relatively low cost and many respondents were recruited rather quickly. The survey was carried out from the 4th of September 2015 to the 21st of September 2015 in selected local communities across the Ebenhaezer and neighbouring areas. The selection of communities was essentially based on the involvement with certain groups of natural resource users and those who cultivate, gathered and trade medicinal plants. It is worth mentioning, that an objective of the study was to survey all known medicinal
plant users, including Rastafarians. In a multi-lingual country like South Africa, it was essential that the respondents are interviewed and answered in their home language, which in this study was Afrikaans.

It is for these precise reasons why survey method was utilised, but this was also supplemented by in-depth interviews and to gather more information especially concerning farmers/cultivators that are subject to these interviews and how they go about cultivating and gathering medicinal plants.

3.3. **In-depth interview**

In-depth interview was utilised precisely because it is a qualitative research technique that involves conducting intensive individual interviews with a number of respondents to explore their perspectives relevant to this study. This technique offered the opportunity to capture rich, descriptive data about people’s attitudes, perceptions and behaviours. This method was carried out face to face basically to create a rapport with the respondents.

The use of these methods to gather data, allowed me to have a rounded picture of cultivation and gathering practices of medicinal plants. Through the use of survey I was able to identify the type of medicinal plants and if there were any changes with regards to cultivation and gathering. What follows in the next section is, how this was utilised?

Prior to my fieldwork, other colleagues and I undertook a trip to Ebenhaezer, the purpose being to familiarise myself with the neighbouring communities and make contact with prospective participants. This provided me with a foothold to can better leverage other surrounding communities which was essential for this study/survey.

3.4. **Sampling**

The participants in this study were people from the peri-rural area Ebenhaezer, with the following characteristics:

- a) They gather medicinal plants in the wild and cultivate it at home, b) they gather plants on private property, c) they plan when to gather or cultivate the plants, d) they utilise these plants mostly for ailments, e) they share the local knowledge with regards to gathering and cultivating medicinal plants and demonstrating an active relationship with nature and
their home gardens, f) they (Rastafarians) sell medicinal plants (they have a stall on the street where they display all their available medicinal plants on a blanket or paper bag).

Having these characteristics in mind, my first obligation when entered the field (Ebenhaezer) was to refamiliarize myself community and make immediate connection with the neighbouring communities. Field work started with the identification of farmers and those relevant to my study, my observation allowed me to capture their everyday activities. This also allowed me to informally introduce myself to those I found along the way. With that being said, I gained entry to particular groups namely the Rastafarians and farmers, which automatically created a network “buzz” of me being in the community. Those I found along the way introduced me to their friends and family. They now know me as the “plant doctor” even though I explained that I am not one, however, the senior generation fail to remember that I am only a researcher.

I interviewed 160 individuals, 90 females and 70 males, the ages of the individuals are between 18-86. Unfortunately, I could not reach 300 individuals. I guess I was too ambiguous and highly unrealistic on my part. I have tried my best to interview as much as I could, but time was not on my side. Initially, I wanted to start from the age 16, but after interviewing six individuals (three males and three females) I came to the conclusion that they were not suitable for my research questions at hand. My aim was to stop at the age of 65, but after entering the field I discovered that the journey of medicinal plant knowledge continues after the age of 65 where histories began and new beginnings unfold. The individuals included in this research were 6 Rastafarians (who regularly gathered, trade, and sell medicinal plants), 90 individuals who gathered medicinal plants and plant it in their gardens, 60 (farm workers; mine workers and unemployed) who utilised medicinal plants but don’t collect it, the rest are the wives of farmers and only some of them utilised medicinal plants but don’t cultivate it. I interviewed individuals in different settlements situated in Ebenhaezer, which consists of several, namely, Papendorp, Hop Land, Nuwepos, Rooi erwe and Olifantsdrift. I had to travel with a local taxi to Papendorp, Olifantsdrift and Rooi erwe. Even though my sample size was relatively large, I reach theoretical saturation point after 50 interviews. To protect the identity of my interviewees I utilised pseudonyms or refer to them as a participant.
3.5. **Field methods**

I entered the field of Ebenhaezer starting from the 1st of September 2015 to the 30th of September 2015. I met most of the interviewees in their homes for face to face interviews; on farms as well as those roaming the street. The reason why I valued face-face interviews is because you can easily pick up the body language, whether they are experiencing comfortability or not, interested or not, the tone of their voices, the circumstances at home. It helps the researcher to understand the respondent’s life or worldview. All interviews were audio-taped and transcribed, as were follow-up on interviews. During the course of interviews I tried to make each interview flow in a conversational tone, the reason being is to cut through the tension and get rid of answers they think I want to hear, this automatically led to the creation of narratives that could be analysed for meaning. The second reason for this was to show the participant that I was interested in their stories, their views and opinions on the subject matter and this allowed the participants to talk about their cultivation and gathering methods at length and more casually. What I tried to do during these sessions was to guide them, to make sure that the participants stay on track, because it is easy to get lost in the story that goes well with the questions (especially the elders) and by doing this I did not spend too much time on one question.

3.6. **Interviews**

I began my sessions/interviews by introducing myself, explaining the purpose of the research. I asked permission to audio tape them and if I can make use of this information. All anonymity and confidentiality were essential in the introduction and participants were asked to sign a consent form (see Appendix A). The floor was opened to anyone who had specific question with regards to my research and if by any means, they feel uncomfortable with any questions, they can stop me at any time or refuse to answer. It was important for me to gain the individuals/community’s trust by ensuring them that I was not to make them feel inferior. That essentially was the feeling I got from most of them, mainly because I came from a University. (Not all had the privileges to be educated due to their circumstances). Half of my interviews were done at night and over weekends and I always got home after 1 am. This also depends on how many people were available between 23h00 or 00h00. I made sure that I always had someone whom accompanied me, because during the day I walk alone and I go to the furthest settlements.
The interviews normally took an hour to an hour and a half and the younger generations 30-45 minutes. I never stayed longer then I should, because there were so many grounds to cover. As an ice-breaker my interviews started with basic information on their background and upbringing, life in Ebenhaezer. After cutting through the nervousness, I moved on to more personal questions like occupations, age, and then to specific questions related to my study.

3.7. **Focus Group Sessions**

Focus group discussion started the second week of my stay in Ebenhaezer. Wilkinson (2004) indicated that it is an informal discussion among a group of certain individuals about a particular topic. This method involved more than one participant per data collection session. Broadly speaking, focus groups are ‘collective conversations’, which can be small, or large (Kamberelis & Dimitriadis, 2013). Why is it call a focus group? Kitzinger, (2005) said that ‘it involves some kind of collective activity’, an example would be debating a specific set of issues relating to the research topic, reflecting on common perspectives or experiences or discussing any issue related to the topic. This helped me a lot and I got more information from the participants when they debated the questions that were asked during these sessions.

Methodologically, focus group interviews involve a group of six to eight people who come from similar social and cultural backgrounds or who have similar experiences or concerns. My focus group sessions start relatively small; eventually I had more than 5 individuals in my group. My goal with these groups was to create an atmosphere, a setting to make the participants feel comfortable, and willing enough to engage in a dynamic discussion for one or two hours. A focus group does not aim to reach consensus on the discussed issues. Rather, focus groups as Hennink (2007) noted should ‘encourage a range of responses which provide a greater understanding of the attitudes, behaviour, perceptions or opinions of participants on the research issues’.

This method allowed group dynamics and help the researcher capture shared lived experience, accessing elements that other methods may not be able to reach.

The focus group sessions of this particular research took place during the time of data collection. I conducted seven focus group sessions and the groups varied from four to six participants.
During these sessions, I made sure to take notes during these discussions, opinions and interpretations shared. I sometimes encounter that the audio recorder automatically switched off or has only recorded for a few minutes without me realising what had happened. That is why it was essential to take notes for which I created a journal so that I can go back if I need to make sense of something. Note taking also helped me with regards to capturing the attitudes, behaviour and facial expressions of individuals in the group. The audio device obviously cannot capture the emotions of the focus group sessions.

My sessions took place in the homes of my participants, because this setting provided a more comfortable space for those participated in the focus group sessions. There were three groups one that consists of small-scale farmers, secondly Rastafarians and thirdly community members that actively participate in the practices of cultivation and gathering of medicinal plants in the peri-urban area called Ebenhaezer. All which led up to seven focused groups. These sessions took up to one and a half to two and a half hours. This provided me rich insight with their thinking, their interpretations of words and gave me the opportunity to be part of their world.

3.8. **Field notes**

I took notes on dates, times and settings of interviews for the purpose of aiding memory recall and providing fuller detail for the writing process. These notes were added as appendices to my transcripts. Such notes included reflective observation about interviews such as general mood (for both interviewer and interviewee), responses that includes, confusion, doubts during the interview/conversations and questions for coding and analysis. Such field notes are typical of ethnographic investigations (Emerson et al, 1995). I also made use of an audio recorder for dictating thoughts and impressions about interviews when I am home.

3.9. **Data analyses**

I audio taped and personally transcribed all interviews. Even though it was time-consuming, I felt that it was important to go over my tapes personally to ensure proper transcriptions and to make notes about the interviewee’s (as well as my own) elocutions. Analysis of the interviews began as soon as each interview was transcribed. This iterative process, common in most ethnography, provided me with a feedback loop to ask more precise questions of interviews in
future meetings analyses of data was an ongoing process. In the field and during transcription of interviews, I was constantly grouping information and identifying possible themes that could link to the study objectives. The data analyses process involves making sense of the data collected as well as preparing the data analysis, moving deeper into understanding and representing data, and interpreting the larger meaning of the data (Cresswell, 2009). The process of data analysis that I followed is highlighted below.

<table>
<thead>
<tr>
<th>Raw data</th>
<th>Transcribing interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 22nd &amp; 23rd</td>
<td></td>
</tr>
<tr>
<td>Sept 2nd week</td>
<td></td>
</tr>
<tr>
<td>Reading through data</td>
<td></td>
</tr>
<tr>
<td>Validating the Accuracy of the information (Sept 21st - 5 hours)</td>
<td></td>
</tr>
<tr>
<td>Generating codes and themes (Sept 20th - 4 hours)</td>
<td></td>
</tr>
<tr>
<td>Interpreting the meaning of the themes</td>
<td></td>
</tr>
</tbody>
</table>

Box 1: Illustrating the steps of data analysis (adapted from Creswell, 2009:185):

Cresswell (2009) adds that qualitative data analysis is conducted alongside with data gathering, making interpretations and writing reports. The information and data (more specifically the oral history interviews) from the fieldwork were transcribed and translated by the researcher self. To ensure that the translated transcribes were transcribe correctly, the researcher listened to the recorded interviews, and check her notes for any inconsistencies. The data from the survey were coded and entered into a Microsoft Excel spread sheet, and averages and percentages were extracted where necessary. The major task was to organise the data in such a way that the
inevitable question of what to do with all this data, could be overcome, and the researcher was able to present a coherent picture of what had emerged from the fieldwork and how this could be linked to the preliminary conceptual framework, as well as some of the theoretical notions and approaches governing the study. Some of the rich data which emerged from the interviews were presented in to the letter form. Therefore, excerpts from transcribed oral transcripts and quotes from interviews are presented in the analysis and used as examples in this thesis.
4. **Chapter 4: Research site-Ebenhaezer**

4.1. **Introduction**

Matzikama, as the chosen study area is seated approximately 240km outside of the City of Cape Town, Western Province, South Africa. It is affectionately known as the “place of water”; including fertile soil make it a thriving agricultural hub. Their agricultural sector encompasses the cultivation of vegetables, citrus fruit, vineyards as well as medicinal plants which is the core of this study (SDF, 2014).

Ebenhaezer, a town in Matzikama, is known as a peaceful village, occupied predominantly by farmers and located near the mouth of Olifants River, which are located 37km from other towns such as Vredendal and 12.5km from Lutzville. Lucerne, beans and coriander fields are part of the landscape with livestock and sheep ‘grazing’ in green fields.

This town has minimal services accessible in the settlement because of low income, which leads to low demand of thresholds. The majority of the community have to travel to larger towns. The settlement is normally situated on higher land between the canal that takes water from the river near Koekenaap and the agricultural lands below.

Even though it is well situated in relation to intensive agriculture, it is far away from the R362 and in close proximity from the higher order settlements such as Vredendal and Lutzville, because of this, it is unable to promote tertiary and secondary sectors of the economy, which is one of the main income that originates from small scale agriculture (SDF, 2014).

4.2. **Background: A Historical Overview**

‘Exchange’ of land: From Ebenezer to Ebenhaezer

Ebenhaezer community dates back to 1832 when the colonial British government gave the old ‘Ebenezer’ land to the Khoi King, Kees Andries Louis. The land was kept in trust for the community by the Rynse Sendinggenootskap. The Rynse Sendinggenootskap took the agreement back in 1889 and the land as well as other responsibilities to the Dutch Reformed Church. The government gave fittings twenty years later on such land, including Ebenhaezer in relation to the acceptance ‘aanvarding’ and implementation of the 1909 Act on ‘sendingstasies’
missions. In 1917 the government started with the Olifantsriver irrigation scheme as efforts to reduce white poverty and to make them part of “regstellende aksie program”. The government made a decision to keep the land of “Ebenezer” and to include the irrigation scheme for “toekenning aan arblackes”. This happened during the year 1925 where land exchange negotiation took place and an alternative land was made available for the community of Ebenhaezer.

Before the move, a government committee was appointed to ascertain which persons would have to be negotiated with and what rights and claims would have to be bought from local people or compensated for in order to acquire the farms for inclusion in the Olifants river irrigation scheme (VKG, 1996).

The community of Ebenhaezer is approximately 2,600 individuals that live 40 kilometers from Vredendal and about 10 kilometers from the mouth of Elephants River “Olifants Rivier” on the West Coast of the Western Cape Province, about four to five hours drive from the city Cape Town. At the time generally known as “removal” (when people were forcefully removed from their residential areas, because of skin colour, following the Act No 14 of 1926) the Ebenhaezer community had title two portions of land, Ebenezer (4,514 ha) and Doornkraal (5,615 ha), 10,129 ha in total. In 1926, in terms of Ebenezer (Van Rhynsdorp) Exchange of Land Act No 14 of 1926, the community was dispossessed of, and removed from 3,485 ha of their most fertile river frontage land. This portion of 3,485 ha includes 1,566 ha of irrigable land that was subdivided into 264 “erwe” subsequent to the removal. These “erwe” are currently owned by approximately 52 private owners. The current estimated value of the 1,566 ha dispossessed land is in the vicinity of R100,000. The remaining extent of the 3,485 ha of dispossessed land, 1,919 ha in all, is marginal land without water rights and has an estimated value of R150 per hectare (R28,785 in total). This portion of land currently vests in the State. With regards to Ebenezer (Van Rhynsdorp) Exchange of Land Act, the community was granted 11,045 hectares of “exchange land” to offset the dispossession of the 3,485 ha. This exchange was patently unfair. The 11,045 ha of “exchange land” is low-value marginal land without water. Its current value is estimated to be just R1.6 million. The “exchange land” is situated adjacent to the portion of Ebenhaezer land retained by the community. The community was dispossessed of the most
prized and fertile portions of their land. The dispossessed land is, situated higher up on the canal (so that white land owners could get water first); situated higher (in altitude), which consist of the best quality (alluvial) soil, leaving the community with predominantly red Karoo soil.

In return the community received 11 045ha (12 895 mg) of land of exceedingly low quality and value at the time of dispossession.

The Ebenhaezer people had access to extensive portions of land in the area since time immemorial. White colonial expansion during the late 1700s initiated a process of erosion of the land rights of the community. On 6 July 1837 and in partial recognition of the Community’s rights, two smaller portion of the land to which the community had access were registered by virtue of a Deed of Grant. The farm Ebenezer (4 514 hectares) was registered in the name of the Rhenish Mission Society to be used as a mission station for the Ebenhaezer people. Doornkraal (5615 hectares) was reserved for the Ebenhaezer people. On 2 December 1844, in further yet partial recognition of the land rights of the indigenous people of the area, the farm Elsje Erasmuskloof of (23 444 hectares) was set aside for the use of the Ebenhaezer people by virtue of a Ticket of Occupation. As a result of the increased demand for land by white settlers, however, the Ticket of Occupation was cancelled unilaterally and without any compensation on 2 February 1877. Despite the cancellation, the Ebenhaezer community continued to use the land in the vicinity.

As early as 1859, the State realized that the Olifant’s River had enormous irrigation potential. In 1890 the Dutch Reformed Church (DRC) succeeded the Rhenish Missionary Society as trustee of the farm Ebenezer. This transfer was in direct breach of the 1837 Deed of Grant, which determined that the land had to be allocated to the Ebenhaezer people if the Rhenish Church renounced its trust. Doornkraal remained reserved for the Ebenhaezer people. A range of government investigations and plans culminated in the commencement of construction of the government irrigation scheme from 1912. The irrigation, at the time was to span 42 miles stretch of the river, which meant that the white landowners along the river were to be incorporated into the scheme and were not to be dispossessed. During the early period the State, through the intercession of the DRC, it has acquired land adjacent to the community land for establishment of a poor-white church controlled labour colony. Archival records show that from as early as
1909 the State and the Church already had plans for the removal of the community, whose land holding at the time, formed a fraction of the total area earmarked for irrigation. In the course of the following years, the church was to play a duplicitous role under the leadership of Reverend William Murray, Chairman of the Home Mission Committee of the DRC. In 1915, the church appointed missionary for Ebenhaezer, Reverend Smith, wrote that he needed to be as cunning as a serpent with regards to this matter in order not to trigger a motion of no confidence on the part of the residents.

The dispossession occurred as a result of a series of actions and omissions on the part of the State, culminating in Ebenezer (Van Rhynsdorp) Exchange of Land Act No.14 of 1925, the instrument of dispossession. During 1926, the Ebenhaezer people were “induced” (to cite official reports) to move from the subject land onto a retained portion of the farm Doornkraal. A government report in 1923 notes that the provision of water in the area to which the community was to be removed should be held out as “bait”. The actual water did not materialize to any significant degree. The retained portion of Doornkraal to which they were moved was vastly inferior to the land given up and it was situated at the very end of the canal. This meant that the white landowners upstream used the water before any of it reached the community during the summer months when no rain fell, and when irrigation was most desperately needed. The “irrigable” land retained by the community was allocated in the form of 150 irrigation allotments. Some 40% of these allotments have been become unusable due to salination. The remaining 60% is only partially farmed due to lack of water. The community retained just a portion of their land, to which the Ebenhaezer “village” was moved. The community lost its best land, only to be uprooted from where it lived and moved forcibly 15kilometers further away. Only a small portion of the original land that the community managed to retain still abuts the river.

The “whites only” settlers at the Olifants River Irrigation Settlement Scheme to whom the Ebenhaezer community’s land was allocated were paid a generous subsistence stipend to work the land for a first five-year probationary period. A probationary farmer was entitled to keep 60% of any profit that was made, without a deduction from the stipend. In addition, the settler farmers
were given extensive State supported low interest loans and permitted to lease or purchases the land on very favourable terms.

The area of Ebenhaezer is one of 23 coloured rural areas. Twelve of these areas, which include Pniel, Saron, Grenadendal, Suurbrak, and Mamre are situated in the Western Cape. The land in these areas currently vests in the Minister of Land Affairs who holds it in trust for the respective communities in terms of section 7 of the Coloured Rural Areas (House of Representatives) Act (Act 9 of 1987). The trust land at Ebenhaezer is currently subject to a tenure reform process in terms of the Transformation of Certain Rural Areas Act (House of Representatives) Act 9 of 1987. The trust land at Ebenhaezer was subject to a tenure reform process in terms of the Transformation of Certain Rural Areas Act. In terms of this law, community members were in the process of preparing a report to the Minister on their preferred options for the holding and management of their lands in 2005. The dispossession of Ebenhaezer people was patently racially motivated. The series of acts and omissions of the State, the misrepresentations made by the State, the enormous discrepancy between the way similarly situated white people were treated, the unequal bargaining power of the parties, and the presentation of the loss of the subject land as a fait accompli, show that the purpose of the dispossession was to move the ‘undesirable’ Ebenhaezer community in the interest of the upliftment and ultimately enrichment, of the white community. The fact that the pretence of exchanging land for equivalent land was a smokescreen is illustrated starkly by the end result. The state was aware that the irrigation scheme would never reach the portion of the retained land at Doornkraal to which the claimant community was removed. What transpired was an elaborate and barely disguised attempt to portray the dispossession as a voluntary agreement between the government of the day and the Ebenhaezer people. The state secured the best land for white people, ensuring the impoverishment of the Ebenhaezer community while their white neighbours flourished.

The descendants of the original inhabitants, who were classified as coloured, would be moved from Ebenezer and Droonkraal or the “Old Ebenezer”, known today as Lutzville, where they are currently settled. Below is the old church and next to it the new one. The picture next to the new church was Ebenhaezer’s first standard bank. They do not have any banks or ATMs in the area.
4.3. Setting

Ebenhaezer consists of several settlements which are Olifantsdrift, Rooi-erwe; Hop Land; Nuwepos and Papendorp. The latter which is located 15 km away from the main settlements of Ebenhaezer, is considered to be an extended settlement of the area. The last national census taken in Ebenhaezer was in 2013 and the population in Ebenhaezer area stood at 2,100 inhabitants, currently today it stands at 2,600 individuals according to the local Municipality in Vredendal. In all settlements housing consist predominantly of what is known as Reconstruction and Developing Program (RDP) housing. Some people in Ebenhaezer extended their housing with large rooms, and other houses remain crowed (simply cannot afford to extend their house). All households make use of prepaid electricity and some have running water in and outside,
other houses only have water (pipe) outside, so in relation to this they will fetch water in a bucket and keep it inside for washing, drinking, or cooking etc. There is a canal that has water but it is switched on every two weeks and it is used by the community as well, especially when there are water shortages or tap water that appears white and so forth. The canal comes from the river in Papendorp and that water comes from the ocean Lamberts bay. Sanitation facilities in most houses are limited and they do not seem to be bothered with flies inside the house and around their food. The reason why there are so many flies is because of cattle grazing in their fields. Some community members have toilets inside their homes and others have outside. Those that have toilet facilities outside make use of a bucket at night. Some of them have geysers and others make use of the kettle to boil water to make food etc. Getting into Ebenhaezer by foot would be time consuming; it is preferable use a vehicle due to the distance before you get to Ebenhaezer. Most streets have gravel or sand and only tarred roads that lead to the main highway. There is one primary school and no high school in Ebenhaezer. Therefore, children have to travel either to Lutzville or Vredendal to attend a high school. They make use of a school bus or taxi to get to it. Children attending school in Lutzville is about 15 km away from Ebenhaezer and those travelling to Vredendal are 20 km away. There are no shopping centres located in Ebenhaezer; hence, there are five tuck shops (mobile markets) that sell the necessary household things. Community members in ‘Eben’ as they call it take food on the book at some tuck-shops and pay their account at the end of the month or during “all pay”. The community members’ have to travel to Lutzville or Vredendal to do their monthly shopping. There is one liquor store and this is often visited by individuals (surprisingly the senior generation) who take alcohol on the book, until they get their grant. Not all of them take alcohol on the book; some go on the day that they get paid.
There is a small library and next to it, one satellite clinic, next to it is the community hall (where school activities take place, SASSA -all pay; funerals and events), next to the community hall is the municipality. There is no petrol station and community members have taken it up with the municipality/ government to invest in one, due to the fact that they have to drive to Lutzville each time to fill up a tank and come back. With regards to other facilities such as ATM/Banks they have to travel to Vredendal to draw money, or swipe at their local tuck shops to buy something. For the people that receive grants (like pension, disability, and child support) get hard cash on the day of “all pay” which normally takes place every month between the 1st and the 5th. Members of Ebenhaezer love cultivating their own vegetables such as carrots, beetroot, onions which they buy the seeds in order to do so. They do not really spend money on buying vegetables. There is also a field of cabbages cultivated by the small-scale farmers and sometimes they share these products with the community. Fish in the area are very scarce and community members either have to go to Vredendal to get some or wait for the fisherman’s from Papendorp. They would normally drive around the community or send their wives or friends to sell this particular fish. People in Ebenhaezer love this fish, when cooked it has a bitter taste to it, but normally they would turn it into a curry, price range from R2 a fish to R10 up, depending on how much fish they have caught. The name of the fish is called Harder and is a species of mullet.
Here is a picture below of the fish caught in Papendorp called “harders”.

Figure 3: Photograph of fish, respondents buy from the fishermen in Papendorp, called “harders”

4.3.1. Natural systems in Ebenhaezer and Wetlands Awareness Project:

The Olifants River corridor is highly disturbed from a natural system point of view both with regards to its vegetation and river conservation status. The Olifants River supplies the two-critical north and south bank canals that irrigate the intensive farming areas alongside. It is said that care must be taken to ensure that a sufficiently wide buffer of riverine vegetation is retained in order to conserve the water quality so that the river can continue to sustainably fulfil its long-term role of providing the “life blood” to the intensive agricultural activities (Matzikama SDF, 2014).

The prominence of the Olifants River corridor is emphasized by most of the population being concentrated in these settlements of Ebenhaezer (± 2 600) and Papendorp (±200) are found along the river. Most of the municipality’s rural population also lives on the farms in the corridor.
4.4. **Entering the field of Ebenhaezer, plants heal the heart**

I arrived in the study area, Ebenhaezer late on the 31 of October 2015. The following day which was the 1st of September 2015, I was ready to the tackle the day with full steam. However, people were not very accommodating at first, and initially I thought that they still need to get use to me but it had nothing to do with me. Exploring and observing that particular day, I was included in a conversation about a murder that took place over the weekend. The 30-year-old women who lived in Ebenhaezer, a mother, a daughter, a close friend, was stabbed eight times in her neck, and died instantly. The relationship the community have with one another (when it comes to unfortunate incidents) was admirable, while observing and sympathizing at the same time, medicinal plants came up in one of the conversations. The older generation tried to calm other members by suggesting that they should steep this medicinal plant (as you would do with a tea bag when pouring hot water on it, steep it until the flavour reached a certain height) and use it in collaboration with another herb just to calm the nerves. I observed that even though medicinal plants are not acting as a source of income people rely on them to “heal”; “calm” and “console” their fellow neighbours. A lot has happened in Ebenhaezer in the last couple of months, children committing suicide (hanging themselves) and drugs that are being sold to kids (especially in the primary school in Ebenhaezer). Talking about medicinal plants especially to the older generations brought back memorable memories, “lieflike vreedsame dae” (lovely peaceful days). Stories vary from becoming a young lady to crossing over to womanhood, bearing children and re-introducing medicinal plants to their children and curing sick husbands, giving them strength.
to get through their daily activities. On the last day of my stay in Ebenhaezer, I was approached by one of the seniors, asking me if I learned anything new about Ebenhaezer, initially I thought that she referred to my research project but this was not the case. Another suicide took place and in the area, that I was staying. A young man committed suicide by hanging himself on one of the tree branches near the canal. I went to the crime scene and witnessed him still hanging on the tree while waiting for the forensics to come. This was very sad and troubling to witness; it was certainly not how I intended to spend my last hours in Ebenhaezer. Most of the community members witness this tragedy and there were young children who do not seem to be troubled about what had occurred. Mainly, because it was not the first time that such a tragedy took place in their home town. The field was full of possibilities and disappointments but the love and history of Ebenhaezer despite the unfortunate incidents is what gives meaning to its name “Ons steen van hulp!” 1Samuel, 7:12.

Below are pictures of the common medicinal plants utilised by the community of Ebenhaezer:

Jantjieberend  b) Kraalbos  c) Wildeals

Figure 5: Photograph of three common use medicinal plants.

4.4.1.  **Relationship with modern medicine:**

Before the establishment of science-based medicine, traditional medicine was the central medical system for millions of people in South Africa/ Africa but with the arrival of the Europeans, there was a noticeable turning point in the history of this ancient tradition and culture (Conserve Africa, 2002). Although modern scientific medicine is successful in developed countries, it doesn’t have the same positive impact in many of the undeveloped African countries. (Abdullahi,
2011) Though Western practices can make an impact in health care practices, in certain areas such as in the spread of various diseases, it cannot integrate wholly into the culture society. (Abdullahi, 2011) There are many reasons why the Western medical system has not been effective in Africa or rural areas as it has in more developed parts of the world. Hospitals and medical facilities are difficult for many people to get to. With vast areas of land and poor road and transportation systems, on top of it expensive, many people have to travel immense distances on foot to reach help. Once they arrive they are often required to wait in a line for hours, especially if there is just one doctor and two nurses present. Patients are often not told the cause of their illness or much information about it all, so they have no way to prevent or prepare for it. The technology used is usually of poor quality, which impairs the quality of treatment. Modern medicine can also be too expensive for the average individual to afford, making it difficult for them to receive proper care. Western medicine removes people from their culture and tradition and forces them into a setting that they are not comfortable with, away from their family and traditions which are of utmost importance to them. What I meant by the above statement is that, some people in Ebenhaezer are sometimes afraid to utilised medicinal plants, because of the misperception of the law ( if they use medicinal plants, they will get a fine or go to jail), secondly because medicinal plants often requires money to cultivate or by seeds (clinic gives free medication/ nurses urge them not to utilise medicinal plants), thirdly as I mentioned before, some religious institution believe that only God can heal and if you believe you will receive his protection (especially against evil spirits and so forth).

4.5. **Ebenhaezer famers trying to get into commercial farming**

Ebenhaezer is one of the Act 9 areas of the Western Cape. The land is currently held in Trust by the Minister, but for all practical purposes the land belongs to the community. The total size of Ebenhaezer is 18 300ha. This is mainly arid grazing land but originally 152 famers received 1.8ha irrigation land each. Ebenhaezer thus has a total of 257ha water rights from the Olifants River Canal System. Each farmer owns a plot of about 1.8ha with irrigation water rights. Water rights from the canal system constitute 12200 m³water per hectare per year. Ownership of each 1.8ha plot is not in dispute but the owners do not have title deeds and land can be rented but cannot be sold or use as collateral.
Traditionally the main crops produced under irrigation in Ebenhaezer are Lucerne, dry beans, coriander and small planting of vegetables. All these crops are not very profitable when relatively small areas are cultivated. Water scarcity during the mid-summer months is a problem and limits the production possibilities. What most of the farmers does is operating a small family farming operation on 1.8ha. Earlier years farmers did most of the work themselves and only employed seasonal labour when required.

In Ebenhaezer resource-constrained farmers have been farming for more than fifty years. Despite this commercial production was extremely limited. The reasons for this situation include small pieces of land, lack of capital, lack of commercial farming experience, lack of financial management expertise, lack of complete ownership of land and so forth. Furthermore, the water distribution system in Ebenhaezer and the control thereof has a lot of shortcomings causing water shortages especially during the mid-summer months. Just recently Ebenhaezer had experience drought, because of lack of rain and this effect the farmers as well as the community. The canal system is only on for two weeks and then off for another two weeks, and people utilise this water for personal reasons, especially those who live near the canal. The challenge was to find a crop that could be produced on a small piece of land profitably. Not only per hectare but the income should be sufficient so that the venture would make economic sense on a small piece of land. Production normally occurs during the winter months.

Adjacent to Ebenhaezer are many irrigation, commercial irrigation farms with an average size of about 24ha. A number of these commercial farmers have been producing cauliflower and broccoli seed for Syngenta seed from March to November. This is a high value crop and the climate of the region is well suited to the crop. An advantage of seed production is that a contract is awarded and the price per kilogram seed is fixed at the beginning of the season. The producer carries no price risk except the exchange rate as producers are paid in Euro. Only production risk is carried by the producer. Transport of the product is easy as the seed is delivered to Syngenta in Lutzville (Du Randt, 2010).

One of the problems with the production of cauliflower seed is that many different cultivars are produced and each land needs to be isolated from the next by at least 3km. This meant that if producers in Ebenhaezer produced on open fields they would need to be 3km from one another
limiting the number of producers. If they produce the same cultivar it would not pose a problem. Production under the net structures that are bee proof was a solution. This appeared to be the preferred solution as a high value crop could be produced on a small piece of land. As farmers only have access to 1.8ha it meant that rotational cropping would be possible as the size of the net structures were 1500m². A resting period of 3 years is advised for the production of cauliflower seed. Farmers did not have enough capital to purchase the net structures, irrigation systems, inputs and so forth. Syngenta preferred that producers utilize a drip irrigation system as it offered many advantages over flood irrigation. The production of cauliflower seed requires a lot of working capital. Planting is during March and harvest takes place during late November. Payment for the crop is usually received during January and February of the next year. This meant that farmers needed to spend a lot of working capital before income was received (Du Randt, 2010).

One of the major stumbling blocks to overcome was access to seed contract from the international seed company. The seed produced is exported to overseas existing markets by Syngenta. Syngenta is therefore careful with the selection of their producers. Some years prior the start of the project Syngenta had a very negative experience with cauliflower seed production on a communal project in Ebenhaezer. This created a barrier.

A firm relationship between the farmers and the seed company had now been established and during 2008 there were three farmers whom produced successfully for Syngenta again. During 2009 are awarded not only contracts to produce under net but also 3ha open fields. The farmers have since expanded their businesses by producing onion seedlings, spring onion seeds, dry bean and carrot seed. They are renting land in order to do this. The expansions of farming activities in Ebenhaezer were placing stress on current systems, especially the water supply system which is not managed well. A lot of repairs and maintenance or redesign also needs to be done on the system. The farmers that contract is now able to employ five people on a permanent basis with many seasonal labourers that work for them during the season. Total labour per hectare of cauliflower seed, excluding management, amounts to about 300 labour days per season (Du Randt, 2010).
The success of the seed farmers is highly noticed and debated in the Ebenhaezer community. A number of new farmers have approached the Department for assistance in order to start seed production or other ventures. Unfortunately, these particular farmers are also criticised by the community as being the Departments favourites. The assumption is that their success has more to do with the assistance they received than their hard work. They also seen as the farmers who want to keep everything to themselves and this created stress in the community (Du Randt, 2010).

The some of the farmers are not very keen in going into commercial farming, due to back luck, poor planning in relation to meeting deadlines with companies, and losing more money than getting in. They spend money in transporting, seeds, labourers and renting and the Department is not doing much to help these small-scale farmers. They are not happy about the way things are going now, and some of them prefer small-scale farming and only works on a contract base with local stores (Du Randt, 2010).

4.5.1. Small-scale farmers

Agriculture has always been central to increasing human wellbeing and national economic growth. Its importance is in part due to its multi-functionality as livelihoods provider and source of income and jobs for rural households. Agriculture’s contribution to rural communities’ cohesion, through the maintenance of ecosystem services (e.g. water supply and purification, pollination, pest and disease regulation) and transformation of local economies (IAASTD, 2009), illustrates the importance of agricultural issues.

Within the agricultural sector, small-scale farmers have remained central to agricultural development and continue to play important roles promoting an ecologically rational and socially just food system. Small-scale farmers and farming systems are themselves extremely diverse as influenced by geographical region, national governance system and management type.

Smallholders and family farms vary in terms of activities they engage in, the assets and resources available to them (such as land area and quality, water resources, animal stocks, infrastructure and machinery, financial assets) and their access to these productive resources. They also differ in terms according to land tenure, the type of contractual arrangements which can include renting
or share-cropping; the control of the natural resources used; the scale production; the share of family labour utilised (who in the family and manages what and how); the extent and nature of wage labour employment; the degree of market integration; and the distance of holdings from family residence.

In engaging in economic, social, cultural, environment and reproductive functions, family farming can itself be a means of maintaining family patrimony and social status, cultural heritage, territories, landscapes and communities. As a result, the motivations of family farmers often go far beyond maximising economic profit to encompass other social, cultural and ecological motives. Agriculture (in its broad sense) is a critical foundation for family farmers’ livelihoods due to its important role in providing income and employment, food supply and a direct household basic consumption source. However, smallholders and family farmers often diversify their activities to complement incomes or reduce risks, participating in non-farm activities or bearing temporary migration. For these reasons, the view of a small-scale farmer as much more than an agrarian economic actor is gaining in prominence. Rather, small-scale farmer can be thought of as a nuclear unit for the environmental management of land and its biodiversity, an important source of cultural value and a fundamental pillar of the national development. As much, smallholders and families become a means and unit of organising agriculture, forestry, fisheries, pastoral and aquaculture production systems.

4.5.2. Access to land and water

The distribution of access to the most important agricultural resource, land, is extremely inequitable. The majority of producers, therefore, own less than two hectares of land. The trend towards ever smaller plots for the majority of small farmers continues. This is furthered by prevailing inheritance laws. The worldwide increase in concentration of land ownership in the hands of the few and the growing influence of companies and investors who acquire vast tracts of land as income property are further threats to their livelihood.

As well as access to land for crop cultivation, access to pasture, forest resources, and fishing and hunting grounds are of considerable importance for the livelihood of poor rural households. However, in many cases, their rights of access and use are not sufficiently protected, a situation which particular affects indigenous groups. Traditional systems that have governed land use for
generations are often not recognised in national land law, so that such user rights can be denied and small scale farming driven from the land and displaced.

Conflicts over land and water are increasing worldwide. While fertile land becomes even scarcer, industrialised agriculture, with its deep wells and irrigation systems, is literally cutting small-scale farms off from the ‘water of life’. Industrial and mining concerns also overexploit and even pollute local water resources.

This is a speech delivered by the Minister of Water Affairs and Forestry, Mr Ronnie Kasrils at the opening of the Ebenhaezer balancing the dam on 24th of November 2003.

The Minister stated that there has been a vast amount of government assistance in the area of Ebenhaezer over the past century. He continues by saying that with the assistance of the Department of Agriculture and the West Coast District Municipality has made R5.4 million available during that time by the Government to enable the construction of the Ebenhaezer balancing dam. The Minister stated that with this dam a capacity of 14 000m³ will be enable water flows from the main canal to be stored during times of low demand and to be released during times of high demand. The water will be used to stabilise the supply and demand of 150 resource poor farmers. This in turn will enable the resource poor farmers to pursue their dreams of irrigating the full 300 morgens of land that the water is allocated for. This canal is the core of cultivating medicinal plants in Ebenhaezer and this water is cleaner than the water that comes out from the tap. If a pipe burst in Ebenhaezer the community make use of the canal to support them with all their basic needs.
Below is a picture of the canal in Ebenhaezer.

Figure 6: Photograph of the canal situated in Ebenhaezer.

Small-scale farmers make use of the irrigation system for vineyards that is not for commercial purposes. This is located right next to a farmer’s house. The farmer made it clear that this is not for commercial use and he just wants to see how it turns out.

Figure 7: Picture taken of the irrigation system suitable for a small vineyard next to a farmer’s home.
4.6. **Medicinal plant use in Matzikama, South Africa**

Up to 80% of the population currently choose accessible and affordable home-grown herbs and plants to treat health issues (WHO, 2003). The Matzikama area has a variety of plants most of the below mentioned plants are used by locals. Here are only a few of the medicinal plants that are well known in the Western Cape.

**Kattekruie/ Cat herb (BallotaAfticana)**-Kattekruie is an important herb mostly used as tea for the treatment of coughs, colds, bronchitis, sore throats, bladder and kidney’s infections. It grows in sheltered areas where there is sufficient moisture. It is a hardy kind of plant so it can survive drought, growing again when the rain returns. It is frost resistant.

**Widde dagga (Leonotisleonurus)**-An infusion is made with the leaves and it is believed to soothe various conditions such as eczema, itchiness, insect bites and muscular pains.

**Kankerbossie (Sutherlandiafrutescens)**-It is a well-known medicinal plant in South Africa and it is used to treat stomach ailments and internal cancers. It is believed that the medicinal use of the plant stems, was used by the Khoi to wash wounds and were used for a remedy to treat a fever. The leaves are used for colds, flu, asthma, heart failure, poor appetite. This plant is propagated from seeds and cuttings. Planting should be done in spring and autumn.

**Kooigoed (Helichrysumpetiolare)**-It is also a well-known medicinal plant and the infusion of the leaves is used to treat a number of conditions including fever, headaches, colds and menstrual cramps. The soft leaves and flowers can be used to stuff pillows which deter insects but at the same time treat restlessness. Kooigoed is propagated by seeds and stem cuttings and it should be planted in autumn.

**Wilde-als (Artemisia afra)**-It is a well-known indigenous medicinal plant and its leaves are used as a treatment for various ailments but mainly for fevers, colds and chest problems. Nasal congestions and headaches is said to be alleviated successfully by placing roll-up leaves into the nostrils or by inhaling the dried powdered form of leaves. It grows well from cuttings if the cuttings are put in the ground in autumn and kept moist.
Oondbos (Conyzaivaefolia)-Traditionally the branches of this plant were used to sweep ovens. Infusions are also used as a treatment for influenza, fever, chest complaints and heart conditions. Steaming this plant is known to open nasal passages.

Bitterbos (Chrysocomaciliata)-This plant is used to wash sores, wounds and syphilis. It is said that the decoction helps to alleviate rheumatism, constipation and gastric fever.

Aambeibos (Chironiabaccifera)-The decoction of the entire plant is a well-known blood purifier in treatment of boils, skin disorders and abscesses. The plant however is toxic and overuse can be harmful.

Wilde knoffel (Tulbaghiaviolaceae)-This plant is used for colds, fever, asthma and tuberculosis. Regular use of the wild garlic in your diet allegedly helps to combat high blood pressure and high cholesterol levels. This plant is propagated form seeds or by dividing larger clumps. Wild garlic can be grown in spring.

Dawidjieswortel (CissampelosCapensis)-Is a very familiar medicinal plant, especially in the Western Cape, the roots and rhizomes are use medicinally. Chewing the rhizomes or drinking an infusion of the rhizome, will help to combat boils, syphilis, cholera, diarrhoea and bladder disorders.

Renosterbos (Dicerothamnusrhinocerotis)-Infusion of the leaves and twigs in brandy are a popular Cape remedy for stomach disorders. Infusion also acts as an appetite stimulant.

Bitter-aalwyn (Aloe ferox)-The leave juice is used to treat bums and to rid dogs and cattle of internal and external parasites.

Kougoed (Sceletiumtortuosum)-Dried leaves are chewed or the powdered form is inhaled to reduce stress and insomnia. It is also believed that chewing the leaves promotes the flow of breast milk. Kougoed can be grown in autumn, winter, and spring and can rest during summer.

Suurvy (Carpobrotusedulis) -The saps from the leaves are used for insect bites and it works well for conjunctivitis. Grows well where there is drought and mist.
Devil’s claw (Harpagophytum)-This plant is endemic to the dry areas in South Africa, Botswana and Namibia. Its medicinal properties are confined to the large tuberous roots that are harvested and dried to form powders, tinctures and extracts. It is use to treat pain, provide relief from a wide range of muscular conditions, diabetes, headaches and menstrual problems. It can be planted in late spring and early summer.

4.6.1. Medicinal plants in Ebenhaezer

Up to 50% of the population currently choose accessible and affordable home-grown medicinal plants to treat their ailments. The community in Ebenhaezer does not have that much medicinal plant in the area. Here are only a few of the medicinal plants that are well known in the area.

Wilde-als (Artemesium afra)

It is a well-known indigenous medicinal plant and its leaves are used as a treatment for various ailments but mostly for colds, chest-problems and fevers. Nasal congestions and headaches is said to be alleviated successfully by placing roll-up leaves into the nostrils or by inhaling the dried powered form of leaves. It grows well from cuttings if the cuttings are put in the ground in autumn and kept moist.

Groenamara (Vernonia oligacephala)

Its use for stomach aches and you drink it as a tea. You pour hot water on the leaves and let it sit for a few minutes and consume it when you have stomach aches.

Geneesbos (Lobostemon fruticosus)

It is use for colds, flu and chest problems. You can also drink it as a cup of tea, pour hot water on the leaves for 10 to 15minutes.

Kruisement (Mentha longifolia polyadena)

This particular medicinal plant is very common in Ebenhaezer and the part used of this plant is the leaves. It is mostly utilised for indigestion, heartburn, stomach upset, it also cleanses the liver, good for gum infections. You can also use this plant as a tea to wash your eye to remove
dust and grit. It serves as an anti-bacterial, anti-inflammatory, antiseptic, anti-spasmodic, anti-flatulent and as a stimulant.

**Roosmaryn (Rosmarinus officinalis)**

It is easy to grow and it prefers full sun and well-drained soil. It helps to relieve nasal and chest congestion caused by cold, flu and allergies. It is also used to relieve the symptoms of asthma. You can drink it as a tea; you put leaves in a cup of boiling water for 10 to 15 minutes.

**Jantjie Berent/Kankerbossie (Sutherlandia frutescens)**

It is a well-known medicinal plant in South Africa and it is utilise to treat stomach ailments and internal cancers. It is believed that the medicinal use of the plant stem was utilised by the Khoi to wash wounds and were used for a remedy to treat a fever. The leaves are use for colds, asthma, poor appetite, flu, and heart failure. This plant is propagated from seeds and cuttings. Planting should be done in spring and autumn.

**Kraalbos**

This type of medicinal is very common in this area. It is use it cure sores and skin problems. You wash yourself in the water with the leaves or wash your hair to get rid of lice and sores on your skull. This medicinal plant was mostly use on farm children who lived in extremely impoverished conditions.

**Granadilla skin**

It is used for insomnia, cardiovascular benefits as well as an asthma attack. The peel includes a group of substances which includes chemicals, acids and several other ingredients which can supply a little bit of alleviation to the asthma sufferers.

**Lavender (Lavandula angustifolia)**

Lavender the flower and the oil of the lavender are used to make medicine. It is also use for restlessness, loss of appetite, nervousness, upset stomach, and nausea. It is also utilised for hair loss, pain, to repel mosquitoes and other insects. By inhalation, lavender is used as aromatherapy for pain, agitation, joint pain, toothaches, cancer and menstruation.
**Gauva skin**

It is used for constipation, cough and colds, skin care, weight loss, and high blood pressure. The leaf of the guava is used to relieve cough and cold by loosening cough and reducing mucus. It is also used as a remedy against extreme cases of cough, cold, and congestion. Guava being rich in fibre and hypoglycaemic in nature, help reduce blood pressure.

**Dagga (Cannabis sativa)**

It helps relieve insomnia, it increases appetite and hunger, it helps with an irritable bowel syndrome (particularly the leaves), constipation and helps to prevent colon and intestinal cancer, epilepsy, joint pains, back pains. It is an extremely rich plant.
5. **Chapter 5: Results—Cultivation and Gathering in Ebenhaezer**

5.1. **Introduction**

This chapter presents the result from the in-depth interviews, focus group discussions and the survey of cultivation and gathering of medicinal plants in Ebenhaezer. What is presented in the form of a narrative to allow the foregrounding of the two critical variables in the study cultivation and gathering of medicinal plants. These two variables are then discussed as a social practice in the chapter that follows. The first set of questions centred on why participants engage in cultivation and gathering of plants. What follows provides the reasons.

Cultivating and gathering of plants and their parts were and still are essential to individual and group survival. This primarily applies to the Rastafarians, who actively engaged in this activity for human survival. Rastafarians believe in the gathering of wild and semi-wild specimens as an important factor, for one it stands as a good economical factor, and secondly treating others with wild specimen has more positive results with regards to their illness. Thus, they stated that the collection and cultivation of medicinal plants collected from the mountain (Gifberg) or open veld hold more power than the plants that were collected elsewhere. The belief is that collecting medicinal plants from the mountain (e.g. Gifberg) contains purity and natural power and that it is the one place where it is not man-made.

What is rarely mentioned are the socio-cultural, psychological, and physical fitness benefits people derive from taking part in the gathering activity. An example would be that gathering medicinal plants reminded some of the respondents of their cultures and their childhood. Thus, cultivation and gathering provide opportunities for people to connect with nature, allowing them to develop a long-term relationship with particular types of species and gathering sites. As observed during my time in the field. Therefore, gathering frequently involves developing ecological knowledge about where and how a particular kind plant grows, as well as sharing information with their relatives, friends, and neighbours. Thus, this practice gives people a reason to get outdoors and be physically active, it also relieves stress and it is a natural way for people to relax.
The relationship between nature and culture is more evident in human communities in which there is a greater direct dependence of humans on the environment. Medicinal plants, which are obtained from the wild environment and through cultivation, are important environmental resources for health-related processes in traditional medicine, especially as home remedies and some time in this setting (which rarely happens) for ritualistic purposes.

This section provides a summary discussing four sub-themes, namely gathering for health-related purposes, secondly as a form of self-provision, thirdly as a social activity and lastly as a means of maintaining identity. The second half discusses more intangible, unquantifiable benefits that respondents reported experiencing while gathering. The chapter closes with a brief discussion of factors that maintain or inhibit continuance of gathering and cultivating practices in Ebenhaezer.

Gathering for health (both mental and physical) and gathering as a form of self-provisioning were the most commonly given answers. Respondents revealed the love of cultivating and gathering, which resulted in them treating their own ailments, as well as keeping their culture alive that had been passed on to them as kids. In Bourdieu’s “language” the respondents developed a taste (medicinal plants) to what’s available to them (gathering wild specimens). Their predispositions remain more or less the same given that the unfolding of the practice (game) is highly situational. Some respondents indicated that if they cannot find medicinal plants in the wild (field/veld) they will purchase the seeds of those plants. In doing so, a few of the respondents are hesitant to purchase medicinal plants from Rastafarians. There are a lot of uncertainty with regards to mixed species given to them by Rastafarians. This, however, is not the only reason why they are so reluctant to put their trust in this specific group. Some respondents developed a fear of being cursed by these Rastafarians. There is a racial connotation attached to it, when they talk about the bush doctors. Even though, the community members and ‘rastas’ are from the same ethnic group, they believe that Rastafarians are different and behave like sangomas (African Traditional Healers). This racial hint towards ‘black people’ is very much real in this area. Sangomas in this community (and their fear for black people) are seen as people who do not believe in God and who have the ability to cast a spell on you. Even though, it was only a handful who felt that way, you do get the sense that there is more to it, especially
when Rastafarians are being criticised. Thus, some feel that collecting medicinal plants as a family, individually and sharing that knowledge with their children, is the best way.

With this statement, I concluded that different types resources or capital comes into play, for example, cultural (knowledge); economic (money); social (personal connection), or symbolic (recognition) capital (Bourdieu, 1986). This indicates that these agents, within their fields, struggle to acquire these forms of capital so as to advance their own positions. Even though, these individuals do not sell medicinal plants, they seek recognition for their shared knowledge of medicinal plants, even those who shared the most medicinal plants amongst each other. The senior generation generally send someone to gather medicinal plants (could be the garden boy, someone in the family that are well familiar with the plants or a family friend who regularly visit other areas outside Ebenhaezer).

The respondents that do not play an active role in cultivation and gathering of medicinal plants usually purchase from the Rastafarians, when they get their grant money (e.g. child support/disability grant) or they will approach community members who have medicinal plants in their gardens. These individuals are reluctant to share their use of medicinal plants and thus keep it a secret. The reason being that they do not want to be labelled as poor or ‘those’ who got it from Rastafarians. The medicinal plants they gather are generally from the senior generation and trusting that the seniors will keep this information to themselves. The respondents are well knowledgeable about some of the medicinal plants but rarely participate in the cultivation of it. Thus, they will utilise it in combination with their prescribed clinic pills which they get from the local clinic.

During the interview process, the respondents were asked to describe why they gathered and cultivate medicinal plants. Connecting with nature and looking for plants to treat their ailments was the most often-repeated answer I received.
<table>
<thead>
<tr>
<th>Characteristics Total (N=160) Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender:</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Age:</strong></td>
</tr>
<tr>
<td>18-30</td>
</tr>
<tr>
<td>30-45</td>
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<tr>
<td>45-59</td>
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<td>59-69</td>
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<td>69-89</td>
</tr>
<tr>
<td><strong>Education:</strong></td>
</tr>
<tr>
<td>No education</td>
</tr>
<tr>
<td>Primary school</td>
</tr>
<tr>
<td>Secondary school</td>
</tr>
<tr>
<td>Tertiary education</td>
</tr>
</tbody>
</table>

Table 1: Socio-demographics of respondents

I will discuss each reason for cultivating and gathering in greater detail, from those who cultivate and gather, by using supporting literature where necessary. From the above table the socio-demographics characteristics of the participants are clear. Most of the participants were aged above 60. Almost 60% of the participants were above the age 50. This is very instructive and to a great degree reflects those engaged in medicinal plant cultivation and gathering in this area. They tend to be between the ages 45 to 65 generally and a significant number of females with no education or primary school level education. The table shows that 22% of the participants have none.
The table above indicates the level of education of people in Ebenhaezer. As indicated below 0.3% of individuals located in Ebenhaezer have no schooling, but 10.5% have some primary schooling. Even though some have some primary education, there are individuals that have not completed their primary school education which is 0.5%. There are individuals that have some secondary education which is about 40.5%. Some individuals have completed their grade 12 education but only amounts to 10.8%.

Figure 10: Chart stating reasons why respondents gather and cultivate medicinal plants.
This table illustrates why respondents collect, gather, and cultivate medicinal plants. There are eight sections in this table below and I will go through it individually. Firstly, hobby which is six percent and that goes for passion as well. Hobby is what you like doing every other day. This six percent indicates that they like going into the field collecting, gathering medicinal plants and they do not feel the long walk, because it has become part of their everyday activity. Passion which is a feel for what you love doing, and you simply cannot imagine your week or day without doing this activity. Income is when you collect medicinal plants and sell it to those that utilise it. This activity helps individual with their financial aspect and it is sometimes the only activity that assures a monthly income. Most individuals utilise medicinal plants for health purposes in the table below it indicates that nineteen percent utilise medicinal plants for health purposes. Self-provision, which consists of six percentage and these individuals’ collection of medicinal plants are for themselves and their personal needs. They also share this with close family members. The social activity is when these individuals like socialising in nature and they would normally ask their friends or family members to accompany them. This allows them to spend some quality time with their friends and family while collecting or gathering medicinal plants in the field. The taste/sight and smell which is twelve percent in the table below generates from individuals tasting medicinal plants and smelling it, just to make sure that it is the right plant they are looking for. The sight is exploring the view while in the field and appreciating what God has put forth for them to utilise. The time in nature is nineteen percent is an activity that allows them to connect with nature, while in the field this activity brings them a sense of peace and a relaxation that only nature can give them. Connecting with nature allows them not only to explore the different medicinal plants but also brings them closer to God.

Gathering contributes to the maintenance of physical and mental health. Most of the participants (except for the farmers) said that physical exercise is beneficial when you gather medicinal plants in the wild. Rastafarians stated that walking to the mountains and digging medicinal plants give them peace of mind. It helps them to connect with nature and with God.
The occupational level of individuals living in Ebenhaezer varies. There are five sections that indicate in what occupational level they are situated. Firstly, are the farmers which amount to 40% and following the farmers are the seasonal workers. There seasonal workers only work a particular time in a year or when help is needed at the farms and the percentage of seasonal workers are 10%. There are self-employed individuals which were interviewed although not much which is 10% of those that were interviewed. Following the self-employed are the 50% housewives, most of these individuals stay at home because their husbands work or they have children working for them or are pensions. Lastly are the unemployed and majority of the youth struggles to find a job or are either too depended on the grant money which is basically the child support that they get from the government, which amount to 50%. The respondents from ages of 30-48, struggles to get a job due to lack of education, experience or have an elder that he or she depends on.
Some of the respondents do not engage in the cultivation and gathering of medicinal plants. One of the reasons below is that 10% of the respondents are too old to go to the field to gather medicinal plants. They are unable to walk far distances. This 10% of the participants note that the medicinal plants grow rapidly in the area as such there is no point going to the field to gather them. Some of these medicinal plants grow in front of their homes or near it, which makes it accessible for them to collect when they feel the need to. In the group of the respondents who do not engage in cultivation and gathering of medicinal plants, 40% indicated that because these plants grow so rapidly around their home, the seeds also end up in their back yard, where their gardens are located. That is why they do not need to go out and collect the plants because it is already in their gardens. Another 40% of the respondents who do not engage in cultivation and gathering of medicinal plants stated that because of working hours they are unable to collect plants and too tired when they get home from work. There are those who also voice their concerns that it is not safe collecting plants in the field, because past events although not related to collecting medicinal plants made them aware of the dangers of walking alone or with a partner that result to people being attack or rob in the process of visiting someone.
Figure 13: Chart indicating various reasons why respondents purchase medicinal plant products for their ailments.

Here are those who simply purchase medicinal plants from Rastafarians. These are individuals in Ebenhaezer who do not participate in the practice of cultivation and gathering of these medicinal plants but regularly consult the Rastafarians or purchase of medicinal plants for their specific illness. The ailment that was common in this group is arthritis which accounts for 25% of medicinal plants purchase for the treatment of ailments, 20% was asthma, 10% bladder problems, and 20% for chest problems/pains. Colds which results in flu symptoms were 18%, 10% for both diabetes and epilepsy, 6% were problems babies experience such as teething; 2% were for sexual desires, which were either low sexual drive or none; 5% indicated that it was to boost their immune system; 4% wanted these plants to keep away evil spirits from their home and family and stated that one of the reasons for not getting cured or a job was because of this; 10% sought help to lower their blood pressure or to stabilise it; 10% were for protection, so that no harm can come to them or their family when leaving their home; 10% were for period pains, these individuals indicated that the pain become so severe that they needed an alternative because the pain pills they were using did not help; lastly 4% needed the medicinal plants to help with their weight and it was mostly females that sought help in that specific area.
5.2. **Rastafarians and Medicinal Plant in Ebenhaezer**

During the course of interview with respondents, a common reason for utilising medicinal plants, or engaging in cultivation and gathering is that clinic prescribed medication was not enough to address their ailment and that they were prescribed different types of medication which was mostly the case when they attended primary health care centre. The author Dyson (1998) agrees with the above statement, noting many years ago, that 70-80% of South Africans depend on herbal medicine for their primary health care options. However, Rastafarians do not really speak about prescribed medicine, but a few has mentioned that when they could not find the species that speaks to their ailment, they would visit the local clinic.

Rastafarians collects plants from the wild and supply these raw products in bulk, however there is little processing or sometimes no processing to the urban informal street markets. Rastafarians carry a shoulder bag (or sling bag), to help them carry the plants they collect from the mountain or field. They also have a walking stick to navigate their movement. The bag that they normally carry is brown; this colour is associated with the earth. The Rastafarians that have the finances will have the ‘rasta’ colours which are green, gold, and red on black; these colours incorporate the colours of the Ethiopian flag. They are always known for their dreadlock which is a sign of their religion; their hair is neatly wrapped in turban.

Even through these “rastas” from Matzikama, Ebenhaezer, know their way around the areas, including mountains. They sometimes operate illegally, due to no permits or inability to obtain permits for gathering of species which opens the doors for arrest or fines. With this being the case, they still feel the need to continue harvesting for income.

5.2.1. **Short narrative of a Rastafarian during my in-depth interview session**

Rastafarian 1: “I love walking, especially in the field. The air is clean and breathing it is a blessing. Gathering medicinal plants brings me joy, because it is something that will help others. I make use of medicinal plants myself, you see I smoke the “real” stuff even though its healthy, you can never be too sure... that is why I don’t just pick plants for others but also for my well-being. It is important to stay fit and be active in the field; breathing the mountains air is also
good for your health. Collecting wild plants in the field or mountain contains stronger power, because it is in its natural habitat and the healing does not take forever, it works I won’t lie”.

In rural communities, the senior generation (both community members and ‘Rasta’s’) who accumulated the medicinal plant knowledge with regards to the usage, play a significant role in the community/family when it comes to plant remedies (Van Wyk et al, 2009). Symbolic capital is one of the most important elements for both groups. It is always a battle field between these two groups, once they get a feel of the game, the game is being played to the best of their ability using resources that is available to them (e.g. symbolic capital).

Young Rastafarians acquired a lot from the older generation but due to old age; participation in this practice has become a distant memory. Some Rastafarians (the seniors) said that the younger generation do not really know what it takes to be a “real” Rastafarian. According to this group “you have to absorb the culture and then make it your lifestyle; some do it to smoke a joint ‘plants’ it is not about getting high. It is about helping people with the knowledge that has been passed on to them”.

There is today a growing appreciation of the value of traditional knowledge. This knowledge is valuable not only to those who depend on it in their daily lives, but modern industry and agriculture as well. Many widely-used products, such as plant-based medicines are derived from traditional knowledge.

In contrast with western medicine which is technically and analytically based, traditional African medicine takes a holistic approach. For example, success and failure; health and disease are not seen as chance occurrences but are believed to arise from the actions of individuals and ancestral spirits according to the balance and imbalance between the individual and the social environment (Anyinam, 1987; Hedberg et al, 1982; Nqubane, 1987; Staugard, 1985; WHO, 1977). Traditionally, rural African communities have relied upon the spiritual and practical skills of TMPs (Traditional Medical Practitioners), whose botanical knowledge of plant species and their ecology and scarcity are invaluable. Throughout Africa, the gathering of medicinal plants was traditionally restricted to TMPs or to their trainees.
Briefly mentioned in the literature review by various authors was that the traditional rural African communities have depended upon the spiritual and practical skills of the Traditional Medical Practitioners, whose botanical knowledge of plants species as well as their ecological and scarcity that are invaluable. Thus, throughout Africa, the gatherings of medicinal plants were traditionally restricted to these traditional medical practitioners as well as their trainees.

Even if the above statement is relevant to rural Africans, this also applies to the coloured rural individuals. Mainly, because they are being influenced by the Rastafarians and the senior generation have that belief that had been passed on to them from their elders. There are some religious groups that do not believe in traditional medicine (medicinal plants) mainly because they believe that God is the healer and that our trust should be in Him and not depending on medicine (referring to people who seek protection from evil spirits, or who believe that they are cursed). So in retrospect, agency is the individual’s ability to act, to choose and to decide what works best for him/her. It is also the capacity for freedom of action in the light of or despite social structures, structures refer to the social forces and constraints that affect so much of our social lives.

Rastafarians most traded/used medicinal plants:

<table>
<thead>
<tr>
<th>No.</th>
<th>Common name</th>
<th>Scientific name</th>
<th>Part(s) use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Boegoe</td>
<td>Agathosmabetulina A. Crenulate</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>2.</td>
<td>Kooigoed</td>
<td>Helichrysum spp.</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>3.</td>
<td>Wilde Knoffel</td>
<td>Tulbaghiaviolacea; T. Alliacea</td>
<td>Leaf &amp; stem; rhizome</td>
</tr>
<tr>
<td>4.</td>
<td>Bitterbos</td>
<td>Chironiabaccifera</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>5.</td>
<td>African potato</td>
<td>Hypoxishemerocallidea; H.colchicifolia</td>
<td>Corm</td>
</tr>
<tr>
<td>6.</td>
<td>Dawidtjiewortel</td>
<td>Cissampeloscapensis</td>
<td>Root</td>
</tr>
<tr>
<td>7.</td>
<td>Aloe</td>
<td>Aloe ferox</td>
<td>Leaf; whole</td>
</tr>
<tr>
<td>8.</td>
<td>Bloekom</td>
<td>Eucalyptus spp.</td>
<td>Leaf</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Scientific Name</td>
<td>Part</td>
</tr>
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<td>---</td>
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<td>-----------------------</td>
</tr>
<tr>
<td>9.</td>
<td>Kalmoes</td>
<td>Alepideaamatymbica</td>
<td>Rhizome; root</td>
</tr>
<tr>
<td>10.</td>
<td>Roosmaryn</td>
<td>Rosmarinusofficinalis</td>
<td>Leaf</td>
</tr>
<tr>
<td>11.</td>
<td>Lavender</td>
<td>Lavandulaangustifolia</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>12.</td>
<td>Wilde dagga</td>
<td>Leonotisleonurus</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>13.</td>
<td>Renosterbossie</td>
<td>Elytropappusrhinocerotis</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>14.</td>
<td>Wilde als</td>
<td>Artemisia afra</td>
<td>Whole</td>
</tr>
<tr>
<td>15.</td>
<td>Perdepis</td>
<td>Hippobromuspauciflorus</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>16.</td>
<td>JantjieBerend/Cancer bush</td>
<td>Sutherlandiafrutescensherba</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>17.</td>
<td>Geneesbos</td>
<td>Lobostemonfruticosus</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>18.</td>
<td>Jug uie</td>
<td>-</td>
<td>Whole</td>
</tr>
<tr>
<td>19.</td>
<td>Duiweldrek</td>
<td>Asafoetida</td>
<td>Rhizome/ tap root</td>
</tr>
<tr>
<td>20.</td>
<td>Matunga</td>
<td>Haemanthusalbifossanguineus</td>
<td>Bulb</td>
</tr>
<tr>
<td>21.</td>
<td>Bitter patat</td>
<td>Sansevieraaethiopica</td>
<td>Tuber</td>
</tr>
<tr>
<td>22.</td>
<td>Koorsbos</td>
<td>Acacia xanthoploeaBenth</td>
<td>Bark</td>
</tr>
<tr>
<td>23.</td>
<td>Dassie pie</td>
<td>Hyraceum</td>
<td>Whole</td>
</tr>
<tr>
<td>24.</td>
<td>Crystals</td>
<td>-</td>
<td>Whole</td>
</tr>
<tr>
<td>25.</td>
<td>Kamferstokkie</td>
<td>Cinnamomumcamphora</td>
<td>Whole</td>
</tr>
<tr>
<td>26.</td>
<td>Inqwebeba, white onion</td>
<td>Albucasetosa</td>
<td>Bulb</td>
</tr>
<tr>
<td>27.</td>
<td>Impepho</td>
<td>Helichrysum spp.</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>28.</td>
<td>Groenamara</td>
<td>Vernonioligacephala</td>
<td>Leaf</td>
</tr>
<tr>
<td>29.</td>
<td>Kruisement</td>
<td>Menthalongifolia</td>
<td>Leaf &amp; stem</td>
</tr>
<tr>
<td>30.</td>
<td>Wynruit,vue</td>
<td>Rutagraveolens</td>
<td>Leaf</td>
</tr>
</tbody>
</table>

Table 2: Indicating the most traded/used medicinal plants.
A few of the parts used of medicinal plants sold by the Rastafarians:

Common name: Mpepho

Scientific name:

Plant use:
Burned or smoked and the ashes are sometimes utilised to eliminate spirits. It is also utilised for soothing chest pains.

Plant part: Leaves and shoots

Common name: Cancer bush

Scientific name:

Plant use:
Sliced and boiled, extract drink for blood purification. Smoked to calm nerves and it is apparently good for restoring the central nervous system.

Plant part: Stems and Leaves

Common name: Skilpad

Scientific name:
Dioscoreasylvatica

**Plant use:**

Boiled and sliced, extract drink to strengthen muscles. Ground powder form with water and utilise it for protection against evil spirits. It also cures strokes, heart problems but poisonous if taken in high doses.

**Plant part:**

Rhizome

5.2.2. **Gardens**

Community gardens are potential places for healing. In a time when families have limited resources including time and money, community gardens can provide nutritious food and medicine. Garden is also a crossroads where diverse people come together to interact and connect. Elders can share their stories and wisdom, while the youth can share their insights, energy and enthusiasm. Gardens have potential to foster community healing by bringing isolated people together over a common purpose. For many, gardening is a great way to relieve stress and to reconnect with nature.

Participant 1: “I am 83 years of age and I can never get enough of walking in the field or mostly in my garden. Watering the plants in my garden brings me great joy. I don’t have to do it, but in order to stay fit I do these activities, besides if I don’t water the plants that helps me with my arthritis and my high blood pressure then all will be in vain. I also do this for my grandchildren, you know how babies are. They constantly get sick and the most common illness around my kids are the flu, but when I give them “wildeals” and “jantjieberent” they sleep better at night and it keeps them healthy. My own children drink it when they are sick, but not all the time. I combine these concoctions with my clinic pills. One day I went to the clinic just here up the road and the nurse told me that my high blood pressure was high. I went home and drank my mixture and the next week when I went to go see her, she asks me why it is down so quickly? I just said I ate healthy, because you can’t tell them that you’re using medicinal plants with your actual medication. I wasn’t lying I do eat healthy. Overall I don’t have to spend a lot of money on
medication; actually, I don’t because at the clinic the medication that I use is free. If I have a headache, stomach-ache, stiffness in my joints I just drink my mixtures that I make as a cup of tea. It is part of my daily routine I don’t taste the bitterness anymore, it’s like drinking water”.

Participant 2: “I am turning 50 next year and mama introduced me to medicinal plants. At first I just drank it because it makes me sleep at night and I help her sometimes when she looks for a certain medicinal plant “kruie”, but the stuff that mama gave me helped me with my high blood pressure, it keeps it down. I never get sick, like flu and stuff; because I drink my “concoction” and I do it every night. I probably drink it ‘because I stay with my mother. If I was on my own, I think I will come to her or maybe one day, I will learn the different plants when she’s not there. I also have epilepsy and drinking “wildeals”, lavender; rosemary and “jantjieberent” keeps me calm, really it does, I am not just saying this”.

Partipant 3: I am 67 and I had eczema for most my life. I work at NamaqaSenus (mine) and I do not have the time to go and look for plants and stuff. The ointment I got from the clinic helps a bit, but not really. So, my wife spoke to someone, an old lady about my skin condition and she was told to go and collect “kraalbos”. Kraalbos you’ll find everywhere in Ebenhaezer, even I know how it looks, but never really know what it does. So, my wife and I spoke to other people in the area and they also told us that it is good for skin conditions, sores and so. One day we decided to give it a go, we got nothing to lose and if this helps than it will save me a lot of money because, besides the ointment I get from the clinic and the other stuff I bought never really cleared it. I was never really into medicinal plants and stuff until now. The “kraalbos” really helped me, I bathe in it, daily. As a result, to it my skin is better than ever. Now I find the time to go and collect “kraalbos”, because I do not have the time to plant it in my yard”.

The use of plants to treat skin disorders and diseases was and still is a common practice in Ebenhaezer. According to Grierson &Afolayan (1999) and Srinivasan et al (2001) the causes of the conditions being treated are not always understood. Quave et al (2009) noted that the tropical application of medicinal plants for the treatment of different skin conditions has proven effective due to the biological activities of plant compounds such as antimicrobial, anti-inflammatory and anti-erythema.
Participant 4: “I am 38 and I work at the farm, I don’t have the time to go out and collect medicinal plants but my neighbours would normally bring it to me or my wife would collect it by the neighbours if they still have. Otherwise she will just walk around and see if she can spot a “wildeals” or whatever. When I am in town (Vredendal) I just get R10 herbs if I am really sick, but I normally combine the medicinal plants with allopathic medicine. I make it like a tea and sweat it out, because I work hard and I cannot afford to fall sick, so it helps getting the best from both of these medicines. I use to collect “wilde dagga” but you don’t get it here in Ebenhaezer, I don’t smoke those things anymore... it used to help me but you know it is not legal here, so I am not involved in illegal activities”.

Below are three sub-themes that most respondents made use of when taking about medicinal plants.

5.2.3. **Smell**

People put a lot of emphasis on smelling the medicinal plants while collecting or planting them. The sense of smell will give them an indication that they are on the right track whether they are buying it from the Rastafarians or collecting it themselves, or received it as a gift from neighbours, friend/family. The aroma of medicinal plants takes them back to a place where they once were and reminds them of their parents and late family member. It also indicates to them whether the plant is fresh or not, especially when they are buying them.

5.2.4. **Taste**

During my interview, I observed that when people talk about medicinal plants they include taste. “If it is not bitter then it means that some powers are lost, the more bitter it is, the more it works, especially when you put it in a cup and pour hot water in it. You don’t boil it no! You just pour the hot water on the plant and let it sit for three to five minutes” said one of the old ladies (67) when I interviewed her about the health aspects of medicinal plants. Hoodia was the most common medicinal plant they would taste, probably because it is edible and helpful when you are thirsty.

Below is a quotation of how Bourdieu (1984) describe taste in his book “Distinction, A social critique of judgment of taste”.

Page | 67
“The science of taste and of cultural consumption begins with a transgression that is in no way aesthetic: it has to abolish the sacred frontier which makes legitimate culture a separate universe, in order to discover the intelligible relations which, unite apparently incommensurable ‘choices’, such as preferences in music and food, painting and sport, literature and hairstyle. This barbarous reintegration of aesthetic consumption into the world of ordinary consumption abolishes the opposition, which has been the basis of high aesthetics since Kant, between the ‘taste of sense’ and the ‘taste of reflection’, and between facile pleasure reduced to a pleasure of senses, and pure pleasure, pleasure purified of pleasure, which is predisposed to become a symbol of moral excellence and a measure of the capacity sublimation which defines the truly human man” (Bourdieu, 1984).

Most common medicinal plants utilised by people in Ebenhaezer for their ailments:

<table>
<thead>
<tr>
<th>No.</th>
<th>Common name</th>
<th>Scientific name</th>
<th>Part (s) use</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Wilde als</td>
<td>Artemisia afra</td>
<td>Whole</td>
<td>Flue, colds</td>
</tr>
<tr>
<td>2.</td>
<td>Geneesbossie</td>
<td>Lobostemonfruticosus</td>
<td>Leaf &amp; stem</td>
<td>Flu, colds</td>
</tr>
<tr>
<td>3.</td>
<td>Groenamara</td>
<td>Vernoniaoligacephala</td>
<td>Leaf</td>
<td>Stomach aches</td>
</tr>
<tr>
<td></td>
<td>Kraalbos</td>
<td>Galeniaafricana</td>
<td>Leaf &amp; stem</td>
<td>Wash in it, utilise for skin problems, sores;toothaches, treat lice/dandruffs, pimples etc.</td>
</tr>
<tr>
<td>4.</td>
<td>Wilda dagga</td>
<td>Leonotisleonurus</td>
<td>Leaf &amp; stem</td>
<td>Restlessness, cancer</td>
</tr>
<tr>
<td>5.</td>
<td>Kankerbos</td>
<td>Sutherlandiafrutescens</td>
<td>Leaf &amp; stem</td>
<td>Colds, flu, chest pains</td>
</tr>
<tr>
<td>6.</td>
<td>Boegoe</td>
<td>Agathosmabetulins A. Crenulated</td>
<td>Leaf &amp; stem</td>
<td>Cold, chest pains</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Lavender</td>
<td>Lavandulaangustifolia</td>
<td>Leaf &amp; stem</td>
<td>Colds, in combination with other medicinal plants</td>
</tr>
<tr>
<td>8.</td>
<td>Kruisement</td>
<td>Mentholongifolia</td>
<td>Leaves</td>
<td>Coughs, cold, stomach cramps, headaches, asthma, indigestion, treat wounds</td>
</tr>
<tr>
<td>9.</td>
<td>Skilpad</td>
<td>Dioscoreasylvatica</td>
<td>Rhizome</td>
<td>Use for epilepsy, evil spirits, heart problems etc.</td>
</tr>
<tr>
<td>10.</td>
<td>Dassiepis</td>
<td>Hyraceum</td>
<td>Whole</td>
<td>Stomach, back pain, poison, nervousness, epilepsy</td>
</tr>
<tr>
<td>11.</td>
<td>Granaatskille</td>
<td>Punicagranatum</td>
<td>Fruit rind, roots,</td>
<td>Treatment of diarrhoea</td>
</tr>
<tr>
<td>12.</td>
<td>Kooigoed</td>
<td>Helichrysumpetiolare</td>
<td>Leaves</td>
<td>Colds, coughs, chest problems, high blood pressure,</td>
</tr>
</tbody>
</table>

Table 3: Illustrating the most common medicinal plants utilised by people in Ebenhaezer.

A brief summary of the difference between wild plants and domesticated plants will follow. Generally, there are two situations occurring in domestic cultivation of medicinal plants; one is in situ domestication and the other is ex situ domestication. In situ domestication means that wild seeds collected from the mountain are planted in indigenous farmland. Under such situation, the climate and soil type of cultivated plants are the same as the wild, while the fertilizer and sunshine are better than conditions of the latter. Therefore, such references have been widely reported that the quality of product cultivated in situ domestication is better than or same as that of the wild (Wang et al, 1990; Guo et al, 2001; Liet et al, 2007). Cultivation has pharmacological advantages over wild-collection and it also reduces the possibilities or misidentification. In relation to this, these include practices of domestication, certain beliefs that are attached to it, secrecy, protection of plants at the burial sites, respect for the forest. Even if this is the case, medicinal plants are vanishing, not because it is highly demanded for primary healthcare but also because of other factors such as food, trade, accidental and deliberate fires this all contribute to the loss of species.
Indigenous traditional knowledge refers to the complex bodies and systems of knowledge, know-how, practices and representations maintained and developed by indigenous peoples around the world, drawing on a wealth of experience and interaction with the natural environment and transmitted orally from one generation to the next. The knowledge could be collectively owned, whether taking the form of stories, songs, beliefs, artwork, agriculture and ecological knowledge and the skills to implement this knowledge. Not only does this knowledge provide local people with tremendous possibilities for their daily life and sustainable and collective development as peoples, it also reflects local people’s holistic territorial and cultural rights. Thus local people place a great deal of importance on passing this knowledge on to future generations, not only for the sake of preserving the knowledge, but also for preserving their own cultures and identity.

5.2.5. Transmission of traditional knowledge: (she insisted on speaking English)

Respondent 3: (78-female) “As a child I was very blessed to be raised by my grandparents “ousie” (referring to her own mother) she worked on the farm, so she didn’t really have the time to raise and teach me stuff. My grandparents at the time were the same age as I am now. They both passed away when they were in their 90s, first my “oupa” grandfather and then my “ouma” grandmother. To get to the point, I was blessed as I said before. I would walk with them to the
fields, and “mama” grandmother, she was a very patience, God-fearing woman, and “papa” too but she always took the time to show me different types of mixtures. At the time, I was very confused with the different names but got use to it quickly especially, if the plant had a specific name that spoke to the illness, for example “koorsboom”, “geneesbos” and so forth. Soon I knew how to mix different types of medicinal plants and what to use it for. When I became a woman, I had many problems. I was a cleaner, and during that time you don’t talk about your problems, especially to madam (referring to her boss). Coloureds were seen just as the helper and that they are very lucky to even have a job. I just gave birth to my son and I was in severe pain, I couldn’t stand nor clean the house. One day I decided to go to the field still in Lutzville and I told madam that I have to take a parcel to my mother whom is waiting for me. I gathered a few medicinal plants (those of which I could find) and hide it in my chest, because I was not allowed to pick “those” plants, whites had this ridiculous fear that we “coloureds” might harm them. That evening I made my special mixture and went to bed, the next morning no pain I tell you and the beauty of it all is that no one knew. Madam just thought that it was that time of the month (referring to menstruation/period) and that I was fine now. Today people in Ebenhaezer come and ask me where they can find this plant, but my memory is not all there. I have plants in my garden and I love to share it with them. I don’t ask anything, because God is our sole provider. I am the keeper of knowledge and I try to pass it on to my kids, so when I am gone they continue with this, by planting and saving money”.

The local knowledge is embedded in community practice and relationships and is inextricably linked to the local people’s identity, their experiences with the natural environment.

5.2.6. Rastafarians (during FGD session)

Language is an important tool in the Rastafarian community. When I first introduce myself to the Rastafarians they greeted me by using the words “ahoy sista”. As I stood there I observed that they call each other/ greet each other using the following names, Iya, Irie, Lord, King and the curiosity in me spoke and asked them about it. I was told that it is a symbol of respect and nobility. The greeting is accompanied by handshakes, a prayer and some words of encouragement, and blessing them on the way forward. Rastafarians make use of the Old Testament rituals, which essentially blend Jewish and Christianity customs. They are known as
the people who call on God and to some degree they claim that they recognise the second coming of God. Amongst Rastafarians this God that they are talking about is called Jah, His Imperial Majesty, the Lord of Lords, the King of Kings, True Light of this World. Jah for the Rastafarians is regarded as their god, their king and seen as a prophet.

The community of Ebenhaezer recognise them by the way the dress, speak, greet and even the way they smell. I want to elaborate on two plants that are significant to them and it is the Ganja and dagga. Some respondents see Rastafarians utilising these two drugs and this place them in a bad light. I have notice that before they start smoking the ganja they say a prayer to Jah. The herb according to them is part of their spiritual healing and they were quoting bible passage to support their argument. One of the scriptures was Genesis 3: 18 “Thou shalt eat the herb of the field”. Rastafarians are well-known for their medicinal plants in particularly the healing aspect of it, bare foot on the ground (connecting with nature and God) and the knowledgeable ‘bush doctors’. They have their own language, they are vegetarians and they are very spiritual. Women are familiar with the cultural aspects attached to it, when approaching (Rastafarians). What this basically means is that men are seen as the ‘head of the house’ and woman need to respect that and it was clear that they demand that kind of respect. Rastafarians will not hesitate to correct you, if you do not know your place or speak. In other words, “the men are the head of the house and the women must be submissive to her husband/elder or any other man just as in the bible”.

I have experienced this type of behaviour in the focus group sessions, but I must say that they do treat you with respect. Rastafarians are sometimes painted as “evil”, “confused”, and “morally wrong”. I however, had a very different experience with them and this might be because they were well aware of the study that I was conducting. On the other hand, some of the Rastafarians that I have encounter from other places, did not know my status and they treated me with the same level of respect. My sessions with them, sometimes, were worrying, most probably because I was the only female in the group. Rastafarians are predominantly men; I have never encountered a female Rastafarian. The late sessions at the beginning made me feel uncomfortable, but once I got to know them the uneasiness went away and I too was called a “bossiedokter” bush doctor. I too was part of the game, and got to know the rules, I simply developed a taste for it, also utilising resources that was made available to me.
6. **Chapter 6: Discussion- The social practice of cultivation and gathering**

6.1. **Introduction**

This chapter discusses the findings on cultivation and gathering, by focusing on the old and new farming operations being used by farmers (not just those residing in Ebenhaezer). The discussion here is within the framing of the activities of cultivation and gathering as social practice. A key question of the research is centre around the manner of cultivation. The question asked was, has this changed overtime? This question requires a discussion of the method of cultivation. This is the section that comes first in this chapter.

As indicated in the previous chapter, these findings represent data from the two groups; members of Ebenhaezer and Rastafarians. These two groups actively participated in those four sub-themes mentioned earlier. However, the small-scale farmers did not participate in all four sub-themes, but did acknowledge using medicinal plants for health purposes other than for economic reasons. As discussed in chapter five, majority of the farmers focused primarily on vegetables and seeds that they claim bring them more financial support than cultivating and gathering medicinal plants. This chapter therefore, focuses on the agricultural methods utilised by these farmers and their role within the community.

6.2. **Cultivation and gathering: old and new**

The irrigation scheme utilised by the farmers in Ebenhaezer, is not used on the cultivation of medicinal plants but solely vegetables/seeds. This practice started in several parts of the world thousands of years ago, with families growing vegetables for their own consumption or trade locally. Small-scale farmers focus on vegetables and not medicinal plants, partly because they believe that there is no money in cultivating medicinal plants. Having said this, it is not an indication that they do not consume wild medicinal plants, as noted during my fieldwork; some are a bit reluctant to say that they use medicinal plants. Hence, there seem to be uncertainty amongst these respondents with regards to what species to keep in their home gardens, because in Ebenhaezer you are only allowed to keep specific medicinal plants in your garden or must have a receipt of the medicinal plant you purchased, unless the plant is not threatened. This is due to scarcity of plants and the toxicity in some plant species. However, by participating in an
activity, respondents gradually experience and internalise its structures such as its norms, rules and shared understandings, including critical notions of success and failure learned from previous actions.

With regards to farming operations, declining farming profitability and water scarcity (over-demand for water, drought, and declining rainfall) has left South Africa with less than two-thirds of the number of farms it had in the early 1990s. In many instances the lost farms have been changed to other land uses, or consolidated into larger farming units to achieve effective economies of scale. The remaining farms have generally increased their irrigation, fertiliser, genetically modified seed inputs, fuel and mechanisation. In many cases, advisory services are provided by fertiliser companies and agribusinesses have entered the vacuum of under resources government extension services. These corporate companies provide their own extension staff and build relationships with farmers, which can create a dependence on the products they promote and sell. Poorly managed intensive farming has many negative impacts on the natural environment, as well as on people’s well-being and on a farmer’s ability to adapt to change. A dependence and overuse of synthetic fertilisers, pesticides and herbicides reduces long-term soil fertility, causes soil erosion, pollutes water supplies, exposes farmers and farm workers to toxins, poisons fragile ecosystems, and contributes to climate change through greenhouse gas emissions. Input costs required for intensive farming are increasing. These costs are also subject to changes in the price of raw material, the oil price, and exchange rate fluctuations, leaving the farmer with little control over his affairs. Intensified agriculture often also means increased mechanisation, which in turn means fewer jobs on farms. This ultimately affects the social well-being of our country and in this study Ebenhaezer.

There are many stakeholders interested in linking medicinal plant production and income generation; however, the WWF (World Wildlife Fund, 2002) argues that primary producers are likely to consider high yielding medicinal plants that are responsive to economies of scale, fast-growing, and demanding less space as economically attractive. Economically it would be advantageous for community members where there are long-standing partnerships and contractual arrangements to supply manufacturers. In relation to this, Hamilton (2004) sees the cultivation of medicinal plants as attractive to relatively well-off people with better access to
land, financial capital, and information. He holds the view that the virtually landless and other disadvantaged sectors of society would fail to benefit from such cultivation.

In relation to fertilisers, if correctly applied, fertilisers can have a positive impact on soil fertility and plant growth, and were one of the main drivers behind the 20th century’s Green Revolution. Thus, by increasing the production potential of land, fertilisers also protect the natural environment from agricultural expansion. According to Mulvaney et al (2009), poorly applied synthetic fertilisers also reduce the soil fertility and the opposite effect to what they are intended to achieve. That exclusive use of synthetic fertilisers leads to a decline in soil organic matter and soil life. Eventually the soil become devoid of life, and only provides physical support to the plant. As Mulvaney et al (2009) also noted that in the end it creates a dependency on fertilisers and may increase inputs to compensate for the reduced soil fertility.

Ploughing is one of the oldest methods of preparing the soil for planting and controlling weeds, but is also one of the most abused methods. Specifically, in South Africa, the use of this imported practice results in ploughing dry, sun-baked soil and makes little sense. The increased use of heavy machinery has also caused compaction layers on top of many soils, making these areas prone to erosion. Excessive ploughing stimulates the breakdown of organic matter in the soil. This not only diminishes this soil resource, but also releases carbon dioxide into the atmosphere, contributing to climate change.

Irrigation however, is a common method use in Ebenhaezer, it is also an old method of increasing agricultural productivity. It expands the arable area, improves yield and increases cropping frequency (sometimes enabling two or even three crops a year). In South Africa, only 1, 5% of the land is under irrigation, producing 30% of the country’s crops (South Africa Yearbook, 2008/2009). Expanding irrigation seems the obvious means of increasing productivity, but all of South Africa’s irrigable land (estimated at 1, 2% of the country) is already cultivated, with irrigation now rapidly expanding into unsuitable areas and negatively impacting the environment. Water Accounts for South Africa (2000) noted that it is a concern that in South Africa the biggest water use is that of irrigation.

The ox-plough was brought to Southern Africa by Europeans settlers and it replaced the hoe as a tool to clear the ground. It also changed the society of African farmers. The plough had to be
pulled by oxen, but women were not allowed to handle cattle. This meant that the women could no longer work in the fields and that men could take over that job. This weakened the position of women in societies. The plough also made it possible for farmers to plant more crops, but this would require more land, that is why some small-scale farmers rent other pieces of land from members residing in the area.

Some farmers indicated that it takes good soil to produce good food, hence the other half seems to disagree with this statement. Even though the soil in Ebenhaezer is very fertile, farmers always encounter unforeseen problems, for example, weather conditions. Hence, the disagreement from the other farmers, that “good soil” does not always produce good food. With regards to conventional farming methods, they normally strip minerals and nutrition from the soil so that overtime, more and more fertilisers are required. This ultimately leads to the yield of crops drops, requiring more to produce less.

Even though “good soil” will not guarantee good food, a healthier soil is better and able to retain water, and in the process, needs less irrigation and fewer chemical interventions, which means that farmers should only use synthetic fertilisers or herbicides when absolutely necessary. Fewer chemicals mean less chemical run-off, which helps to maintain water quality as well as contributing to maintaining biodiversity, both in and above soil.

There is soil degradation that is caused normally by water or wind erosion, or loss of chemical nutrients, concentration of salt or acidic chemicals, compaction (this results in where soil cannot retain moisture and nutrients) and water logging. There are other causes for example overgrazing, and sometimes stripping land for fuel wood. Shifting cultivation systems are often mentioned as prime causes of environmental degradation, but according to some, such systems have the potential to become settled systems supporting higher population densities through soil conservation, fertility-enhancing practices and possibly irrigation. However, where very rapid population growth occurs, technologies appropriate to lower densities tend to persist and there is little time for leaning and making a transition. This is how environmental damage is caused.

There are several fertiliser applications but two popular methods were clear, and that was the Manual application and Mechanical application. Manual application in much of the industry, fertiliser is applied in the furrows and as a top-dressing using the ‘tin and string’ methods, or by
a range of manually operated ‘wheelbarrow’ and knapsack-type applicators. These applications are very accurate and cost effective. Output per operator varies between 1 and 15 hectares per day, depending on the method use, the row spacing and the terrain.

Mechanical application is an application of liquid and granular fertiliser, using mechanical, banding and broadcasting equipment, is carried out on much of the flat terrain in the industry (Anon, 1981a; Anon 1981 b). The machines used are capable of treating up to 15 hectares per day, depending on the type and capacity of the machine as well as field layout and condition.

Loading systems two loading methods that are being utilised namely Manual loading and Mechanical loading. Manual loading is usually carried out when field conditions are poor and where the annual tonnage handled does not justify other forms of mechanised systems. The main advantages of manual loading are that it is often expensive and time consuming, resulting in poor vehicle utilisation and therefore increased transport costs. Mechanical loading in most instances the first step in mechanising harvesting operation is the acquisition of a mechanical loader. However, any cost savings made during the manual harvesting operation and/or increase in transport payload must justify and cover the cost of owning and operating the loader. In a mechanical loading operation cutter performance is significantly improved, as the manual cutter can now concentrate on putting all his effort into the cutting operation.

Self-propelled grab loaders in South Africa the most popular grab loader is the locally developed hydraulically operated three-wheel non-slewing loader. Its popularity is based on the fact that it is relatively inexpensive, and highly productive, cheap to operate and extremely versatile (de Beer, 1982). Self-propelled and tractor mounted slewing push-pile loaders on some larger estates, especially in the northern irrigated areas, high capacity self-propelled push-pile loaders are used by growers and contractors to load windrowed sugarcane into both infield and road transport vehicles. Mechanical grab and push-pile loading systems are prone to include extraneous matter and several ways to reduce the amount of extraneous matter have been studied and systems developed (Gordon, 1978 & Neethling, 1982).
6.2.1. **Agricultural crops and livestock**

The early farmers grew crops and this shows that, unlike the San and the Khoikhoi who were always moving around, they lived more settled lives. They grew crops on small pieces of land where they lived. Their cattle were their wealth. Cattle provided them with milk and meat. They made butter from milk. Cattle dung was used for huts and for fuel to make fires. Goats and sheep were also kept in the kraals. This happened a number of years ago, hence the same practice applied at the beginning stages of Ebenhaezer, and today farmers’ cattle are still their wealth and they take pride in their piece of land.

6.2.1.1. **Types of crops in Ebenhaezer**

<table>
<thead>
<tr>
<th>Beetroots</th>
<th>Onions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabbage</td>
<td>Pumpkins</td>
</tr>
<tr>
<td>Carrots</td>
<td>Broccoli</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Spinach</td>
</tr>
<tr>
<td>White beans</td>
<td>Tomatoes</td>
</tr>
<tr>
<td>Green beans</td>
<td>Maize for grain</td>
</tr>
<tr>
<td>Dry beans</td>
<td>Lucerne</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>Other types of hay</td>
</tr>
<tr>
<td>Sunflower</td>
<td>Cucumbers</td>
</tr>
<tr>
<td>Squash</td>
<td>Other types of veg.</td>
</tr>
</tbody>
</table>

Table 5: Indicating the crops cultivated.
6.2.1.2. **Services and Facilities: Farming operation**

<table>
<thead>
<tr>
<th>Seed or seedlings</th>
<th>Fertilisers (chemical or manure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop pesticides</td>
<td>Irrigation water</td>
</tr>
<tr>
<td>(herbicides,</td>
<td></td>
</tr>
<tr>
<td>insecticides,</td>
<td></td>
</tr>
<tr>
<td>fungicides</td>
<td></td>
</tr>
<tr>
<td>Ploughing services</td>
<td>Harvesting services</td>
</tr>
<tr>
<td>Livestock (including grain, hay)</td>
<td>Milling, other crop processing</td>
</tr>
<tr>
<td>Road from farm to market</td>
<td>Packaging services</td>
</tr>
</tbody>
</table>

Table 6: Indicating the facilities small-scale farmers utilise.

6.2.2. **Pollination**

Pollination is a process in which pollen is transferred to the female reproductive organs of seed plants, thereby enabling fertilisation and reproduction through growth of the pollen tube and eventual release of sperm. Both gymnosperms and angiosperms undergo pollination, although the mechanism for angiosperms is much faster and more complex.

With the decline of both and domestic pollinator populations, pollination management is becoming an increasingly important part of horticulture. Factors that cause the loss of pollinators include pesticide misuse, unprofitability of beekeeping for honey, rapid transfer of pests and diseases to new areas of the globe, urban/suburban development, changing crop patterns, clear-cut logging, clearing of hedgerows and other wild areas, bad diet because of loss of floral biodiversity and loss of nectar corridors for migratory pollinators (Sihag, 1995).

Crops that traditionally have had managed pollination include pears, apple, some plum and cherry varieties, cranberries, blueberries, cantaloupe, watermelon. Cucumbers, onion seeds and so forth. Some crops that have traditionally depended entirely on chance pollination by wild pollinators need pollination management nowadays to make a profitable crop.
<table>
<thead>
<tr>
<th>Common name:</th>
<th>Number of hives per acre:</th>
<th>Number of hives per hectare:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumpkins</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Squash</td>
<td>1-3</td>
<td>2.5-7.4</td>
</tr>
<tr>
<td>Sunflower</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Watermelon</td>
<td>1-3</td>
<td>2.5-4.9</td>
</tr>
<tr>
<td>Muskmelon</td>
<td>1-3</td>
<td>2.5-7.4</td>
</tr>
<tr>
<td>Zucchini</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Canola</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>1-2</td>
<td>2.5-4.9</td>
</tr>
</tbody>
</table>

Table 4: Indicating the number of hives needed per unit area of crop pollination.

It is estimated that about one hive per acre will sufficiently pollinate watermelons. In the 1950s when the woods were full of wild bee trees, and beehives were normally kept on most South Carolina farms, a farmer who grew ten acre (4ha) of watermelons would be a large grower and probably had all the pollination needed. But today’s grower may grow 200 acres (80ha) and if lucky there might be one bee tree left within range. Malcolm (1995) noted a few years ago that the only option in the current economy is to bring beehives to the field during blossom time. Farmers in Ebenhaezer make use of beehives.

Monoculture is the agricultural practice of producing or growing a single crop, plant or livestock species, variety, or breed in a field or farming system at a time. Polyculture is where more than one crop is grown in the same space and time, is the alternative to monoculture.
Below is a broccoli/pumpkin pollination picture taken in the area

![Pollination Picture](image)

Figure 16: Picture of pollination process, with bee boxes for specific types of crops.

6.3. **Cultivation and gathering as a social practice**

Respondents’ love to cultivate and gather medicinal plants individually; this activity is rarely accompanied by family or friends participating in this practice. They prefer to do this activity alone, for this allows them to deliberate and calculate clearly. Doing it as a group distracts them from choosing specific species in mind. Thus, they prefer to gather and cultivate individually. There were two women that did this as a social practice. They have been friends for years and their parents are in their late 80s. Escaping from the everyday chores was something they thoroughly enjoyed. Below is the conversation I had with them during my interview session.

Marlene & Sara: They are in their late 40s and live next to each other with their parents in Hopland. “We know it sounds cruel but escaping the house after lunch is a major stress reliever. The reason being that we have to constantly cook, clean, feed people and our children also keeps us busy at night. We both are unemployed but if we can get a piece job we would, but looking after our parents is a full-time job. Our parents make use of medicinal plants and through their knowledge we were educated. They are friends and that is how we became friends. Every single day they want some of the medicinal plants, yes, we do keep some in our back yard, but it is better to just take a walk and collect. It is not a mountain just normal ground where they grow even alongside the road. We are always hoping to discover something new, but that day has not arrived. Telling the “ouers” parents at home that we are going out to see if we can get more
plants, is a good enough reason for them “escaping from the burdens for an hour or two”. It is so relaxing, walking, smelling most of all enjoying the free time outdoors in nature. Yes, a lot of people here don’t do it, because they are lazy and stuff, but even if we don’t find anything we’ll come back and spend time with them in the gardens, watering, digging and planting. After all, they are old and we do enjoy spending time with them especially when it comes to something they are good at. We enjoy our “escape time” out in nature or in the field, but doing it as a family is the best. We don’t know how long we have with them. If plants are what they love as an activity, we enjoy it too. We are happy they educated us on the matter”.

6.4. **Cultivation and gathering as self-provisioning: Why respondents cultivate medicinal plants.**

When I went through the literature to get background knowledge on medicinal plant situation in South Africa, my initial understanding was that medicinal plant trade was an income generating activity that accumulated relatively large sums of money for the benefit of the rural poor (Cunningham, 1991 & Mander, 1998). However, when I arrived in the research area, it did not take much time to see that Ebenhaezer is a unique area, and that said economic reasons hardly apply here.

Through interviews with Rastafarians, local households, local small-scale farmers, I discovered that most of them were offended by that insinuation, meaning that it is not the only means of income they do have “real” jobs. Not all Rastafarians have a second income and selling medicinal plants is the only source of income (besides grant money). People in the community are not allowed to sell medicinal plants and they only utilise it for home consumption. On the other hand, this rule did not apply to all. The Rastafarians were allowed to have some sort of income from medicinal plants that comes in two forms: a) Cash income and b) Reciprocal exchange. The cash income from the Rastafarians range from R10 to R30 and these prices applies to treatments for small illnesses such as cough and headaches to chronic diseases such as cancer and epilepsy. When asked during focus groups and individual interviews why they prefer cash, they spoke the same language that they needed to make a living and hard cash was necessary because of the need to feed their families, but it indicates that it is a sensitive subject for some of them were reluctant to answer. Some Rastafarians also prefer gifts, if payments...
cannot be made in hard cash, such as food, meat, even a simple prayer for their journey forward. They put a lot of emphasis on gifts for it allows them to build a bond with the giver. When Rastafarians give their services as gifts it tells the community (the receiver) how they should interpret the Rastafarians both politically and socially. The Rastafarians calls themselves medicinal doctors “kruiedokters/bossiedokters” and they introduce themselves as such. The idea of being a good Rastafarian or in this case medicinal doctor or in Afrikaans “kruiedokter” is important to them as the ability to heal.

Looking at the general economical income of Rastafarians in the research area from medicinal plants, there are three types of economical income. The first is a small-scale income from R10 to R30 for their medical services by selling medicinal plants. Hence, this income is not the main source of revenue (at least not for all of them), and during interviews I was told that the “kruiedokters” depended more on grants/pensions of their fathers/mothers than this limited income.

Another income of significance is medicinal plants as gift-exchange. This is in the sense in which it is commodity exchanged for other commodities between and among community members, for example medicinal plant exchange for vegetables or meat. The exchange does not however, happen very often but it does substitute as a source of income especially to the Rastafarians whose income is limited and who hardly derive much income from medicinal plants.

However, the exchange does not happen very often due to the satellite clinics in the area and Rastafarians do not have a lot of income through the exchange of gifts. The third source of income of the Rastafarians is a more abstract income, which is termed symbolic capital (see box below) that gives the Rastafarians their position and influence in society. This power however, should not be taken for granted, because this income from their medicinal services is a huge factor in the Rastafarians understanding of themselves and in the general community. The Rastafarians spiritual practice is embedded in deep layers of cultural value, and because people see the Rastafarians role in the community as significant in their daily understanding of their spiritual world and religious reality, it gives the Rastafarians symbolic capital.
An observation was made during a focus group discussion in the identity formation of a homogenous urban group of healers who combine elements of a globally acknowledged eco-religion and socio-political movement Rastafarians with numerous South African cultures through knowledge of medicinal plants. By rejecting “colonial” principles, including “capitalistic” biomedical systems, that have as bush doctors formulated a place in society whereby that knowledge and herbal remedies are utilised for the treatment of general ailments. The Rastafarians indicated that their sole role in society is basically to help their people by renewing what the Khoisan had used given the fact that healing traditions, as indigenous ancestry was for the most part rejected by coloureds during apartheid. Symbolic capital and social capital goes hand in hand what Rastafarians try to accomplish.

Capital as explained by Pierre Bourdieu (1986) “is accumulated labor...which when appropriated on a private, i.e., exclusive basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor” (p.241). The ways in which forms of capital are distributed governs the structures of the social world, and an individual’s access to capital determines the, “chances of success of practices” (Bourdieu, 1986, p.242). There are two types of capital that I want to highlight in this presentation of data for the purpose of clarity.

### Box 2: Symbolic and social capital explained by Pierre Bourdieu.

**Symbolic capital** is prestige a reputation or a common presumed competence. Symbolic capital has no meaning in and of itself, due to the fact that it is a mere perception, but when a group agrees to recognise and consecrate symbolic capital, it becomes what Bourdieu calls “magical power” (Bourdieu, 1998, p102).

**Social capital** describes an agents social network and social obligations

Through semi-structured interviews and focus groups, the researcher estimated that these men earned between R200-R500 a month, but they still depended on the grants/ pensions of their family whether it be from their own parents or aunts and uncles. These men go out three times a month to the mountains one of them is called “Gifberg” which is located in Vredendal 30kilometres from Ebenhaezer to collect their medicinal plants, hence even though this mountain has a lot of medicinal plants they go to other places outside Matzikama where plants are not legal and gather them and bring it back to Ebenhaezer/Vredendal to sell it to people.
6.5. **Cultivation and gathering for health**

Medicinal plants are supplied from wild and domesticated vegetation types that can be described by their size, species composition, and quality. The global number of medicinal plant species is estimated at almost 53,000 (Schippman et al, 2002), corresponding to 10-18% of the world’s vascular plants species (Hamilton, 2004). Except for the few hundred species in cultivation (Shippman et al, 2002) these are all wild harvested and there is thus a close link between renewable natural resources and human health. However, as stated by Frei et al (2002) it should be noted that domestication takes place along a gradient of increasing human energy input per plant and that low energy input supply mechanisms may be important or maintained supplies in house gardens. As biodiversity is degraded (Djoghla, 2010) noted that the opportunities of medicinal plant use for health care will change.

6.6. **Cultivation and gathering as a means of maintaining identity**

Below is a table illustrating how people come to gain indigenous knowledge of medicinal plants in Ebenhaezer. There are four sections namely; receiving indigenous knowledge through word of mouth which accounts for nineteen percent and receiving information from Rastafarians was thirty-seven percent. This means that respondents allowed themselves to be educated by Rastafarians about certain medicinal plants and their functions. The passing of this knowledge normally happens when Rastafarians sell medicinal plants to the community or the community members seek help from the Rastafarians. The calling accounts for six percent, these were mostly respondents who feel that there is a higher calling and that they have been given the opportunity to help people and this calling comes from God. The last section is ‘up-bringing and culture’ these are people who were brought up and utilising medicinal plants, and going to the field has become a cultural thing for them. Some respondents have been doing it for years, especially with relatives such as their parents, grandparents, great aunts, because of this experience they acquired the ecological knowledge of indigenous medicine embedded in their psyche.
6.7. **Social practice and gathering**

Factors influencing on one’s motivation is caused by social environment (objective structure) and individuals motives (subjective or cognitive structure). Here, in this study, objective structure seems to be working and motivate individuals to carry our certain social practices.

Practices are guided by what Bourdieu calls the “practical sense” stored in the habitus. Individuals behave according to the patterns that their community (class, subculture) requires, but not just in the sense of deliberately learning rules of “appropriate” behaviour, as formulated in etiquette manuals, and “obeying” them. Practice theory is more interested in implicit knowledge in the largely unconscious sense of what correct behaviour in a given situation would be, in the feel for the game” thus, practice is skilful behaviour (cultivating and gathering), dependent on practice until they become automatic. The classic example used to illustrate this principle is that of the pianist, whose hands eventually know how to execute a piece of music on the instrument without conscious attention paid to the placement on the fingers, or of the soccer player for whom dribbling the ball at high speeds has become “second nature”. People move about in their social environments in much the same manner. These practices are neither “natural” nor random. They adhere to a learned repertoire that positions a person in a social field and constitutes participation in that field’s “game”. They are not executed as a mere reproduction of norms, but rather according to Bourdieu refers to as “strategy” and the practical sense that emerges from the habitus.

For Boudieu (1989) “Habitus is both a system if schemes of production of practices and a system of perception and appreciation of practices.” Our practice is found in a particular space and time. Our practice is not organised by conscious actions nor do we think on a daily about how we conduct ourselves. The practices are reproduced nonetheless and have more meaning that the agents know. This harmonious coincidence produces what we see as objective structures and internalized structures. This does not mean that the agents can directly manipulate the outcomes. The nature of our actions is governed by *doctaignoratia*, or ignorance (Williams, 1995). Agents are hardly aware of their actions as having more meaning than they give thought to. This highlights the importance of ethnographic studies when using Bourdieu’s work. The assumption is that what we wish to capture cannot be communicated for that takes recall only and people can
easily, consciously or unconsciously, communicate to us the ideal state or do not report significant data. Ethnography observes these unguarded behaviours unfold, whether it be eating or playing sports, we are able to objectively see the embodied structure manifest. Other creative uses of video recording and participant observation with a combination of other data capturing method help give a comprehensive account of health behaviour (Williams, 1995). There is an all governing principle that informs institutions we are located in of the rules and social positions.

In Ebenhaezer the daily routine in terms of cultivation and gathering starts before it gets too hot, so that the sun does not dry out the water when watering the plants. People in Ebenhaezer get up at six (06:00) in the morning and starts to water their plants. They do so again between six (18:00) and seven (19:00) in the evening when the sun is gone. This seems to be a regular activity amongst the community of Ebenhaezer. Individuals working in their gardens are mostly aged 60 and older. The younger generation seldom participates in this activity. Besides cultivating and gathering medicinal plants, the older generation would generally call young men (that are either seasonal workers or unemployed) to gather plants or purchase seeds. Medicinal plants are actively growing in the area, and other medicinal plants that do not grow in the area, you will find in the wild (e.g. mountains). Respondents gather medicinal plants from neighbours or purchased it from Rastafarians. After this collection process, whether seeds or plants they go home and cultivate it in their home gardens. This results to some respondents not being active in the field, because now they have these species in their backyard. Farmers do not really participate in medicinal plant activity. They are more focused on vegetables and seeds and some even find it unpractical to keep medicinal plants in their home yards or farms. However, after conducting a few interviews and focus group sessions, I discovered that they do have one or two species in their backyard.

The social practice written in Bourdieu’s work applies more to this particular study as explained in chapter one, which is essentially about age-old practices of cultivation and gathering.

Having said that, the relationship between humans and nature becomes more evident in communities in which there is a greater direct dependence on the environment. In the study area, Ebenhaezer, I observed how people interact with their surrounding environment and how much care is generated towards it. Most of these individuals are more focused on small scale
cultivation and home gardens, which require low economic inputs, can be a response to declining and supplying regional markets. This, however, can be a secure income than from wild harvest which is notoriously inconsistent. As noted by Agelet et al (2000), home gardens are increasingly a focus of medicinal plant propagation and introduction programme, intended to encourage the use of traditional remedies for common ailments by making the plant source more accessible. I agree with the above statement, purely because my field observation and interviews has shown me in Bourdieu’s language people develop a ‘taste’ for what is available to them. Each practice, like each ball game, invokes rules, strategies and skills, but the social actors (like game players) do so in largely habitual, less fully conscious manner. Similarly, practices (or games) are never fully predictable, even the social actors (or game players) habitus (or predispositions) remain more or less the same; given that the unfolding of the practice/game is highly situational (Bourdieu, 1990).
7. **Chapter 7: Conclusion**

This chapter concludes with a brief summary of the findings of the study reflecting on the findings as social practice which was theoretically framed in the previous discussion chapter. The study sets out to examine the cultivation and gathering of medicinal plants as social practice in a community of ecologically aware locals against the backdrop of a general-national demand and supply of these plants. It utilised the qualitative method, which proved to be appropriate given that adequate and satisfactory data relative to the research aim was able to be generated. The focus was on those small-scale farmers in the locality of Ebenhaezer who engage in cultivation and gathering of medicinal plants for less commercial purposes.

Medicinal plants play a vital role in the lives of people residing in Ebenhaezer. Even though this is not a common practice to all, most of them acquired some ecological knowledge regarding cultivation and gathering of medicinal plants. Primary health care to rural people remains a paramount concern and periodic visit to the local clinic does not prevent them from using medicinal plants in conjunction with their prescribed medication. Gathering and cultivating medicinal plants in this peri-urban area was done for various reasons. It was done for the purpose of self-provision, health and as well as a means of maintaining identity. As Bourdieu (1990) would say “Habitus is a concept that seeks to explain the disposition that influence individuals to become who they are, and yet also includes the conditions of existence”. These four terms explained why respondents took part in this activity. It was not just for treating their ailments, it was also the honouring of knowledge that was passed on to them. In this sense, it is part of their habitus and cultivation and gathering is better understood as a social practice.

Rastafarians and members of the community made use of resources that were available to them. They all understood the tenets and basic principles of plant nurture and cultivation and developed their knowledge and passion on its use. The ecological knowledge of their locality and different species and family reflect cultural embeddedness. Thus, the senior generation has great depth of certain medicinal plants as well as garden plants. Farmers are knowledgeable about these plants but cultivate less for commercial purposes. Things have changed over the years for these farmers. They are being exposed and introduce to more western medicine due to capital.
Some of the practices are still carried out today. However, many of them have fallen out of use, because of mixing of cultures through migration and urbanization, which has resulted in the depreciation of local people’s knowledge of their ancestors’ beliefs and traditions. This is being aggravated by population pressure on the land, which has resulted in cleaning vast areas of vegetation to make way for cultivation and the construction of houses. Local people have always depended on nature and the land for their survival and it would be difficult to convince them otherwise, especially the elderly.

Culture and traditional practices adapt to those of other local communities and in the process, increase the knowledge pool of traditional plant remedies.

Home gardens are increasingly focusing on medicinal plant propagation and continue as well as encourage the use of traditional remedies for common ailments, which in this sense the plants sources are more accessible. Therefore, the use of plants in the preparation of medicine is an old-age practice that remains common in many parts of the world, and specifically in this area. For modern society, traditional plant uses and botanical knowledge are of more than academic or historical interest. The of art healing with medicinal plants or herbal remedies is empirical, and it is usually transferred by oral teaching from a parent to a child. Thus, the botanical and ecological knowledge remains sacred and a culture that continues to inspire many. Although, farmers and the other two groups face unforeseen challenges the love for medicinal plants will always remain. It is the one element in this community that is common and link one group to another even if their dispositions are different. The resources that they acquired overtime gave them an entrance into the field and the means to do what is best for them and their families. Knowledge of medicinal plant remedies was not shared easily, as in the case when they got questioned by local medical health practitioners. This knowledge was only shared with close friends and relatives. Remedies are easy and convenient for most respondents and it does not require one to stand in an endless queue to get prescribed medicine from the clinic. However, there were instances when respondents had to choose between herbal and conventional medicines which were influenced by the type of ailment. Even getting prescribed medication and strict instructions from medical practitioners, respondents always used it in conjunction with their herbal remedies.
Hence, culture and experience (primary and secondary habitus) taught them that the utilisation of these plants relieve more symptoms than conventional medicines.
Hierdie studie gaan oor die sosiale aktiwitiete van die verbouing en insameling van medisinale plante in die gemeenskap Ebenhaezer, Wes-Kaap, Suid-Afrika. Die studie is deel van die navorser se Meesters graad. U samewerking sal hartlik verwelkom word.

As deel van die studie gaan die navorser persoonlike vrae vra byvoorbeeld: vlak van opleiding, maandlikste inkomste, aktiwiteite, werksnemerstatus, gesondheid ens. Die onderhoudvoerder sal alles baie vertroulik hanteer en u sal teen alle tye anoniem bly.

**Toestemmingsvorm:** (Dui asb aan, deur te merk in die blokkie)

<table>
<thead>
<tr>
<th></th>
<th>Vrou</th>
<th>Man</th>
</tr>
</thead>
</table>

Voordat ons met die onderhoud begin, wil die navorser seker maak dat u die volgende inligting verstaan aangaande die studie:

- U deelname is heeltemal vrywillig. U mag weier om deel te neem aan die onderhoud, en u mag enige tyd besluit om op te hou as u nie wil voortgaan nie. U het ook die reg om enige vraag of vrae oorteslaan indien u nie gemaklik is met die stelling van die vraag nie.
- Die tyd van die onderhoud neem gewoontlik 30 to 45 minute, maar dit kan ook verskil afhangende hoeveel dele op die vraelys u beantwoord.
- U is vry om enige vrae te vra gedurende die onderhoud of na die onderhoud.
- Alle inligting wat met die oog op hierdie studie ingesamel word, sal vertroulik hanteer word. Alhoewel die informasie wat ingesamel word vir navorsingdoeleindesis, sal inligting wat u aan die navorser gee, in terme van huishouding nooit openbaar gemaak word in enige navorsingverslag of publikasie nie.
- Die navorser sal u toestemming vrae enige opname en fotos wat geneem kan word, as u nie gemaklik voel met die proses nie is u meer as welkom om die proses te weier.

Deur hieronder te teken gee u toestemming dat u bereid is om deel te neem aan die studie, en dat u deelname heeltemal vrywillig is.
Indien u enige verdure vrae het inverband met die studie, is u meer as welkom om die navorser te kontak op die volgende:

Melissa Louw (071) 009 5067 E-pos: Melissa.louw@gmail.com

Baie dankie vir u tyd en ondersteuning!
Goeie dag! My naam is Melissa Louw en ek is tans besig met my Meesters graad in Sosiologie. My studie is gebaseer op die sosiale praktye van die verbouing en insameling van medisinale plante in die gemeenskap Ebenheaser, Wes-Kaap, Suid-Afrika. U antwoorde op die vraelys sal streng vertroulik hanteer word, u sal nie blootgestel word aan enige ander publikasie nie en u persoonlike inligting sal tans persoonlik bly. Baie dankie vir u tyd en samewerking en wees verseker dat u anoniem sal bly.

Vraelys:

Vandag se datum ...........................................
Geboorte datum ...........................................
Geslag (sirkel asb) ........................................

Vrou               Man

Agtergrond:

1. Etniese oorsprong (merk eenkeer af asb)

☐ Wit
☐ Swart
☐ Kleurling
☐ Ander

2. Sirkel asb u hoogste graad wat u voltooi het, dankie.

|   | 1 | 2 | 3 | 4 |   | 7 | 8 | 9 | 10 |   | 13 | 14 | 15 | 16 |   | 17 | 18 | 19 | 20 |
3. Nommer van familielede in u huis: (merk asb eenkeer af)

☐ 1-2  ☐ 3-5  ☐ 6-10  ☐ meer as 10

4.1 U is tans? (merk asb eenkeer af in die blokkie)

☐ Enkel  ☐ Tydelik geskei  ☐ Weduwe
☐ Getrou  ☐ Egskeiding

4.2. Wat is u werknemerstatus? (sirkel asb die nommer)
1. Kruiedokter
2. Kennisdeler
3. Taxi bestuurder
4. Werk deeltyds (seisoen)
5. Werk voltyds (e.g myn, winkel, besorgde dienste ens)
6. Werk nie
7. Pensioenaris
8. Ander (dui aan asb-regs) ................................................

5. Huishoudelike aspekte: (merk asb af in die blokkie)

5.1.1 ☐ Toegang tot water
5.1.2 ☐ Toegang tot toiletgebruike

☐
5.1.3 Toegang tot elekrisiteit

6. Dui asb onder aan watter gesondheidstoestand u tans beleef:

☐ Diabeet  ☐ Asthma
☐ Long siekte
☐ Hart siekte
☐ Artritis of ander rumatiese siekte dui asb aan
☐ Kanker (dui asb aan watter kanker)

6.1 Algemene Gesondheid:

6.1.1. Hoe sal u, u gesondheid tans beskou?(sirkel asb eenkeer)


6.1.2. Simptome:

Hoeveel tyd gedurende die laaste twee weke ....

<table>
<thead>
<tr>
<th></th>
<th>Was nog nooit nie</th>
<th>N bietjie bekommerd</th>
<th>Meeste van die tyd</th>
<th>Al die tyd</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Was U ontmoedig deur u gesondheids probleme?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2) Is U bang vir u toekomistige</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page | 97
gesondheidstoestand?

<table>
<thead>
<tr>
<th>Nooit</th>
<th>Amp</th>
<th>Somty</th>
<th>Baie</th>
<th>Alty</th>
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<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</table>

6.1.3. Wanneer u, u dokter of kliniek besoek hoe dikwels.... (sirkel as been nommer for een vraag).

<table>
<thead>
<tr>
<th>Berei u voor ’n lys van vrae vir die dokter of verpleegster by die kliniek.</th>
<th>Nooit</th>
<th>Amp er nooit</th>
<th>Somty ds</th>
<th>Baie dikwels</th>
<th>Alty d</th>
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<tr>
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<td>2</td>
<td>3</td>
<td>4</td>
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<thead>
<tr>
<th>Vra vare oor die dinge wat u graag will hoor oor u gesondheid, wat u glad nie verstaan nie?</th>
<th>Nooit</th>
<th>Amp</th>
<th>Somty</th>
<th>Baie</th>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Bespreuk persoonlike sake interme van u</th>
<th></th>
<th></th>
<th>2</th>
<th>3</th>
<th></th>
</tr>
</thead>
</table>
7.1 Hoekom maak u gebruik van medisinale plante? (sirkel asb die nommer)

1. Gesondheidsredes
2. Sosialisering
3. Oefeninge
4. Inkomste
5. Ander, dui asb aan .................................................................

7.2. Indien verkoop, aan wie verkoop u? (merk af asb)

1. Mense wat in die gemeenskap woon
2. Het gereelde klante in die gemeenskap met wie ek ooreenkoms het
3. Mense wat van buite af kom (toerisme)
4. Meestal vir vriende en familielede

7.3. Hoeveel maak u van u verkoop van medisinale plante? (sirkel asb die nommer)

1. Minder as R100
2. Tussen R100-R200
3. Tussen R200-R300
3. Tussen R300-R500
4. Meer as R500 en op

7.4. Watteer prosedure volg u wanneer u medisinale plante kollekteur/insamel? (sirkel asb die nommer eenkeer).

1. Versamel in die veld (wilde)
2. Versamel in die veld en verkoop
3. Versamel in die veld en plant
4. Versamel in die veld, koop en plant
5. Koop net
6. Koop en Groei
7. Groei net
8. Geen

7.5. Dink u die aanvraag vir medisinale plantes sal hoog of laag wees in die toekoms? (sirkel asb die een nommer)

1. Sal hoog in aanvraag bly
2. Sal dieselfde bly
3. Aanvraag sal verminder
4. Kan nie se nie (ek is nie seker nie)

Verskaf redes vir u antwoord.

<table>
<thead>
<tr>
<th>Naam van plant</th>
<th>Lente (Spring)</th>
<th>Somer (Summer)</th>
<th>Herfs (Autumn)</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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Watter tyd van die jaar is medisinale plantes baie gewild? (Noem die plant en merk as en of twee van die seisoene)

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<th>Naam van medisinale</th>
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BAIE DANKIE VIR U SAMEWERKING!
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