



# **SOCIALITY IN THE SEEDING FUTURE PROGRAMME**

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## Table of Contents

Chapter 1: Introduction	6
1.1: Background and Research Questions	6
1.2: Locational Context of Seed	8
1.3: Seed’s Climate Resilience and Green Economy Education	9
1.4: Thesis outline	11
Chapter 2: Literature Review	12
2.1: Historical Background	12
2.2.1: Physical health and Wellbeing	14
2.2.2: Mental health	14
2.2.3: Ecological practices	15
2.2.4: Social benefits	15
2.3: Summary and Implications	16
Chapter 3: Research Design	18
3.1: Methodology	18
3.2: Research Approach	18
3.3: Participants	19
3.4: Instruments	21
3.5: Procedure:	21
3.6: Analysis	22
3.7: Ethics And Limitations	23
Chapter 4: Results	26
4.1: Background Information	26
4.2: Skills Development	26
4.3: Social Relationships	28
4.4: Cultural Tolerance	30
Chapter 5: Discussion	33
5.1: Seed and social relationships	33
5.2: Seed and lasting period of social relationships	34
5.3: Seed and cultural tolerance	35
Chapter 6: Conclusion	36

## Abstract:

Seeding the Future is one program that has begun to think about the ways that we can address the impacts of climate change and the need for sustainable practices within our immediate environments. While critics see permaculture community gardens to shift governmental responsibilities in addressing climate change through non-governmental organizations, some see them as the best climate resilience technique. I am interested in how these permaculture design programs are not only about the direct importance of sustainable livelihood practice, but how they shape our social relationships between one another as youth.

This paper explores the role that community gardens play using Seeding Futures permaculture programme on the social relationships of the participants. It uses four participants from the Seeding Futures program to get an in-depth experiences on how the organization affects their social relationships.

Findings suggest that (1) Seeding Futures programme makes the participants to care, respect and encourage each other on a daily basis as well as (2) positively affecting the duration of the social relationships created after they graduate. However, these relationships after the participants have graduated are not as strong as before, which suggests getting to the end of these social relationships. (3) Lastly, the Seeding Future Programme has provided a place where participants learn and respect each other's cultures, hence, bring about cultural tolerance within the participants. However, despite the positive impacts that the organization is having, the race dynamics in the leadership board. needs to be looked at.

## Chapter 1: Introduction

This chapter presents the background information on the broader topic of climate change and its impact on societies. It starts by providing the Seed's locational context followed by the outline of the Seed permaculture design program. Then I present the problem statement and then introducing the main research theme, topic and research question. In the section, I finish with the outline of the other remaining chapter in this study.

### 1.1: Background and Research Questions

Climate change is a major concern in many societies due to the devastating impacts it has on all aspects of community life. The melting of icecaps, the rise in sea levels, devastating heat waves, loss of biodiversity and frequently occurring wildfires are just a few examples of the impacts that climate change and global warming is having on the planet and all its species. This had particularly devastating effects on those living in poverty. Even in countries such as South Africa which is more developed than most of the African countries, climate change has affected many civilians. Here, climate change has resulted in severe droughts leaving community members with "severe water shortages, driving up the food prices and leaving residents without tap water" in places such as Limpopo (Gernholtz , 2019).

In the 21<sup>st</sup> century, the increase in natural disasters, floods and droughts have caused many governments to increase the interventions and programs such as the sustainable development goals, Paris Agreement and many more which are designed to address this global crisis of climate change and global warming (United Nations, 2018). However, since 2000, the involvement of non-governmental environmental organizations (NGOs) have played a key role in coming up with better ways on reducing the impacts of climate change. However, in some developing nations such as those in Africa where the governments have not been effective in delivering the services to the people, environmental NGOs are more than just an alternative but rather the at the forefront in addressing these development projects (Gemmill & Bamidele-Izu, 2002, p. 13). In the case of South Africa, Seed is one of such NGOs.

Seeding the Future is one program that has begun to think about the ways that we can address the impacts of climate change and the need for sustainable practices within our immediate environments. I am interested in how these permaculture design programs are not only about

the direct importance of sustainable livelihood practice, but how they shape our social relationships between one another as youths.

I spoke with program organisers as well as those who are in the current cohorts and some alumni of the program.

I also consulted material put out by Seed (websites, adverts, learning and teaching documents) alongside a broader literature about climate change and community programs.

With the global rise in temperatures, the problem of climate change poses a major threat in South Africa's "water resources, food security, health, infrastructure, as well as its ecosystem services and biodiversity hence, having an impact on development." (Ziervogel et al, 2014, p. 606). One of the major problems when it comes to climate change is that it is mostly seen to environmental problem instead of a development problem. This limits our understanding of the seriousness and the agency of climate change. With high per capita emission, South Africa has focused on climate change mitigation techniques and policies such as the Renewable Energy Independent Power Producer Procurement Programme as well as National Treasury consideration and planned implementation of carbon taxes as means to reduce of causes and effects of climate change. The National Climate Change Response White Paper established the Long Term Adaptation Scenarios (LTAS) Project in 2013 with the main objective of "developing national and sub-national adaptation scenarios under a range of plausible future climate conditions and development path ways, so as to enable the incorporation of 'climate resilience' in future development planning" (Ziervogel et al, 2014, p. 607)

The (LTAS) has projected that by 2050, climate change will have relatively small impacts on the loss of biodiversity especially those of plant species such as grasslands due to the increase in CO<sub>2</sub> and temperatures in the atmosphere. In the agricultural sector, it has been predicted that there will be high demand of irrigation in large agricultural projects as well as reducing the production of cereal crops. It is predicted that South Africa will be experiencing unpredicted seasons of high rainfall as well as severe droughts, both will have a huge impact on the socio-economic aspect of the citizens. (Ziervogel et al, 2014, p. 607). The 2018 Cape Town drought is a good example of how droughts are one of the impacts of climate change.

However, there have been several local community-based initiatives usually driven by non-governmental organizations, local, regional and national government in adapting to the problems of climate change. However, the problem is that most of these initiatives are not well

monitored and researched. Therefore, there must be a link between academics and local projects practitioners so that will increase the partnership and funding of these projects.

This research has two broad topics which are “Seeding Futures” program and the participants’ social connections and relationships with each other. These two topics are very important because they allow the researcher to analyse how the Seed organization uses the permaculture design program as a climate resilience techniques in Cape Town through the impacts it is having on the participants who are involved in the program. This brings an interest to the following research question.

How does the Seed permaculture design program affect and shape the social relationships between participants involved in the program?

## 1.2: Locational Context of Seed

Mitchells Plain faces particular social, economic, and political challenges. This section provides a historical and locational background of Mitchell’s Plain in relation to its development statistics about employment rates, population and others.

Mitchells Plan is one of the largest suburbs located in Cape Town. Like many agencies and scholars, (DPLG, 2005, p. 4) believes that the suburb was established by the government as a way of moving the “coloured” people out of the main city and other areas where the Apartheid government had evicted them. The “coloured” group in South Africa has been the product of the intense social construction, stereotyped with many bad things and behaviours during the Apartheid government and still very relevant in contemporary South Africa.

With the population of about 400, 000 people, the Mitchells Plain community is about 45 km north of Cape Town. While about 62% of the population are below 29 years, 18% of the population are still living without electricity and 13% without piped water services. With these conditions, about half of households live below the poverty line with only 43 % of the working population being employed. (DPLG, 2005, p. 4)

The Mitchell’s Plan community has very high transport costs because it is situated far away from the business centre of Cape Town as well as having very high rates of gang violence. Despite some projects that have been implemented such as Mitchell’s Plan CBD, Mitchell’s Plain Housing Programme and Swartklip Sports Complex/ Mitchell’s Plain Urban Renewal Centre, the community is still lacking behind in relation to Western Cape development.



Mitchells Plain has a very small GDP per capita of R5, 800 in 2004 report in relation to Western Cape which is R33, 820. The manufacturing sector has the highest level of employment of about 21.4% of the working population while the Agricultural, Hunting, Forestry and Fishing sector employing only 2.2% of the working population which is the lowest (DPLG, 2005, p. 10). With the high unemployment rates in the community, some people work outside the area and in the process use the train, taxi and buses as their means of transportation in and out of the area. Therefore, with very low levels of employment in the agricultural sector, it becomes important for environmental non-governmental organisations to provide support on the agricultural related projects and programmes in these communities.

SEED is “a Cape Town public benefit organization which focuses on building climate resilience skills in unemployed youths.” (Seed, 2019). According to the governmental report, “In South Africa, the youth is defined as the population between 15 and 35 years” (Van Der Byl, 2014, p. 3). However, as I attended the organization and after seeing the people who were involved in the “seeding futures”, I realised that there were a few members who did not fit the youth age category according to the South Africa standard. Some of the people who were taking part in this permaculture design program were above the 35 years age limit. Therefore, it is important for the organization to consider this especially when it comes to their target population group. Therefore, because of this, I will use the word “participants” to replace “youths” since not all of them fit this age group.

The organization is guided by the permaculture principles which then helps them in transforming societies by teaching participants resilience techniques through sustainable community gardening programs. Since the introduction of permaculture design, there have been different definitions that are used in explaining this process. For the purpose of this research, I define permaculture as “a design concept for sustainable, food producing landscapes mimicking the diversity and resilience of natural ecosystems” (Brain, 2013, p.1).

These programs then aim in providing participants with skills to address the social, economic and environmental problems within their surroundings.

### 1.3: Seed’s Climate Resilience and Green Economy Education

“Seeding Futures” is a 15-week internationally accredited permaculture program which focuses on skills development amongst participants on climate resilience techniques.

In the first 4 weeks, the program introduces the participants to the broad concept of permaculture by looking at aspects of soil, water, plant systems and energy in their environment (Seed, 2019).

The second module of the course takes place over 6 weeks where participants are introduced to issues of resilience facing neighbourhoods and households. Through this, the organization aims to instil capacity within the participants to design environments that can absorb, adapt and cope with the problems of climate change. Hence, making the participants prepared for any change. During this time, they are trained using best international and local practices of resilience techniques. Through participatory process with the community members, participants design and implement resilience systems through retrofitting buildings to withstand environmental shocks and disturbances. Module 2 aims to help participants in “interviewing clients and design systems to address food, water, energy, temperature management, waste, medicine and fuel” in Mitchells Plan community (Seed, 2019).

Module 3 take place over a week which focuses mainly on the issue of communication both interpersonal and intrapersonal. During this time, participants engage on the workplace and how to familiarize themselves with the problems that they might face in these places. They get to know their strengths and weaknesses and how to best express themselves at the workplace. They are equipped with communication skills, conflict resolution skills as well as self-meditation for body growth and development.

The last 4 weeks concludes the learning process of the program. The youths are introduced to the working environment where they can obtain valuable working experiences. This provides the youths with an environment where they get to implement whatever they have learnt over the 11 weeks. It is important to note that Seed chooses environmental organizations that focus on agricultural aspect so that their participants are able to put into practice what they have learnt in “Seeding Futures”.



*Figure 1: Participants at the "Seeding Future" graduation*

Source: (Haji Abdulla, 2019)

#### 1.4: Thesis outline

I now turn to critically evaluating and discussing the literature on permaculture design and its impacts on people and communities. Chapter three discusses the research design and methodology that has been used to answer the main research question and ends with discussing the ethics and limitations of the study. In chapters 4 and 5 I present and discuss the results of my research.

## Chapter 2: Literature Review

Chapter 2 starts by providing a historical background of permaculture, followed by the impacts that permaculture design has to the communities in general. In this section, I discuss the physical and health impacts, mental health, environmental benefits and lastly finishing with the social impacts on the community members who take part in permaculture lifestyle.

### 2.1: Historical Background

The ideas of permaculture were first developed by Bill Mollison and David Holmgren in the late 1970s. Guided by twelve main principles, Bill Mollison's and David Holmgren's permaculture design course aims to restore a balance to the environment through better use of ecological principles which then addresses resources use, diversity, resilience and sustainability of natural resources (Francis, 2004, p. iii). This definition of permaculture fits very well in this study because, the Seeding Futures uses some of these principles and view permaculture as not only "just gardening, but also social, economic, environmental and every sphere of life" (Seed, 2019).

Therefore, permaculture design is not only used for the production of food but rather a whole lifestyle that encompasses all aspects of the lives from the landscapes to economic and social infrastructures that we interact with on our daily lives (Aiken & Gerald, 2017, p. 176).

### 2.2: Impacts of Permaculture Design program

Most environmental organizations have many benefits to the members who take part and the community in general. Permaculture through the use of community gardens has been one of the ways in which environmental organizations mobilize the people in relation to their environment. In many African countries where agriculture is a major contributor to the economy, community gardens help community members to come together to discuss many problems as well as interact with each other. When it comes to permaculture lifestyle to community members, it is believed that "community gardens bridge gaps, reduce existing tensions, and foster social integration between otherwise segregated groups by bringing people of diverse races/ethnicities, cultures, religions, socioeconomic classes, genders, ages, and educational backgrounds together to participate in shared activities with a common purpose" (Dilonardo, 2016). This is very important especially when linked to the last objective of this

study which is looking at how Seeding Futures affects the level of cultural tolerance of the participants.

Community gardens are organised initiatives whereby sections of land are used to produce food or flowers in an urban environment for the personal or collective benefit of their members who, by virtue of their participation, share certain resources such as space, tools and water (Looy, 2015, p. 264). Community gardens serve as an alternative to the global crisis of food insecurity because local farmers produce foods that are cheap hence, benefiting the whole society.

Most community gardens provide five main benefits which are engaging youth, improving health, reduces land holders versus gardener conflicts, increasing social capital and lastly participation (Looy, 2015, p. 263). Some other benefits include opportunities to socialize, chance to beautify and give back to the community, growing culturally accepted foods, and saving money on food expenses.

Community gardens also produce food which has low ecological footprint hence, having less negative impacts on the environment. Lastly, community gardens facilitate the process of learning through connection between community members and nature which then leads to path towards ecological citizenship.

Therefore, community gardens which use permaculture designs have been able to transform communities and bring many benefits on psychological health and wellbeing, mental health, as well as social and environmental benefits.

While many authors see community gardens to play a key role in the development of the community, some believe that community gardens to be aiding to the problem of climate change. According to (Ogawa, 2009, p. 50), community gardens results and “demonstrates the notion of responsabilization by enhancing personal responsibility, while reducing public responsibility.” What this means is that many community gardens end up doing the job that is supposed to be performed by the government. In Michael Maniates’ article titled: *Individualization: Plant a tree, Buy a Bike, Save the World?*, the author presents the problem with the concept of “individualization of responsibility as the solution to climate change “buy a tree and plant it” then save the world from climate change” (Maniates, 2001, p.37). The same idea can be seen when it comes to community gardens. We have been constantly taught that our choices of using organic foods from gardens is better than the genetically modified ones. This approach characterizes individuals as consumers and hence, their poor choices of item they choose as the main reasons for the environmental problems. This limits people from seeing themselves as citizens who have the capacity to challenge the institutions and policies that

affect the environment. Individuals have been so alienated from active participation which limits their understanding of the environmental problems. The issue with this idea of “individualization of responsibilities” is that it neglects the issues of power dynamics and how they play a role in the environmental degradation as well as limiting our understanding of the environmental problems and effective ways to solve them.

Some green companies such as those of cars and power ask its citizens to buy “green electricity” to present a fake idea of solving the environmental problems, but in fact these are just new ways of making profits for these large corporations. The same can be seen with many game reserves and parks where in the cry for protection, they are there to make more profits for their donors and themselves. Therefore, despite community gardens seen as the best way in achieving these benefits and reducing the impact of climate change, they end up shifting government responsibilities of being at the forefront in combating climate change and providing public service in communities.

### 2.2.1: Physical health and Wellbeing

Community gardens which use permaculture design have been able to improve the physical health and wellbeing of the people involved in many societies. Much of the literature on the benefits of community gardens has shown that community gardens do not only provide healthy foods but also increase healthy eating habits and overall wellbeing amongst the community members (Machida, 2017; Egli et al, 2016; Schmutz et al, 2014; Dewi et al, 2017). In a recent study conducted on the impacts of community gardens, (Siewell et al, 2015) found out that “almost half of all respondents indicated that access to fruits and vegetables was not a problem for them”. This becomes a very important benefit to the members of the community especially in developing nations where food insecurity is still a major issue. With such accessibility and availability to fruits, foods and vegetables most young people will become more energized in going around their daily works.

### 2.2.2: Mental health

Community gardens play another important role of improving the mental health of the people who are involved. When it comes to the mental health, community gardens and permaculture practices have been said to significantly reduce mental related problems. Literatures have suggested that community gardens have significantly reduced depression symptoms (Stepney

& Davis, 2004; Gonzalez et al, 2011), improved the self-esteem (Son et al, 2004) as well as significantly increasing the attentional capacity (Rappe et al, 2008). This has massively increased the number of organizations that “promotes and supports the use of therapeutic horticulture, such as the number of UK horticultural projects for vulnerable people (including those experiencing mental health difficulties)” (Clatworthy et al, 2013). Mental health development is not only in those who are already facing mental problems, but also even amongst the youths. The mental health of youths is very key especially in the African continent where the youthful and working population is very large.

### 2.2.3: Ecological practices

Furthermore, community gardens have played a big role in educating communities about environmental issues which brings about ecological citizenship. In a research done on “assessing the influence that community gardens practices on ecological citizenship”, it was found out of the members involved in community gardens in Brisbane and Gold Coast in Australia “34% of them joined because of its environmental sustainability” benefit (Lovell & Taylor, 2013). Different scholars share the same view that community sustainable gardens play an important role in understanding and addressing the environmental problems but also are vital “in providing ecosystem services, mitigating environmental degradation and promoting environmental sustainability” (Kennedy, 2017, p. 13). Thus, community gardens are very important in addressing the environmental problems as well as acting as resilience technique for climate change and global warming issues.

### 2.2.4: Social benefits

Lastly, community gardens provide a perfect space for social benefits and transformation of the community. Through the gardens, members get the chance to “interact with each other, naturally building their social skills and confidence and ultimately strengthening their social development” (Mobayed, 2009, p. 49). Several scholars echo the social benefits that community gardens provide to the members of the community (Moquin et al, 2016; Siewell & Thomas 2015). On a similar study done on the benefit of community conservation programs in Illinois in 1998, Kuo and colleagues stated that “compared to residents living adjacent to relatively barren spaces, individuals living adjacent to greener common spaces had more social activities and more visitors, knew more of their neighbours, reported their neighbours were more concerned with helping and supporting one another, and had stronger feelings of

belonging” (Kuo et al, 1998, p. 843). Social benefits of community gardens have played important roles in building communities and uniting them to the extent that they work collectively to reduce and address other issues such as crime, abuse.

### 2.3: Summary and Implications

Throughout the literatures that I have looked at, it is evident that permaculture design through sustainable community gardens has many impacts to the members of the community. The benefits range from the physical wellbeing, social benefits such as community building to bringing about environmental protection. This means that in this study that looks at how permaculture design program affect and shape the social relationships, I want to see the ways in which Seeding Futures program holds up to these benefits and impacts.

However, in most of the literature that I came across on the study of the impacts of non-governmental organization that use permaculture on the social relationships did not take into consideration how permaculture actually creates, improves and makes social relationships to last. This means that the literature that I have come across does not provide evidence on how permaculture programs are sustainable in the benefits they offer to communities. Despite the fact that some authors acknowledge that permaculture programs do have social benefits to the people and the community that is involved (Mobayed, 2009; Kuo et al, 1998), they do make it clear if these organizations act as a space for the creation of the new social relationships which have not been created prior to taking part in the permaculture program.

Also, all the literature that has been done on this subject fail to consider how these relationships are tied to the bigger issue of cultural tolerance in these communities that enjoy these social benefits. This is very important especially in South African communities such as that of Mitchells Plain where cultural intolerance is a big issue. By cultural tolerance I do not only mean participants being able to withstand and respect but also tolerate the beliefs and practices of that specific group of people. According to (Haiming, 2019), “to strengthen social cohesion and promote greater solidarity in the international community, there is a need for people to adhere to the principle of cultural tolerance. Being culturally tolerant means not discriminating against people of other cultures.” Therefore, this research will provide an insight not only on how permaculture as a sustainable way affects social relationships of the participants who are involved, but also provide an understanding of how such as program affects the way people



view people from different cultures and if they are able to live together in harmony with these different cultures.

## Chapter 3: Research Design

I start with the discussion on the methodology and the approach that has been used. I then provide the details of how the participants were obtained as well as outlining the research instrument used in this study. I also outline the main procedure that has been used and discussing how the data has been analysed. In the last part, I discuss the ethical considerations in this study as well as highlighting the problems and limitations of this study.

### 3.1: Methodology

This study takes a qualitative approach which gives me the chance to explore and describe the experiences of the participants who are involved in the permaculture design program from the Seed organization. With a topic of this nature, it becomes very important to consider this type of paradigm because it allows me to dig deeper into the different perceptions, feelings and perspectives of these permaculture students as a group in relation to how it affects their daily social relationships with each other. Hence, this is a descriptive study aimed at having a deeper understanding of a specific characteristic which is social relationships of the participants who take part in the permaculture design program. This basic research design with its solely purpose is to get an expansion on the existing knowledge on how the social relationships of the people who are involved in permaculture design are affected daily. It does not aim to solve any problem in the community, but rather improve on the concept related to the relationship between permaculture design programs and their impact on social relationships of the participants involved.

### 3.2: Research Approach

Due to the nature of this study, I used a qualitative research approach. This approach is very important because it provides a rich framework in learning, understanding and telling about the experiences of a specific group of people. This approach becomes vital in this study because it allowed me as a researcher to “study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them” (Lincoln, 2007, p.3). With its in-depth nature, this approach provided me with opinions and perspectives from the eyes of the participants. Therefore, instead of eliminating and distancing myself from the participants, I got a chance to interact with the members and participants who are taking part

in this permaculture design program. Therefore, through these lived experiences with them, I have a better objective, holistic and unbiased knowledge on how non-governmental organizations that use permaculture design program such as Seed affect the daily lives of the participants who are involved in it and the whole community in general. Lastly, as discussed in the previous section, the purpose of this study is to get a better understanding of the relationship between permaculture design programs and their impact on the social relationships. It is important to note that this qualitative research does not aim to generalize its results and findings to a larger population. This is because it used a very small sample which provided an in depth understanding of the permaculture participant's experiences, perceptions on how it affects their social relationships with each other.

### 3.3: Participants

The research setting of this study is the Seeding Future permaculture program which is carried at this non-governmental environmental organization. This Seed organization is located at the Rocklands primary school in Mitchells Plain, Cape Town. This study uses Seed organization as the population and all the students who take part in the permaculture design program are part of the sample frame. This sample frame was obtained from the administrative office of the Seed organization since they have all the names of the participants who are taking part in the Seeding Futures permaculture program. From this sample frame, 4 participants who are taking part in the permaculture program were used in this study. A probability sampling was used in this study so as to give everyone an equal chance of participating in this research.

As a student, I have always had an interest in environmental related issues. Through the University of Cape Town knowledge co-op, I was provided a chance to work with an environmental organization that fits my interest. The UCT Knowledge Co-op “works by matching community groups with academic partners in a collaboration that meets the needs for research or practical support identified by the community group hence, partners jointly reformulate the questions into manageable student projects” (UCT Knowledge Co-op, 2019).

Initially, “Seed” asked for a student who could do an impact assessment of the organization and how it was affecting the people especially the participants who were involved. With my interests in environment, I agreed to take part in the research not only for my academic purposes, but also as a way to provide information on how the organization is having an impact

on the participants. Upon attending first on the graduation ceremony out of the three times, I was privileged enough to meet the young, brilliant and hardworking youths and other participants who just finished the program and the second group who just started the program. Hearing their testimonies of how the program has been able to have affected their lives in different ways especially when it comes to the skills that they were able to obtain; I was sure that I want to capture the experiences of these participants and Seed organization. However, like many organization, there were some issues raised; with the main one being about the leadership structure at Seed, which I will discuss later on in chapter 4.

Two weeks after the graduation ceremony and having many interactions with the participants, I drafted a proposal by focusing on the social impacts that Seeding Futures program has on the participants and the community. Therefore, I presented the following as the guidance for my study which were reviewed and approved by both knowledge co-op and Seed organization.

How did participants hear about the program?

What motivated them to join the program?

What are the factors in their friends/peers joining/not joining the program?

What skills have the participants gained from the program thus far?

What are the social interactions and relationships created through the program that were not necessarily part of the curriculum?

What are people's interactions with one another outside of the program space?

In this study, I used a stratified-simple random sampling techniques which is best applicable for this specific study. The sample population was divided into 3 strata based on the period in which participants took part in the permaculture design program at the organization. As highlighted in the first chapter of this document, the Seeding Futures program at Seed takes 15 weeks to complete then the participants graduate after that. Therefore, when one cohort is in the last phase which is job shadowing, a new group joins the program. Therefore, I used the participants who are currently in the program and the previous group that graduated while leaving those in job shadowing because they were not available during this time. Therefore, for the purpose of this essay, the group of participants that are currently in the program are called group 3, and the one that previously graduated are 2 and group 1 is the that graduated before group 2. It is important to group the participants based on these groups because it provides an

understanding of how the social relationships between these different groups have been affected with time. After, the strata (group 1, 2 and 3) have been established, about 2 participants voluntarily agreed from these groups to participate in the study.

It is important to highlight that as a researcher; I did not have a say on who I interviewed since participants volunteered to take part in the study. The facilitator at Seed who has all the contacts of the participants reached out to some of the volunteers and this might mean that the people that I interviewed might have been those with success stories while those left out are the ones who might not have affected positively to the same extent. Therefore, since I did not have direct contact with the participants, this might have affected the validity and accuracy of the results obtained from this study.

### 3.4: Instruments

When it comes to data collection, the study mainly use interviews as the main source of data collection method. Interviews are vital because they provide a one on one and face to face interaction with the participants who are taking part in the permaculture design program. I used semi-structured interviews because they allowed me to ask open-ended question which helped me to obtain multiple insights to the different aspects of the study. It was also vital to use semi-structured interviews because they allowed me to probe and change the questions in such a way that will allow me to obtain enough information regarding a specific topic of inquiry. Small group discussion of only 2 students was another data collection method. As a researcher, I felt that the current participants who are in the permaculture design program (group 3), cannot answer some of the question related to how they have been affected by the program over a period. This is because they are at the initial weeks of the program hence, I had to do a combined or group interview to get different perspective and enough information which are vital in answering some of the questions in this study. It is important to note that, some observations during the time I was at the organization played a big role in shaping some of the questions that were included in the questionnaire guide, even though it is not part of the data collection method.

### 3.5: Procedure:

Due to the nature of this study, I am working in conjunction with the Seed organization to see how this organization's permaculture program affects the social relationships of the

participants who are involved in it. Because of this, I was able to get permission from the organization for me to conduct this study. The proposal of the study was presented both to the organization and the university's ethics committee which then gave approval of the study to continue. When it comes to the participants in this study, they were very easy to find because they were from the organization. Some of the participants (group 2 and 1) were not currently at the organization since some of them have graduated and some of them were doing job shadowing. However, as stated above, the group 2 participants were at job shadowing when the interviews were conducted hence, they were not used in the study which will be discussed as a limitation in the later chapter. Therefore, I had to find ways to have access to these participants who were not around for me to interview them.

### 3.6: Analysis

After the Interviews have been conducted, each of them were transcribed manually and then put in to the NVivo software for the analysis. The NVivo software is very important to use especially in this qualitative research because it provides data which is very rich in text-based information. In a report written in 2016 by Dr. Philip Adu from The Chicago School of Professional Psychology (TCSPP), he highlighted three main purposes on NVivo. "It firstly helps in capturing significant information from the data and putting them into nodes, labelling the nodes with descriptions and lastly using the parent nodes to address the main research question" (Adu, 2016).

Due to the nature of the research question, I have decided to use the Miles and Huberman's method of data analysis which uses three main steps.

The three main steps in Miles and Huberman's method are data reduction, data display and lastly, conclusion drawing and verification. These three steps set the foundation for my analysis on the data that I have been able to obtain on the larger topic of impacts of the Seed permaculture design program on the social relationships of the participants involved.

On the data reduction part, I used both the first level and second level coding. In the first coding level is largely descriptive and I organized the data and information based on specific themes that I created from the main research question guide that I developed. This means I had to filter all information which is relevant, and which is not in answering the main research question. In order to get a better understanding of the impact of permaculture design programs on the social relationships of the participants, four broader main themes have been created in the first level

coding. These themes are (1) background Information, (2) Social relationships, (3) skills development and (4) cultural tolerance. Each piece of relevant data is grouped into one of these four distinctive yet very related themes on the main topic of the impacts of permaculture design program on the social impacts of the participants who are involved in it. However, as a researcher “I made sure that I filtered and reduced data without removing its context” (Miles & Huberman, 2014, p. 86).

The level two coding involves higher levels of abstraction, where responses which are meaningful are captured. On this coding level, the codes that were created in the first level were then connected and linked with each other to answer the main research question. In this phase, the parental codes which were established in the previous section had child nodes to them which act as sub themes. (Punch, 2013, p. 199)

Data display is another important element of the Miles and Huberman’s method of data analysis. Data display allowed me to display and present my reduced data in an organized manner. The information can be presented in a table or drawing form so that it becomes important to and easy to make a visual link between the different themes created in the analysis.

Conclusion Drawing and Verification was the last phase which provided a chance for the researcher to take a step back and see how the themes that have been displayed are related in answering the main and sub-research questions. It is however important for me as a researcher to go back and check over and over again and verify my data so that I get a better accurate conclusion on the impact of permaculture design program on the social relationships of the participants at “Seed”.

### 3.7: Ethics And Limitations

When it comes to research studies such as this, it becomes important to consider all aspects of the ethics. Firstly, as a researcher it becomes vital for me to explain the purpose of this research in details. I had to use language that was very easy to understand while explaining the main purpose of this study. I also explained in detail the purpose of this research both verbally and in writing in a consent form. Once, the respondents read all the information, they had an option of agreeing to participate in the research willingly or not. For those who have provided informed consent will have to sign the consent forms which explains the purpose of the research

in detail. I provided one copy of the consent form to be kept by the participant while the other is being kept by the researcher.

Another important aspect to consider when it comes to the research ethics causing little harm or no harm at all to the participants. Taking the location of the Seed organization, Mitchells Plain is well known for its high crime rates. Therefore, as a researcher, I conducted the interviews at Rocklands Primary school where the organization is based. This location does not only assure to minimise the harm to the participant but also the researcher too.

Moreover, protecting the anonymity of the participants and providing confidentiality is very vital. As a researcher, I informed the participants that everything that is discussed during the interviews will remain confidential between the researcher, the participants and the academic staff. However, the nature of the research does not ask for personal and confidential information hence, all the participants consented to the use of their names in the research.

Lastly, it is important that all the participants are given the right to withdraw from the research. As a researcher, I know that sometimes the data collection phase can be very difficult. During this time, the respondents might feel like he or she does not want to answer the questions. If this happens, through the terms and conditions that I have explained to them, I have to respect their decision to do so. Sometimes, the respondents can even decide to omit some information or withdraw from the research in total. Therefore, the respondents are aware that they have the right to withdraw from the research at any time.

Just like many research, this study has its own limitation and weaknesses. When it comes to the limitations and weakness of this study, the number of participants that took part is very low. Because of the nature of the Seed permaculture design program, most of the participants that I was supposed to interview were still continuing with their classes at the organization. This made it very hard because they were having classes almost every day. Even those from cohort or group 3, I was able to interview them during a small lunch break so that I do not disrupt the classes and what they are learning. It was impossible to get any participants from cohort 2 because all of them were doing job shadowing where they were not on the organization. Therefore, I had to remove this group from the study. Group 3 participants volunteered on their own free times to take part in this study because all the two of them were free on that specific day. It would have been better if I took three participants from each cohort, but instead I ended up interviewing two participants from cohort 1 and other 2 from cohort 3. Therefore, because



of the small number of participants in this research, the results obtained from this study cannot be generalized to the larger population.

Another limitation of this research is seen when it comes to the participants from cohort 1. In order to find Seed participant's interactions with one another outside of the program space, the 1st cohort participants do not present the best sample for this purpose. Since, I was interested in finding out how the social relationships established at Seed manifest themselves after the participants graduate in a long run. The 2 participants that were interviewed just graduated about 2 months ago when the interviews were conducted, Therefore, this period is not long enough for one to get a better understanding on the lasting period of these relationships outside the program. It would have been better if I had participants who have graduated from the Seed permaculture design program at least a year ago so that to get a better representation of how Seed permaculture design program is affecting the longevity of the social relationships of the participants after they leave. Therefore, again the results obtained from this research only present the perspectives of the participants interviewed and is very limited in answering the second objective of this study stated in section 1.5.

Lastly, before designing my study, I had to sign a memorandum of understanding between me as the research and Seed organization as an agreement between two of us. This had a huge impact from the beginning because I knew that my proposed study had to be agreed by "Seed" before I am given permission to carry it on. Therefore, this limited me and had an influence on the type of questions that I asked. I knew I could not ask highly controversial questions even though I might have a reason to ask them. Therefore, despite the fact that leadership questions at Seed being of a huge interest to me; as explained in chapter 4, the initial topic that they presented to the UCT knowledge co-op and the signing of MoU made it difficult to ask some question that might have affected the image of the organization.

## Chapter 4: Results

### 4.1: Background Information

There are two main ways in which participants heard about “Seed”. Through the data collected, one of the participants *“heard about it to a very good friend”* who also was able to join and do the permaculture design program together. Abdulla. H (2019, July). personal interview. The majority of the respondents (3 out of 4) believe that they heard about the organization through social networks such as Facebook posts and internet. However, it is important to note that even those who heard from the internet and social media, 2 of them got posts from their friends. Therefore, friends are very vital when it comes to get and access information concerning the Seed permaculture design program.

When it comes to the reasons for the participants in joining the Seed permaculture design program, one of the participants indicated that he joined because his friend convinced him to join the program as a way to increase his knowledge on the permaculture lifestyle. However, the other three respondents believe that the main motivation to them joining the Seed permaculture design program is because they are *“interested in plants, farming and green lifestyle”* Abdulla. H (2019, July). personal interview. This is very important because it shows how important the topic of climate change and permaculture is taken seriously between the youths not only in Mitchells Plain but also those around Cape Town.

Two of the respondents indicated that some of their friends did not know about Seed permaculture design program. Because of this, they were not able to apply or even those who wanted to apply realized that it was too late for them. Therefore, one thing is very clear is that there are still a lot of youths out there who do not know about the Seed permaculture design program and because of this, it limits them from getting the knowledge and skills that their peers get in this organization. However, because of the financial limitations, Seed can only accommodate for a specific number of youths per cohort which explains why some of the youths do not know about it.

### 4.2: Skills Development

When it comes to environmental organisations such as Seed, skills development is an important aspect of the organization. One of the important skills that the respondents indicated is about learning and living a permaculture lifestyle. This skill is very important to most of them such

that three of the respondents indicated that they have been living permaculture lifestyle. For the participants who take part in this program, one respondent believes that once you get ***“hit with permaculture, you are terminal. It’s never leaving you, it’s with you for ever and ever. You’ll see with your permaculture eyes forever”*** Abdulla. H (2019, July). personal interview. Through these 11 weeks, the participants are able to learn about the wind, sun, water systems, gardening and farming techniques and other aspects which improves their permaculture lifestyle skills and resilience to climate change. As we have seen earlier that permaculture design programs and lifestyle in general brings about health, mental and environmental benefits. Therefore, While Seed inculcates permaculture lifestyle to the participants, this brings hope that the future generation can live in harmony with the environment.

However, through the Seed permaculture design program, some of the participants get a chance to improve their social skills. This category of skills is very important because it teaches them how to communicate and interact effectively. All the four participants interviewed in this research acknowledge that they have learnt about some form of new social skills. Seed permaculture design program has definitely made some participants to be more confidence. It has made those who are shy and introverts to ***“become stronger mentally and physically and like spiritually”*** just like one of the respondents highlighted during the interview. Abdulla. H (2019, July). personal interview. By spirituality, the participants get a sense of connection towards a higher power which then in return provides meaning in the lives of people who participate in the permaculture lifestyle. One of the participants who is from the Northern Cape believes that Seed has acted ***“like an incubator”*** for her. Abdulla. H (2019, July). personal interview. She has been able to learn about a lot of things in the first few weeks at “Seed” and all the things that they do together connects them even more. In my opinion, through the conversations that I had with the participants, I got a sense most of the participants talking more about the idea of them leaving together and this was of great value to them. As participants who are mostly youths, coming together to work and exchange ideas is one of the most important things that the participants are getting from this organization.

For those who have recently left the Seed permaculture design program by the time the interviews were conducted, both of them have applied their skills that they learnt to the outside communities. One of them, mentioned that Seed permaculture design program has made him to be able to transform community gardens in his own community from the design all the way to the planting of plants and vegetables. With influence from the organization in relation to their values, this student volunteers to design these gardens for free so that everyone can share

and benefit from each other. Therefore these participants extend their skills to the outside community and make sure that they “conduct needs analysis, sector analysis and asset mapping (including skilled people) through participatory process, effectively drawing the problems and solutions from local people.” (Seed, 2019).

### 4.3: Social Relationships

Under the social relationships section, I have three main questions which provides an understanding on the impact of the Seed permaculture design program on the participants. The first section of the social relationships looks at whether the participants have been able to create new social relationships amongst themselves during the 15-week period. The results show that one out of the four participants interviewed knew at least three other members in the program. The rest of the interviewed participants did not know anyone prior and had to establish new social relationships.

However, the results clearly indicates that all the participants had established new social relationships. For many of them, at the start it was “*very strange, awkward and weird*” which made it hard for them to create these new relationships Abdulla. H (2019, July). personal interview. As time went on, people become more and more opening to meeting new people and making new friends. Hence, “Seed” is considered by many participants as an area where new social relationships are created.

The second section of the social relationships theme looks at daily impacts of these newly relationships that have been created at “Seed”. Throughout the interviews, I found out all the participants spoke about the positive impacts that their social relationships have created for them. One participant from the recently graduated class shared a lot of his stories on how they have been able to help each other. The most prominent one is when he made a single mother to conquer her fears of height, as he puts it.

*“So, we went on a camp one day and we were chilling on the end of the slope. She really wanted to be at the end, but she was afraid of heights. For weeks before this, I've been conditioning her slowly, telling that you can, and you are capable. Eventually, the very first night, I sat on the top of the thing, called the Devil's thorn. And it's like a cliff, that leans off like 100 metres plus. And the woman with*

***the biggest fear in her life, came and sat right next to me on the edge holding my hand and later let it go being unaware how that happened.”***

Abdulla. H (2019, July). personal interview

It is evident that the participants believe that these social relationships that they have created at “Seed”, have played a big role in different part of their lives. While some sees their social relationships to bring a sense of caring and helping, some are taught to care and help their fellow youths. What is interesting is the idea of how at “Seed”, everyone is doing their best to help each other. As one of the respondents said ***“everyone did it for everyone. Imraan, he did, the cook did, some people and Alex did it from some people. Alex did it for me, there was a point where I was also demotivated. We just kept each other's flames”***. Abdulla. H (2019, July). personal interview. To the youths and other participants, Seed permaculture design program did not only help them to create new friends, it also created a ***“community”*** that helps everyone.

In the last aspect, I look at how are the relationships which were created at “Seed” affected the participants after they graduate. Out of the four participants that were interviewed, 2 of them have graduated from Seed permaculture design program. The results from the interviews indicated that even after leaving the organization, these participants still find ways to stay in contact with each other. However, all the two youths indicated that they do not see each other sometimes as One of the respondents said

***“I used to see my friends often, very often. But it has slowed down now between the months. Also, lot of people have been getting work, so they've been busy. And other people have been struggling a little bit, but we keep in touch on our seed WhatsApp group so, we are always in touch with what is going on at Seed.”***

Abdulla. H (2019, July). personal interview

To the participants, the reasons why they are not able to stay connected as much is because some of their peers stay far away while others have been working which leaves less time to stay connected physically. However, the distance does not break the connectedness because WhatsApp has been an important tool for them to stay connected and discuss their daily issues.

#### 4.4: Cultural Tolerance

When it comes to the impacts that the Seed permaculture design program on the cultural tolerance of the participant, the results indicated that 2 out of 4 respondents believed that “Seed” has helped a lot in becoming more culturally tolerant because of the daily activities that they perform with their fellow youths. One of the two participants believes that ***“as everybody in the morning, we have a meditation time. So that kind of settles your mind. And so, by the time we interact, everybody's a bit more open and a bit more themselves.”*** Abdulla. H (2019, July). personal interview. Therefore, for her the meditation phase in the morning helps her to be more open to different views and ideas which then makes her to be more tolerant to other perspectives and cultures in general.

The other two respondents believe that they have always had an aspect of cultural tolerance and openness to other ideas before they joined the Seed permaculture design program. However, the small things at Seed such as ***“respect one another, if you speak in a language that is misunderstood by another person, please translate it or try to not use it. Don't disturb people when they're speaking. Everyone's entitled to their own opinion. Don't sermon someone down for their opinion. That made such a major impact because I could look at it every day.”*** Abdulla. H (2019, July). personal interview. All these things helped him to be more aware about other peoples' views and respecting their opinions. The last participant also mentioned that she always had an aspect of tolerance to other cultures and ideas before joining the Seed permaculture design program. She mentioned that ***“even though you have that openness, and you have non-judgment, you still come up against things that you haven't before, and it does cause you to open and expand. So, you know, so you kind of still open, But yeah, it's about being open.”*** Abdulla. H (2019, July). personal interview. When asked if Seed permaculture design program has had any impact on her tolerance to other cultures, she replied by saying ***“Yes definitely, it has made me more open towards other religions, cultures. Even experiencing other cultures as well, like you learn a lot about Rastafari. So it was very interesting and a new experience.”*** Abdulla. H (2019, July). personal interview. At the end, throughout the interviews that were conducted, all the respondents mentioned that the Seed permaculture design program has been a ***“family”*** where they learn different things.

This qualitative research looked the social impacts of the Seed permaculture design program to the social relationships of the participants who take part in this program. Thus being said, the analysis of this research is focused on four main aspects which were created on the data analysis part. However, it is important to note that the findings obtained from this research only

presents the experiences of individual participants on how the permaculture design program affected their social relationships between them. Therefore, the finding and results obtained from this research are not meant to be generalized to the larger population.

Just like many organizations, “Seed” does have some problems especially when I attended the graduation ceremony. During the graduation ceremony of the participants in the Seeding Futures program, a very important issue was raised concerning the leadership structure by some members of the community. The main concern was that Seed organization is mostly lead by “whites” who in the views of the person who raised the issue was not fair and affected the way things were run at the organization. As I heard the conversation unfold at the Annual General Meeting (AGM) which was part of the graduation ceremony, the main concern to the community members who spoke out was that all the top leadership roles from the director, chairman, board health, treasurer to the operational director and amongst other positions were all occupied by “whites”. This was sparked an important interest in my research at the time but then because I had to sign the MoU which then had to be reviewed by the director, I could not design my research to focus on something that investigated the organization which would have not been accepted. What was very ironic was the fact that when one of the community member suggested that they have to choose all the leadership position at this meeting since most the stakeholders and some of the shareholders were present, the chairman denied the suggestion and stated that they have different rules governed by the organization. Therefore, they had to continue with the same leadership structure which was not a very good suggestion. While the South African government through the National Development Plan (NDP) strives to achieve a “constitutional goals of equality and non-discrimination and the need for protection against racism, racial discrimination, xenophobia and related intolerance” within public and private sector, some of these situations are still very dominant in our societies. (NDP, 2018, p. 12)

As a researcher who was there at the AGM, I did witness a lot of “whites” occupying the top managerial positions and this is can be seen as a big problem. The problem with having such leadership structure is that it intensifies the already existing race inequality within the country. In places such as Cape Town where the “whites” occupy most of the means of production and the economy in general, race in organization has a huge impact not only on how the communities supports the organization, but also the type of information that the participants are taught. This is not to say that the information that Seeding Futures program doe does not

benefit the participants who are mostly of a black race, but to put an emphasis that there is a need to recheck the organization structure and the possible ways this affects the participants and the support from the outside community.

On a different occasion when I was speaking to a very good friend of mine from the University of Cape Town, She also presented the same concern. As I spoke to her about Seed organization in relation to their leadership problems, she stated that she also had a friend who was at the time a treasurer at the Seeding Future program. According to her, the friend who was also a “white” male left after years of service at the organization mainly because of the same problem of having the top leadership positions being occupied by the “whites” only. Therefore, in the eyes of many people from the community and even some participants, the race dynamics in the leadership at Seed does have an impact on the community in general which was evident during the Annual General Meeting.



## Chapter 5: Discussion

This chapter discusses the interpretation of the results that have been recorded from the interviews. These results are discussed in relation to the main three objectives of this study. Under each objective, I discuss the results obtained from the study in reference to the main literature used and see if there are any similarities or differences. Finally link these results to what they mean to the larger community.

### 5.1: Seed and social relationships

When it comes to the social relationships, it is evident that Seed permaculture design program does have an impact on participants who are involved in it. This 15-week permaculture design program has made it possible for the participants to not only establish new relationships with each other, but also all the members of Seed including cooks, facilitators and more. While some see these relationships as their normal routine, to some people these relationships that have been created at Seed help them to motivate each other, help each other with transport money and some even get encouraged to face their fears. The social relationships that have been created at Seed permaculture design program have provided an opportunity for these people to share ideas and care for each other especially during difficult times. When one of the participants is feeling a bit low and is unable to attend the class, some students ***“passed his house and just went there and gave him a little motivational talk. Just told him, like today’s class was a little bit down without you. We missed our gentle giant and that really warmed his heart. And the very next day, he was back”***. Abdulla. H (2019, July). personal interview. The results that have been obtained from this study agrees with the similar studies done on the social impacts of community gardens. In (Mobayed; 2009, Kuo et al; 1998) studies, they found community gardens to enhance the interaction of members of the community as well as making the communities stronger.

The story of the single mother who had the fear of height perhaps is one good example of how the social relationships established at Seed affect the daily lives of the participants. As a single mother who has always been afraid of heights and thinking that she can never be able to face her fears. With the help from Ashraf who was seen as a ***“the catalyst in the reaction. So when something were to happen, I would bring it up and be like, yeah, the person is getting annoyed with you, please stop doing that”***, he was able to convince her to do what has always been impossible for her. Abdulla. H (2019, July). personal interview. It might look as if he just

helped to stand on the edge of the slope, but in actually fact he might have opened a lot of doors for her to see that everything is possible when you have good social relationships with your fellow youths. I believe that because of this one occasion, she will be able to not only count on her fellow youths whenever she faces challenges but also, they will make her to be more confident and take more risks in her daily life. Therefore, there is no doubt that Seed permaculture design program has become a place where new relationships are established as well using these relationships in helping each other to be better people in different aspects of their lives

## 5.2: Seed and lasting period of social relationships

When it comes to lasting period of the social relationships that have been established at the Seed permaculture design program, it becomes important to understand how these relationships last after the participants have graduated from the program. As highlighted in the results section, the two participants who have graduated have been able to stay in contact with each other however it is not very frequently. Because most of the participants come from different parts of Cape Town, it becomes hard for them to see each other very often. At the same time, some of them have already entered the job market in environmental field while some of them are occupied with other works. However, the Seed permaculture design participants still stay in contact through their phones. WhatsApp has been an effective tool that they have been using in making sure that they share ideas and help each other with other tasks. As a researcher, I believe that as youths, technology has become part of our lives. We use in our daily lives and this just shows how the youths are using technology in a better way of making sure that they stay connected.

During my free time on the days that I visited the Seed organization, I got as chance to have a chat with the former Seeding Future Program student; Imran who is now the facilitator of the program. In our conversation, he mentioned that when he finished the Seed permaculture design program, him and his fellow youth started their environmental organization together here in Cape Town. Despite whether the organization is very successful or not, it is clear that through the social relationships that have been created at Seed, the youths are able to trust, depend and help each other in different ways.

This story might be one of the many that shows the extent at which the social relationships that have been created at Seed permaculture design last longer even after the participants have graduated.

### 5.3: Seed and cultural tolerance

In relation to the last objective of this study, is it important to know how Seed permaculture design program affects the tolerance of the participants towards other cultures and religions. As seen in the results section, all the participants who took part in this study believed that through Seed permaculture design program, they have become more tolerant to other views and become more acceptable to other cultures and religions. Through these 15-weeks, the participants learn a lot of things from each other which plays an important role especially in an environment where there are high levels of gender-based violence. Therefore, through Seed permaculture design, participants become more aware and learn how to live together in harmony.

During the interview, two of the participants described the Seed permaculture design program as a “*community*” and one described it as a “*family*” where they share ideas and learn from each other every day. It is this family and community aspect of “Seed” that “*has made me more open towards other religions, cultures. Even experiencing other cultures as well, like you learn a lot about Rastafari. So it was very interesting and a new experience.*” Abdulla. H (2019, July). personal interview. Therefore, this small aspect of “Seed” does play an important role in making sure that the participants are well equipped and prepared to be very responsible members of the community. Because of these relationships, they are able to work together in communities and reduce some of the problems. In a place such as Mitchells Plain where the organization is located, cultural tolerance is very important especially with very high rates of crimes. Therefore, Seed permaculture design program plays a big role in making sure that the youths and other participants become more culturally tolerant to other cultures and religions.

## Chapter 6: Conclusion

As a resilient technique to climate change, permaculture design programs provides a unique way of understanding and coping to climate change, at the same time having major positive impacts in the society. In societies such as Mitchells Plain in Cape Town where the consequences of climate changes are very visible through droughts and rise in sea levels, Seed organization provides and contributes largely to the resilience of climate change by inspiring and equipping youths and other participants with skills to be effective in the green economy. Using the Seed permaculture design program this study looked at the impacts of permaculture design programs on the social relationships on the participants involved. The findings show that (1) the Seed permaculture design program has positive impacts on the participants by making them to care, listen, respect and encourage each other during this 15-week period. (2) Secondly, Even for those who have graduated from the program, they are still able to help each other and talk even though not as often due to other external commitments. (3) Lastly, the Seed permaculture design program has given the participants an opportunity to live together as a family and community and thus bringing about tolerance to other cultures, religions and gender. This is so important especially in South Africa where there are high levels of gender-based violence.

Despite the results presented in this paper, this study did not have sufficient participants due to reasons that could not be controlled which makes it hard to generalize. Also, when it comes to the second objective of this study, the participants had recently graduated during the time the interviews were conducted. This means that they have not been out of the program for long, so it becomes difficult to see how the relationships are affected in a long run. However, as it was explained in chapter 4, the issue of leadership at “Seed” still remains a big issue that needs to be looked at in the coming studies.

## References:

Adu, P. (2016, February 01). *Perfecting the art of qualitative coding*. Retrieved from qsrinternational.com: <http://www.qsrinternational.com/nvivo/nvivo-community/the-nvivo-blog/perfecting-the-art-of-qualitative-coding>

Brain, R., & Thomas, B. (2013). Permaculture.

Byl, C. V. (2014). Background Paper: Youth. *Republic of South Africa*, 3-5.

Clatworthy, J., Hinds, J., & M. Camic, P. (2013). Gardening as a mental health intervention: a review. *Mental Health Review Journal*, 18(4), 214-225.

Co-op, U. K. (2019). *Welcome to the Knowledge Co-Op website*. Retrieved from knowledgeco-op.uct.ac.za: <http://www.knowledgeco-op.uct.ac.za/>

Dewi, N., Komatsuzaki, M., Yamakawa, Y., Takahashi, H., Shibamura, S., Yasue, T., ... & Sasaki, S. (2017). Community Gardens as Health Promoters: Effects on Mental and Physical Stress Levels in Adults with and without Mental Disabilities. *Sustainability*, 9(1), 63.

Dilonardo, M. J. (2016, May 18). *How community gardens help (and even hurt)*. Retrieved from mnn.com: <https://www.mnn.com/your-home/organic-farming-gardening/stories/how-community-gardens-help-and-even-hurt>

DPLG. (2005). Mitchell's Plain Nodal Economic Development Profile. *Department of Provincial and Local Government*, 3-11.

Egli, V., Oliver, M., & Tautolo, E. S. (2016). The development of a model of community garden benefits to wellbeing. *Preventive medicine reports*, 3, 348-352.

Francis, R. (2008). *PERMACULTURE DESIGN COURSE HANDBOOK*. Lismore: Djanbung Gardens PEC.

Gemmill, B., & Bamidele-Izu, A. (2002). The role of NGOs and civil society in global environmental governance. *Global environmental governance: Options and opportunities*, 77-100.

Gerntholtz, L. (2019, September 17). *For communities in South Africa, climate change is now*. Retrieved from mg.co.za: <https://mg.co.za/article/2019-09-17-00-for-communities-in-south-africa-climate-change-is-now>

Gonzalez, M. T., Hartig, T., Patil, G. G., Martinsen, E. W., & Kirkevold, M. (2011). A prospective study of existential issues in therapeutic horticulture for clinical depression. *Issues in mental health nursing*, 32(1), 73-81.

Haiming, C. (2019, June 10). *Cultural tolerance key to social harmony*. Retrieved from chinadaily.com.cn: <http://www.chinadaily.com.cn/a/201906/10/WS5cfd9107a310176577230235.html>

Kennedy, M. J. (2017). Community Gardens And Ecological Citizenship: Their Potential And Limitations In Fostering Environmentalism.

Kuo, F. E., Sullivan, W. C., Coley, R. L., & Brunson, L. (1998). Fertile ground for community: Inner-city neighborhood common spaces. *American Journal of Community Psychology*, 26(6), 823-851.

Lincoln, Y. S., & Guba, E. G. (2007). Qualitative research guidelines project. *Robert Wood Johnson Foundation*.

Looy, T. (2015). Action for sustainability through community gardening: The role of adult learning.

Lovell, S. T., & Taylor, J. R. (2013). Supplying urban ecosystem services through multifunctional green infrastructure in the United States. *Landscape ecology*, 28(8), 1447-1463.

Machida, D., & Yoshida, T. (2017). Relationship between fruit and vegetable gardening and health-related factors: male community gardeners aged 50-74 years living in a suburban area of Japan. [Nihon koshu eisei zasshi] *Japanese journal of public health*, 64(11), 684-694.

Maniates, M. F. (2001). Individualization: Plant a tree, buy a bike, save the world?. *Global environmental politics*, 1(3), 31-52.

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). Fundamentals of qualitative data analysis. *Qualitative data analysis: A methods sourcebook*, 69-103.

Mobayed, G. (2009). Community Gardens: A place for cultivating social and community development. *The University of New South Wales*, iii.

Moquin, R., Diduck, A. P., Sinclair, A. J., & Davidson-Hunt, I. J. (2016). Cultivating community through gardening in Kenora, Ontario. *Canadian Food Studies/La Revue canadienne des études sur l'alimentation*, 3(2), 70-103.

Nations, U. (2015, May 17). *What is the Paris Agreement?* Retrieved from unfccc.int: <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>

Plan, N. A. (2018). National Action Plan (NAP) to Combat Racism, Racial Discrimination, Xenophobia and Related Intolerance. *Republic of South Africa*, 12-13.

Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*. sage.

Rappe, E., Koivunen, T., & Korpela, E. (2008). Group gardening in mental outpatient care. *therapeutic communities*, 29(3), 273-284.

SEED. (2019, May 17). *Seeding Futures*. Retrieved from seed.org.za: <https://seed.org.za/seeding-futures/>

Schmutz, U., Turner, M. L., Williams, S., Devereaux, M., & Davies, G. (2014). The benefits of gardening and food growing for health and wellbeing.

Siewell, N., & Thomas, M. (2015). Building sustainable neighborhoods through community gardens: enhancing residents' well-being through university–community engagement initiative. *Metropolitan Universities*, 26(1), 173-190.

Son, K. C., Um, S. J., Kim, S. Y., Song, J. E., & Kwack, H. R. (2004). Effect of horticultural therapy on the changes of self-esteem and sociality of individuals with chronic schizophrenia. *Acta Horticulturae*.

Stepney, P., & Davis, P. (2005). Mental health, social inclusion and the green agenda: an evaluation of a land-based rehabilitation project designed to promote occupational access and inclusion of service users in North Somerset, UK. *Social work in health care*, 39(3-4), 375-397.

Taylor Aiken, G. (2017). Permaculture and the social design of nature. *Geografiska Annaler: Series B, Human Geography*, 99(2), 172-191.

Ziervogel, G., New, M., Archer van Garderen, E., Midgley, G., Taylor, A., Hamann, R., ... & Warburton, M. (2014). Climate change impacts and adaptation in South Africa. *Wiley Interdisciplinary Reviews: Climate Change*, 5(5), 605-620.



## Appendix:

### Interview Questionnaire Guide:

#### Sociality in the Seeding the Future Programme

##### What is the Dissertation About?

The topic of climate change has been a major concern in many societies especially those in Africa due to the devastating impacts it has on all aspects of community life. Seeding the Future is one program that has begun to think about the ways that we can address the impact of climate change and the need for sustainable practices within our immediate environments. I am interested in how these programs are not only about the direct importance of sustainable livelihood practice, but how they shape our relationships between one another as youth.

I hope to speak with program convenors and organisers as well as those who are in the current cohort. It would be generative to also be able to speak with some alumni of the program.

I will also consult material put out by the program (websites, adverts, learning and teaching documents) alongside a broader literature about climate change and community programs.

How did participants hear about the program?

What motivated them to join the program?

What reasons have been factors in their friends/peers joining/not joining the program?

What skills have the youths gained from the program thus far?

What are the social interactions and relationships created through the program been that were not necessarily part of the curriculum?

What are people's interactions with one another outside of the program space?

## Transcribed Interview with Participant 1:

Interviewee: Okay, so as I spoke to you earlier, I'm a student from University of Cape Town and I'm basically doing my research on environmental NGOs and how these NGOs use permaculture program today to address our daily issues. So, what I'm basically focusing on is how the permaculture program here at seed is not only having direct impact on people but then how it actually affects the social relationships between the people who are involved.

just before coming into seed, how did you hear about seed?

Respondent: I have a friend of mine and he was supposed to apply last year. I was studying and then he was done studying. But then somehow, he didn't come in study the previous year and just waited for me to finish. And when I was done, it was like, coming to check this out. And I was very reluctant, I wasn't really going to come. Because I have a degree in permaculture. But then he insisted, and when we came on the first of February, and I saw one of my old friends who were also interested in the course as well. So, I heard about it to a very good friend of mine, a friend of mine, but I thought I was in high school.

Interviewee: Did you have like any other friends who, who would have wanted to come to seed, but then maybe they just didn't know about it. Or they applied but didn't get accepted?

Respondent: Ohh yeah, I have a couple of people who want to come but didn't know. They were looking for permaculture courses, but they didn't know seed. But now one of the three of them. gonna join the next code call for the input. He's going to move up here (Mitchels Plain) to live with his family.

Interviewee: So, are you from Mitchells Plain?

Respondent: yeah

Interviewee: If you had to say what exactly motivated to you to join seed, what would it be?

Respondent: Umm, my friend. Karl (His friend) was persisting. And then also, I was looking for work at the same time. So, I was either over-qualified or under-qualified. The system just screws you over. So, I've got a little bit feel for that. And a little bit discouraged. So, the quickest option was to study again, and that's why I came to continue studying. Yeah, so mainly my friend and also because I couldn't find work.

Interviewee: And so now, let's get into the first day when you got to seed, how was it? How was it meeting new people for the first time?

Respondent: Umm, (giggles), you know you, it's like weird. You are like nervous, but you're also excited. But I came here, and I felt very welcome because I'm quite the awkward weird kind of human being. I don't shake hands; I hug most of the times. So, when I came here, everyone was free to hugging, open to it and we even took photos on the first day. watching people that I don't know. Ut it was very friendly and welcoming. I was very nervous though.

Interviewee: So, was just weird for you, or it was weird for everyone?

Respondent: I think everyone because like we were taking photos, the faces, (laughs). Like you would see frightened faces (laughs). So it was. I think everyone felt that strangeness. And If you thought it was strange then, it was only about to get way stranger. We didn't really know

how strange it was until strangeness hit us later. But I was easy for me to adapt because I am strange.

Interviewee: I remember when I came for the graduation and when, when they were about to mention your name, then everyone's like, yeah, that's, that's the guy of the moment. We have been waiting for this person. Why do you think that the guys here at seed think of you that highly compared to all the other guys?

Respondent: I think it's because I was very close with everyone. We never had disagreements even though we would have little dispute because people get annoyed and tensions arise when someone's continuously doing something, but that's normal human being. I was the catalyst in the reaction. So when something were to happen, I would bring it up and be like, yeah, the person is getting annoyed with you, please stop doing that. And there would be mutual understanding and later lunchtime, that very two people will be joining together.

Another woman you saw crying, (referring to the lady (Unna) who cried when speaking on how Ashraf helped him to conquer her fears) actually she's a young mother, single mother. She's got a very big phobia. She's got a number of phobias. She is hindered by fear. And I believe fear is false emotion appearing to be real. So, we went on a camp one day and we were chilling on the end of the slope. She really wanted to be at the end, but she was afraid of heights. For weeks before this, I've been conditioning her slowly, telling that you can, and you are capable. Just imagine what your daughter would say, if you tell her that. Eventually, the very first night, I sat on the top of the thing, called the Devil's thorn. And it's like a cliff, that leans off like 100 metres plus. And the woman with the biggest fear in her life, came and sat right next to me on the edge holding my hand and later let it go being unaware how that happened.

So, I think I put a lot of dedication into my colleagues and I love them with my whole heart, and I will my heart and my sleeve. I mean, you heard what Imraan said, if you really need someone to make you lauh and happy for absolutely nothing, this (Referring to Ashraf) is the guy. So, I want everyone to love me and be loved by me. And that's why I think everyone was so found of me.

Interviewee: Also remember there was one person, I forgot his name who was like; there was a day that he didn't come to the program and you had to pass to his house and just check on him. Can you walk me through what happened?

Respondent: So, there were two guys. One occasion was one of the other students Kyle and Morris. He passed his house and just went there and gave him a little motivational talk. Just told him, like today's class was a little bit down without you. We missed our gentle giant and that really warmed his heart. And the very next day, he was back. The other guy Kyle lives a little bit far from seed, so his struggle was to get to seed using public transport. And he didn't have a stable income. So, he was living off like support basically. So, every time we would see him, Imraan being the amazing facilitator, he will sort him out and give him 50 bucks for fuel every day. Which I didn't know where the money came from, but he always sorted him out. Until one point he felt like he was taking too much and he didn't want to come anymore.

So myself and Max, we decided no, we're going to his house and we are gonna fetch him. And we drove all the way and pick him up and brought him here. And when he came back here, being this amazing seed family, they welcomed him with cheers (makes an act of how people welcomed him). So that also warmed his heart in the moment and joy. I realized that, even

today, some people will come back to me and say, thank you my friend. Like just the little word you said, and everyone did it for everyone. Imraan, he did, the cook did, some people and Alex did it from some people. Alex did it for me, there was a point where I was also demotivated. We just kept each other's flames. The point here is we get taught to keep each other's flames burning, not just our own. So sometimes we get to run out of our own and other people can sort us out.

Interviewee: So, it's more than just you guys participating in the program, but is like everyone, the cook, the gardener and everyone around you?

Respondent: Everyone. Everyone is connected and we interact on daily basis part of that everyone's connected. And we are integrated. daily basis, we will see me Lawrence and spoke to him each and every day. Students who weren't in class, we speak to them on the chat. There will always be a form of connection between everyone. Just cool.

Interviewee: So, did you actually know a lot of people before coming here?

Respondent: I felt like I met Imraan in another life, and I feel magnetized to him. He is very familiar. So, as Alex, but I've never ever met them in this life. So, I'm meeting for the first time and I could see that I could kiss Alex and squeeze against my chest they were like family.

I knew Kyle, I knew Zoe and I knew another girl Nuran. So, I knew three students of the 18 students and the rest got to know them. It was never hard.

Interviewee: So, now that you graduated, how often do you keep in touch with them?

Respondent: I used to see my friends often, very often. But it has slowed down now between the months. Also, lot of people have been getting work, so they've been busy. And other people have been struggling a little bit, but we keep in touch on our seed WhatsApp group so, we are always in touch with what is going on at Seed. But otherwise, we all have each other's private numbers. I occasionally see friends and chill but it's not often, it's very occasional. I think more so in the summer will start to come back to life.

Interviewee: So, your relationship for example with Max (the lady who he came with at the interview), is it is it something that started here?

Respondent: So, on day one. We were all here and I greeted everyone, and I saw this woman and I was like Wow (amazed reaction). And then we were speaking about music and I was like I'm going to listen to some tunes in my car and I asked her if she would like to chill with me and she said sure. And I swear since day one, since like we spoke, again another person I feel like I have known before. The connection was just so synchronizing. It's almost too perfect. I think it took me about a month before deeply, madly in love with this woman to the point where everyone on the course knew, there was some vibe here.

Like we were very conservative. like not showing each other all the time, we would work individually, which is something that stemmed one of my biggest gifts and biggest takeaways.

Interviewee: During your last weeks of seed, during job shadowing. Which organization did you go to?

Respondent: I was on a farm called goodwill Mountain Farm in Stanford. And we covered five things. The one thing I did was with the permaculture garden and design. Because this is

basically a farm that is in the birthing stages of its life, it's just being born, has just been like two years old. So, we designed a garden, Varian medicinal harvest garden. They do garden to table and accommodation, so they accommodate people and feed people from the garden. Then they do retreats, which are like yoga and mind healing workshops and body healing workshops that last several weeks. Then we did alien invasive control which was like we would pull out invasive alien plants and plant indigenous as well. We actually redesign the entire process which we did at Seed, we designed the sector map, we checked where the sun comes up in the morning, we checked where the wind hits, it was brilliant. This course showed me how I can go and do it in real life and be ridiculously successful. So, then we did five tasks, which are those five that I mentioned. And then also, we did like side tasks, we did yoga lessons, we taught yoga, and horse riding. Yes, we did 28 days of proper eating, like we were eating properly. We checked how much protein we ate every day. I can tell you though, ever since I've come back, I've picked up weight and I have gotten fat. The food that we ate was mind stimulating food. It made me wake up and wanting to do someone's work.

First time in my life, I felt that way because I'm a lazy guy, I would like to chill. But those things made me, the food I was eating. We were eating oats that were freshly grind in the morning. So, it had oil in it, we were having super dates, almonds and nuts. And those things changed my life. If I were to go live there again, I will do it in a heartbeat, like right now. Also, going into Stanford, took me out of my comfort and taught me how to take care of myself.

Interviewee: And were you the only person from seed?

Respondent: Myself and my best friend Kyle.

Interviewee: So now, without seed, do you think you would have had the same impact as now in terms of the way you view different people?

Respondent: Yes and no. No in the sense that before I came here, I was a conscious little human being So, I would love and care for everyone, but it wasn't solid. I never viewed people as my friend all the time. So, when I came here, they had a lot of protocols put in place that alive and awakened a lot of that within me. So, No the sense that it was in me, but yes, in the sense that I got new methodology here. I tell my friends just to answer this question, full stop. I tell my friends, I was wanting to live the permaculture way I really wanted to, but I was hanging with folks that told me that it was crazy. They're laughing. They laughed, genuinely, they would laugh, and they wouldn't understand. And then I don't know, I just believe it would happen one day, but then the universe went; hey, you want a group of people to practice with? Boom, here is free bursary, there you go. Here is a whole family for you to practice with, full stop.

Interviewee: Are you working at the moment?

Respondent: At the moment not so. what I was doing is I was cleaning people's gardens, I would clean people's gardens and then design it for them, oh, I would clear out over mango garden. And then I will start to design and do sector map for them. I started planning like sustainable garden. And the other thing I was doing, I make infused oils, medicinal oils but that is my little side business. Not having been working but been offered opportunity to work. For instance, at this very organization. I was very reluctant to see this opportunity that I might get my dream job, in the very near future. And then I have to break hearts and I don't want that. So, I'm just being patient right now holding fingers for September. And that's where I am right now standing on a boat, just sailing.

Interviewee: Do you think seed has in any way kind of made you a better person and actually to become more tolerant to these different views, different perspectives, different cultures, different religions? Respondent: most definitely, without a doubt. On this course, on day one, we had a little. People didn't realize the impact it had but it had a major impact. We had a little artistic rules chat, what the class would like as set guidelines. So, it was respect one another, if you speak in a language that is misunderstood by another person, please translate it or try to not use it. Don't disturb people when they're speaking. Everyone's entitled to their own opinion. Don't sermon someone down for their opinion. That made such a major impact because I could look at it every day.

It would actually be pleasing and stimulating to look at this thing. They don't understand it. I think they do. But it's it was some minority things. And the last thing is, it has changed me in the sense that one day Alex looked at me and she looked at me and she said, You guys think you come in here just for a permaculture design course. And I look at her walking after she said she says no, this is not course. This is a revolution she says. And it didn't hit me until like after the course. I realized Holy shit. Once you can hit with permaculture, you terminal. It's never leaving you, it's with you for ever and ever. You'll see with your permaculture eyes forever. You'll see how things always; I mean I don't litter. I don't understand how, I try not buy those chips with a weird package that can't get recycled. it changed me so much. And I think it's all for the greater, all for the better. When I feel like I'm doing bad for instance, my electric blanket. I would look for something better to compensate. So, it's changed me actually changed my entire psychological genome. It's made me think and performed differently. I know it sounds crazy, but it really has. I haven't used chemicals in my head for six months. I haven't used regular soap, shampoo or conditioner. I have only used organic and medicinal things. It's working and everything is healthy. I haven't cut my hair as often, save my money and put it into good things. vanity is a slave maker. It has woken me up, it really has.

Interviewee: Thanks a lot.