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The Valley Trust: a Historical Review of Food Security and Nutrition-Related Programs at a Health Promotion Non-Governmental Organization in the Valley of a Thousand Hills, Kwazulu-Natal

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THE VALLEY TRUST: A HISTORICAL REVIEW OF FOOD SECURITY AND NUTRITION-RELATED PROGRAMS AT
A HEALTH PROMOTION NON-GOVERNMENTAL ORGANIZATION IN THE VALLEY OF A THOUSAND HILLS,
KWAZULU-NATAL

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Host Institution: The Valley Trust

School for International Training: Community Health and Social Policy, Fall 2012

28 November 2012

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Abstract

The aim of this study is to provide an in-depth review and analysis of past and present programs focused on food security and nutrition at The Valley Trust, in the Valley of a Thousand Hills, KwaZulu-Natal. The Valley Trust is a socio-medical health promotion NGO that works to improve the health of the communities it serves through development, empowerment, and educational initiatives. The study will seek to provide an overview of the various activities The Valley Trust has engaged in over its long history related to improving the nutritional status of communities it influences.

Data was collected on the history of The Valley Trust through an extensive historical review of the archives at The Valley Trust library and of their official website. To get a glimpse of the current activities of the organization and the state of nutrition and food security promotion in one community, an interview was conducted with a staff member, the site of the Integrated and Sustainable Livelihoods Programme was visited, and a group of Community Care Givers in a nearby rural community was interviewed. The effects of past Valley Trust programs were explored through interviews with individuals in two rural communities in the Valley of a Thousand Hills who continue to make use home-based gardening.

The Valley Trust has a rich history of providing nutrition intervention programs to communities in the area. Restructuring and refocusing in past years has led to many of the original food security-related programs being phased out or evolving into new, more relevant or practical initiatives. More recently The Valley Trust has encountered difficulties with funding which has led to much reduction in available personnel and current programs. However, past work by The Valley Trust in bringing food production techniques to communities has been beneficial for some community members, and The Trust plans on refocusing on agricultural and nutrition training in the near future.

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Introduction

The Detrimental Effects of Poor Nutrition in South Africa

South Africa is a fairly developed country in many ways, but poor nutrition is still an issue in some areas. Poverty and inequality still plague much of the population and this leads to the prevalence of issues related to nutrition and food security (Faber, Witten and Drimie 2011). Indeed, “South Africa features as one of the top 20 countries with the highest burden of undernutrition”; it is an important issue in the country that should not be ignored (Altman, Hart and Jacobs 2009). Many people do not have the resources or funds available to them to afford food that is nutritious, such as fresh fruit and vegetables. Adequate dietary diversity is rare and this can lead to micronutrient deficiencies, especially in young children (Faber, Witten and Drimie 2011). Deficiencies in iron, vitamin A, and zinc affect a significant proportion of children in South Africa (Faber, Witten and Drimie 2011). Malnutrition, macro and micronutrient deficiencies in children can lead to a variety of health problems; these may include serious growth problems such as stunting and underweight which can negatively affect child development (Faber, Witten, & Drimie, 2011). Furthermore, under nutrition is related to some of the most prevalent disease burdens in South Africa, namely HIV and tuberculosis. Adequate nutrition is vital for many patients suffering from HIV and TB, as weight loss can increase the chances of acquiring further opportunistic infections, exacerbating the illness (Pers Comm. Adult female, Dietician. 9:30am., 2012). Inadequate food security can also contribute to the disease burden in the country as it is closely linked to treatment compliance in HIV and TB patients. These patients must stick to a very strict drug regimen that often involves taking large amounts of medication at a time. If these are not taken with food, for instance if there is not enough food available to be taken with the medication, patients may experience severe side effects, discouraging them from continuing with the medication, and possibly leading to further drug resistance (Pers Comm. Adult female, Dietician. 9:30am., 2012). However, with good diets and healthy lifestyle changes, many HIV patients can lead relatively normal and normal-length lives (Pers Comm. Adult female, Dietician. 9:30am., 2012). Proper nutrition and adequate food security are vital in maintaining and improving the health of the population.

On the other end of the spectrum, over nutrition has begun to cause its own set of problems in the country. This is apparent by the fact that in South Africa, as many as 51% of women qualify as overweight or obese according to one survey (Faber, Witten, & Drimie, 2011). Processed and refined foods are becoming more prevalent in the country and offer an accessible, affordable alternative for sustenance when funds are scarce. People are more likely to spend money on food that will last them longer though it may not be the most nutritious, than on more nutrient-rich and costlier choices. “The

move away from unprocessed foods to relatively cheaper, more accessible foods has contributed to a rise in overweight and nutrition-related chronic diseases, even as undernutrition remains high” (Faber, Witten, & Drimie, 2011). This combination of poverty, inaccessibility of quality food, plus the increased prevalence of the ‘western-style’ diet have helped lead to the presence of problems related to both under and over nutrition in South Africa. Over nutrition and other poor lifestyle choices have led to increased prevalence of chronic diseases such as diabetes, high blood pressure, and obesity (Faber, Witten and Drimie 2011) (Pers Comm. Adult female, Dietician. 9:30am. 2012). Nutrition as a whole is closely linked to many issues involving health and it is important for communities to be aware of the need for good nutritional support for their residents. Food security or insecurity greatly influences whether or not a population is receiving adequate nutrition, and whether or not they are at risk for these range of health problems.

Food Security and Insecurity: Definitions, Causes and Interventions

According to Du Toit, food security implies that, “... all people, at all times, have physical and economic access to sufficient, safe, nutritious food to meet their dietary needs and food preferences for an active life” (Du Toit 2011). Furthermore, “... food security has three dimensions namely food availability, food access and food use. Food availability in the definition implies that a country must have sufficient quantities of food available on a consistent basis at both national and household level. Food access implies the ability of a nation and its households to acquire sufficient food on a sustainable basis. Food use refers to the appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation” (Du Toit 2011). These important aspects all play a role in food security and are all crucial in ensuring the health and adequate nutrition status of a population. Food insecurity is a problem facing a significant portion of the population of South Africa (Faber, Witten, & Drimie, 2011) (Labadarios et al., 2011). Though there is some evidence that food insecurity has been reduced in recent years, there are still people who are experiencing or at risk of experiencing food insecurity in both urban and rural areas (Labadarios et al., 2011). In KwaZulu-Natal alone, it is estimated that 23% of households have “inadequate food access” (Du Toit 2011). Food insecurity constitutes a serious public health issue, affecting many individuals in South Africa, and requires interventions on multiple levels.

Food insecurity can be triggered and contributed to by a number of factors. In South Africa, factors such as high HIV and AIDS infection, high unemployment, and social welfare systems that inadequately serve the population help add to the prevalence of food insecurity (Du Toit 2011). Furthermore, in recent times, rising food prices and the global economic downturn, household

disruptions such as illness or the death of a wage-earner, and/or risky crop production as a result of climate, or water scarcity all may help contribute to a family becoming food insecure (Faber, Witten and Drimie 2011). With this variety of causes, a variety of interventions must be implemented to help improve the food security status of the country. Direct interventions may involve food supplementation or handouts where as “Indirect interventions relate to agriculture, income generation and maintenance, the status of women, education, water access (quality and quantity), sanitation and health services (preventive and curative)” (Haddad and Geissler 2005). These types of interventions, though not directly or immediately affecting food insecurity, may do more to address the problem in the long run and prevent chronic hunger from reoccurring and causing lasting damage. It is possible that direct interventions may not be effective as previously thought since, for example, “Despite evidence that food fortification programmes have improved the micronutrient status of South African children, they have failed to improve dietary diversity and overall macronutrient intake. Hence, stunting still affects a large proportion of children” (Labadarios et al. 2011). Unlike direct interventions such as food fortification and handouts, indirect interventions strive to affect the deeper causes of food insecurity and prevent the issue from becoming a problem in the future; these will constitute the majority of the focus of the study.

The South African government has put programs in place to address food security issues, especially since the advent of the Millennium Development Goals and their focus on reducing poverty and hunger. For example the National School Nutrition Programme has been put in place to help improve education, provide food to children, help with short-term hunger and micronutrient deficiencies, while incentivizing children to come to school consistently and on time (Labadarios et al. 2011). South Africa also has a variety of social grants available to qualifying populations, and these can help with food security, for example, by giving women greater purchasing power (Labadarios et al. 2011). In this way, improving access to these grants could help reduce hunger experienced by those who are food insecure (Altman, Hart and Jacobs 2009). However, in order for these benefits to become more lasting and sustainable, promoting greater involvement in the economy through job creation and increased employment opportunities is needed in the country (Altman, Hart and Jacobs 2009). The formation of jobs is moving slowly however, and interventions need to be found in the meantime to support people without secure livelihoods (Altman, Hart and Jacobs 2009). Furthermore, it has been suggested that interventions that increase income or help improve families’ access to food may do more to influence a person’s diet than their traditional or agricultural practices (Labadarios et al. 2011). This is important to consider when implementing food security initiatives and one such initiative that can address some of these issues is small-scale and subsistence farming.

The Potential Role of Small-Scale Agriculture in Addressing Food Security

According to Labadarios, “Although the measures and programmes initiated by the South African government appear to be beneficial, they need to be run more effectively to further alleviate food insecurity. Moreover, the lack of access to land for the South African majority must be addressed through sustainable, non-income-dependent measures, such as the promotion of subsistence farming” (Labadarios et al. 2011). Subsistence farming can be beneficial through its potential improvement on dietary diversity and macronutrient consumption. Furthermore, the home production of both domestic and wild plants can help promote food security in more rural areas not only by supplementing the diet and serving as a source of food, but also by creating a source of income and livelihood for some growers (High & Shackleton, 2000). Through the implementation of home-based agriculture combined with education, individuals and families can be encouraged to grow and consume a variety of indigenous fruits and vegetables which fit into the traditional South African diet while also providing a range of vital nutrients (Faber, Witten and Drimie 2011).

There are benefits in addition to increased food security and nutrition status that gardens can provide as well:

Community gardens have been associated with increased consumption of fruits and vegetables, physical activity, and improved mental health. Gardens represent a behavior setting that has purpose and coherence, promotes social inclusion and gives rise to positive social and psychological processes that ultimately lead to health. Community gardens have also been shown to increase collective efficacy, strengthen sense of safety, associate with stronger neighborhood attachment, build social capital and provide a platform for organizing around other urban issues. Further, gardens have the potential to save money, foster local environmental knowledge and serve as an alternative to the environmentally unsustainable aspects of conventional agriculture (Hale et al. 2011).

Community or personal gardens can lead not only to an increased consumption of nutritious food and improve physical health, but may also help benefit the emotional and psychological well-being of the gardeners. Though these benefits are not directly related to food security they may be related to helping to improve the overall health of the population, and provide another reason why gardening and small-scale agriculture should be considered as a public health intervention.

Furthermore, the use of agriculture is flexible. Families in need and with the necessary resources, time, and ability, can use it as a way of helping to support and feed themselves. When it is

inconvenient to them however, they can stop or switch to more efficient methods of support, such as if employment becomes available. For times when able-bodied family members are home without employment however, keeping a home garden can serve as a resourceful pastime as well as an effective way to provide for a family who may be struggling to put food on the table (Altman, Hart and Jacobs 2009). The promotion of subsistence agriculture and home gardening thus provides one possible solution to the problem of food security.

Study Overview and the Role of The Valley Trust in Promoting Food Security

The Valley Trust (TVT) is a non-governmental organization located in the semi-rural community of the Valley of a Thousand Hills. Established in 1953 by Dr. Halley Stott as a socio-medical health promotion experiment, it is a non-profit organization whose mission is to improve the health of the communities it serves through various sustainable and empowering development initiatives. It was initially founded with a focus on nutrition and food security and it has a long history of nutrition intervention programs implemented in and around the Valley. Nutrition interventions may involve education, but they also involve putting sustainable systems in place to involve the community in its own health and empower it to continue with the programs put in motion by the organization. Many of the nutrition interventions put in place by The Valley Trust focus on agriculture and proper land and plant use as a means of improving people's health statuses and lives. Providing people with knowledge is one step of the process, but The Valley Trust also strives to take into account the context of people's lives, and provide them with skills so they can take part in their own development. This study will make a historical review of the long history of nutrition and food security interventions implemented by The Valley Trust over the years. Sources for this review come from archives at The Valley Trust library and their official website. Primary data collected through an interview with a staff member at The Valley Trust working on the current nutrition-related program will provide a picture of the state of the organization and what obstacles it faces today in continuing its work in aiding rural communities in The Valley of a Thousand Hills. Data from community members who have benefited and made use of food production skills and practices imparted by The Valley Trust in the past will provide a glimpse of the benefits, challenges, and current status of this food security intervention among a handful of individuals in a couple rural communities in KwaZulu-Natal. The Valley Trust has employed a variety of techniques in the past in its efforts to improve the health of the communities it reaches, and this study will provide a picture of the successes and challenges that a non-profit health promotion organization faces in accomplishing its vision.

Terminology Used

NGO – Non-Governmental Organization

TVT – The Valley Trust

Food security – The state of having physical and economic access to sufficient, safe, nutritious food to meet one's dietary needs and food preferences for an active life.

ISLP – Integrated and Sustainable Livelihoods Programme

CCG/CHW – Community Care Giver/Community Health Worker

Methodologies

Overview and Secondary Data Collection Methods and Limitations

Data for this learnership was collected through a mix of secondary and primary data collection techniques. The first section of the study involves a review and analysis of the history of food security-related programs at The Valley Trust through the use of print and online archives. A staff member at The Valley Trust was also interviewed to get a picture of the current state of food security-related projects. To get a sense of the effect these programs have had on people in the community and the status of food security in one rural community, primary data was collected from community members involved in gardening and a group of community care givers. Finally, secondary data was collected on food security and nutrition in order to triangulate the primary sources and get a sense of the problem in the context of the current state of South Africa.

Secondary data was collected from searching for articles through the search engine Google Scholar, as well as the academic article database of Brandeis University. Examples of keywords used include 'food security', 'nutrition', 'malnutrition', 'gardening' and 'South Africa'. Print sources were also collected using the library at The Valley Trust. The resources in the archives were filtered through by searching for those related to food security, nutrition, and gardening or agriculture. Historical articles on The Valley Trust from a variety of sources were collected from the 1970's through the early 2000's. These were collected from both print sources in the library, and online sources found on The Valley Trust's official website. Types of articles included academic reports and studies, articles in periodicals, magazines and journals, newsletters, and annual reports outlining Valley Trust activities and programs. The Valley Trust has a rich history however, and the archives at the library contained a wealth of articles and other sources. Because of this large amount of information and the limited time available, it is possible that the historical review does not provide an entirely complete and thorough picture of the

NGO's entire history of programs. On the other hand, some sources that may have been relevant to the history were found to be missing from the library, and thus inaccessible. A bias may be present in the history as well, tending towards the effectiveness and successes of the organization, given that the articles were collected from The Valley Trust's own library and website. For these reason, the historical analysis of The Valley Trust at this stage is in many ways incomplete. It provides a general overview, touching upon only a few of the many programs related to food security that The Trust has implemented over the years.

Interviews with Valley Trust staff and community members helped to add to the information gleaned from research done online and at the library. Asking community members questions about nutrition and food security helped the learner get a sense of the practical application of the interventions being researched at the Valley Trust, their effect on the community, and the status of food security and nutrition education in a few rural communities in the area. An interview and conversation with a staff member at TVT helped to round out the history and get a more complete picture of the current situation at the NGO. When getting data from the staff member at The Valley Trust, the bulk of the information was collected through a formal interview. The interviews with community members were conducted more informally, and rather than one on one, these took the form of multiple informants providing data at once, in the style of a focus group, though less structured. Finally, limited amounts of participant observation techniques were also used as a less prominent method of data collection.

Methods and Limitations of Data Collection from Community Members

The following questions helped guide the conversations and interviews with community members involved in gardening: Where do you get your food? How do you decide what food to eat and what food to buy? What affects your decisions about what to eat and what food to buy? How much of your food comes from community/personal gardens? How do you feel food gardens have contributed to your diet, your overall health, and the health of the community, if at all? When did you first get involved in community/personal gardening and why? How are community members encouraged to make healthy food choices? What do you know about what foods are good for you to eat and how? Are people in the community educated about what foods are healthy to eat? If so, how? Do you ever find it difficult to buy or grow enough food to feed you or your family? How has The Valley Trust and its programs had an effect on your life/your community, if at all? How have you been involved in programs implemented with the help of The Valley Trust? How do you feel The Valley Trust has impacted your ability to get and

eat enough food, nutritious food, if at all? What programs and interventions from The Valley Trust have you found most helpful? Where would you like additional support?

The informants who provided this primary data were community members involved in some form of gardening, which they became involved in due to interventions by The Valley Trust. A total of five informants were interviewed, during two conversations, one with two gardeners and the second with three. For these interviews, the participants were interviewed simultaneously, in the style of a focus group, though less formal and structured. This method was more convenient for the parties involved and provided an efficient way of collecting data from community members who were somewhat difficult to access due to their location. It was difficult to set up a formal one-on-one interview with these informants, thus the style was more informal and conversation based, with the presence of another learner studying similar issues as well. The interview was set up and facilitated by members of The Valley Trust who had had previous interactions with the participants. Though it was an informal situation, the above interview guide with relevant questions was still used in order to facilitate the discussion and make the best use of the informants' and the interviewers' time. A staff member from The Valley Trust acted as transport to the location, and translator for these interviews as there was the limitation of a language barrier between the learner and the informants. Furthermore, the interview was conducted in the participant's own home which was preferable, more efficient, and more comfortable for them and the translator from The Valley Trust. The informants gave written informed consent through the use of the translator interpreting the consent form for them. The mode of data collection for the interviews with community members was strictly note taking. No identifying pictures or voice recordings were used, and names will also be omitted for the sake of confidentiality and anonymity. Because the interview was also set up somewhat quickly, and it was not known beforehand that more than one participant would be interviewed, there was not adequate time to obtain supplies to provide the informants with refreshment during the interview, as a reciprocal measure. In terms of reciprocity the informants were informed that the interviewer was only a student and simply hoping to learn about food security and nutrition and could offer no additional monetary or other sort of benefit; however, the informants were adequately thanked for their time and the valuable information they provided after the interview was complete.

Several limitations were apparent with this form of data collection. The most prominent limitation in these interviews was the issue of the language barrier. The use of a translator meant that certain information or aspects of the questions asked, aims of the learnership, or details of the consent form may have been lost or misinterpreted. Furthermore it is possible that answers may also have been

mistranslated in some way. The fact that the translator was a member of The Valley Trust may also have influenced the answers from the informants, particularly on questions pertaining to The Valley Trust and the effects of its interventions. The presence of another learner and other participants at the time of the interview may also have partly inhibited the informants' desire to answer openly in some cases. Two interviewers from a different culture may have created a dynamic less conducive to openness than just one would have. Confidentiality and privacy were also restricted given the presence of one or two other members of the community, and a third party translator. However, it is also possible that the presence of a translator and another person who understood their language and culture may have helped put the informants at ease and made them more willing and able to answer questions. During the interview, it was also observed that one participant usually took the lead in answering the questions, seemingly speaking for the other participant(s) present. This may have led to less variety or accuracy of the data. In addition, the learner had never met or had a conversation with the informants prior to the interview, and thus a relationship of comfortableness and trust had not been established beforehand. This made it more difficult to ask possibly sensitive questions about food security status, and not a lot of in-depth data was collected on this issue; however, the learner did attempt to ask about this topic when she felt it was appropriate during the conversation. This lack of a personal relationship may have affected the accuracy and quality of the data collected as well. Finally, the learner's own biases and beliefs about food security and nutrition in rural areas may have come into play during the interview and data collection. Biases towards the seriousness of food insecurity in these areas and the effectiveness of home gardening in addressing the issue may have been present. Furthermore, the primary data was collected from participants who had been involved in gardening for many years and had a close relationship with The Valley Trust, skewing the data towards more positive testimonies about the practice and about the effects of The Valley Trust's initiatives. The small sample size and the small amount of data collected also means that the data provides an incomplete picture of the role and effect of gardening and TVT programs on community members, and .

Methods and Limitations of Data Collection from Community Care Givers

Cursory data was also collected from a group of community care givers in one rural community in The Valley of a Thousand Hills. Examples of questions that guided the interview include: To what extent is poor nutrition a problem in your community? What is being done to address the problem of malnutrition in the community? How much does nutrition education play a role in the work of

community care givers? To what extent do you see chronic diseases and problems of over nutrition in the community? What is being done to address chronic disease and problems of over nutrition?

The interview with the community care givers was again conducted in a group setting, though with this interview approximately 10 or more participants were present. A Valley Trust staff member again served as a translator, and The Valley Trust staff member who facilitated the group meeting was also present. Two other learners were also present during the interview and asked their own questions. It was not possible to distribute consent forms to each member in the group, as the size of the group was unknown prior to the interview and not enough forms were prepared. However, similar to prior interviews, the learner had the translator explain the terms of the consent form to the community members verbally, and the CCG's who were most vocal signed off on their consent after the fact. This group interview was relatively short and limited data was able to be collected possibly due to the circumstances of the interview. It seemed to be relatively impromptu, it is unclear how far in advance the community members were informed of the interview and the CCG's were engaged in work for the community (building a house for a community member) while the learner was asking questions. These circumstances may have decreased the quality of the data. Other limitations present were similar to those from the other interviews. The presence of Valley Trust staff members and other learners may have influenced the answers of the participants. The lack of personal relationship with the learner, differences in cultural background, and the language barrier may also have affected the quality of data. The fact that only a few members of the group were vocal and spoke for most of the others meant that less data, and less variety of data, were collected. Biases of the learner due to previous research done on the prevalence of malnutrition and chronic disease, and the benefit of gardening may have come through in the questions asked and influenced the data or collection of data in some way. Furthermore, because of the small sample size and paucity of data collected, the data does not provide a complete picture of the presence of poor nutrition or the role of community care givers in addressing this.

Methods and Limitation of Data Collection from Valley Trust Staff Member

The following questions were included in the interview guide for the staff member at The Valley Trust: What strategies and techniques for food security and nutrition promotion has TVT learned over the years? What are the challenges that TVT faces in promoting food security and nutrition in the surrounding communities? What challenges does the organization face in implementing and developing nutrition and food-related programs? How have these obstacles changed and evolved over time and why? How has TVT adjusted and adapted to these obstacles? What is the future of the TVT's nutrition

and food security programs? How will TVT continue evolving and adapting to fit the needs of the community and various stakeholders in terms of food security? Are people in the community educated about what foods to eat? What happened to past nutrition and food security-related programs? What role does gardening play in the community now? How did TVT have an effect on this, if at all? What past programs have been successful/unsuccessful? Why? How much do you see that food insecurity and poor nutrition are a problem in the communities you serve?

The staff member at The Valley Trust who was interviewed was done so in a more formal style than the community members. The setting of The Valley Trust and the relationship between the learner and the staff member allowed for this. This formal interview allowed the learner to gain deeper information and quality data on The Valley Trust and its past and current programs. This interview was set up at a mutually beneficial time for the learner and the interviewee. An interview guide with relevant questions was prepared in order to get the most relevant information from the interview and make efficient use of the staff member's time. Data collection of this interview was taken with a digital hand-held voice recording device. Signed informed consent for the interview, the topics and issues covered in it, the questions to be asked, and the mode of data collection was given before the interview or any recording took place. The interview was conducted at The Valley Trust in an area with some degree of, though not complete, privacy, that was agreeable to the staff member. No translator or other third party was present. No material gift of reciprocity was given at the time of the interview though a card and chocolate bar were given at the end of the learnership. At the time of the interview the staff member was verbally thanked for his time and the information he provided.

Limitations to this data collection method were also present. There was some difficulty encountered in setting up mutually beneficial meeting times, especially during the first half of the learnership period, as many staff members were away at conferences or not available. It is also possible that this more formal style of interview led to some discomfort among the informant, as it is a method which tends to put the participant more on the spot. This could have been exacerbated by the voice recording and this could have affected the quality of the data collected even though the informant did agree to and seem comfortable with being recorded. In addition the learner tried to ask the questions and engage with the interviewee in such a way as to emulate a regular, informal conversation and increase the sense of comfort and trust in the subject; however, a formal interview guide was still used. Furthermore, having already interacted with and gotten to know the informant, there was a relationship established prior to the interview which could have aided in the openness of the conversation and mitigated any possible discomfort, and ill effects on the data obtained. Given that the interviewee was

currently a staff member at The Valley Trust, some bias may have occurred in his representation of the organization. There may have also been a bias from the learner towards focusing on the effectiveness and positive aspects of the organization through the questions asked.

Other Modes of Data Collection and Limitations

The learner was able to attend one site visit with an NGO member during the learnership as a form of participant observation. The Valley Trust's Integrated and Sustainable Livelihoods Programme (ISLP) has nutrition and food security promotion through the use of gardening as one of its components. The program site is unfortunately not easily accessible, and thus only a single site visit was facilitated. The ISLP is being implemented in the rural village of Makabheleni which is approximately a three hours' drive from The Valley Trust location. Though much of the time was spent in transit, this gave the learner the opportunity to learn more about the program and the community through casual conversation with the NGO member during travel. In addition, because of weather and transportation concerns, not a lot of time was able to be spent at the actual location. This limited time meant that the NGO member had to spend much of the time engaging with the community members on issues relating to the program. Again, because of the language barrier present, the learner was unable to engage with the community members on an individual basis or glean much information or data from the staff member's interactions with the community. Because of these constraints, there was limited opportunity to talk with community members and gain primary data from this site visit. Towards the end of the site visit, the learner was able to ask one or two exploratory questions of a group of 20 to 30 community members, with the NGO member acting as a translator. The size of the group and the situation, as well as the time constraints, did not allow for in-depth questioning however. Furthermore, again because of the group's size and the limited time, signed informed consent was not obtained, though the community members were informed by the translator that the learners were students and hoping to gain some information on food security, gardening and nutrition for their learnership project. No direct quotes or names were taken and minimal information was obtained, thus confidentiality, privacy, and anonymity will remain intact. The constraints of time, the environment and situation, and the language barrier prevented significant amounts of primary data to be collected from this site visit. It did however, provide an opportunity to experience first-hand how The Valley Trust implements this particular food security-related intervention, how it engages with the communities in which it works, and what these communities are like and the challenges they face.

Overall, primary data collection methods from participant observation, community participation, and informant interviews did not help contribute to the information gathered during the learnership as much as expected, and many limitations to this method of collection were present, in addition to the constraints mentioned above. Community participation was largely not possible during the learnership for several reasons. The learner had little opportunity to spend much time out in the community, as it was widely discouraged that she should go places without a guide, and it was difficult for the members of the NGO to find time to facilitate this. The area of The Valley of a Thousand Hills is fairly wide spread and it takes time and transportation money to get to relevant areas of the community, where The Valley Trust has implemented programs. Furthermore, due to the time of year and other factors, many community gardens, as well as the gardens at The Valley Trust were no longer in use, and thus there was little opportunity to engage in hands-on experiences in food security interventions, or talk to a greater variety of individuals involved in these initiatives. Because of the time of year and the current restructuring and difficulties that The Valley Trust is going through, there were not many programs for the learner to take part in. The one program that does relate to food security and gardening (ISLP) was being implemented in a community several hours from the learnership site as previously noted and was also in the process of being phased out; thus only one site visit was able to be facilitated during the learnership for observational purposes. These issues of safety and constraints in the availability of current programs and activities hindered the ability of the learner to get meaningfully involved in the community, or to offer some sort of reciprocity in a practical and hands-on way. The lack of programs related to food security, the lack of staff members involved in these programs, the lack of availability of individuals to engage in interviews or staff members to facilitate interviews all contributed to the paucity of primary data collected. These issues were most likely the result of the difficulties The Valley Trust has recently faced in terms of funding, and the resultant restructuring and loss of staff that they have experienced. This is an unfortunate reality faced by many NGOs and something that was outside the control of staff members and the learner, but that nonetheless inhibited the quality and quantity of the primary data obtained.

Literature Review

Several important texts inform the background and triangulation of the data in this learnership. Food security is an important focus of the learnership and thus a few studies are used that provide information on this issue in South Africa. The Human Sciences Research Council released a paper in 2009 discussing their project to assess the issue of food security in South Africa. This involved releasing a total

of eight papers dealing with a variety of topics relating to food security. A couple of these will further inform the project and be discussed later, but this review paper, "Food Security in South Africa" provides a useful overview of the problem, and a compilation of the insights gained from the other papers. The paper provides an introduction to several aspects of food security and insecurity. It mentions the multi-dimensional nature of the problem, how many different factors may play into it, such as poverty, unemployment, distribution, and access, and how it is closely tied to other issues of development (Altman, Hart and Jacobs 2009). The paper suggests that a range of interventions may be helpful in addressing the problem, not only increased employment opportunities and social grants, but also small-scale agriculture (Altman, Hart and Jacobs 2009). Furthermore, Altman, Hart, and Jacobs also explain the continued uncertainties and unknown variables surrounding food insecurity, its causes, and the challenges present in how to address the problem in South Africa. An overview of the insights from the various papers written on food security provides some useful information on the problem. For example, the nutritional status of South Africa is discussed. Though the authors report that hunger has decreased in recent years, malnutrition, chronic and transitory food insecurity still remain in the population (Altman, Hart and Jacobs 2009). They also mention that rural households spend more on food total than urban ones, but less per person, a phenomenon that needs further study but points to rural areas possibly needing attention in terms of food security (Altman, Hart and Jacobs 2009). This information from this source informs the paper in that it provides background and context for the work that The Valley Trust does in terms of development, nutrition, and food security. It makes it apparent that food insecurity is a relevant public health problem in the country and that work needs to be done to address the issue. It also provides background for the context in which The Valley Trust works with its details on the status of food security among rural populations.

Furthermore, the paper provides some insights into the use of small scale agriculture production to address the problem of food security. The presence of a home garden does not necessarily mean the gardener and their family are food secure, however it seems that an increasing number of people are getting involved in gardening in order to produce extra food (Altman, Hart and Jacobs 2009). Though the focus is often on commercial agriculture, many individual households could use support in their agricultural efforts (Altman, Hart and Jacobs 2009). It also provides some information on who is involved in gardening, saying that in fact, in terms of absolute numbers, more young people are taking part in the practice than older individuals (Altman, Hart and Jacobs 2009). Black farmers are also highly concentrated in certain areas of the country, particularly in former homelands (Altman, Hart and Jacobs 2009). This information on agricultural practices as a way to address food security is highly relevant in

the context of the work of The Valley Trust, as the organization is a big advocate of household gardening practices. The article stresses the fact that support for home gardeners is needed in the country and thus corroborates the need for this aspect of the work of The Valley Trust. It also provides some interesting background information on who is involved in gardening which can serve as a comparison to the data collected during the learnership. The learner will hope to gain more insight about what practices relating to gardening were successful in the development and health promotion of the communities with which the organization worked.

The report on food security by D.C. du Toit and the Department of Agriculture provides further and more recent background information on the issue in the context of South Africa. The paper provides a working definition for food security. It also defines the three main factors of food security: food availability, access, and use. These definitions and aspects of food security will be kept in mind when reviewing the work of The Valley Trust, and assessing what aspects of the problem their interventions have helped to address. The report also gives a more current picture of the state of food security in South Africa. Though it states that South Africa as a nation is fairly food secure, there are still households that struggle with being able to get enough food, with about 20% of households not having adequate food access (Du Toit 2011). It also gives statistics for specific districts, with KwaZulu-Natal having 23% of households having inadequate food accessibility (Du Toit 2011). This important information provides more background and context to the problem in South Africa, and more specifically in the area where The Valley Trust resides. It gives an idea as to what the current state of the problem may be in the community served by The Valley Trust. The paper also gives information on the presence of small-scale agriculture in the population, reporting that about 4 million people are involved in this practice (Du Toit 2011). The author asserts that small scale agriculture should be supported in order to help with the issue of food security in these populations, but that further research should be done to examine the role that agriculture can play in addressing this problem (Du Toit 2011). This information provides some background and context to the issue and to many of the interventions that The Valley Trust has implemented over the years. This paper helps inform the ideas held by The Valley Trust that land use, farming, and gardening are important possible interventions to address food security and promote health and development, especially in the rural areas which The Valley Trust serves.

A recent article by Labadarios et al. provides some more up-to-date background on food security in South Africa, with a comprehensive review of national surveys taken on the subject. This article also provides another definition of food security on which to base further discussion and again

stresses the importance of looking at access to food along with availability and use. The study found that though the prevalence of food security has decreased substantially in South Africa, the proportion of people at risk of food security has remained the same (Labadarios et al. 2011). Food insecurity is also more of a problem in rural areas than urban according to the article with 20.5% in the latter and 33.1% in the former (Labadarios et al. 2011). In addition, the review mentions low scores for dietary diversity and variety according to one survey, and the fact that stunting, wasting, and underweight are still issues among children in the population (Labadarios et al. 2011). These statistics show that food security and the resultant detrimental effect on nutritional status are still issues in the country, even though food insecurity has improved in recent years. This information helps inform the context in which the work of The Valley Trust is being studied and why there is still a need for their interventions, especially in rural areas. Many of the programs of The Valley Trust in the past and now focus on promoting health through improving nutrition; this review helps support the fact that these are much needed developmental activities. Finally the discussion of the paper goes into some interventions that have been put in place by the government, how there is room for improvement, and how there is a need for “sustainable, non-income-dependent measures, such as the promotion of subsistence farming” (Labadarios et al. 2011). This provides another argument for the utility of the work of The Valley Trust and how the organization is still relevant and much needed in the country, especially for the rural populations the organization serves in the Valley of a Thousand Hills.

The article “Community-based agricultural interventions in the context of food and nutrition security in South Africa” by Faber, Witten, and Drimie provides some more information for the learnership on the use of agriculture and farming in addressing malnutrition and food insecurity. This is important in the context of the work at The Valley Trust and much of its focus on agricultural interventions. The article reviews some home-gardening interventions implemented in different populations to help address lack of dietary diversity, micronutrient deficiency, and food security (Faber, Witten and Drimie 2011). It mentions the importance of promoting the use of indigenous fruits and vegetables which is also relevant to the work of The Valley Trust and the type of growing techniques they promote and have promoted in the past. Importantly, though the article mentions the possible benefits of promoting home-based agriculture, it also reviews the many challenges that this intervention presents. These include things like climate and weather such as drought, deterioration of soil fertility, access to water and irrigation, and access to fencing materials (Faber, Witten and Drimie 2011). This information about possible challenges that this food security intervention poses will help triangulate the

data collected about The Valley Trust's gardening programs and the involvement in gardening of community members, and serve as a critique of the difficulties involved in this intervention.

An article by Baiphethi and Jacobs titled, "The contribution of subsistence farming to food security in South Africa" provides an extensive overview of this practice in relation to food security and insecurity. The article gives some background as to the changing practices of the population of South Africa, reporting that there is a greater shift towards food purchase from markets rather than strictly home production, even in rural communities (Baiphethi and Jacobs 2009). However, it also mentions that although there is a decline in households using farming as a main source of food, there is an increase in households using this practice for extra food, as well as an apparent under-utilization of resources related to agriculture (Baiphethi and Jacobs 2009). In terms of numbers, the article reports that about 4 million people in South Africa are involved in farming for various reasons, particularly as an extra source of food (Baiphethi and Jacobs 2009). The article goes on to say that greater access to resources and inputs are necessary to support small scale farmers and encourage this practice; this may include availability of water harvesting and irrigation techniques, as well as other technologies (Baiphethi and Jacobs 2009). This article helps provide some of the argument and evidence for the work of The Valley Trust, especially their interventions that involve supporting household agriculture and gardening. The Valley Trust can possibly serve as an example of an organization working to provide the resources, inputs, and supports needed that the article mentions. It is important that small-scale farmers are supported by organizations like The Valley Trust, especially in rural areas, as this home food production can help decrease dependence on the market, decrease pressure on limited income availability, and help cushion against fluctuations in food prices which may lead to food insecurity (Baiphethi and Jacobs 2009). This article can help provide a guideline and background for analyzing the work that The Valley Trust has done in relation to agriculture in the communities it serves.

The article, "Connecting food environments and health through the relational nature of aesthetics" by Hale et al. from the Journal of Social Science and Medicine provides one view point on how community gardens have the ability to help promote health. It focuses on the ideas of relational connections between people and places and aesthetics as a lens through which to view people's experiences of community gardens, and to connect this back to how these places and experiences have an effect on overall health. This is useful in providing another view on the benefits of community gardening. Though much of the focus has been how agriculture can contribute to food security, this article mentions a variety of other ways in which gardening can promote the health of community members. The article cites increased produce consumption and physical activity, as well as a way to save

money (Hale et al. 2011); these benefits can be related to increasing food security and nutritional status in populations making use of the intervention in South Africa, including rural communities like that which The Valley Trust serves. Though the study was based in an urban, western environment the principles applied and discussed in relation to the effects, benefits, and experiences of community gardening can possibly be extrapolated to the settings of the learnership, that of rural communities in The Valley of a Thousand Hills, or, alternatively, offer a comparison of how benefits of gardening may vary depending on where they are implemented. Given that the article also makes use of interviews and personal testimonies of gardeners, it will also provide a comparison and contrast for the testimonies from community members taken during the learnership. This literature on food security and home-based agriculture will provide background, context, and secondary data for the analysis of the history and programs of The Valley Trust.

Findings and Analysis

Early History and Background Context for the Founding of The Valley Trust

The Valley Trust is a not-for-profit NGO located in the Valley of a Thousand Hills in KwaZulu-Natal, South Africa. Founded in 1953 by Dr. Halley Stott, The Valley Trust is a health promotion organization with a rich history of implementing programs in communities in the surrounding areas to improve the health and well-being of their people. Many articles in the library at The Valley Trust go into the history of The Trust's past programs, reasons for why the organization was started, and assessments of some of the past programs as well. These articles on The Valley Trust provide a picture of its long history and its many health promotion programs. This review will focus on those related to food security and nutrition.

As many of the articles attest to in their introductions to The Valley Trust and its history, the organization was founded by Dr. Halley Stott as an addendum and support organization for the health center he established at Botha's hill. Dr. Stott was concerned with the large number of cases of diseases caused by malnutrition that he saw in his patients at the health center. Furthermore, he noticed that he would treat many of these patients, only to have them return again after a time, suffering from the same ailments of malnutrition (Zipperlin 1986). Seeing this he decided to establish The Valley Trust in conjunction with the Health Center, "... specifically to sponsor the overall scheme, explore non-medical aspects of malnutrition and to develop essential complementary services and facilities around the medical service with particular reference to improved nutrition" (Robb 1972). Thus The Valley Trust hoped to help improve some of the more underlying aspects and causes of malnutrition, rather than just

treating the symptoms, in an effort to try to prevent future complications from malnutrition from occurring. This is an example of an organization working to implement indirect interventions as listed by Haddad and Geissler. These include interventions related, "... to agriculture, income generation and maintenance, the status of women, education, water access (quality and quantity), sanitation and health services (preventive and curative)" (Haddad and Geissler 2005). Many of these, as we will see, are aspects of the programs that The Valley Trust has worked on over the years.

Reasons for the prevalence of malnutrition in the area of The Valley were complex, and many articles go into the possible causes that Dr. Stott observed and how he tried to address them. A report by Lindsay Robb goes into some of the causes related to misuse of land as well as change in diet. He says, "With increasing influence of Westernization and urbanization and the absence of the men from kraals for lengthy periods in mining and industry, the land became impoverished through misuse until production and quality of produce could not provide nutritional requirements" (Robb 1972). Furthermore, the Zulu people in the area began to move away from their traditional diet, which involved many nutritious and whole foods, towards one based on processed and refined foods bought at the store. Instead of whole maize, dried beans, and wild leafy plants people began turning to foods such as refined maize and flour, sugar, jam, and sodas (Robb 1972). Colonization and the presence of westerners have likely contributed to this change in diet: "

... It is the shift from the former, healthier pastoral diet to a more starchy diet, brought about by contact with the so-called superior European dietary habits, that has resulted in poorer health standards. One hundred and fifty years ago the local African people ate a far more varied and nutritious fare than now, consisting of roots, tubers, spinach, whole-grain maize, sour milk and meat (Pollock 1974).

Again it seems that as previously mentioned, this move away from a more traditional diet had helped add to the problems caused for native African people by western colonization and urbanization. This trend is corroborated even today and has been cited as a contributor to poor nutrition in the country (Faber, Witten and Drimie 2011). The fact that this western-style of diet is relatively cheap and more accessible compared to some more nutritious foods exacerbates its use especially among people living in poverty, much like the clients of Dr. Stott and The Valley Trust were, and are (Faber, Witten and Drimie 2011).

The encroachments of western society and urbanization in conjunction with ill use of land were also contributors to the problem of malnutrition in the area. This again, seemed to have an effect on both farming practices and diet. According to an article by N. Pollock, in the 70's there was a wide gap

between African subsistence farmers and white agricultural farmers. European farmers would often have better access to roads, communication, and other resources, specifically modern farming techniques to aid them and improve their harvest (Pollock 1974). Furthermore, in the Valley of a Thousand Hills, African farmers often had to grow their crops on plots of land located on steep slopes, in drier areas, plagued by heavy soil erosion (Pollock 1974). Dr. Stott recognized the challenges the Valley faced in terms of food production through his patients and the frequent and reoccurring signs of malnutrition that he observed.

The survey conducted by Robb found that the health of the soil in the area was lacking as well and was another contributor to malnutrition. “Over-cropping” and “over-grazing” over long periods of time contributed to this damaged land (Robb 1972). Without adequately fertile soil, abundant, nutritious plant life cannot grow and those plants that do may be less nutritious than if they were growing in healthy soil (Robb 1972). Robb says, “If a soil, which is a living entity lacks vitality the plants that grow on it will lack vitality and so will the animals and humans who consume the plants” (Robb 1972). Furthermore, “With our almost complete dependence on plants for nutrition, soil becomes the foundation of health and agriculture an integral, essential part of any health service. This was recognized by Dr. Halley Stott in his practical approach to the problems underlying health and the need to consider all related ecological factors of a health service” (Robb 1972). Thus it was argued that the ill-health and malnourishment of the soil was a contributing factor in the malnourishment of the people who used the soil. These difficulties related to environmental health are mentioned in a current article on agricultural interventions as well. “... traditional home farming and wild food gathering are done under relatively harsh conditions in which rainfall is unpredictable and soil fertility is declining. Various agro-ecological conditions, combined with negative social conditions, are resulting in the deterioration of natural resources” (Faber, Witten and Drimie 2011). Again, this source also speaks to the issues of soil health and difficult ecological conditions which make food production a challenge in many communities, and thus may affect their nutritional status. This was apparently true for the area of The Valley of a Thousand Hills as referenced in multiple articles, and it was recognized as one of the problems that The Valley Trust tried to address (Pollock 1974) (Robb 1972). The Valley Trust and the associated Health Center provided a more complete resource to the health of the community than just a health center would, as they tried to discern and attend to the underlying causes of the health issues they encountered among the patients, rather than just treating the problem. This is especially important with complications due to malnutrition, as this can be chronic, has to do with lifestyle and environment, and has a straightforward prevention cure if the right resources are in place.

Early Interventions and Obstacles at The Valley Trust

Dr. Stott was aware of these issues, and to begin addressing them at their roots, he consulted with Africans on how to reconstitute the land without the use of fertilizer or frequent water, as one was frequently too expensive for people in the Valley, and the other was often unavailable except for from the rain (Robb 1972). The man who Dr. Stott took on to aid The Valley Trust in its agricultural endeavors was R.T. Mazibuko, as much of a proponent of promoting healthy soil to promote a healthy person as Stott was. In his own words Mazibuko wrote:

In order that vegetables can be raised or grown, they need a healthy fertile soil. In order that man can benefit from milk, meat, skins, eggs, wool etc. the animals and birds must eat healthy vegetables from a healthy soil, to build healthy cells in their bodies. All this leads us to this; the relationship between man, vegetables, animals, birds etc. and the soil is closely knitted together. Man's greatest possession and blessing is good health; the same applies to all animals, birds, insects, and in plants – in one word, all creation. A healthy man can achieve much more than an unhealthy one (Mazibuko 1971).

This quote hints at Mazibuko's passion for health promotion, ecology, and agriculture, and his belief in the intertwined relationship between them. These beliefs aligned with those of Dr. Stott and The Valley Trust, and came through in the work he did for them. The technique he developed and which was used by The Valley Trust is known as trenching. It is done by digging a hole 2 ½ - 3 feet deep, 7 feet wide, and however long is necessary and filling it with the soil that was removed mixed with grass cuttings from the area (Robb 1972). Sun hemp is then grown on the plot and also mixed in. To sustain the health of the soil throughout the various growing seasons, crops being grown are rotated yearlong which helps prevent the overuse of the soil (Robb 1972). Thus this technique uses composting methods to revitalize the soil without needing to use resources beyond what is naturally available in the area. Along with this trenching technique for soil reconstitution, The Valley Trust also created dams in the area to provide water during the dry winter season, and fish as well to add protein to the local diet. Poultry farming offered another source of protein as well as fertilizing material. Finally, The Valley Trust had a maize grinding mill to encourage the consumption and production of whole grains (Robb 1972).

These interventions by The Valley Trust provide examples of an organization striving to increase the access of the communities it serves to the inputs necessary for productive gardening as a means of addressing food security. The need for these improved inputs and access is mentioned in Baiphethi and Jacobs' 2009 article on the contribution of subsistence farming to food security. The authors assert, "...

governments have to start investing in understanding how to promote the cost-effective use of improved inputs such as fertiliser, animal traction, organic inputs, water and soil conservation technologies as these are the appropriate inputs required for sustainable intensification of agricultural production” (Baiphethi and Jacobs 2009). The composting and trenching techniques of The Valley Trust helped conserve and reconstitute the soil; the promotion of livestock keeping served as a way of increasing access to organic inputs and organic fertilizer, and the dams helped provide increased access to water. In these ways, though The Valley Trust is an NGO, it is still an example of one organization that in the past has strove to make subsistence farming and home food production a greater possibility for people through increased access to these agricultural inputs and techniques. According to Baiphethi and Jacobs, there is still a need for this work today as a way of addressing food security.

In improving the nutrition and agricultural techniques of the people in the area, The Valley Trust and Dr. Stott faced a variety of obstacles. Pollock mentions the resistance of Africans during that time to new ideas and techniques brought by white people or Africans associated with white people and the white government (Pollock 1974). By using techniques developed by a native South African, Mazibuko, the people in the area were more inclined to accept them. High levels of illiteracy and lack of education combined with frequent strict adherence to traditional customs are cited as other obstacles to introducing new farming techniques to people in the area (Pollock 1974). However, The Valley Trust’s approach to these problems has not been to further push western and industrialized standards and techniques, rather, “... the Trust has decided to tackle the problem at its roots by helping the people to improve their own farming standards, and by making better use of their resources and skills” (Pollock 1974). Mazibuko’s soil reconstitution techniques helped accomplish this, as they did not promote dependence on western or foreign support and resources. Instead, his simple, organic methods made use of the indigenous resources available to community members in their own environments. Furthermore, “The Trust has sought to bring about innovation and change by encouraging the people to help themselves and by emphasizing the value of local talent and resources” (Pollock 1974). These techniques by The Valley Trust to promote agriculture, nutrition, and health have largely had a focus on empowering individuals and making use of their available resources. They also fit into The Valley Trust’s overall vision for development, namely by thoroughly involving the beneficiaries in their own advancement. They also do so in a way that promotes sustainability, for if people learn to help themselves and make use of the resources and skills they have available to them, they can build self-efficacy and become less likely to have to depend on outside influences for support.

Early Response to and Benefits of The Valley Trust Initiatives

The response to the work of The Valley Trust and the associated Health Center was largely quite positive in the Valley through the 1960's according to the report by Lindsay Robb. The community was involved and cooperative, including traditional health practitioners, who accepted the presence of the Health Center, made use of it themselves, and also assimilated gardening into their own lives and their teaching (Robb 1972). The gardening campaign was quite successful at the time of the article, with "over 600 vegetable gardens" being grown in the area under the influence of the Health Center and The Valley Trust (Robb 1972). There was also an increase in the growing of beans which The Valley Trust had been heavily promoting due to their nutritional benefits (Robb 1972). Furthermore, the attendance at the Health Center and its sub-centers in 1971 was over 550,000 Africans (Robb 1972). This article looks briefly to the future as well, and Robb states that with the eradication of causes of malnutrition future generations can benefit from increased health status, while still learning about proper nutrition (Robb 1972).

A 1972 article by Dr. Stott himself, also goes into the benefits seen so far at that time because of the initiatives of The Valley Trust. Stott mentions the increase in vegetable gardens as well, and though he says many are poorly maintained, he also attests to the high productivity of others (Stott 1972). In addition Stott mentioned an increase in the demand for produce and legumes in local stores and an increase in stands selling vegetables alongside home gardens. There was also a decrease in signs of malnutrition according to the local doctors and nurses. This was reiterated in a couple of articles from 1983: one on Dr. Stott which noted that signs of kwashiorkor in the area had decreased from 200 out of 30,000 cases in 1965, to 21 out of 65,000 cases in 1981 (Dr. Halley Stott 1983), and one from the South African Journal of Science, which also mentions a decrease in malnutrition along with fewer cases of tuberculosis, an improvement in the number of mothers coming to the clinic for health advice, and an improvement in the appearance of the children and infants in the area (Baker 1983).

Overview of Valley Trust work in the Early 1970's

These articles provide some of the earlier reports on the work of The Valley Trust while also going into some of the initial causes and reasons for its establishment by Dr. Halley Stott. An article by Phyllis Lean from the mid-1970's goes into some of the joint work of the Health Center and The Valley Trust and how they work together to improve the health and nutrition status of the patients and clients that come to them. The Valley Trust project is a combination of the Health Center, which provided referrals to the nutritional education unit, cooking demonstrations, and garden demonstrations (Lean

1975). If malnourishment in a patient or a patient's child is observed at the health center, the patient is educated about proper nutrition and then taught how they can prepare and access nourishing food for them and their children and families, through these various sections of The Valley Trust (Lean 1975). Through the demonstration kitchens and gardens, community members can be educated about proper preparation and production of nutrition foods, and in turn possibly be inspired to start their own garden and begin improving their own nutritional status and that of their families (Lean 1975). The patients are not forced to start a garden, but many are interested, and either create one on their own or ask for assistance from Valley Trust members (Lean 1975). The Valley Trust can then assist interested community members in proper, sustainable gardening techniques in order to use the land to its fullest. This process of referrals from the Health Clinic, through the demonstration gardens and kitchen, all attest to a holistic approach to treating the causes of malnutrition. According to Faber, Witten and Drimie, "It is imperative that the agricultural component of the intervention be integrated with a comprehensive nutrition education and behavior change component, as the two components work synergistically to increase household consumption of micronutrient-rich foods" (Faber, Witten and Drimie 2011). These intervention techniques made use of these ideas as they incorporate educational components. They strove to affect behavior change as well by motivating the patients to start their own gardens. Thus, even though these methods were used by The Valley Trust in the past, they may still be relevant to food security promotion initiatives today.

The gardeners could also purchase fencing from The Valley Trust on a "long-term interest-free hire purchase basis" (Lean 1975). This activity addresses one of the many challenges and barriers to at-home food production mentioned in Faber's article on agricultural interventions (Faber, Witten and Drimie 2011). This is also another way that The Valley Trust helped contribute to access to inputs in order to encourage subsistence farming (Baiphethi and Jacobs 2009). Lack of fences constitute a significant deterrent to engaging in agricultural practices, and thus by offering a pathway for community members to access this material The Valley Trust helped increase home production. Furthermore, The Valley Trust also had a fresh produce market to further promote gardening and the production of fruit and vegetables, which could be used to create a source of income for the family as well as a source of nutrition (Lean 1975). As Lean describes in another article continuing the story of The Valley Trust, "The centerpiece of The Valley Trust approach is the garden; in encouraging people to grow food" (Lean 1976). This approach is apparent in much of the work and the history of The Valley Trust: from the agricultural techniques used by The Trust to improve the health of the soil to allow for gardening, to the

joint work of the Health Center and The Trust in educating and teaching people about proper nutrition and gardening.

The Valley Trust Through the 1980's

An article from the mid-1980's written by Helen Zipperlin in the periodical *Biodynamics* expounds further on the many programs related to food security that The Valley Trust implemented during this later time period and the 1970's. At the time of this article, The Valley Trust had been in operation for 35 years already (Zipperlin 1986). Like most articles on The Valley Trust, the author goes into the beginnings of the organization, how Dr. Halley Stott first founded it in the 50's because of the malnutrition-related health issues that he saw in his patients at Botha's Hill, and because of the damage he saw in the land and soil throughout the area of the Valley of a Thousand Hills (Zipperlin 1986). It is mentioned that though the area is not plagued by drought throughout the year, the rainfall that it does experience erodes the soil from the hill slopes, and the over-grazing from the abundant cattle in the area contribute to erosion and soil damage as well (Zipperlin 1986). Once again, this leads to poor quality of home-grown crops, and this in combination with the availability of refined maize-meal for purchase on the commercial market leads to a diminished quality of diet for the people in the area (Zipperlin 1986).

In addition to this introduction, the article also goes into the other initiatives that The Valley Trust has implemented, such as the use of "appropriate technology" like solar cookers and fire-screens to save on wood and the provision of fencing materials at reasonable prices by The Trust as again, wood is scarce in the area and needed for fires (Zipperlin 1986). The formation of community gardens are also mentioned in this article and a caption on a picture of the Zamokuhle Communal Garden says that at the time of the article The Trust had helped establish six communal gardens, with "up to thirty families" taking part in them (Zipperlin 1986). The author mentions the social and economic benefits that these gardens can provide to community members; Fencing is less expensive with one bigger garden, people can learn the benefit of working together, and there are benefits for "production, marketing and the possibility to improve the site" (Zipperlin 1986). A current article by Hale et al. also goes into the potential benefits of communal gardening:

Community gardens have been associated with increased consumption of fruits and vegetables, physical activity, and improved mental health. Gardens represent a behavior setting that has purpose and coherence, promotes social inclusion and gives rise to positive social and psychological processes that ultimately lead to health. Community gardens have also been

shown to increase collective efficacy, strengthen sense of safety, associate with stronger neighborhood attachment, build social capital and provide a platform for organizing around other urban issues. Further, gardens have the potential to save money, foster local environmental knowledge and serve as an alternative to the environmentally unsustainable aspects of conventional agriculture (Hale et al. 2011).

It is possible that The Valley Trust also recognized these many potential benefits of community gardens. According to the article, they not only had the potential to increase the nutrition status of community members through greater produce consumption, they also could provide social benefits. The article by Zipperlin shows that communal gardening addressed some of these benefits and perhaps in this way helped aid in the development and empowerment of the community.

The author goes into the initiatives by The Valley Trust to improve water and sanitation as well, which are closely linked to food security. These include concrete and cement tanks to diminish contamination of springs, and collect rainwater, the dams and fish ponds, wells to pump water from marshy areas lacking springs, and spiral screen toilets (Zipperlin 1986). Like the fencing, this access to clean water is another major barrier to productive farming. In fact, "Access to a secure water supply for irrigation is probably one of the biggest challenges to overcome when implementing community-based gardening activities" (Faber, Witten and Drimie 2011). Water conservation is also one of the inputs to agriculture mentioned by Baiphethi and Jacobs. Thus, again it is seen that The Valley Trust was ahead of its time in implementing programs to enable individuals to engage in agriculture in order to address food security. The Valley Trust worked to help increase access to these important resources, and thus improve agricultural practices. Furthermore, Zipperlin talks about the role of The Valley Trust as a training center as well. "Trainees come from all over Southern Africa. A number of rural hospitals are establishing demonstration gardens and health care methods modeled on the Valley Trust. Land and people must be healed together. In too much of our world they are destroying each other and medicine is treating only symptoms" (Zipperlin 1986). Though The Trust started off spreading its techniques and health promotion methods only in the area of the Valley of a Thousand Hills, this model also began being spread to other communities in South Africa and used by other health care facilities, who were also striving to treat the underlying causes of illnesses like malnutrition as opposed to just the symptoms. The Valley Trust provided a viable model for accomplishing this task.

Many articles in The Valley Trust library provide these detailed histories and overviews of the variety of programs implemented by the organization over the years. Other articles in the library go into further detail and evaluation of specific programs related to food security developed or promoted by

The Valley Trust. For example, poultry farming was one techniques that The Valley Trust was a proponent of in the past, and in the mid 1980's a survey report was conducted by Bongani Emmanuel Gumede on the poultry keeping practices of one area of The Valley of a Thousand Hills. According to Gumede, "Rapid increases in population lead to a greater demand for protein which could be greatly assisted by an improvement in poultry farming methods. This could result in the generation of income, surplus meat and eggs from relatively small areas of land" (Gumede 1986). Keeping chickens comes with its fair share of problems, such as diseases and noise, but "Most problems find solutions... and so long as adequate attention is given to the practical care of the chickens they will give ample repayment in terms of fresh eggs, meat and a fund of interest" (Gumede 1986). In this way, this report supported the fact and served as a form of baseline data for the importance and benefits of promoting poultry farming to help improve nutrition status, particularly protein intake. In the report, demographics of the poultry farmers were collected as well as such information as statistics on the breeds of poultry kept, poultry selling practices, diseases encountered, feeding and penning, water supply, suggestions for improvements in selling poultry, and whether or not poultry farmers would recommend the practice to their neighbors (Gumede 1986). According to the report, farmers were able to gain some benefits from poultry farming, whether that be meat, eggs, knowledge, or some income from selling them (Gumede 1986). Thus, this report showed that poultry farming might be a worthwhile skill to teach people in rural areas, and indeed The Valley Trust did make use of this technique in conjunction with their promotion of gardening, as chickens provide a useful source of fertilizer as well.

Nutrition-Related Programs at The Valley Trust through the 1990's

Nutrition-focused initiatives were still present at The Valley Trust in the early 1990's as well. A newsletter for "members, donors, and friends" from 1993 mentioned that the Al Rama Nutrition Education Programme was handed over for management by The Valley Trust from the organization Vandenberg's (The Valley Trust 1993). It was thought by the previous directors of the program at Vandenberg's that The Valley Trust was better equipped to run the program as an organization focused on development, and better able to raise adequate funding (The Valley Trust 1993). The program appears to be run in schools and helps educate children in soil conservation and nutrition (The Valley Trust 1993). Gardening is also promoted through this program and the previous organization held competitions between schools as a way to encourage home production (The Valley Trust 1993).

Continuing with the history of The Valley Trust in the early 1990's, Jinabhai, et al. produced a report and assessment of another program by the organization meant to help promote development

and food security. The Food for Work Stamp System (FFWSS) was a short term program implemented by The Valley Trust and evaluated in the early 1990's (Jinabhai, et al. 1993). This program combined the ideas and goals of public work development and employment creation with nutrition intervention.

According to the authors:

Both social security measures, (nutritional relief, expanded PHC facilities, environmental services), and economic growth are necessary to make the maximum impact on malnutrition and poverty. International experience has demonstrated that neither economic growth nor social support can work in isolation. Since poor nutritional status is a major factor in morbidity and mortality profiles, investments in nutrition programmes will increase productivity and play a central role in any development strategy. A food security policy must evolve as a basic element of a social security policy" (Jinabhai, et al. 1993).

This program implemented by The Valley Trust was an example of one option for accomplishing this task. It was funded by the Department of National Health and Population Development's National Nutritional and Social Development Programme, but involved community members as much as possible, such as Community Health Workers, a Nutrition Committee made up of community members, and community markets and dealers (Jinabhai, et al. 1993). The CHWs, given their knowledge of and relationship with the community were chosen to make decisions on which people would benefit from the FFWSS, where the need was greatest. The beneficiaries would participate in a public works program usually on a one-time basis for the span of five days, and in exchange would receive food stamps. These food stamps could then be used at local dealers to buy goods from a set list of food items. Children at community crèches also received food stamps, as did their teachers. (Jinabhai, et al. 1993).

This Food for Work Stamp program was one of the food security programs at The Valley Trust not related to home-based agriculture. However, current reports suggest that such initiatives still provide benefits in dealing with the problem. A 2009 report by Altman, Hart and Jacobs states that, "Income security is an essential ingredient to address food insecurity" (Altman, Hart and Jacobs 2009). Furthermore, they suggest that, "More intense strategies to strengthen non-grant livelihoods are needed to transition marginalised work-seekers into economic activity" (Altman, Hart and Jacobs 2009). The FFWSS could possibly be seen as addressing these concerns. The work provided during the program, though short term, did offer some options for "economic activity" for community members. In addition, though participants were not paid with direct cash, the work stamps offered provided a form of income security by helping them in purchasing food. According to this report, these are possibly viable and beneficial ways of addressing food insecurity even today.

Problems did arise however, related to the management of the program, adequately involving tribal leaders, and questions were raised about its sustainability as well (Jinabhai, et al. 1993). It was also difficult to adequately assess the program's effect on individual's and the community's nutritional status and socio-economic development, given the short timeframe of the program, and a lack of strong systems in place for monitoring and evaluation (Jinabhai, et al. 1993). It was also noted that at times the program was unable to provide sufficient amounts of food stamps, possibly due to the limited funding (Jinabhai, et al. 1993). Finally, the FFWSS was not well integrated into the other programs at The Valley Trust dealing with nutrition, health, development, and training (Jinabhai, et al. 1993). However, the evaluation did note that the level of involvement of community members as well as the use of local businesses to distribute food did help stimulate the economy to some extent (Jinabhai, et al. 1993). An effort was made to make sure that the benefits of the program stayed within the community and that community members were actively participating and involved in this development strategy, as opposed to simply receiving, and being dependent upon a handout. Thus, though the FFWSS was a short term project, the evaluators recommended that it could be more sustainably integrated into community development programs, for example in health promotion and prevention programs focused on nutrition and health in schools and crèches, in developing more long term construction projects for building community infrastructure, and in programs to educate, train, and develop employable skills in community members (Jinabhai, Sigwaza, et al. 1993). All these initiatives can help lead to increased education, employment, and thus potentially increased stimulation of the economy and income generation. According to Altman, Hart, and Jacobs, "Ideally, poverty and food insecurity would be addressed by expanding employment opportunities thereby enhancing household incomes (Altman, Hart and Jacobs 2009). In this way, these initiatives again provide a viable option for alleviating food insecurity. By stimulating the economy and contributing to employment and income security, this program could possibly help alleviate poverty and thus the concomitant food insecurity and chronic malnutrition in the community (Jinabhai, et al. 1993) (Altman, Hart and Jacobs 2009).

Another health promotion program that is partly related to nutrition that The Valley Trust helped support was the use of the "educare sector" in the area (Jinabhai and Khumalo 1994). This involves the use of local crèches and pre-schools to help intervene in child health as early as possible. Nutrition promotion and education plays a significant role in the curricula for training educare workers; nutrition was included in the curriculum for all five of the training centers reviewed in the report. In the assessment of educare facilities in The Valley Trust, it was found that in terms of child nutrition status, stunting was fairly common, with as many as 20% of children exhibiting this symptom (Jinabhai and

Khumalo 1994). Community Health Workers (CHWs) also played a role in the educare centers, specifically by providing weighing and measurement services, as well as distributing food stamps through the FFWSS program mentioned previously (Jinabhai and Khumalo 1994). In addition, through the National Nutritional and Social Development Programme and the FFWSS, 93% of creches received food aid and many were able to provide the children with meals and snacks (Jinabhai and Khumalo 1994). This was cited as one of the strengths of the FFWSS, along with its uses in helping to maintain school gardens and contribute to teacher salaries (Jinabhai and Khumalo 1994). Additional recommendations for the program from respondents in the report were a greater provision of stamps from the CHWs, as well as addendum to the list of goods available for purchase with the stamps, such as meat, maas, and cleaning supplies (Jinabhai and Khumalo 1994).

Changes and Restructuring at The Valley Trust

In 1994, South Africa finally realized the dream of democratic government after years of oppressive minority rule. According to a newsletter, in 1996 The Valley Trust went through a restructuring period and refocused its mission to adjust to this changing environment in South Africa (The Valley Trust 1996). Though at this time, The Valley Trust was finally able to have approval from the South African government, it did mean that funding was more difficult to obtain for organizations such as The Trust with funding from international organizations instead going through government channels such as the Reconstruction and Development Programme (The Valley Trust 2004) (The Valley Trust 1996). The Valley Trust took this as an opportunity to rebuild however, and focus more on training and development of the communities it works with (The Valley Trust 1996). In the early 1970s, accommodations had been built at TVT to house “African men and women who are in a position to act as community leaders, to spend a short while at The Valley Trust in order to gain experience of its methods of health promotion. They could then apply, or adapt, these to the conditions pertaining in the localities and communities from whence they came” (McCarthy 1977). With the establishment of these training courses The Valley Trust hoped to be able to spread its mission and its well-practiced health promotion techniques throughout Southern Africa, to any communities that were willing and able to come and learn. In the early 1990’s, The Valley Trust refocused on this aspect of their organization. With this restructuring came a new mission statement as well: “The mission of The Valley Trust is to offer quality education and training and associated resources in fields relating to comprehensive primary health care and sustainable development, to strengthen the capacity of individuals and communities to improve their own quality of life” (The Valley Trust 1996). Nutrition education was still an area of focus

for the organization, but it seems that continual focus was being made on handing over programs to the control of communities and community members, and taking a role in their training to provide them with the skills to implement these programs themselves (The Valley Trust 1996). A conference center was set up, and was initially going to provide training through various courses run by The Valley Trust. It was found there was not much demand among people and organizations for a set schedule of courses run by The Valley Trust, however. Instead over the years, it evolved into a resource for other organizations such as other NGOs, academic and governmental institutions, and a venue for conferences and events (The Valley Trust 2008).

Since the mid-1990s and for the next decade, "... a new approach to community development had begun to emerge in the organization... This new approach involved placing greater emphasis on processes that enabled people to initiate their own developmental processes, and less on services that are usually associated with traditional approaches to community development" (The Valley Trust 2008). The Valley Trust began to move away from just providing goods, funding, or services to a community, and rather began to refocus on working with, training, and building up communities and their members so that they could be the agents of their own developmental processes. This has been reflected in the implementation of many of The Valley Trust's programs, though they still focus on many of the same problematic issues that communities in the area face.

The Valley Trust Through the 2000's

According to a 2004 annual report, The Valley Trust still ran some programs that included nutrition and food security as part of their components at this time (The Valley Trust 2004). The community health worker program was established in 1982 (The Valley Trust 2008), and since 1999 through the time of the report The Valley Trust was in partnership with the KwaZulu-Natal Progressive Primary Health Care organization, and was involved in the training, mentorship, and supervision of Community Health Workers in the region (The Valley Trust 2004). This initiative reinforces The Valley Trust's focus on primary health care and health promotion, of which nutrition is a big part. In 2004 The Trust also had its Integrated Technology Department whose purpose was, "To facilitate the exchange and development of ideas and practices which enable rural people to manage plants, land and water using ethical technologies in ways that are meaningful to their lives" (The Valley Trust 2004). Among others, this department included teams put in place to assist households in making use of their land to promote food security and livelihoods (The Valley Trust 2004). In the Whole School Development department, The Trust included a program for Health Promoting Schools which involved nutrition

education workshops for educators to bring nutrition education to their classrooms, the use of vegetable gardens in the schools to encourage children to bring these techniques back to their homes, and the continual improvement of nutrition education manuals to reflect the most current nutrition information and changes (The Valley Trust 2004). According to an article by Labadarios et al, “Deficits in macronutrient intake and poor dietary diversity could conceivably be addressed by means of strategies not dependent on income, such as the promotion of subsistence farming and efforts to increase awareness of the nutrient content of indigenous fruits and vegetables” (Labadarios et al. 2011). This Whole School Development program at The Valley Trust served as an example of this by encouraging farming and gardening in communities through the children, while simultaneously educating them about nutritious eating. It is thus possible that these initiatives did play a role in increasing dietary diversity and macronutrient intake in the populations they served. These educational programs also possibly addressed the issue of food use, one of the three dimensions of food security outlined in one recent report (Du Toit 2011). In this way, even after the changes in the organization brought about by the end of Apartheid and the advent of democracy, nutrition in conjunction with primary health care still played a role in The Valley Trust.

In 2005, the Integrated Technology Department was still in effect, with departmental activities including: discussions and workshops dealing with nutrition in relation to HIV and AIDS; the sharing of orange-fleshed sweet potatoes among the community; preservation of local biodiversity through gardening practices at individual households of traditional health practitioners; and activities which strive to increase income opportunities for community members, specifically surrounding organic farming and selling of vegetables (The Valley Trust 2005). Farming and gardening as a source of income has been facilitated by The Valley Trust through subsidizing fencing and through greater access to water (The Valley Trust 2005). Again, these programs by The Valley Trust not only potentially provide greater access to inputs to help with agricultural productivity, they also may help provide another source of income for the person involved, thus increasing their income security as well as their food security (Baiphethi and Jacobs 2009) (Altman, Hart and Jacobs 2009).

Also in 2005, schools continue to introduce nutrition education in their curricula using The Valley Trust Nutrition Education Manual, and furthermore, at the time of the Annual Report, 70% of schools had gardens, parents were also learning the benefits of starting gardens at home, and children were increasingly learning about the benefits of fruits and vegetables in the diet (The Valley Trust 2005). In 2006 The Valley Trust continued to carry through with many of these programs. The community based health program in conjunction with the community health workers continued to educate

community members about a variety of health topics, including nutrition (The Valley Trust 2006). The Whole School Development department also continued to be in effect at this time; this department continued to include its nutrition education program, implemented in 41 primary schools, 75% of which started their own gardens, encouraging children to start them at home, and using the produce to help feed the children in school (The Valley Trust 2006). The Integrated Technology Department still included programs related to food security, integrated land use, traditional plant resources management, and water and sanitation (The Valley Trust 2006). Through this department The Valley Trust continues to share techniques and ideas related to organic food production and sustainable land use, such as terracing to prevent erosion, growth of grasses and sun hemp to improve soil fertility, and the use of liquid manure to improve crops (The Valley Trust 2006). Finally, in conjunction with HIV and AIDS treatment and education, The Valley Trust integrated nutrition and antiretroviral therapy. They recognized the important interplay between good nutritional status and effective HIV/AIDS treatment and as such incorporated nutrition education, support, and care into their activities (The Valley Trust 2006).

In 2007, the Community Based Health and Whole School Development programs continue to play a role. Nutrition education workshops are still conducted in schools, targeting not only educators, but also vendors and parents (The Valley Trust 2007). The Integrated Technology Department also continued to work with community members and farmers to enhance food security and proper land use, with farmers gaining confidence and communities taking on more of the control and responsibilities over activities previously held by the NGO (The Valley Trust 2007). The Nutrition Education Program as part of the Whole School Development Department is one of the oldest interventions at The Valley Trust. The goals of educating communities about proper nutrition and gardening techniques has been around for much of the organization's history and was still alive in 2008. TVT recognized the role of schools in educating the community about nutrition and food gardening and made use of them to spread food gardening techniques to learners' own homes (The Valley Trust 2008). In addition, in the 2011 annual report it was mentioned that The Social Plant Use program at The Valley Trust helped inform KZN Premier's One-Home-One-Garden Flagship Programme (The Valley Trust 2011).

Recent Valley Trust Programs and Activities

The Social Plant Use Programme which was part of the Integrated Technology Department, was renamed the Integrated and Sustainable Livelihoods Programme in 2010/beginning of 2011 and remains under that name today. The vision of the program is “Communities in which men and women work together in sustainable practices that promote health by enhancing capacity for food, nutrition and economic security based on indigenous knowledge and practices” (The Valley Trust 2011). Thus this program works directly towards improving food security in the community, largely through agricultural practices. The program takes place in the community area of Makhabeleni a few hours’ drive from The Valley Trust. Stores are not easily accessible in this area and the community is very dependent on gardening and farming to get their food (Pers. Obsv. 8:00 am - 1:30 pm. 2012). The Valley Trust helped bring skills for harvesting as well as land and water use to the community and the gardens can produce enough food to feed families with a surplus for selling as well (Pers. Obsv. 8:00 am - 1:30 pm. 2012). Not only does the program work on land use, food security, and traditional plant use management, it has also begun integrating self-help groups and leadership development to provide a more complete approach to development and the previous work of the Social Plant Use Programme (The Valley Trust 2011). Workshops were also held in the community under the program to teach community members about proper nutrition and nutritious food preparation techniques. Follow-up workshops showed that participants were making use of these healthier techniques, such as using less oil and cooking foods to conserve nutrients (The Valley Trust 2011). Water availability and lack of fencing were additional areas of need cited for this program and community members in 2011 (The Valley Trust 2011). Even in its current program, The Valley Trust continues to make use of relevant interventions to address food security. The program strives to increase awareness and education surrounding healthy eating and nutritious vegetables which is one way of addressing poor dietary diversity and macronutrient intake (Labadarios et al. 2011). In addition, the program also combines this nutrition education with behavioral change initiatives through the workshops and demonstrations, which is cited as an important strategy for improving nutritional status (Faber, Witten and Drimie 2011).

A focus of the ISL program that is of particular interest in terms of food security, however, is the formation of vegetable gardens at the homes and schools of community members (The Valley Trust 2012). This use of agricultural methods to promote food security is apparent in much of the literature. According to Labadarios et al, subsistence farming is an example of a “sustainable, non-income-dependent” measure, which is important to have in order to address the issue in the context of many South African populations. Furthermore, Faber, Witten, and Drimie assert that, “it would be prudent for

government and agricultural networks concerned with food and environmental sustainability to invest in and support appropriate and optimal home food production strategies” (Faber, Witten and Drimie 2011). Through this program and encouraging vegetable gardens, The Valley Trust is acting towards this recommendation. The use of vegetable gardens can also address the different dimensions of food security (Du Toit 2011). Growing food long term at home may make it so that sufficient quantities of nutritious food are more consistently available as well as more easily accessible to families (Du Toit 2011). This food security intervention method was focused on in the interviews collected from people in the community and the staff member at The Valley Trust.

The Valley Trust staff member mentioned the evolution of types of gardens that The Trust has promoted in the community over the years:

... over the years the Valley Trust has been assisting the community to be able to work on their small size gardens, and then on the community gardens, and then we have gone back to the household because the community gardens were neglected because the people were not going there to work... people were fighting over somebody stealing somebody’s food you know stuff like that. I would go there at 10 to work on my own plots and I would find that my plots are not producing as much as yours so I would end up harvesting from yours... but then we refocused on the household... because we see that the community gardens were no longer worked... We ended up working strictly at the household level ... in that way we knew that people are sleeping having eaten something healthy and then saving some money and that money can be reused for buying a school uniform for a child or something better (Informant 1. Adult male 2012).

It seemed that though The Valley Trust tried to implement community gardens in the past, these did not seem to stick in many communities. This is interesting in that it provides a contrast to the findings seen in the article on communal gardening by Hale et al. Hale et al found that, “Gardeners see their dedication to garden activities as part of a social agreement that builds cohesion within the group and further strengthens a common aesthetic judgment of the garden” (Hale et al. 2011). In this South African population however, communal gardens seemed to almost do the opposite; rather than cohesion, in the groups that The Valley Trust worked with they seemed to breed fighting and animosity, at least in the long run. It could be speculated that the differences in findings were a result of the vastly different settings for the gardens: one in an urban, western environment, the other in a rural, South African one. Though as seen previously, community gardens did function well for a time, perhaps more long-term beneficial effects would be seen if they were implemented in a different environment. In an effort to

continually adapt to results they see from their work, however, The Trust has more recently refocused on encouraging home and personal gardens once again.

Current and Future Status of The Valley Trust and Its Programs

Due to financial difficulties, including the withdrawal of several large funders since the end of Apartheid, The Valley Trust had to go through further intensive restructuring in the 2011/2012 period (The Valley Trust 2012). They had to let go of almost half of their original staff members and in turn refocus their health promotion initiatives back towards the Valley of a Thousand Hills area, rather than branching out into other regions of South Africa as they had done in the past. Because of these difficulties, programs such as the Integrated and Sustainable Livelihoods program are being phased out of Makhabeleni, as the organization continues to draw back and refocus on the immediate surrounding communities (Informant 1. Adult male 2012). The Valley Trust faces many obstacles in the present related to financial issues. The informant at the organization lamented that the Department of Agriculture is lacking in the amount of help they provide the organization. This also partly leads to a paucity of skilled staff members available to do work in the community, “There are skilled members who are at home, who went to universities...and are sitting at home because what they’re looking for is a job... they deserve to have some sort of [salary] and we don’t have money to give them, and the government who’s got a bunch of money, but they don’t employ them in fact” (Informant 1. Adult male 2012). So it seems that some of the biggest challenges at The Valley Trust currently, stem mainly from lack of funding. This has led to the aforementioned phasing out of some programs and is also part of the reason why the organization isn’t as active as in previous years in terms of promoting home gardening.

The status of the demonstration gardens and training that The Valley Trust had made use of in earlier years was asked after. The Valley Trust informant said:

“We have a demonstration garden at the top there... it’s currently not in shape now because we lost quite a lot of our staff so we’re looking to rework it in January where we’ll clear the land again and we’ll start plotting winter crops and that is where we do the training, [teaching] people to learn how to use the agricultural methods, using methods of liquid manure, instead of chemicals, just the indigenous methods of gardening, because people will save a lot of money and it’s much healthier, than using the inorganic [methods]... At the moment because we’re trying to reshape and rework the VT after we lost so many staff, we’re planning to do that in January, and before March we’re planning to restart the training (Informant 1. Adult male 2012).

Thus, though The Valley Trust has been going through a difficult restructuring period, they still have plans for the future to continue with their goals of promoting the health of communities and encouraging healthy living through the use of sustainable gardening and land use techniques. The organization has been receiving calls and requests for this training as well (Informant 1. Adult male 2012), and with it The Valley Trust can teach people valuable food production skills and, through example, motivate them to bring these lessons back to their organizations and communities (Informant 1. Adult male 2012). In this way The Valley Trust is hoping to bring back their methods of nutrition education and behavioral change through motivation that are so important when using agriculture as an intervention to address food security (Faber, Witten and Drimie 2011). It is possible that by spreading these techniques The Valley Trust can still play a role in ensuring the food security status of people who come into contact with these gardening methods.

Home-Based Agriculture and Gardening in the Community

It seems that gardening is still present in communities in the area of the Valley of a Thousand Hills as well. When asked about the current status of these activities the staff member said, “They are continuing going on in different areas of the Thousand Hills... even if I drive around I still see women working in their homes and I still see people working... it just became a norm to them to wake up and go to their small garden and work and you can see their harvesting, and you can see in their supplies... it means that that man is still continuing working” (Informant 1. Adult male 2012). This informant does see instances of gardening still being prevalent in the community; it seems that at least among some motivated individuals the techniques taught by The Valley Trust in the past have stuck and have continued to benefit the community members in the present. In addition, the informant feels that, given that employment is so scarce and that many people “end up going home and doing nothing”, that “the best thing that they can do is start working in their land so they have something to eat regularly rather than taking [their] last money and going to buy food” (Informant 1. Adult male 2012). Furthermore, the requests that The Valley Trust has been receiving regarding training has said to the informant that there is a demand for these services and these techniques in the community and the communities surrounding the Valley, especially among NGOs working in rural communities (Informant 1. Adult male 2012).

This evidence of the use of gardening in the area is partly corroborated by the literature, though there is evidence to the contrary as well. For example, Baipheti and Jacobs estimate that, “... four million people engage in smallholder agriculture for various reasons, and the majority of these people are in the

former homeland areas” (Baiphethi and Jacobs 2009). This is a fairly large number, however, some evidence also shows that in the homelands farming practices are decreasing, which may partly be because of a lack of government support or subsidies (Baiphethi and Jacobs 2009). It also seems that there is a movement towards buying food rather than growing it, “...rural poor households (including many smallholder farmers) are increasingly net consumers rather than net producers of foods, and they tend to purchase their food from the expanding network of supermarkets in nearby rural towns and cities. These expanding trends in the sources of local food purchases in communal villages have been observed in Limpopo, Eastern Cape and KwaZulu-Natal in the post-1994 era” (Baiphethi and Jacobs 2009). Therefore, it does seem that more people are turning to stores and supermarkets to get their food rather than producing it themselves. It has also been shown that though using agriculture as a “main source of food” has decreased, there has been an increase in farming and gardening as an “extra source of food” (Baiphethi and Jacobs 2009). This shows that though perhaps people are moving away from home food production practices, they still make use of them to supplement their diet, and they can still thus provide some benefit in terms of nutrition and food security.

To get a sense of the current use of gardening in a few communities and its effect on food security, some community members from rural areas in the Valley of a Thousand Hills were interviewed in a group setting. In the community of Mabetlana two women who had their own personal home gardens discussed their experience with gardening. They started community gardening in 1989, but switched to individual household gardens when they encountered problems with other people harvesting their crops (Informant 2 and 3. Adult females 2012). This reiterated what Informant 1 has said about why The Valley Trust began focusing on personal rather than communal gardens – due to fighting and stealing of others’ crops. It also provides further contrast to the benefits of communal gardening outlined by Hale et al (Hale et al. 2011). According to these gardeners, they produce a variety of vegetables throughout the year, from beans and maize in the summer, to carrots, spinach, and cabbage in the winter (Informant 2 and 3. Adult females 2012). Prior to 1989, the women only used to plant in a big field, only during the summer months. The women said they, “Didn’t know they could produce vegetables during that time, they thought that only white people could produce them because they were buying them from town” (Informant 2 and 3. Adult females 2012). The women were not making full use of the land and growing seasons available to them, because they were not aware that it was possible for them to do so. This mirrors some of the difficulties from the past in terms of agriculture outlined in articles from The Valley Trust archives. The Pollock article mentions that white farmers often had better access to resources and technologies than did black, and this gardener’s testimony may

provide some evidence towards that fact (Pollock 1974). With the help of The Valley Trust and their initiatives however, the women said that many changes occurred, and they soon picked up many useful skills related to food production (Informant 2 and 3. Adult females 2012). They mentioned many of the techniques that The Valley Trust had developed over the years, such as how to plant on sloping ground and use grass to avoid soil erosion, how to make compost, and the importance of keeping livestock for manure and other purposes (Informant 2 and 3. Adult females 2012). In this way, this provides a real world example of The Valley Trust providing access to important agricultural inputs (such as appropriate technology and farming techniques) in order to increase the productivity of these farmers (Baiphethi and Jacobs 2009). Learning these skills from The Valley Trust has helped these women excel in food production and gardening practices which has in turn changed their lives for the better in some ways.

When asked if the women had ever had difficulty getting enough food for their families, they replied that it did happen sometimes due to lack of grants coming in and lack of jobs as well. However, they said of having their own garden, “Even now their children are not getting hungry. They just get food from the garden. It is helping the whole family now” (Informant 2 and 3. Adult females 2012). Though they also said that they supplement the food in the garden with staples such as maize, flour, and sugar from the store, it seems that often there is food available in the house because of the presence of the garden. Furthermore, the quality of the food on hand is good, as it is fresh produce, like onion and cabbage that they keep on hand (Informant 2 and 3. Adult females 2012). In this way The Valley Trust and gardening has helped increased the women’s access to and the availability of nutritious food, two important dimensions of food security (Du Toit 2011). Even though The Valley Trust no longer works directly with these women and their community, they said that, “... even without TVT they are doing well and eating fresh vegetables etc.” (Informant 2 and 3. Adult females 2012). Thus the work of The Valley Trust has not made the community dependent on them, but has rather taught them valuable skills that have allowed and enabled these individuals to support themselves without constant need of outside assistance. With the return of The Valley Trust to the area, they are hoping to gain even more skills in food production and gardening, as well as resources, such as the ability to plant fruit trees, and stronger fencing structures (Informant 2 and 3. Adult females 2012).

Another group of women gardeners in the community of Ngcolosi that The Valley Trust used to serve shared similar stories and information about their experience with food gardening. These women also produced a variety of food in their gardens, while supplementing these vegetables with staples from the shop, such as maize and rice (Informant 4 5 and 6. Adult females 2012). These women started gardening in 2007 through the work of The Valley Trust (Informant 4 5 and 6. Adult females 2012). They

previously had community gardens but these women switched to individual gardens because other farmers' livestock were eating their crops, and in addition the women got older and water was scarce, so it became easier to plant gardens at home (Informant 4 5 and 6. Adult females 2012). The women believe that the gardens have played an important role in their health and nutrition status, as they no longer have to go to the shop to get most of their food, but rather are able to harvest fresh food from their gardens (Informant 4 5 and 6. Adult females 2012). However, the fact that both these groups of women do purchase some food and staples from the store reflects the findings that rural households are increasingly becoming consumers of food and making use of supermarkets and other retailers (Baiphethi and Jacobs 2009). The women are not consistently able to sell their food for a profit however, as they lack a market place or other venue to sell perishable produce (Informant 4 5 and 6. Adult females 2012). Furthermore, in terms of impacting food security status, the women said that, "It is difficult to have food sometimes, especially when there is drought, but can buy food from store if have the money" (Informant 4 5 and 6. Adult females 2012). Unfortunately, this presents one of the issues of gardening as a means of increasing food security, as the production of food from gardens is so dependent on the weather and the natural resources available. Water availability is a problem in many areas of South Africa and this can decrease a person's ability to grow their own food. Indeed, water scarcity and risky crop production as a result of climate are two factors that can lead to food insecurity (Faber, Witten and Drimie 2011). The testimony from this group of women illustrates that to be true in this case. In addition, though food is available at the market, rising food prices and income insecurity could prevent this from being a viable option for some families and also result in food insecurity (Faber, Witten and Drimie 2011).

Despite these difficulties that every gardener faces, the women at Ngcolosi still feel that they have gained valuable skills from The Valley Trust in methods of food production (Informant 4 5 and 6. Adult females 2012). They have been taught how to compost and use organic fertilization methods, for example, have been provided with fencing to help make food production possible, and have been taught other skills to improve their gardening ability (Informant 4 5 and 6. Adult females 2012). Through the work of The Valley Trust the women have gained greater access to these valuable agricultural inputs, which has in turn helped increase their productivity, possibly aiding in greater food security (Baiphethi and Jacobs 2009). Furthermore, the women don't need to ask their husbands for money to buy food, as they are able to produce much of it themselves (Informant 4 5 and 6. Adult females 2012). This data aligns with information from the Baiphethi article, "... producing some food for the household increases its food security, as well as releasing cash for other household uses. It reduces the over-reliance on cash

to access food and thus the demand for cash in feeding the household” (Baiphethi and Jacobs 2009). This backs up the testimony from this individual; since she no longer has to use the money her husband makes for food, that income can be used in other ways to support the family.

The women are motivated to produce their own food partly because they say, “Growing is our life” (Informant 4 5 and 6. Adult females 2012). Their mothers and grandmothers were involved in gardening and food production, and they recognize it as a way to get vegetables as well. For them, their knowledge of food production and their passion for gardening drives them to continue with the practice (Informant 4 5 and 6. Adult females 2012). Reflections of this passion were also present from interviewees in the Hale et al article. According to the article, “... many gardeners talk about how good the soil or nurturing plants or being in nature makes them feel, before relating these connections to others values such as reciprocity, healthy food, learning, and sharing” (Hale et al. 2011). It is possible that in addition to the healthy food and knowledge that they gain from gardening, that these women also experience these other benefits from the practice, and perhaps this contributes to their passion.

They also mention, however, the difficulty in passing their passion and this practice on to their children and the next generation who may not be as motivated to take part. Home gardening can be a useful and resourceful way to help increase a family’s food security and nutritional status, but it may prove difficult to be able to motivate people in some communities to take up this often labor intensive practice. However, according to the literature, subsistence farming is actually done by more young people than older people (Altman, Hart and Jacobs 2009). Though a higher proportion of older people than younger people are involved in farming for extra food, there are less older people than younger in the population, so the absolute numbers are lower. In fact, “Approximately 1.9 million subsistence farmers are aged 15 – 29 years” (Altman, Hart and Jacobs 2009). Thus it is still possible that younger generations are receptive to home-based food production and can take on these practices to help increase the food security and nutritional statuses of their families. Furthermore, the large role of women in farming and gardening repeatedly comes up in the literature, and it is suggested that interventions geared towards them could help increase the effectiveness of these practices (Altman, Hart and Jacobs 2009). A 2003 study also found that, “... food gardens are popular among African women’s groups in South Africa” (Baiphethi and Jacobs 2009). These statistics were corroborated by the fact that the interviews conducted with gardeners were primarily from women, and furthermore the population served by the ISLP at Makhabeleni appeared to be primarily women as well (Pers. Obsv. 8:00 am - 1:30 pm. 2012). It seems that this is an important population to focus on in terms of agriculture interventions, and The Valley Trust has addressed women’s roles in their past and current programs.

An informal interview with a group of community care givers, helped give a sense of the status of poor nutrition in one rural community and what is being done by the government, through these health workers to address that. According to the CCGs, they do see some instances in their community where people are affected by different diseases and their nutrition statuses aren't good (CCGs. 2012). They also see instances of diseases where people need to eat nutrient dense diets in order to boost their immune systems (CCGs. 2012). The learner speculates that it is possible that these diseases that the women refer to may include HIV/AIDS and TB. These have also been noted in the literature as being closely connected to nutrition and food insecurity (Altman, Hart and Jacobs 2009) (Du Toit 2011), and it has been previously noted the important role nutrition plays in the progression of these diseases. The women said that having a garden can help increase the nutrients and vitamins that these people get however, and they work with the Department of Health to encourage people to have gardens; an example of this they mentioned is through the One Home One Garden program (CCGs. 2012). This method of subsistence farming as a way of addressing dietary diversity and adequate nutrient intake has also been recommended in the literature (Labadarios et al. 2011). Furthermore Labadarios et al also suggest that nutrition education play a role in these interventions and the use of CCGs in the community help to do this (Labadarios et al. 2011). In terms of impacting the rising prevalence of chronic diseases related to diet and lifestyle, the CCGs mentioned that the Department of Health teaches them to tell people healthy ways of preparing food, for example by boiling and not using a lot of oil in their meals (CCGs. 2012). They also encourage people to go to the clinics and continue with the treatment they have received there, though this health intervention method does not help prevent the diseases before they start. As it is the CCGs job to educate people about proper nutrition and healthy diet, they may serve an important role in affecting the rising prevalence of chronic diseases in South Africa, as well as the still present issue of malnutrition.

Though this data from various community members speaks to the possible usefulness and success of home-based agriculture in addressing nutrition and food security, the literature also cautions that there are still many challenges in this health promotion intervention. This intervention may not be possible for some populations for a variety of reasons. Much of the population, for example, lacks land on which to start a garden, especially in urban areas and thus must rely on the purchase of food from commercial markets (Labadarios et al. 2011). Furthermore, just because an individual or fame engages in home-based food production, this does not mean they are necessarily more food secure. They may use this method as an additional source of income, as recreation, or alternatively this practice may indicate severe poverty and a strategy for survival (Altman, Hart and Jacobs 2009). In addition, there are

many barriers possible to home food production. The practice is very dependent on climate and environment and this may lead to risky crop production, inadequate water supply for irrigation and water scarcity (Faber, Witten and Drimie 2011). Availability of fencing is also a big issue for farmers, and though The Valley Trust does offer fencing, not all families may be able to afford it or access it (Faber, Witten and Drimie 2011). Families and individuals also may not stick with subsistence farming because of poor yields or if they find a more efficient or convenient source of income, and in fact “There is considerable movement into and out of agriculture” in the population (Altman, Hart and Jacobs 2009) (Baiphethi and Jacobs 2009). Finally, as mentioned by Baiphethi and Jacobs, there is a trend towards buying food from commercial sources and relying on varied sources of income (Baiphethi and Jacobs 2009). However, there is still a sizeable portion of the population that uses farming as an extra source of food, and if the proper resources and inputs are made accessible to these individuals, greater home food production can occur and contribute to the food security and health of these individuals (Baiphethi and Jacobs 2009).

Conclusions

Established in 1953, The Valley Trust has had a long history of health promotion in The Valley of a Thousand Hills. In the beginning much of the organization’s work revolved around improving the nutrition status and food security of the communities it served in the area. Initiatives in the past have included nutrition education units, demonstration gardens and kitchens, the promotion of poultry farming, and the establishment of fish dams for water conservation and additional protein intake. Throughout the years the NGO was also been involved in nutrition education and gardening promotion programs in schools and in relation to HIV and AIDS education. They also implemented a Food for Work Stamp program that experienced some success in improving food security. More recently, the Integrated and Sustainable Livelihoods Programme addresses food security and nutrition in a more holistic and sustainable manner, by also teaching leadership skills and promoting self-help groups in addition to providing nutrition education, gardening techniques, and agricultural materials such as fencing.

Over the years and since the end of Apartheid, the organization has experienced difficulties surrounding the funding and financial stability of the organization. Especially recently The Valley Trust has had to go through major restructuring, involving the phasing out of certain programs and letting go of a large portion of their staff. Their current food security-related development program, the ISLP is

soon going to complete its work in the community of Makhabeleni, due to a necessity to condense its efforts and refocus on the nearby communities in The Valley of a Thousand Hills.

Though The Valley Trust is currently experiencing difficulties, they have always been a strong proponent of home-based agriculture as a means of developing community and individual nutrition, food security, and health in general. To study the effects of past interventions relating to gardening, five women gardeners and a group of community care givers were interviewed. From these interviews it was seen that gardening does play an important role in these women's lives. It has helped increase their access to and the availability of nutritious food for them and their families, and the CCGs still promote gardening in the community to help address poor nutrition. Though this was a very small sample taken from just a few rural communities in The Valley of a Thousand Hills, they hint that home-based agriculture and the work of The Valley Trust has benefited these individuals in several ways, and the practice could possibly still have a role in addressing food security and nutrition status, among motivated individuals in other similar communities in South Africa.

Furthermore, despite the current difficulties The Valley Trust is encountering, it still has plans in the future to continue to spread its message of sustainable development through empowerment and addressing health problems at their root causes. They have gotten requests for training in their health promotion methods from outside organizations, such as other NGOs working in deep rural areas. Next year they plan on reinstating their demonstration garden and again working to spread their health promotion techniques to other communities. In this way, the work of The Valley Trust could still provide benefits in terms of food security, nutrition, health, and development to other parts of the population.

Recommendations for Further Study

This review of the history of food-security related programs at The Valley Trust, though it goes into some depth, is still largely incomplete. Further study could be conducted on the history of The Trust through a more complete review of the archives and other relevant literature written on the organization. Furthermore, greater social analysis could be conducted by carrying out more interviews with the other staff members at The Valley Trust. This study also focused mainly on programs relating to food security and nutrition, but The Valley Trust is involved in a wider variety of health promotion and development initiatives and these could use further study and review as well.

Another opportunity for further study could involve a deeper analysis of the effects of The Valley Trust's various initiatives. This was touched upon in the interviews with community gardeners, but this provided only a brief foray into community members' experiences of working with The Valley

Trust. Getting a larger quantity and wider range of interviews from individuals who have been involved in or benefited from Valley Trust programs may provide a more complete picture of the impact the organization has in the community.

The Valley Trust's proximity to the Health Center and their work with community care givers also provides further opportunity for potentially informative data collection. Additional and more in-depth interviews with CCGs and health center staff could provide deeper insight into the prevalence of such issues as food security, nutritional status, malnutrition, nutrition-related chronic diseases, and nutrition education in the areas and communities in The Valley of a Thousand Hills.

Finally, there are many aspects related to nutrition and food security that have only been briefly touched upon in this project and that could benefit from further study. More could be done in looking how The Valley Trust addresses the role of women in food security and production; what specific interventions are geared towards women and how have they had an effect on the population? Food security also has a well-known link with HIV/AIDS; what is the prevalence of HIV/AIDS-related nutrition issues and what is being done in The Valley of a Thousand Hills and by The Valley Trust to address this? Finally, though the interview with the CCGs briefly touched upon this, more could be done to look at the role of chronic diseases related to over nutrition in the community, individuals' experiences of this, how nutrition education plays a role, and what The Valley Trust may be doing to address this public health issue.

Limitations

The scope of this learnership is limited in many ways. Since the sources of data for the history of The Valley Trust were collected from its own archives and website there is most likely a bias towards the positive effects and successes of the NGO. Furthermore, the archives contained a large amount of information, and the three week-long time period hindered the ability of the learner to go into a great level of detail of all the programs and history of The Valley Trust. There were also instances when possibly relevant material and information was missing from the archives, and this too contributed to the incompleteness of the history.

In terms of primary data, there was also a bias in this information, as only women who were currently, actively involved in gardening took part as participants. This skewed the data towards the benefits and positive effects of this practice as a form of food insecurity prevention, though triangulation with the secondary sources that were found did support this as an intervention as well. Also the fact that members of The Valley Trust set up the interviews, and already had a good

relationship with the subjects possibly skewed the data towards providing a more positive picture of the effects of the organization. The learner was not able to interview a sufficient amount of individuals to get data offering different points of view or experiences.

In addition, the primary data collected during the learnership was somewhat lacking. This may have been due to a variety of causes. One big contributor is the fact that, as discussed, The Valley Trust is currently going through difficulties related to funding and finances, and they have recently had to cut back on staff and programs. For this reason the one program that was related to nutrition and food security was in the process of being phased out and was also located quite far from the learnership site, thus the learner was not able to engage with the program and its beneficiaries as fully as expected. Also because of funding issues and perhaps the time of year as well, few other programs related to the topic of the learnership were in progress, again resulting in greatly reduced opportunities for engagement with organizational activities, potential interviewees, and other sources of primary data. It was difficult to engage with the community and community members as well, as the learner was prohibited from going into the community without a guide, and even so many of the communities were only accessible via taxi or other vehicle. The recent staff cuts and the fact that at the time of the learnership there were various conferences and workshops occurring at other locations which required the staff members' time and attention, also contributed to the lack of data. Due to these difficulties and engagements, it was challenging for the relatively few staff members at The Valley Trust to find time to act as guides for the learner, discuss organizational activities and programs with the learner, or set up and provide transportation to interviews, focus groups, site visits, or other contacts within the community. These obstacles were largely beyond the control of both the learner and the organization, but rather provide a glimpse into the difficulties that non-profit organizations may face in a constantly changing economic and social environment.

Another limitation to the quality of the learnership was the limited engagement with an advisor for the majority of the time. The advisor was met with once prior to the beginning of the learnership to discuss initial ideas, but unfortunately due to various professional responsibilities s/he was not able to meet with the learner again after that. The learner was informed that the advisor would be unavailable to meet for the remainder of the learnership when she first attempted to set up a meeting part way through the project. After attempting to set up a final meeting after the end of the data-gathering period she failed to hear back from the advisor and a second meeting was not arranged. Because of these circumstances the learner was not able to receive much guidance, feedback, or advice during the majority of the project for either research or writing purposes.

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CCGs., Adult females., interview by Jeannine Garcia. 1:45 pm Translated by Mfanafuthi Ngcobo. KwaZulu-Natal, (November 20, 2012).
 Informant 1. Adult male, Valley Trust staff member., interview by Jeannine Garcia. 12:00 pm Valley of a Thousand Hills, KwaZulu-Natal, (November 14, 2012).
 Informant 2 and 3. Adult females, gardeners., interview by Jeannine Garcia. 11:00 am Translated by Mfanafuthi Ngcobo. Mabetlana, KwaZulu-Natal, (November 15, 2012).
 Informant 4 5 and 6. Adult females, gardeners., interview by Jeannine Garcia. 10:40 am Translated by Mfanafuthi Ngcobo. Ngcolosi, KwaZulu-Natal, (November 19, 2012).
Pers Comm. Adult female, Dietician. 9:30am. King George V Hospital, Durban, (October 24, 2012).
 "Pers. Obsv. 8:00 am - 1:30 pm." Makhabeleni, November 7, 2012.

Ethical Clearance Forms

ILP Application for Review of Research with Human Subjects Fall Semester 2010 School for International Training - Study Abroad South Africa: Community Health, Program

Student to complete all questions, and anticipate probable issues and interactions before actual research begins. Submit this document and related documents to your Academic Director(s). Should you need to interview subjects that differ from the profile(s) below, you will need to provide details to the Academic Directors for further approval. Please make inserts in **BOLD**, and email to john.mcgladdery@sit.edu

ILP Details

1. Student's Name: Jeannine Garcia
2. Student Phone and/or E-mail: jeannine@brandeis.edu 083-700-1357
3. Title of ILP: The Valley Trust: An historical and current review of food security and nutrition-related programs at a health promotion NGO in the Valley of a Thousand Hills, South Africa
4. ILP Advisor Name, Title, and Contact Telephone:
 Dr. Irwin Friedman, Public Health Physician
 +27(0)31 765-1494
 Cell: 083-6018235
irwin@seedtrust.ne

Human Subjects Review

1. Brief description of procedures relating to human subjects' participation:

- a. Indicate proposed number of persons that may be participating per set
 - Experts- 1 (Valley Trust staff member)
 - Academics- 0
 - Minors- 0
 - Other – community care givers, community members participating in gardening and nutrition intervention programs.

 - a. Provide details of any cooperative institution? What is it, who is the contact, and how was their permission obtained?
 - The Valley Trust – Health promotion NGO in the Valley of a Thousand Hills
 - TVT Director: S'bongiseni Vilakazi.
 - Met in person during excursion to TVT, sent a follow up e-mail after decision to conduct ISP there, and had a second meeting in person to sort out details.

 - b. What will participants be asked to do, or what information will be gathered? (Append copies of interview guides, instructions, survey instruments, etc. where applicable).
 - Participants will be asked to provide information and knowledge about various nutrition interventions especially gardening and home-based agriculture, their experience of them, experience of food security, food choices and nutrition knowledge in general. People were asked to participate in formal or informal interviews, as individuals or a group.

 - c. Reciprocity – what is being given back to each participant?
 - The majority of participants received an expression of appreciation or affirmation of the information and assistance they provided the learner, such as a “Thank you very much for taking the time to answer my questions.” They were also given the opportunity to ask the interviewer questions as well. Finally, staff members who were particularly instrumental in making the learnership a possibility and facilitating the research received a thank you card and a candy bar.
2. Protection of human subjects. Before completing this section, you must read and agree to comply with the SIT Study Abroad Statement of Ethics. Even if no research is being done it is incumbent on any person volunteering or learning to ensure no harm might be done.
- a. Have you read and do you agree to comply with the World Learning Ethics Statement noted above?
 - YES**

 - b. Identify and indicate whether any participants risk any stress or harm by participating in this Learnership Project? If there is even a slight possibility, should this research go ahead? Why? How will these issues be addressed? What safeguards will minimize the risks? (*Even if you do not anticipate any risks, explain why*)
 - Little if any harm or stress will be risked by participants taking part in questioning by the learner. The topic of food and nutrition is fairly low-stress for most people. Furthermore no minors or vulnerable people will be interviewed. It is possible that some community members living in relatively less advantaged rural communities will be interviewed about their food choices, accessibility, and security. Some people may be made uncomfortable in answering questions about the food they eat, if they feel that it is a sign of their poverty or that they will be judged in some way for their choices. Despite this, the study should still continue because the learner will make it very clear that the questions are being asked simply to facilitate learning and not in order to pass

judgment. Furthermore, all of the participants were fully informed as to what they were being questioned on, and they were made aware that they were welcome to opt out of answering any questions they didn't feel comfortable with, at any point during the interview or discussion, without any repercussions. The learner will also assessed before and during the interview whether the participant was able to and comfortable enough with answering questions and proceeded appropriately. It is also possible that staff members at the NGO may have felt uncomfortable about answering questions about past programs and what did or did not work. Once again however, every participant was fully informed about the nature of the questions being asked, and was given the opt-out option at any point. Additionally, upon observation at the time of the interviews it didn't not seem that any participants were in significant discomfort. Furthermore, it is felt that more can be gained by the NGO from an in-depth exploration of past and current programs, than can be lost through any discomfort that may be felt in answering questions.

- c. Who might you need written consent from?

Written consent was acquired from most interviewees. The interviewer did make sure that all parties understood the scope of the learnership and the nature of the questions being asked, however some situations encountered did not allow for every participant to give written consent, including large group interviews and instances when the participant could not sign their name.

- d. Indicate whether any participants are minors or not likely to understand consequences of participation? If there are, how will they be protected, and who will ensure their rights are protected?

No participants were minors and it is unlikely that any of the participants did not understand the consequences of participation. Again, the nature of the study and the questions being asked were explained to the participants in their language and fully informed consent was acquired. No participants expressed discomfort in answering questions, but they were allowed to opt-out without any repercussions. Furthermore, all of the responses and data collected have been kept confidential and anonymous.

- e. Will you ask questions of any persons who may appear unable to negotiate freely? How will you protect them from feeling coerced?

No persons who were unable to negotiate freely were asked questions. All participants were fully informed of the nature of the study and the questions being asked in their native language. They were given the option to refrain from answering any questions or from opting out of the interview or discussion at any point during the process. The participants were informed that there would be no repercussions or consequences from doing this. The participants were ensured any level of privacy, confidentiality or anonymity that they require. They were informed that if they did not want to be included at the end of the interview, that their data would be omitted with no consequences.

3. Human Subject Protection Essay:

Describe who you will be interviewing and how you will ensure that the following will be protected. (Essay format – 1000 to 1500 words depending on situations)

Even while aiming to learn as much from this study project as possible, the learner has put the interests of all human subjects first and foremost. Throughout the learnership the policy of do no harm

remained at the forefront and was strictly enforced. Participants in the research included NGO and community members and community care givers.

a. Privacy

Each participant's personal and identifying information has been kept private. This information includes a real or fake name, age, gender, role in the community, or other such identifying data. All subjects were informed that they could change their minds about whether they want their information included at any time during the process. Participants were also informed that they are free to share only whatever information they are comfortable with, and were free to rescind, add, or revise what they have said in any way up until publishing occurs, free from any consequences. The interviewer also made sure that subjects were comfortable with the time and location where discussions took place, in order to ensure that subjects felt their privacy was protected when answering questions. Finally, they were informed that they were free to exit the study at any point during the process without any repercussions.

b. Anonymity

Unless otherwise requested by the participants, the only identifying information included with the data was general age, gender and short descriptor of position. The data and personal information was such that no one will be able to associate the information provided with the community member. For example, if someone in the community or at the NGO were to say something negative or disapproving about another member or the NGO as a whole, this information will not be discussed in a setting where or in such a way that the participant could be identified by other community or NGO members. However, the subject was also informed that even given the interviewer's best intentions anonymity may not be able to be ensured in all cases.

c. Confidentiality

All information retrieved from participants will be kept confidential at all times if the participant wishes to remain unidentified. In order to ensure confidentiality, all names and identifying information are kept separate from the data. Data taken on paper will be promptly entered into the computer and separated in this manner. Following data entry, the hard copies with all identifying information were confiscated. Furthermore, this digital information is password protected with a password known only to the learner. Data collected during the learnership will not be used for any purposes in the future.

d. Organizational Integrity

The integrity of the organization at which the learnership is taking place will be respected at all times. If any information or data is gathered on the organization that could possibly be viewed as negative or critical, or in some way put the organization's reputation or integrity at risk, it will be omitted. Information that could put an individual at the organization at risk for losing their job or position in some way will also be left out. The data will be left out in such a way that it is not obvious to the reader what has been omitted. This critical data will be included in a separate, confidential file strictly for grading purposes, and will be destroyed directly afterwards.

4. Participant observation situations; Declaration:

When participating in an organization or community I will:

- a. Undertake a bilateral negotiation with the group I am participating with.

- b. Work with gatekeepers to assist in that negotiation and draw up a contract with that gatekeeper, defining roles and conditions of access.
- c. Work with the gatekeeper to communicate that contract with the group.
- d. Refrain from criticizing and intervening unless invited by the gatekeeper in consultation with the group, and even then with due tact and caution.

By signing below I certify that all of the above information is true and correct to the best of my knowledge, and that I agree to fully comply with all of the program's ethical guidelines as noted above and as presented in the program and/or discussed elsewhere in program materials. I further acknowledge that I will not engage in ILP activities until such a time that both my ILP proposal as well as my Human Subjects Participation application are successful and I have been notified by my Academic Director(s) to this effect.

Student's name (signature)

____ Jeannine Garcia _____
Student's name (printed)

Date: ____11/28/12____

Consent Form for Adult Respondents in English

I can read English. (If not, but can read Zulu or Afrikaans, please supply). If participant cannot read, the onus is on the researcher to ensure that the quality of consent is nonetheless without reproach.

I have read the information about this learnership project and had it explained to me, and I fully understand what it says. I understand that this learnership is trying to find out about:

- The experience of and effects of nutrition interventions and food security
- The experience of and effects of food security – related programs of The Valley Trust
- History of TVT and food security-related programs (interview with staff member)

I understand that my participation is voluntary and that I have a right to withdraw my consent to participate at any time without penalty.

I understand and am willing for you to ask me questions about:

- The accessibility, affordability, and quality of food available to me and to the community
- The role of gardens in the community and in my personal life
- My knowledge and experience of nutrition and nutrition education and interventions
- My knowledge and experience of issues surrounding food security, affordability, quality, and availability in my personal life and community

I **do/ do not** require that my **identity (and name)** be kept secret (***delete inapplicable***). I understand that, if requested, my name will not be written on any questionnaire and that no one will be able to link my name to the answers I give. If requested, my individual privacy will be maintained in all published and written data resulting from this learnership project.

I **do/ do not** (*delete inapplicable*), give permission for a **photograph** of me to be used in the write-up of this learnership or for future publication. I understand that the learner will not use or provide any photographs for commercial purposes or publication without my permission.

I **do/ do not** (*delete inapplicable*), give permission for a **voice recording** to be taken of me during the interview to facilitate the capture of direct quotes to be used in the write-up of this learnership or for future publication. I understand that the learner will not use or provide any quotes, recordings or transcripts of interviews for commercial purposes or publication without my permission. I understand that the recordings and full transcripts of the interview will not be made available to anyone but the learner.

I understand that I will receive **no gift** or direct benefit for participating in the learnership.

I confirm that the learner has given me the address of the nearest School for International Training Study Abroad Office should I wish to go there for information. (Cowey Park, Cowey Road, Durban).

I know that if I have any questions or complaints about this learnership that I can contact anonymously, if I wish, the Director/s of the SIT South Africa Community Health Program (John McGladdery 084 6834982).

I agree to participate in this learnership project.

Signatures held by SIT SFH Durban

Signature (participant)_____Date:_____

Signature (learner)_____Date: _____