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Agricultural Transformation and Livelihood Struggles in South Africa's Western Cape

By Michaela Palchick

Honors Thesis - Submitted May 5, 2008

Geography Department

Macalester College

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Abstract:

South Africa's post-Apartheid land reform programs redistribute previously white-owned farmland to a small percentage of blacks, and provide these new farmers with agricultural extension services that promote large-scale agriculture. Due to the national legacy of racial oppression and international pressure for neo-liberal development policies, there is scant infrastructural support for small-scale agriculture. Despite the government's vision, most black farmers produce for local consumption because competing internationally is unfavorable, especially since the removal of agricultural subsidies in 1994. The shortcomings of the agricultural transformation program are apparent in the village of Genadendal, a former mission reserved for coloureds and a historical agricultural community in the Western Cape. The author's field-based research conducted over the past two years evidences that while valuable resources such as land, water, and farming knowledge are locally available, gardeners cannot put them to full use. Genadendal's rich resources are unique in South Africa, its problems, however, stem from the national legacy of Apartheid. The case study of Genandendal demonstrates that a national agricultural transformation program for an elite class of black commercial farmers does not address the real problem. South Africa's land reform programs fall short of dismantling the inherited structures of economic and power inequality, while creating a façade of racial equality in land ownership. This paper shares the specific challenges faced by South African small-scale farmers, argues that these problems can be overcome with a new government vision for smallscale agriculture, and, in a broader sense, enumerates the advantages of small-scale farming over the industrial model.

Acknowledgements:

This is the most important section of the thesis, because without the help of the following people it never would have been completed. I can only begin to express my gratitude to Anna Joorst and Recardo Carlson. Thank you both for your patient guidance, your tireless work, your thoughtful insight, your visions of improved futures and your inspirational commitment to your community as you work to get there. Thank you also to Genadendal for your hospitality, your trust, your stories, your teachings and your friendship (and of course, vie danke for all of that tea). I especially wish to thank Uncle Paul and Auntie Yolande Adendolf for welcoming me into their home and their hearts. I would also like to thank the Department of Agriculture for allowing me to shadow employees on extension visits and to sit in on meetings, the University of Cape Town and its Enivironmental and Geographical Sciences Department for hosting me, (most specifically Professors Jane Battersby and Maano Ramutsindela) the Keck Foundation for making it possible for me to return to South Africa in order to continue with my research, Brenda Piatz and for all of her logistical support, Birgit Muehlenhaus for making the Genadendal map and the Social Science Institutional Review Board for assessing my research proposal. I am very grateful to my advisory committee – Professors William Moseley and Helen Hazen in geography and Professor Peter Rachleff from the history department - for working with me on this thesis. A very big thanks goes to Bill Moseley for sharing his research with me, for guiding my own (and reading over it so many times), for his persistent encouragement, and for all that he has taught me over the past four years, because I know that these lessons will inform my perspective for many years to come. Finally, I want to thank Claudia Leung and Miriam Larson for their endless patience and support throughout this process, Sarah Claassen for her kind wisdoms and strong communal spirit, Aaron-Johnson Ortiz for making the connections and helping me find my words, and my family - Andra Palchick, Bryce Palchick and Arlene Sanderson - for their confidence in me and for all that they have given that has gotten me to where I am today.

Table of Contents

Chapter 1: Introduction and Historical Background	4
Objective	8
Chapter 2: Methodology	11
Theoretical Framework	11
Literature Review	11
Fieldwork	12
Chapter 3: Context in the Literature: Themes in Political Ecology	15
Environmental Narratives: Marginalization and Degradation	15
The Myth of the Industrial Farm	21
Sustainable Agriculture and Local Knowledges – The Counter-narrative	27
Scales of Power and Development Actors	29
Chapter 4: Background on South Africa's Programs for Agricultural	
Transformation and Land Reform	31
Failures of Market-based Land Reform and the Willing Seller/Willing Buyer	
Model	36
Lack of Funding	36
Bureaucratic Structures and Misdirected Management	38
Selection and Prioritization of Beneficiaries	40
Chapter 5: Agriculture in Genadendal	42
Historical Background	42
Resources	43
Farming Systems	45
Declining Agricultural Productivity	55
Chapter 6: Constraints to Agricultural Success in Genadendal	57
Impact of Land Reform, Regional Politics, Current projects	61
The Way Forward	67
Chapter 7: Conclusion and Policy Recommendations	73
Challenges for Land Reform in Improving Redistribution	76
Addressing the Land Market	76
Post Transfer Support	77
Developments	80
References	84
Appendix I: Questions for Genadendal participants	88
Appendix II: Agricultural Survey	89
	1

Chapter 1: Introduction and Historical Background

As the Apartheid era drew to a close, and the African National Congress (ANC) prepared to assume political control, South Africa was energized in anticipation of its rebirth as a nation that would guarantee a better way of life for all its citizens. The promise of increased political access and new economic opportunities, not only excited Apartheid's recently liberated victims, but also drew the attention of global capitalists. In its re-emergence as a competitive player on the world market, South Africa became an ideal partner for transnational moneyed interests. Moral imperative no longer prevented exchange with this country whose endowment of natural resources and massive commodity producing capabilities had long proved hard to resist (W. Moseley, pers. comm., January 19, 2006).

With the dropping of international sanctions came a rapid deregulation of the South African economy. Recognizing the economic potential suddenly made available through South Africa's re-emergence within the sector of international trade, multilateral lending institutions, such as the World Bank, saw that a complete restructuring of the national economy in addition to the destabilization of existing racialized power structures would be against the interests of capital accumulation (Greenberg, 2004a, 2005b). For example, in conjunction with a 1993 \$850 million loan, the IMF issued a report on the South African economy, "that stressed an outward-looking macro-economic strategy with growth trickling down to the poor through employment growth and increased government revenue" (Peet, 2002, p. 130). The ANC's incorporation of these neoliberal policies directly diverged from the democratic socialism put forth in the 1955 Freedom Charter. Instead of promoting the Charter's goal of sweeping away the legacy of colonial

conquest, the new government welcomed the neo-colonial global market into South African politics (Peet, 2002). Voicing concerns that dramatic capital redistribution would compromise the success of the commercial farming sector, with possibly detrimental consequences for the Gross Domestic Product, South Africa's business elite teamed up with the Bretton Woods Institutions in an effort to shift the goals of agricultural transformation from a pursuit of the radical restructuring of systems of oppression to the reaffirmation of the profit imperative (Levine and Weiner, 1997).

As a result of the market-led reform strategy promoted by the World Bank and the 1993 Interim Constitution's protection of private property rights, land reform and agricultural transformation has ultimately been constructed as a process of de-racializing land ownership without destabilizing the existing economic power structures or challenging the elite class's practice of exploiting the labor and resources of the historically oppressed to whom they owe their positions of privilege (Hunter, 2004). The ongoing market-driven reform strategy promotes a corporate farm model. In granting a few large tracts of land to business-oriented farmers, and providing extension services based on an industrial agriculture model, the program privileges agricultural production for large domestic and international markets—thereby encouraging unsustainable practices, such as chemical intensive farming and mono-cropping.

This paper will speak to both the land redistribution component of land reform and to the more general government program for national transformation in the agricultural sector, which is set forth in AgriBEE's Broad-Based Black Economic Empowerment Framework for Agriculture (DoA, 2004). AgriBEE follows the goals of the Black Economic Empowerment (BEE)

initiative, but applies them specifically to the agricultural sector. Both AgriBEE, and the redistribution component of land reform, favor large-scale agriculture over small-hold farming. Despite corporate agriculture's growing infamy for worker exploitation, environmental degradation, and corporate irresponsibility, South Africa continues to promote this failing system as a national model. Not even the international demand for Fair Trade and organic commodities has motivated government officials to rethink the program goals. To the large majority of black small-scale farmers, the government's agricultural transformation program is little more than lip service to a utopian vision of post-Apartheid land redistribution.

Moving from the macro political-economic environment, to its implications on the local level, it is evident that the idealized vision for the "New South Africa" has not been realized for the majority of the nation's citizens. Over a decade has now passed since independence, and Apartheid's legacy endures in terms of great economic and social inequality. The failings of the agricultural program have been made apparent in the village of Genadendal, a former mission station reserved for coloureds² and a historical agricultural community in South Africa's Western Cape. Genadendal presents unique research opportunities to investigate the viability of small-scale farming within the context of South Africa's deregulated economy. Established as a Moravian mission station in 1737, and subsequently incorporated within the 1909 Mission Stations and Communal Reserves Act³, Genadendal residents escaped the forced removals of the

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¹ South Africa has a Gini coefficient of .578. The Gini co-efficient is a ration of income distribution measured on a scale between zero and one with zero corresponding to perfect equality and one corresponding to perfect inequality (UNDP, 2008).

² In the South African context, the term 'coloured' does not have the same negative connotations that it does in the US context and refers to a mixed race group.

³ Which protected mission stations from the black relocation programs of Apartheid.

Group Areas Act⁴ in the 1950s and 1960s. As a result, unlike most South Africans, Genadendal farmers have access to fertile land, clean water and experiential knowledge. Due to structural inequalities that persist as legacies of Apartheid, Genandedal farmers struggle to make a living even though they have access to these valuable agricultural resources.

A case study of Genandendal, therefore, demonstrates that a national agricultural transformation program that is based on a large scale, commercial model and focuses mainly on replacing a small population of white commercial farmers with a minimal percentage of black farmers is insufficient. Instead, if land reform and agricultural transformation are to fulfill their stated goals of post-Apartheid redistribution of wealth and democratized access to resources, they must also support small-hold farming. Many agriculturalists, like those living in Genadendal, produce for their households or for local markets. They understand that with the removal of agricultural subsidies after 1994, competing on the world market is unfeasible. Due to the national legacy of racial oppression, however, there is no significant financial and infrastructural support for small-scale agricultural production for local markets.

Objectives

This study aims to assess the effectiveness of South Africa's agricultural transformation as a decolonizing strategy, considering its stated goal of serving the needs of South Africans who continue to suffer from Apartheid's oppressive legacy. In recognizing the national government's

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⁴ Apartheid's forceful relocation programs.

successive failures to tackle structural inequalities throughout various post-1994 approaches to land reform and agricultural transformation, it is important to examine the program's evolution from its Marxist origins to its current neo-liberal agenda and the interests motivating those changes (Moseley, 2006). The institutional privileging of industrial agriculture over small-hold farming is one outcome of the combined influences of capitalism and colonial discourse, the impacts of which, this thesis will investigate. In addition to addressing the shortcomings of AgriBEE and of national land reform, this study will consider the South African government's recent moves, despite the continuing pressures of market deregulation and globalization, to reevaluate its methods and reincorporate its historically disadvantaged citizens within current agricultural transformation projects.

In order to establish whether or not the Department of Land Affairs and the Department of Agriculture are currently pursuing an effective agricultural reform scheme, this study concentrated on Genadendal, a rural town in South Africa's Western Cape. Genadendal is a significant case study in terms of its recent intergenerational movement away from what many people remember as being a fairly self-sufficient agricultural community, to its current state characterized by unemployment and emigration. Interviews with local farmers and gardeners focused on determining what percentage of food consumed in Genadendal has been produced there, how the situation has changed over time, and if it has changed, for what reasons. Research was conducted in the interest of learning what specific constraints Genadendal agriculturalists face, as an attempt to better understand what agricultural challenges might exist at the national level. The objective of this study is to investigate whether or not small-scale farming is a more environmentally sustainable and economically viable model for South African agricultural

transformation than the nation's current emphasis on free trade, neo-liberalism and large-scale commercial agriculture.

Ultimately this project is interested in the potential ability of the South African government to reaffirm its commitment to the systematic eradication of institutionalized oppression and the possible role for agricultural transformation within this process. As it stands, the commercial-oriented, market driven, South African land reform and agricultural transformation programs have effectively failed to address the needs of disadvantaged farmers. The experience of small farmers in Genadendal, whose love of and dedication to agricultural production is frustrated by the structural inequalities left in the wake of Apartheid can inform national agricultural transformation. The land redistribution program, in particular, can benefit from their input that suggests access to land alone does not in itself guarantee economic empowerment. This paper is predicated upon the belief that the South African government must question the influences of international capital and colonial discourse that argue for large-scale commercial agricultural over other models and extend access to historically appropriated resources to all farmers, no matter their monetary contribution to the corporate economy.

Chapter 2: Methodology

Theoretical Framework

The research has been informed by political ecology as it is concerned with the implications of the global political economy on national anti-colonial (specifically anti-Apartheid) movements and local livelihood struggles. It engages with political ecology themes such as colonial legacies and environmental narratives, the dominant capitalist discourse favoring the industrial farm over small-hold agriculture, unequal distributions of power from the global scale to the local, the roles and interests of different development actors and the subjectivity of the researcher. When conducting and analyzing my fieldwork I looked for evidence of discourse influencing the perceptions or experiences of interviewees. The political ecology framework also guided my research methods so that I sought to interview people whose voices had not been previously recorded, in addition to community leaders and de facto representatives. My analysis is much more complex thanks to the insights of frequently marginalized people – elderly gardeners, women gardeners, young gardeners, ex-gardeners, etc.

Literature Review

I have consulted a variety of written and multimedia sources on South Africa, land reform, agriculture, anti-colonial movements, and gender dynamics. Academic works ranged from policy oriented dissertations, peer-reviewed journal articles, topical essay compilations (written from both national and international perspectives) to political ecology theory. White papers,

historical texts, government publications, political speech transcripts and policy descriptions, have also been considered. Likewise government program websites, agricultural instruction packets, and development agency brochures have been helpful as a way to learn about small farming and land reform from a variety of perspectives.

Fieldwork

Between January 2006 and August 2007, I spent approximately six weeks in Genadendal, (ten months in South Africa as a whole) over the course of two trips. My fieldwork was pursued in both formal and informal contexts and included attending meetings of the South African Department of Agriculture, shadowing agricultural civil servants, conducting semi-structured interviews with approximately eighty small-scale agriculturalists, as well as literally working in the fields with Genadendal gardeners.

Before conducting this research I underwent the Social Science Human Subjects Review to ensure that my project would not in any way jeopardize participants. Respecting this commitment, I will not identify any of the research participants by name in this thesis. At the beginning of each interview, the project was explained, participants were informed that their anonymity would be protected, the voluntary nature of their participation was emphasized, and they were asked if they had any questions. After any questions regarding the project were answered, participants were asked for their consent to be interviewed. Because not all interviewees were literate consent was verbal as opposed to written.

To identify study participants I employed four different sampling strategies: criterion sampling, chain sampling, maximum variation sampling, and opportunistic sampling (Patton, 1990). A Department of Agriculture extension agent who lives in Genadendal and a Genadendal gardener whom I hired as a guide and translator directed the criterion sampling by identifying Genadendal agriculturalists and facilitating interviews with them. Interviewees also helped to identify other agriculturalists, which led to chain sampling. I used maximum variation sampling by interviewing all available agriculturalists, no matter their gender, age, or success. In this way I was able to document the unique agricultural and livelihood strategies that have developed through various experiences and then to identify patterns that cut across variations. Finally, opportunistic sampling allowed me to be flexible during the research process so that I could follow new leads and themes and take advantage of unexpected insights.

This research is based on methodological triangulation. While the majority of information was obtained through qualitative data from interviews, it was supported and complicated by the quantitative documentation of the number of gardeners, their average plot size and their average yield. This quantitative data was then demonstrated visually by taking GPS coordinates of central gardens and overlaying them on a satellite image of the Genadendal valley, using Geographic Information Systems (GIS) software.

Questions asked attempted to gain an understanding of how small agriculturalists earn a living, what challenges they face, what their coping strategies are, and what types of support could help them to meet their livelihood needs (see appendix for complete list of questions). Interviews were semi-structured as I had questions in mind that I wanted to cover, but most became

conversational and directed by the interviewee. It was during these informal dialogues that I gained the most insight into the nuances of local politics and power dynamics and their impacts on gardening livelihoods. Because I relied heavily upon my Department of Agriculture and organic gardener contacts to arrange and often translate for the interviews, I understand that the research may reflect their interests. Likewise, as a student from the United States studying environmental and geographical sciences, and specifically interested in sustainable agriculture, I recognize my biases favoring smallholder farming and have worked to the best of my ability to minimize their impact on my research. Furthermore, I understand that my position as an outsider working within a small community may have affected the way in which interviewees presented themselves or answered questions (Rocheleaue, Thomas-Slayter, and Wangari, 1996).

Chapter 3: Context in the Literature: Themes in Political Ecology

Before discussing the situation of agriculture in Genadendal and the ways in which it may inform

the national land reform program, I first outline the themes in political ecology that relate to

agriculture transformation in South Africa. I will then provide a general background of the land

reform program itself.

Environmental Narratives: Marginalization and Degradation

The current land reform program is falling short of addressing the injustices of Apartheid

because it is being influenced by some of the same discourses that legitimized the colonial

project in the first place. Throughout the continent environmental narratives of African land

mismanagement and degradation continue to circulate. These stories have been told and retold

to give reason for the forced removal of African communities from conservation areas, or for

white intervention into traditional land use practices. Political ecologists in particular have been

engaged in identifying environmental narratives and working to give voice to counter-narratives

that elucidate the details of environmental change (Basset and Zuéli, 2000; Blaikie and

Brookfield, 1987; Fairhead and Leach, 1995; Gray and Moseley, 2005; Leach and Mearns, 1996;

Walker, 2006). One of these colonial legacies that informs policy in South Africa describes

small-hold Black South Africans as irresponsible farmers who over-cultivate and mismanage

their land, and ultimately cause its degradation (Bundy, 1979). The following maps (on pages

16-19), on the other hand, depict a scenario of rural environmental racism. During Apartheid,

-15-

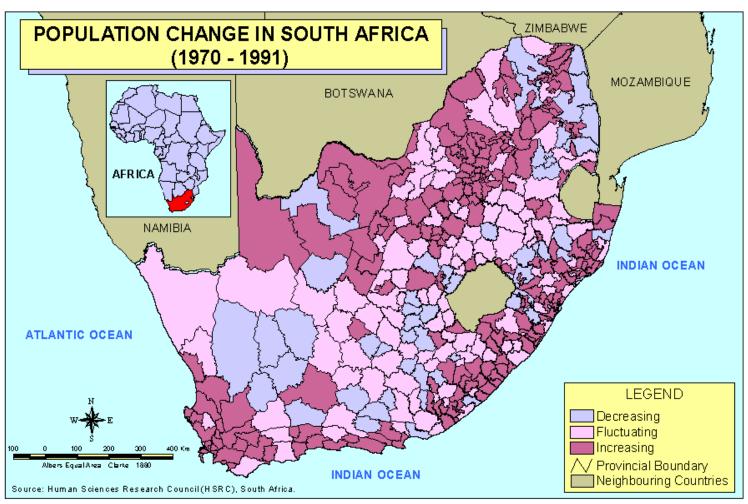
large numbers of Black South Africans were forced onto disproportionately small land areas, causing these "homelands" to be overpopulated and over-farmed. Figure 3.1 depicts the locations of what are referred to as the Native reserves, homelands or Bantusans, created by the Apartheid regime to house black South Africans displaced by the segregating land policies of the 1950s. From 1960 to 1980 over 3.5 million black South Africans were forcibly removed and relocated in these reserves. As illustrated in Figure 3.2, the population density in the reserves averaged 151 people per square kilometer, compared to 19 people per square kilometer in the rest of the country (Thwala, 2002).

In South Africa land degradation was more a result of the discriminatory land policies of the Apartheid regime than of mismanagement by the farmers. As shown in Figure 3.3, which maps the various soil types throughout the country, the reserves are located upon weakly developed erodible soils and rock. While the soils have enough nutrients and water to support agriculture, the hilly terrain and intense periodic rain events in combination with highly concentrated populations eventually led to high rates of erosion characterized by the dramatic "dungaas" carved into the hillside (DEAT, 1999; Moseley, pers. comm., 2006). One can only begin to get an idea of the resulting devastation from Figure 3.4. In this land cover map, the light pink areas representing "degraded lands" exist mostly within the reserves and in the same areas as the weak soils in Figure 3.3 (DEAT, 1999).



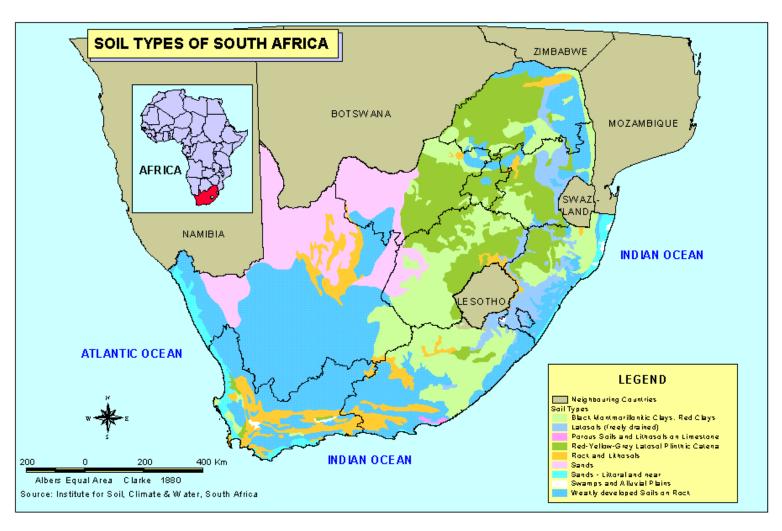
Source: http://www.lib.utexas.edu/maps/africa/south_african_homelands.gif

Figure 3.2: Population Change



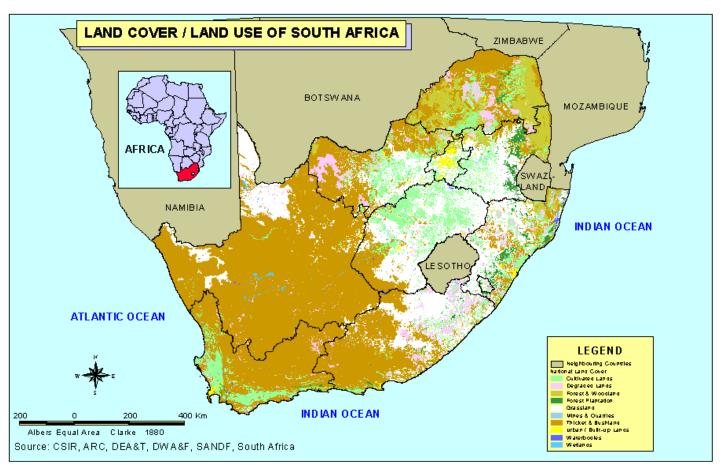
Source: Department of Environmental Affairs and Tourism, 1999

Figure 3.3: Soil Types.



Source: Department of Environmental Affairs and Tourism, 1999.

Figure 3.4: Land Cover.



Source: Department of Environmental Affairs and Tourism, 1999

Rather than recognizing the history of sustainable agriculture and household food production before Apartheid relocation policies, the national land reform program is failing to provide support to facilitate the reestablishment of small-hold agriculture. The movement away from the originally Marxist leaning proposals for land reform can be attributed to the environmental narrative that disparages traditional farming practices as well as international neo-liberal pressures to establish an export-oriented industrial farming economy based on principles of the Green Revolution (Cousins, 1994, 2007). Apartheid land policies not only caused environmental destruction, but they brought about food insecurity because the marginal land was not able to produce enough food to adequately feed the reserves' populations. In turn, these policies gave rise to the migrant labor system without which Apartheid could not have functioned (Bundy, 1979). It is the responsibility, therefore, of the new government to reverse the dualistic practices of large commercial farms extracting labor from agriculture communities and leaving them unable to feed themselves. This will only be possible if there is increased recognition of the benefits of small-hold agriculture and local food production.

The Myth of the Industrial Farm

In addition to ignoring the problem of black pauperization, Land Reform and Agricultural Development (LRAD), the government land redistribution program, assumes the model of the large, export-oriented farm to be commercially viable at a time when many traditional white farms are failing due to climate change, limited water availability,

problems of land degradation, and competition on the global market (Moseley, 2006 and 2007). Increasingly, people have begun to recognize land reform's goal of creating a black counterpart to the traditional large-scale white South African farmer as misdirected (Cousins, 1994, 2007). One senior government official recently admitted to growing evidence that, "small farming operations are more sustainable, viable and contribute better than large scale commercial farming to the economy." He went on to acknowledge that "large-scale agriculture has proved to be a failure with respect to equity" and that smaller farms have proven to be more profitable and better equipped to manage in the present day economy (quoted in Hunter, 2004, p. 134).

Despite prolific documentation of industrial agriculture's unsustainability, the myth of its superior productivity and efficiency has persisted, because its costs are externalized and its benefits are short-term. What is more, it usually privileges people with access to start-up capital or political connections over more marginalized populations – for example, there are few women in the industry. Commercial agriculture normally takes the form of mono-cropping, which came into practice with grain production in the United States towards the end of the nineteenth century (Madeley, 2002). Even after the Irish Potato Famine and the Dust Bowl demonstrated the massive starvation and widespread displacement of people that can result from the intensive cultivation of a single crop, mono-culture farming still continues. The difference is that now it is maintained by the products of the Green Revolution – chemical pesticides and fertilizers. Petroleum-based fertilizers allow for successive field cultivation year after year without fallow periods or crop rotation. Oftentimes these fertilizers are over-applied so that run off from the fields

causes eutrophication of nearby water bodies. Similarly, lack of crop diversity can result in increased predation by pests, fungal infection and weed invasion, so that commercial farmers become dependent on chemical pesticides. These pesticides can be harmful to health of the producer, the consumer and the surrounding ecosystems. What is more, pests have become resistant to many pesticides, requiring heavier and more frequent applications or the constant development of new products, resulting in what some have called a "biological arms race" (Madeley, 2002).

South Africa, a relatively dry country except on the eastern coats, should also learn from the example of the southwestern United States where heavy irrigation has resulted in the salinization of soil. The over reliance on chemical inputs is counterproductive in the long term as it breaks down the organic structure of the soil and undermines natural (less expensive) pest control systems (Madeley, 2002). Field desalinization is a prohibitively expensive process, demonstrating that decisions as to what crops should be grown where should be governed more by the cultural and environmental conditions and less by the demands of the global market. The propagation of fewer and fewer types of crops, also leads to declining genetic diversity and the displacement of family seed businesses by large-agro corporations (Mather, 2002). In places like India, where there has been immense suffering due to inappropriate agricultural reform, mass mobilization against Green Revolution technology is bringing attention to the stance that mono-cropping is unsustainable, and that chemical intensive, high-tech 'modern agriculture' is failing to achieve food security in developing countries. Due to the huge environmental costs, production levels are stagnating, or even declining, in industrial agriculture worldwide

(Madeley, 2002). Overall, high-tech agriculture has taken decisions out of the hands of farmers, thus decreasing autonomy and confidence and further disempowering the most marginalized populations (e.g., women). The negative impacts of industrial agriculture, therefore, extend beyond the undermining of economic and environmental health. They also affect social wellbeing. This undervaluing of traditional land management practices has been repeatedly invoked throughout the history of Western imperialism and is one of many surviving environmental narratives (Basset and Zuéli, 2000, Fairhead, 1995; Leach and Mears, 1996; Richards, 1985; Swift, 1996).

The acceptance of the large-scale farming model as the most efficient and profitable agricultural strategy is a manifestation of the colonial project justifying land and resource appropriation by perpetuating the discourse of black agriculture as inefficient and backwards (Bundy, 1979; Moseley, 2007). In *The Rise and Fall of the South African Peasantry*, Colin Bundy describes the historical context within which the notion developed that black South African rural poverty stems from a failure to adapt the "tribal economy" to "modern" agricultural trade and practice due to "the lack of technical knowledge, the inhibiting forces of social custom, a consequent hostility to innovation and a low level of responsivity to market incentives" (Bundy, 1979, p. 3). Bundy explains that, in fact, before Apartheid became national policy, black South African farmers were so successful that they were out-competing white South African farmers, who at the same time were being threatened with rising land prices and imported produce. Additionally, at the turn of the century the concurrent rise of large-scale commercial agriculture, the gold-mining industry, as well as the related growth in transport, construction and other

service industries, led to demands for cheap labor. Since black communities were producing enough food to eat and agricultural surplus to meet cash needs, their labor was not forthcoming at the wages offered. Frustrated white farmers and mine-owners lobbied for extra-economic pressures to break down the black peasantry's independence. The national government answered with the 1913 Natives Land Act. In Bundy's words, this legislation,

sought to create and maintain a peasantry whose productive capacity had been so inhibited, whose access to markets rendered so unfavourable, that its members must have recourse to labour for white employers even at the very low wage levels prevailing...While the underdevelopment of the peasant sector ensured a vast reservoir of migrant labour, at the same time the ability of the Reserve inhabitants to supply a portion of their subsistence through peasant production conferred direct benefits upon urban employers – particularly the mines – in the form of low wages, cheap housing, the avoidance of welfare considerations for workers' dependants, and a brake on the growth of the urban proletariat (1979, p. 243).

These discriminatory policies were reinforced with a massive program of subsidies, grants, tax relief, credit facilities, rail discounts, training and infrastructure to aid in the commercialization of white agriculture (Bundy, 1979). It is no wonder, therefore, that as a whole white commercial agriculture has enjoyed more economic success over the past century than black small-hold farming. Disappointment in the slow pace of reform since

1994 can in part be attributed to the fact that even though black government officials have replaced Apartheid politicians, colonial and neo-colonial discourses continue to inform policy. These discourses, realized through policy, having meaningful and concrete impacts on people's lived experiences. In the case of agricultural transformation the assumption that the commercial agriculture model is most productive has meant that small-hold farmers continue to be ignored and disadvantaged by government programs.

Both the contemporary example of mechanized, chemical intensive, mono-cropped agriculture proving to be ecologically and economically unsustainable, and the history of successful small-scale black agriculture, suggest that agricultural reform rethink its current approach, especially within the context of market deregulation and environmental degradation. For example, according to an ICG report, "[I]n 1860, over 83% of the nearly half million hectares of white owned land was farmed by black tenants. Black owned and tenant farms proved as efficient as large-scale settler farms that utilized hired labor. Black farmers adopted new agricultural technologies, entered new industries and successfully competed with large-scale settler farming" (Hunter, 2004, p. 135). This recognition is crucial in deconstructing the myth of black Africans as agriculturally inept because it draws attention to areas such as the former homelands where highly degraded and unproductive land can be attributed to the 1913 Native Land Act's crowding of the majority of South Africa's population onto 13% of its land. Compounding issues of over-crowding and lack of access to resources such as irrigation water, the viability of black commercial agriculture was limited due to the state's preferential treatment of white farmers through subsidies, low-interest loans and marketing arrangements (Mather, 2002). Thus an understanding of the potential of small-holder agriculture to address rural (and therefore urban) poverty through increased food security, employment creation, and economic self sufficiency, demands an increased commitment to land reform as it was originally intended by the leaders of the liberation struggle.

Sustainable Agriculture and Local Knowledges – the counter-narrative.

Land reform must recognize the resilience of small-scale localized agriculture if it is to fulfill its stated goals of democratization and the redistribution of wealth. Hindsight over several decades demonstrates the Green Revolution's misguidance. Increasingly, it is recognized that traditional farming systems, based on mixed cropping, soil and water conservation and biological pest management are not only more accessible to everyone, they are generally more productive, especially in marginal environments (Madeley, 2002). Political ecologists have written about the importance of local knowledges, especially in regards to land management practices (Heasley, 2005; Moseley and Laris, 2008; Richards, 1985). They have called for the cessation of privileging western science over experientially developed sciences and for the vocalization of counter-narratives, which call attention to the insights of the latter.

A focus on local food production can increase food security, shorten commodity chains, and allow farmers to avoid being vulnerable on the international market. Moving away from plantation style farming can also improve labor conditions for farm workers. Many South African agriculturalists, like those interviewed in the case study, are involved in

mixed livelihood strategies, in which they garden to supplement their household income and food supply, but not on a full time basis. Land reform with its current focus on the creation of a class of black commercial farmers, fails to support these citizens. Similarly, concentrating on mono-cropped export agriculture is not consistent with farming as most black South Africans practice it. Just as mixed livelihoods minimize risk by diversifying incomes, so does mixed agriculture by diversifying products. Traditional farming, both in South Africa and in the United States, involves both horticultural and livestock production. This integrative system allows for efficient use of resources by cycling of nutrients. The animal manure is used as organic fertilizer and the unused plant material can be fed in turn to the livestock. In this scenario, as explained by Genadendal agriculturalists, both waste and monetary inputs are minimized (Madeley, 2002).

Another technique of sustainable agriculture is intercropping. While planting one crop in a field is desirable for commercial purposes because individual yield may increase, planting multiple crops, with attention to specific advantageous relationships, will have lower yields of individual crops but, in total, will have a higher food output (Madeley, 2002). Even though it is not put forth as efficient for commercial production, intercropping has been shown to more efficiently use resources such as light, water and nutrients through physiologically different plants, with different needs. Intercropping also insures against crop failure, especially in areas subject to frost, flood and drought or with unpredictable climates (which is increasingly true due to climate change).

Additionally, intercropping reduces moisture loss by providing effective soil cover, and shading, while simultaneously suppressing weeds, and is also effective for pest and

disease control (Madeley, 2002). This is important since many small-scale and subsistence farmers cultivate organically because they cannot afford chemical inputs. A different money saving strategy, seed saving, is also beneficial in that it preserves genetic diversity at a time when fewer and fewer species are being cultivated. Sustainable agriculture is, therefore, consistent with the needs of agriculturalists producing for household consumption and with long-term food security and environmental health.

Based upon these benefits, land reform should be restructured to provide for other forms of agriculture rather than focusing exclusively on the commercial model.

Scales of Power and Development Actors

It is also informative to consider the roles and interests of different development actors in land reform through a political ecology lens. To begin with, the influence of global economic institutions (specifically the neo-liberal policies of the World Bank, the International Monetary Fund and the World Trade Organization) has been instrumental in pushing the national land reform program towards it current market orientation. Political ecologists have joined others in voicing concerns about the appropriateness of development suggestions offered by outside actors who are more concerned with the functioning of the global economy than the health of local livelihoods (Bryant and Bailey, 1997; Chambers, 1991; Gibson-Graham, 1996, 2004; Peet, 2002). Likewise, political ecologists have warned against the uncritical confidence in the ability of non-government organizations and non-profits to represent the interests of the communities they are trying to develop (McMllwaine, 1998), and have called attention to the

heterogeneity of interests within those communities. In general, political ecology's concern with differential scales of power (global, national, local), and the unequal distribution of power between and within each level is a crucial theme in relation to South African land reform and agricultural transformation (Bukey, 1993; Freire, 1990). The way in which systems of power and the discourses about productivity that privilege industrial agriculture over small-hold farming are particularly salient and will be discussed further in the case study after the related shortcomings of the land redistribution are first presented.

Chapter 4: Background on South Africa's Programs for Agricultural Transformation and Land Reform

In its 1997 White Paper on South African Land Policy, the Department of Agriculture set out a land reform policy in attempts to address segregation and displacement dating back as far as 1658 when settlers restricted the Koi to the east of the Salt and Liesbeck Rivers (Thwala, 2002). Discriminatory land policies prevailed throughout the following centuries and included the creation of the first reserves by the British and Boer governments in the 1800s, the 1917 *Native Land Act* and its Amendment in 1937, the 1936 *Development Trust and Land Act*, the 1950 *Group Areas Act*, the 1951 *Bantu Authorities/ Prevention of Illegal Squatting Act*, the 1954 *Blacks Resettlement Act*, the 1959 *Promotion of Bantu Self- Government Act* and the 1964 *Black Laws Amendment Act*. For the purpose of this paper, it is not necessary to understand the details of these discriminatory acts. The importance lays in realizing that the relocation of blacks by whites in South Africa was a systematic and purposeful process of subjugation motivated by profit and power. In the words of Wellington Didibhuku Thwala, a research coordinator for the National Land Committee in Johannesburg,

The land dispossession of the black population in South Africa was driven by the need to reduce competition to white farmers and to create a pool of cheap labour to work on the farms and mines and, later industry. The pattern of land ownership and control also fundamentally structured the social mechanism of control over black workers and the population surplus to the needs of the

capitalist economy. As such, the highly unequal access to land was, and remains, an integral component of the political economy of South Africa as a whole. It must be emphasized that any post-Apartheid land reform would be dependent on the extent and character of economic reconstruction (2002).

Agricultural transformation and land reform programs to address these historical injustices have undergone several phases since the ANC came into power in 1994. The Land Reform Programme of Government has three main sub programs – Restitution, Redistribution and Tenure Reform, whose strategic objective is the "transformation of the South African Apartheid land regime to create an enabling environment for political, social and economic empowerment of Historically Disadvantaged Individuals" (DoA, 2004, 5). Land restitution seeks to return land or provide monetary compensation to rightful owners dispossessed after the institution of the 1913 Natives Land Act. Tenure reform is largely aimed at clarifying tenure arrangements in the former homelands. As explained by Moseley, in the rural areas of the Western Cape Province, the first two programs are largely irrelevant "as: 1) most blacks and coloureds lost their land to European settlers long before 1913 (and thus are not eligible to apply for restitution), and; 2) none of the former homelands are found within this jurisdiction" (2007, 4). In this region, therefore, "land redistribution, which offers government grants to blacks for the purchase of farmland regardless of a legal claim, is the most important component of land reform" (Moseley, 2007, p. 4).

Criticisms of the slow pace of reform and of the inefficiency of the R16,000 land redistribution grant system for small-scale farmers under the 1994 White Paper(a program known as SLAG – Settlement Land Acquisition Grant), led to the adoption of a new approach in 2000 with the Land Reform for Agricultural Development (LRAD) program. This revision further entrenched neo-liberal agendas within policy in its aim to establish black commercial farmers, as opposed to small-holder agriculturalists, able to compete on an equal basis with their white counterparts (Mather, 2002). Furthermore, LRAD stresses the market as a regulatory mechanism and provides for 'willing-buyer willing-seller' framework of implementation, thereby completely ignoring the rural poor who are unable to raise the R5000 required for the minimum grant or afford the time and travel costs of payment in 'sweat equity'. (Mather, 2002). This bias towards commercial agriculture can also be seen in World Bank policies that promote deregulated markets, while ignoring the real needs of the poor such as "security of tenure and access to land, resources and employment opportunities" (Mather, 2002).

In addition to land reform, the ANC government is working to enhance the participation of blacks through "transformation" in commercial agriculture (Moseley, 2007, 4), as outlined in AgriBEE's Broad-Based Black Economic Empowerment Framework for Agriculture. AgriBEE follows the goals of the Black Economic Empowerment (BEE) initiative, but applies them specifically to the agricultural sector. The framework's strategic objectives put forth the goal of "facilitating structural changes in agricultural support systems and development initiatives to assist Black South Africans in owning, establishing, participating in and running agricultural enterprises" (DoA, 2004, p. 9). By

addressing the entire agro-business value chain, the plan also seeks to socially uplift and restore the dignity of Black South Africans within the sector (DoA, 2004, p. 9). For example, the framework encourages "the involvement of blacks and coloureds in decision-making on commercial farms" in order to incorporate them in to management positions, while simultaneously making sure that the consumer end of the commodity chain supports these goals by urging supermarkets to buy produce from farming businesses (Moseley, 2007, p. 4). AgriBEE is an important step forward in the national land reform process because it understands that for empowerment initiatives to be sustainable, they must be accompanied by a long-term commitment to provide support services, such as access to finance, infrastructure and information. The framework goes beyond facilitating land transfer, agricultural training, and farming capital by tackling more systemic barriers such as illiteracy and gender inequality.

The problem with AgriBEE is that, like land reform, it is stuck on the idea that economic and racial disparities can be addressed simply by increasing the number of Black South Africans in agro-business. While the framework identifies the agricultural sector's critical role in a national socio-economic transformation "...as a contributor to food security, jobs, rural development and exports," it continues to push large-scale commercial farming as the best model, without questioning its limitations. What is more, the framework calls for greater attention to be paid to "innovation, com5petitiveness, risks management, knowledge and information management," due to the "rapidly changing global environment," but fails to recognize the innovative strategies employed by

generations of small-hold farmers that have made their agriculture practice resilient and sustainable (DoA, 2004, p. 6).

None of the elements of land reform or agricultural transformation provide sufficient support for small-hold farmers looking to supplement other wages and household food intake or for subsistence agriculturalists. In order to best provide for national food security and the redistribution of wealth, the Department of Land Affairs and the Department of Agriculture should broaden land reform and AgriBEE into a support network for all South African agriculturalists. In this way, the government could facilitate the growth of a mixed farming economy of both large-scale commercial farmers and small-hold gardeners.

Throughout its decade and a half existence, land redistribution has consistently fallen short of the program goals. Originally 30% of land was targeted for redistribution by 1999, a target date subsequently pushed back to 2014. By mid-2006 less than 4 % of formerly white-owned commercial farmland had been redistributed (Cousins, 2006; Moseley, 2007). The following section details the failures of the land redistribution component of the neo-liberal version of land reform in order to provide an overall picture of how the program needs to change in order to help more South African farmers. It is helpful to understand the specific institutional shortcomings of land redistribution before considering how this national program can be informed by the local livelihood struggles of Genadendal gardeners.

The land redistribution program, as it is currently designed, is informed by the assumption that small-hold agriculture is unscientific, inefficient and unproductive. Colonial powers produced this discourse to justify the displacement of black South Africans in order to meet white agricultural and industrial demands for land and labor. If the South African government is truly committed to addressing the structural inequality still present almost a decade and a half after the legal end of Apartheid, it must reject this colonial legacy and facilitate a national transformation of the agro-economy towards one that includes the small farmer. Likewise, if land redistribution, specifically, is to support small-hold farming, it must be restructured so that its end goal becomes the widespread undermining of institutionalized, economic inequalities, as opposed to the accumulation of profit by the national elite. The following section summarizes the ways in which the land redistribution program fails to serve low-income, small-scale farmers. In the last half of the thesis, the Genadendal case study provides some insight into what obstacles farmers face once they have access to land, demonstrating that actual redistribution would only be one component of an effective agricultural transformation project.

Lack of Funding

In 1992 the World Bank entered the scene as a decisive player in shaping the post-Apartheid political climate when it organized a task force of agricultural "experts" to gather information for a sector report to be presented to the new South African

government. Not surprisingly, as policy agendas routinely take the form of political alliances between domestic and international capital, the subsequent proposal strongly urged the national government to avoid expropriation as a method of land reform. The land reform bill, finally adopted within a constitution that has received international praise for its liberal and progressive character, was drafted in the pragmatic speech that shifts attention away from the profit-making agendas of neo-liberal policies, as it guarantees the protection of established property ownership and only allows the state to expropriate for public purposes (Levine and Weiner, 1997). The settlement decision to exclude land nationalization as a method of reform essentially legalized over a century of displacement during which European settlers uprooted millions from their ancestral lands without compensation. In an effort to appease concerns expressed by white farmers, the business community and foreign governments and investors, the ANC leadership prioritized the interests of the elites whose privileged positions could be traced back to colonial conquest, alienation, and social engineering (Samasuo, 2004). The constitutional entrenchment of absolute forms of access and economic control ignores the history of racially based land seizures, the spoils of which have been passed down through inheritance for the last 300 years, not traded on the open market as currently mandated by national policy.

This market-oriented neo-imperial model of limited redistribution not only required the new South African government to seek the consent of the historically advantaged before reapportioning land, but also further impeded the already slow process of reform by obligating program officials to raise revenues in order to finance land transfer grants for

the landless at rapidly rising market-determined prices (Hunter, 2004). Considering that a mere 0.4% of the national budget has been allotted to the land reform program, it is no wonder that insufficient grants in proportion to rising property value have undermined the viability of market-based redistribution. A popular strategy of land reform beneficiaries has been to pool their meager land grants in order to collectively purchase an otherwise unattainable piece of land. The subsequent sharing of property among all contributors, however, has resulted in the condensed ownership of unproductive and commercially unviable small plots of land, sometimes referred to as the "rent-a-crowd syndrome" (Hall, 2007). Over crowded plots are easily over cultivated and quickly degraded, especially due to the tendency of landowners to take advantage of the government's strained resources, time, and personnel as a chance to off-load their un-arable property in exchange for the redistribution grants.

Bureaucratic Structures and Misdirected Management

A limited budget is not the only constraint to funding redistribution. Bureaucracy has played a large part in impeding project implementation. For example, the post-Apartheid government has repeatedly been forced to return European Union financing, because the program's top-down, bureaucratic structure, and the lack of communication between involved departments, have prevented it from spending its own budgetary allowances. The fact that the Department of Agriculture and the Department of Land Affairs are two separate entities may contribute to the problem. Within the context of the willing seller/willing buyer model, the slow pace with which the government processes and funds

grant requests has real implications as landowners lose patience and decide to sell elsewhere for potentially more money on the open market (Hall, 2003). Likewise, bureaucratic barriers to communication and the compartmentalization of rural versus urban issues, land reform versus rural development, as well as the segregation of the restitution, redistribution, and tenure reform programs in general, fail to recognize their necessary integration when seeking to clarify claims to land rights (Hall, 2003).

In addition to the challenges posed by inefficient bureaucracies, the ability of participants to access grants is questionable, as under the willing buyer/willing seller model they are responsible for the identification of land available for acquisition (made even more difficult as the state has proven to be unwilling to publish land audit findings, in fear of occupation by settlers), negotiating a provisional agreement of sale, and developing a business plan for when the land is acquired. Not only has the process's demand of time and mobility severely limited the ability of the landless and rural poor to participate, they are further excluded as redistribution is increasingly contingent on professional services from attorneys, agronomists, private economic consultants, project planners, and state officials (Hall, 2003). Thus, the market orientation and development agenda, advocated by multilateral lending institutions and the interests of the privileged class of global capitalists, ignores land reform's original intention as a means of poverty alleviation and extension of social justice.

With the implementation of Land Reform for Agricultural Development (LRAD) in 2000, the government has committed itself to the establishment of an elite class of large-scale black commercial farmers, as evidenced by the tying of grant size to the size of a beneficiary's contribution in capital or labor, minimum acreage requirements for subsidized parcels of land, and a participant's obligation to live near the land, working it full time in pursuit of an established set of profit goals (Mather, 2002). In other words, LRAD assesses applications rather than the applicants themselves, thereby structuring eligibility around criteria for racial identity and commercial viability rather than a person's need (Hall, 2003). According to Zimmerman, the current redistribution program effectively limits applicants in order to preserve strained budgets, by requiring them to have, "the ability to pay upfront costs out of pocket, the possession of farming skills and experience, the availability of household labor for farming, the willingness to move long distances to access land, and the capacity to cope with risk" (2000, p. 1456).

Despite claims to target marginalized populations, such as women and the poor, redistribution has failed to establish any formal process of inclusion. In advantaging those with "literacy, money, transport, political contacts, and the ability to continue pressing their claims," the reform program ignores the historical processes in which a person's initial access to resources results in the ability to draw further resources. Consequently, LRAD serves to perpetuate the concentration of resource control in the interest of preserving the dualistic structure of the rural economy (Hall, 2003). By

reinforcing exploitive relationships of commodity production, concentrated resource ownership, and market access, current reform policy, combined with a legacy of displacement and marginalization, serves to position South Africa as a small-scale working model for dependency theorists.

Chapter 5: Agriculture in Genadendal

Historical Background

Genadendal's unique history as the oldest mission station in Africa posits the village as an interesting case study to inform national land reform policy. Its name, "Valley of Grace" is a legacy of its missionary heritage and a reference to its beautiful location in the foothills of the Riviersronderend Mountains. This small village was also the first industrial center and at one time the second largest "formal town" in South Africa" (capegateway, 2007). The area is rich in agricultural resources, which is probably one of the reasons the missionaries chose the location for settlement. Today, most people who live in Genadendal identify as the descendents of the South African Khoi Khoi and the German Moravian missionaries. As previously stated, Genadendal was protected from Apartheid displacement policies under the Mission Act, meaning that most families have lived there for generations. Anyone able to claim familial ties to the village has a right to a plot of land, the deed of which is held by the community. Thus, in theory, all residents have access to land and the right to cultivate it. The decline in local food production, however, despite available land, indicates the complexity of agricultural constraints and therefore the insufficiency of the national agricultural transformation project. Furthermore, this decline suggests that the land redistribution program focused singularly on land transfers is too limited in scope.

Resources

Genadendal is located in the Overberg, one of the country's best agricultural zones.

Unlike most Western Cape farms, water is not the largest constraint to agricultural productivity in Genadendal, which is situated in the prime water catchment area between the Zonderend River to the north and Swartberg Mountain ranges to the south.

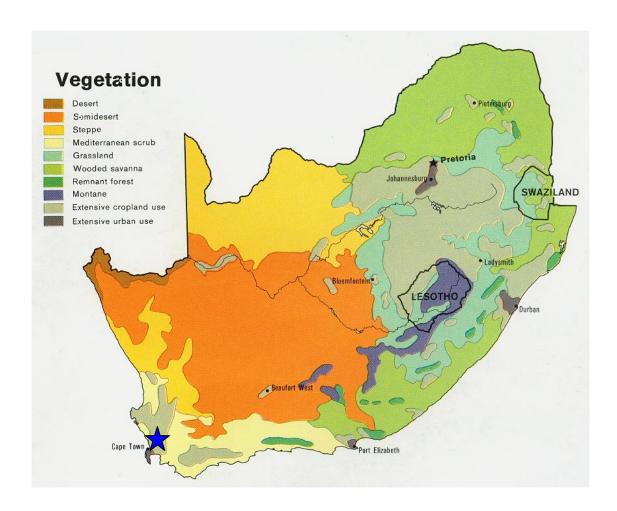
The town has two dams and two reservoirs, one above the residential area to collect water from the mountain streams, and one below into which runoff from the upper reservoir is channeled. All of the agricultural water distribution, therefore, is gravity powered, except for the irrigation water for the commercial plots, which is pumped out of the river (R. Carelsen, pers. comm. March 26, 2006). Genadendal not only has access to water, but also is advantaged by the highly arable land on which it is located (see Figure 5.1).

Figure 5.1: Results of Land Potential Survey

Land Potential	Total Area Available (ha)	Net Area Available (ha)
High	822	616
Medium-High	598	448
Medium	121	90
Medium-Low	294	220
Low	283	212
Total Investigated	2108	1586

Source: Lanok, 2000.

Figure 5.2: Locating Genadendal in South Africa's Western Cape



Source: http://www.lib.utexas.edu/maps/africa/south_africa_veg_1979.jpg

Note: indicates location of Genadenda

In contrast to the "homelands" in the east, where the "African" populations were relocated to under Apartheid, the region of the country called the Overberg, in which Genadendal is located is made up of highly productive farmland, (see figure 5.2). Historically this quality of land is only accessible to white South African farmers. As previously mentioned, the colonial theft of arable farmland has informed the narrative that European or modern, or industrial (depending on the time period) agriculture is more productive than indigenous agriculture. This myth is proven false when coloured or black farmers have access to vital resources, as exemplified in Genadendal, where small-hold agriculturalists have practiced centuries of sustainable agriculture.

Farming Systems

Gendendal's rich history of household food production is still alive in memory and practice, and is probably one of its greatest resources. In addition to the 35 commercial farmers in Genadendal, all households have access to a plot of land for kitchen gardens and small livestock⁵. Some of these plots are mapped in Figure 5.3. GPS coordinates were gathered of sample garden plots and overlayed on the map using GIS software. They are represented by the red polygons. Additional gardens are located in the green strip in the center of the map, although GPS coordinates were not taken. In the top right corner the larger of the two dams can be seen.

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⁵ Each garden plot is small (about 300 square meters), but has enough space to cultivate vegetables for a household. Some people use their plots to grow animal feed or to keep their animals.

Figure 5.3

Gardens in Genadendal: Western Cape, South Africa

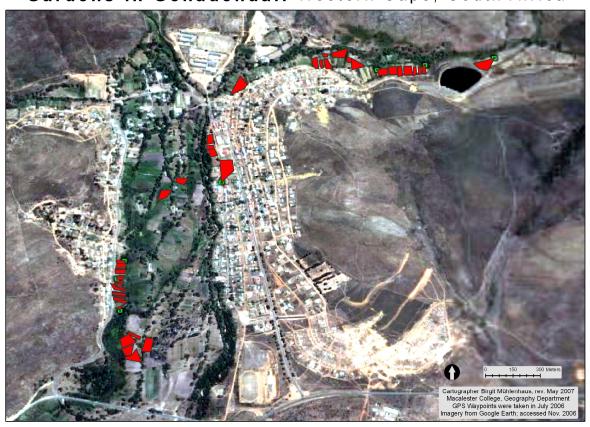


Figure 5.4
Agricultural Survey

	<40 yrs	40-60 yrs	>60 yrs	Total
# of female gardeners	3	8	22	33
# of male agriculturalists	11	17	42	70
Total interviewed	14	25	64	103
Average garden size				700m ²
Average farm size				5 ha

Source: Author's Survey

This chapter will focus mainly on the livelihoods of the gardeners as opposed to the commercial farmers, but it is important to consider both groups since their agricultural experiences in Genadendal are closely tied. Figure 5.4 summarizes the average age and gender distribution among agriculturalists and also gives the average plot size held by both gardeners and commercial farmers in Genadendal. It should be noted that there are no women among the commercial farmers. For the complete survey findings see Appendix II

Most residents grew up farming and therefore have an important agricultural knowledge base.

Older residents recall a time when their families lived out of the gardens and off of their livestock, without any other steady source of income. For example, one of the local principals came from a family of five boys, all of whom were put through secondary schooling with money their father had earned from his gardens.

The gardeners interviewed continue to grow the same produce that they remember planting with their parents and grandparents. These vegetables include potatoes, sweet potatoes, butternut squash, pumpkins, tomatoes, green beans, peas, onions, cabbage, herbs, and occasionally peppers, swiss chard, carrots, lettuce, makatans (a South African melon) and cucumbers. During the growing season⁶, interviewees said that they did not have to buy vegetables. Many also produce enough to sell or give away to neighbors, family or to charity organizations. Some gardeners cultivate neighbors' plots and give them produce in exchange for the use of their land.

⁶ The Western Cape has a Mediterranean climate, similar to parts of California, with cool wet winters and hot dry summers. While some crops, like cabbage and potatoes, can be grown throughout the year, most gardeners have two main growing seasons – the first, in early spring beginning with planting in August or September and finishing up in December and the second, in early fall, beginning in March and lasting through May.

Interviewees who have access to more than one plot explained that they take into account the varying types and wetness of the soil in each location and decide where to plant each crop according to where it would grow best. For example, one gardener indicated that she would soon sow a field of potatoes because she was given permission to use a friend's plot that has potato-friendly dry, sandy soil. She will only plant potatoes there every couple of years, however, because she says that if you plant something that grows underground one year, the next year you must plant something above ground. Potatoes are oftentimes rotated with green beans, which re-nitrify the soil. By considering soil type and moisture content, adding organic fertilizer (such as animal manure) and rotating crops, the gardeners prevent soil degradation and insure that their plots can be cultivated for generations. They also practice sustainable farming methods such as intercropping and seeds saving and create agricultural ecosystems by fertilizing the gardens with manure from their livestock and in turn feeding the animals with plant waste. Even when gardeners do not have their own livestock they will ask neighbors for their animals' manure or, according to a few of the older female gardeners, they will collect it from around town where it is plentiful, since many people let their cows roam freely.

One of the most successful commercial farmers in Genadendal continues to use these traditional organic practices and demonstrates their productivity in larger scale farming. He believes that a successful farmer must practice multiple types of agriculture and has seen many people fail by just trying to produce vegetables. Asserting the necessity of mixed farming, he explains that small farmers cannot put all their "eggs in one basket." Genadendal farmers hold no agricultural insurance policies, so in order to protect themselves against the risks of weather, disease, and the

market they have to diversify income generators by incorporating livestock, grain, flowers, and fruit into horticultural production (Gardener 4, pers. comm., March 26, 2006).

Unlike the mono-cropped, chemical intensive, mechanized, "modern" commercial farm, mixed farming not only reduces risk, but also promotes efficiency and waste minimization through the generation of a production cycle – (e.g. if grain prices are low residuals become livestock feed, livestock manure replaces expensive chemical fertilizers or commercially produced manure). In fact, the same farmer attributes his commercial success to his cattle. "I built my house with those cows," he says, explaining that while vegetables have to be taken to the market, and depending on the competition may take days to turn a profit, raising livestock is an excellent cash generator. (Pigs can be sold at four months by auction to bring in quick funds, and every Monday and Tuesday he can auction off a cow.) At the same time, however, he will only sell a cow out of necessity and considers them as somewhat of a savings account (Gardener 4, pers. comm., March 26, 2006). Even though mixed-farming and mixed livelihoods have been stigmatized by colonists and neo-colonial agro-corporations as inefficient or unproductive, Genadendal agriculturalists have historically prospered, enjoying both economically and environmentally sustainable livelihoods (Sneddon, 2000).

In order to elucidate the significance of agriculture to Genadendal residents, I briefly describe the livelihood practices of six of the gardeners interviewed.

Gardener 89:

Gardener 89 lives in Genadendal. She is 75 years old. She worked at Appleweight farms in Grabouw as a cook and her husband worked as a gardener. During the weekends they built their house in Genadendal and cultivated a large garden plot. Since her husband's death, 11 years ago, she has planted in her yard and her daughter's yard across the street. She has to use tap water, which is very expensive and heavy to carry from the house to the gardens. Sometimes she hires a local youth to dig for her on Saturdays. Her daughter also helps because she only has seasonal employment in Cromco. She grows beans, potatoes, sweet potatoes and carrots. These vegetables make up a substantial part of her diet and are mostly for home consumption, but she grows flowers for the church and people throwing parties. During Easter, she can sell her flowers for R5 a bunch. She also raises pigs and chickens and says that she loves animals. When she cleans out the pigsty she mixes the pig manure with straw and uses it as fertilizer in her gardens. She uses donkey manure and fertilizer, which she buys in the neighboring town of Greyton. Sometimes she saves the pumpkin and bean seeds to replant the following season.

Gardener 3

Gardener 3 is 64 years old. He lives in Bereaville where he grew up farming with his mother who produced food mostly for her family. He remembers that they grew 50% of what they ate and the other half they bought from the store. A third of what they grew, they sold to buy food. He says that more people farmed then and that they knew and loved the ground.

⁷ Within the town of Genadendal, there are four villages: Genadendal, Bereaville, Voorstekraal, and Boschmanskloof. The village Genadendal is at the center and is a cultural tourism site. At the end of the main road there is a museum, a mill, a forgery and other remnants of colonial life where visitors can learn about the local missionary heritage. Genadendal has benefited more than the other villages from outside resources and is more developed.

In 1985, after working for the Cape Town City Council for 20 yrs and at the Epping Market where he checked the produce when it came in, he and his wife started gardening again.

Apartheid had previously discouraged him from farming because he was only able to work the land on the weekends. Today, he feels that the opportunity for farming is greater, but that people stop farming because it is too expensive and that the only thing holding them back is the lack of financial support.

He stopped growing produce for sale last year because the costs became prohibitive. He gave the example of butternut squash seeds, which cost R1,000/kg. (approximately \$150 for two pounds). At the time of the first interview in 2006, he had five pigs and was planting sweet potatoes, butternuts, green beans and gem squash. 2-3% of his produce was for home consumption and the rest he sold by word of mouth out of his house. Each season he made between R8,000 and R10,000 (\$1,400 and \$1,140), but 75% of this went to expenses. The remaining 25% made up 50% of the household earnings, supplementing his wife's pension and his disability grant. With his wife, he begins bed preparation at the end of April. They plow their 5-6 ha plot three times with a rented tractor or with a plow drawn by his cousin's horses and add manure or commercial fertilizer. In August they plant by hand. For watering they practice flood irrigation. They buy the potatoes each season, but will replant the sweet potatoes and save the seeds from the squash and green beans. When they produced for sale they paid 12 to 15 middleaged people to help with the harvest. Currently he and his wife are raising pigs for sale and no longer hire help. They have approximately 23 pigs and spend R1,500 each month to feed them. They slaughter the pigs themselves and sell them locally. They would like to also raise cattle and chickens, but they don't have enough money.

Gardener 1

Gardener 1 is 43 years old and lives in Genadendal. She has gardened her whole life and learned by helping her mother as a young child. Today, she continues to garden the same plot as her mother did. In her family, as in many others due to the impact of the migrant labor system set up under Apartheid, gardening has been passed down through the women in her family⁸.

She has two plots, which are 20X40 meters each. She grows green beans, onions, potatoes and pumpkins. She gets seedlings from the nursery in town and potatoes from the commercial farmers or she buys them, and she also save her seeds. Twenty percent of her produce is for home consumption, 40% is for her extended family and 40% is for sale. Her big sales are at Christmas and Easter, when she sells her produce from her home or her sister's home. Each season she earns about R1000, not including expenses such as R100 for a tractor (which she rents from the Co-op), R50-R70 for horses and a mold-board plow, and payments to the people she hires to water the garden. She weeds her garden by hand and also raises 11 cows, which she keeps in the garden during the off-season and sells during financial emergencies. She believes that there are fewer cultivated gardens now, compared to when she was a child, because the younger generation does not have an interest in gardening.

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⁸ This agricultural matriarchy gave women autonomy in the gardens, because the men were away working. Overall, the gender ratio in gardening is relatively balanced, because men return to Genadenal after retirement and the men that work on the surrounding farms continue to live at home. The commercial farmers, however, are all men.

Gardener 31

Gardener 31 is 33 years old. He lives in Genadendal and works for a water conservation program removing invasive species from the surrounding mountain habitat. In the evenings and on the weekends he works in his gardens. He has been cultivating his own plot for 8 years and learned by working with his parents in their garden when he was younger. He works three plots, one of which he owns. His neighbors have given him permission to use the other two in exchange for vegetables. The younger of his two children helps him in the gardens. They grow green beans, potatoes, pumpkins, onions, tomatoes, gem squash, 50% of which they sell. The other half is for household consumption. They sell the produce locally (in Genadendal and Greyton, by word of mouth). In the winter he has to buy vegetables, but for the most part his family lives off of what they grow. They also have two pigs, (which they feed on the garden waste) two horses, and a milk cow. He does his first planting of the growing year in August or September and then plants the potatoes again in March. He uses the same potatoes for three plantings, buys the onion and tomato seeds, and saves the bean and pumpkin seeds. He rotates where he plants his crops each season, to conserve the soil nutrients, minimize problems with pests and prevent the spread of disease. For fertilizer he mainly uses his animals' manure, but will occasionally purchase guano. Due to the close proximity of his plot to the river he sometimes use aerating synthetic soil inputs to dry out the ground and prevent his crops from drowning. By continuing to practice the agricultural methods he learned from his parents, he is able to spend very little money on his garden, to keep it mostly organic and to substantially supplement his income and household food consumption.

Gardeners 34 and 35

Gardener 34 and her son Gardener 35 live in Genadendal. They are 54 and 22 years old, respectively. Together, with her brother, they cultivate seven plots. She and her brother have gardened since childhood and now her son helps out. They plant potatoes, pumpkins, carrots, beets, tomatoes, cabbage, green beans, sweet potatoes, and onions continuously throughout the year. They eat 20% of their yield and sell the rest locally. Most of the vegetables consumed by the household are from their garden. They also raise geese, chickens, pigs, and have two cows. The manure from these animals is used to fertilize their plots. They save and replant the pumpkin seeds and rotate where they plant their crops.

Declining Agricultural Productivity

Despite its access to the agriculturally valuable resources discussed above, Genadendal has moved away from the fairly self-sufficient and prosperous community it once was, to one described by high rates of unemployment, poverty, and alcoholism (Strategic Development Plan, 2000) (DoA employee, pers. comm., March 25, 2006). Community members have attributed Genadendal's declining ability to support itself in food and capital production to the dying out of the older farming generation and the disinterest of the younger population. One of the commercial farmers remembers growing up when everyone cultivated their garden plot with different vegetables and raised a variety of livestock. Neighbors would trade within their community. Household specialization in food production was efficient and practical when combined with the cooperative exchange of food that allowed for diverse and nutritious diets.

Today, many of these plots are neglected and overgrown, thus greater proportions of a family's income are going towards groceries and items that were previously produced at home. This picture of local agricultural decline frames Department of Agriculture strategies and NGO development initiatives so that they target the more prominent commercial farming sector under the assumption that Genadendal no longer has an interest in household food production.

Throughout the course of this research, however, it became apparent that gardening continues to have a significant presence within Genadendal, Unfortunately, its somewhat hidden or overlooked nature has left gardening with little to no institutional support. The following chapter will examine the reasons for declining involvement in garden cultivation and the consequent reduction in household food production, as well as challenges faced by the commercial, small-hold farmers.

The transformation from community self-sufficiency to strained incomes and declining nutrition levels has been exacerbated by the combination of natural population growth, increased cost of living, and a static resource base. Within the past 10 years, as Genadendal has electrified and modernized in other ways, the cost of living has risen exponentially from about 20 cents a day to upwards of R30 a day – for instance, in the '70s and '80s bread was 5 cents, now it's R5 (DoA employee, pers. comm., May 18, 2006). Wages, however, have not increased accordingly, and families are left to pursue multiple livelihoods, many of which involve traveling long distances. Together, an unenthusiastic attitude toward farming (whose labor intensity and inherent economic risk can be dissuasive), and the lack of other local employment opportunities, force many youths to leave the area in search of work, while others remain at home, unemployed and

dependent on their families (DoA employee, pers. comm., May 18, 2006; Genadendal Strategic Development Plan, 2000).

Chapter 6: Constraints to Agricultural Success in Genadendal

Many of the constraints to household food production are legacies of Apartheid and therefore, probably common throughout South African communities of color. The first constraint to be discussed is the migrant labor system. Even during legalized segregation, the white regions of the country still depended on black laborers. Because 90% of the population were displaced onto 13% of the country, there was not enough work or land to support everyone. Overcrowding and unemployment forced people to look for work in the homes and businesses of White South Africans, leaving their families behind. Remnants of this system can still be seen in the informal settlements surrounding the cities and in rural areas among the farm worker populations. An interesting product of the migrant labor scheme is the relative gender balance in gardening participation.

Although Genadenal reseidents were protected from displacement by the Mission Station Act, the economic implications of Apartheid forced a large percentage of the population to seek employment on nearby white farms as farm laborers and in Western Cape towns in the service and industrial sectors. Many of the female gardeners interviewed described tending the gardens when their husbands were away. Even though none of the commercial farmers in Genadendal are women, the cultivation of the small garden plots oftentimes has been explained as a matriarchal tradition in which the current gardeners had been taught by their mothers as young girls. Women also leave Genadendal in search of work and many interviewed had spent years doing seasonal labor on the surrounding farms or as domestic workers for white households.

Genadendal continues to export labor to the surrounding white commercial farms, business and households and to the industrial sector of Cape Town. Many of its residents are retired, and have only recently returned after spending their working years in the city. The working age people are mostly transient, only spending weekends and holidays in the village. As a result, the greater part of full time residents are pensioners or school age children, many of whom are cared for by grandparents. (These consequences of the migrant labor system are also found in the former homelands). Pensioners make up the majority of Genadendal gardeners, but as their generation gets older and are less able to work in the garden, and today's children are less involved in gardening, less food is produced in Genadendal for local consumption. On the weekends or off seasons, farm laborers are also able to cultivate gardens, but their work is so tiring that many need the short breaks to recuperate. For example, twice a year women from Genadendal work in the nearby apple packing plant. A large number work the night shift from 6 in the evening to 8 in the morning so that they can be home during the day to take care of their children. Work like this doesn't leave much time or energy for gardening.

Another constraint to gardening that can be traced to Apartheid is the high rate of alcoholism. In addition to causes such as loneliness (due to the migrant labor economy) and political despair, alcholism was systematically introduced to the farm worker population under the "Dop" or "Tot" system, in which low wages were supplemented with cheap wine (Scully, 1992). Once workers were hooked, white farmers could count on them to show up to work every day to get their daily ration of alcohol. Even though this strategy was outlawed over a decade ago, there are few support systems in place that address dependency issues, and therefore its legacy continues to control the lives of those farm workers and the next generation who are now mimicing the

behaviors they witnessed as children in alchohol dependent households (Moseley, 2006). As more time, energy and money is dedicated to drinking, less garden crops are grown. One sixty-two year old gardener interviewed explained that he was able to begin gardening again after he stopped drinking. He grew up working on the farms and gardening with his father who was also a farm worker and an alcoholic. He now has five gardens (he owns one plot and rents four). He sells about half of his produce, the other half is for household consumption and is enough so that he rarely has to buy vegetables. His philosophy is that you must look forward, because if you blame people and stay in the past, then you make problems for yourself.

The next two constraints to be discussed, theft and jealousy, are inherently linked. One of the tatics of Apartheid, and colonialism in general, was to pit oppressed peoples against one another by constructing social divides within populations, and by offering political and economic privileges to favored groups. Thus in some instances instead of fostering solidarity among similarly disenfranchized peoples in opposition to governmental injustices, Apartheid caused South Africans to turn against one another. The feeling that one must put someone else down in order to get ahead is still present in Genadendal. Many older farmers and gardeners say that they have stopped cultivating crops and livestock due to frustration when their products are repeatedly stolen. In conversations, they express nostalgia for the good old days when more people produced their own food and theft and poverty were not such problems.

Currently, on the side of the village fed by the smaller of the two dams (see figure 5.3, top left hand corner) most of the garden plots are uncultivated. According to these gardeners, two years ago, an unsuccessful gardener broke the dam in frustration and jealousy of the productive

gardens. Since then, despite appeals to the municipality, the dam remains unrepaired and the gardeners are unable to water their plots. Some of these gardeners grow what they can in their yards. The space is significantly less than their garden plots and they have to use the house tap to water, which makes significant additions to their water bill.

One of the commercial farmers has also suffered tremendous losses due to jealousy in the community. This farmer went through a training course to grow proteas (a South African flower) for export. After a few seasons of production, he was doing so well that in 1998 he was nominated for the national farmer of the year award. Following his nomination, someone set fire to his fields and everything was destroyed. Even though he had the forsight and capital to insure his crop, red tape and dishonesty in the insurance company has left him uncompensated and unable to start again. He insists that if he could just get an irrigation pump to bring the water up from the river (the commercial fields are on the village periphery and are not part of the gravity powered canal irrigation system) he would start farming again tomorrow. Like most other agriculturalists, he expressed a love of working with the land, as well as adeep frustration at being kept away from it for lack of finance and support.

Lack of funding and infrastucture are the most obvious constraints to gardening – an idea supported by interviewee data. Gardeners need money for seeds, fencing and implements. This can be an insurmountable barrier when most of the people gardening have no source of money beyond old-age pensions and perhaps remittances from family members working in the city. Some gardeners minimize costs by saving seeds, using manure rather than expensive commercial fertilizers and continuing to use old tools, but adequate fencing can be a major problem since

livestock roams the village freely, eating people's vegetables. Many of the gardeners will sell their produce locally and in that way make enough money to buy seeds for the following season, but in order to make a living out of their gardens, people indicate a need for business training and access to markets. This is especially the case for people hoping to join the Genadendal commercial farmers, many of whom have some business experience.

Impact of Land Reform, Regional Politics, current projects

Some of these problems, like the distribution of water, have not been dealt with because, after the end of Apartheid, local governance moved from the Genadendal council to the municipality. Now the people who handle the money and make decisions as to how it is used do not live in Genadendal. They do not witness the problems themselves and are harder to approach with complaints. According to one gardener whose parents used to live entirely out of their garden, they were much better off with the old council under which there was a local person in Genadendal to deal with problems, and local people employed by the council and paid with local taxes to do maintenance such as cleaning the aqueducts. Now there is only one representative for all of the villages, who is based in Caledon and all of the local taxes go to Caledon. As a result, he says that local issues are not brought to attention and dealt with and that the municipality has left many promises unfulfilled. Because the municipality, unlike the old local council, does not clean the aqueducts, some people do not have water for their gardens. On the other hand, as more debris and rubbish collect in the river, the water rises and overflows onto this gardener's land and sometimes drowns his vegetables (Gardener 14, 2007). The

uncontrolled water attracts mongoose, which eat his chickens, making it an extremely frustrating undertaking to produce his own food.

Water exemplifies the barriers to local food production put up by bureaucratic, underfunded and unrepresentative governance. While some gardeners have stopped gardening all together because they are not able to water their plants, others are maintaining small kitchen gardens which they water from their house tap. This is water that they have to pay the municipality for. To avoid incurring additional costs some kitchen yard gardeners use "grey water" or house water that has been used for washing or cooking. Interviewees voice frustration because the irrigation water is available, but the infrastructure to get it to their larger garden plots is unmaintained. Besides the broken dam, the canal system that channeled water into the gardens with gravity is full of debris, a problem that was previously taken care of by the local council.

Another criticism of the municipality's unresponsiveness, lack of iniative and thick red tape, was made by people renting houses in Genadendal. One couple who moved to Genadendal after selling their plot in a neighboring village, but who cannot afford the R15, 000 it would take to buy a house, complain that the municipality will not show them where their rental house's allocated garden plot is. At the moment they are living off of the husband's disability check, the wife's sporadic earnings selling baked goods and jams, and dahlias they raise in their backyard. They would like to garden on a larger scale, but currently do not have access to enough land or irrigation water. Due to their use of tap water for the plants and chickens they are raising in their backyard, the municipality has already cut off their access to water three times since they moved in.

Problems with underfunding and inadequate representation are not specific to local governement, but are apparent at a national level in the Department of Agriculture. Even though one of the Department's employees lives in Genadendal and has an office there, his extension area is so large that he is forced to spend more time traveling around to different project sites than working with gardeners and farmers in his own community. This problem could in part be alleviated with the hiring of additional employees, which has been happening throughout the past year, and since the beginning of this study. A worry expressed by the DA employee is that even though the regional office is hiring more extension agents, he is still the only "coloured" Afrikaans speaking employee. In an area of the country where small-hold farmers are almost exclusively coloured and Afrikaans speaking, this will undoubtedly lead to communication and project implementation difficulties as well as alienation from the Department. As it is, gardeners are frustrated with the lack of transparency, the bureaucracy and the long waits involved in applying for government support. The members of one project in particular, involving a group of men hoping to start up a piggery, were hopelessly disillusioned.

In addition to government involvement, NGOs, development agencies and rural specialists have begun to focus on Genadendal agriculture. Despite the five decades or more of agricultural experience behind most of Genadendal's commercial farmers, experts have targeted local agriculture as a key area for improvement within an overall plan to renew economic growth (Genadendal Strategic Development Plan, 2000). Community members express frustration in regard to the favoring of institutional over experiential learning and describe the recommendations offered by rural development corporations, such as Lanok or international

experts, as inappropriate and misinformed (Gardener 4, pers. comm. March 24, 2006)⁹. For example, a couple of years ago, Lanok advised the Genadendal farmers to plant their potatoes a month later than usual and to buy new sprouts for each planting. Ordinarily, the farmers plant three times a year and use the sprouts from the previous crop for each planting; by the third planting when the starter potatoes have been paid off, they will have made a profit for the season. Under the pressure of the development agency, the farmers went against their agricultural training despite the generations-worth of knowledge that inform the local farming systems. As the farmers had predicted, they were not only in debt by the end of year from the multiple sprout purchases, but planting in August rather than July meant that they were harvesting the potatoes in December, when it was so hot that the crop had started rotting in the ground.

Similarly, Farmer Support and Development (of the Department of Agriculture) employees were exasperated after attending an international conference on organic agriculture where Dutch "change agents" lectured a room full of small farmers on how to become certified and enter the international organic export market. Considering the fact that the R 8000/year certification fee is more than unattainable for the farmers that attended the conference, as are the international standards set by institutions such as Eurogap, the convention was not only a waste of time, but probably worked to turn the farmers away from organics, as they were portrayed as an elite product niche requiring lots of start up capital. Still, like packaging and preparation, organics are seen as a value enhancer, which is the development sector's way of accounting for agricultural risk. Within the domestic market, some developers are pursuing contracts for organic produce with distributors like Woolworth (a large, upscale supermarket chain in South Africa), but have

⁹ Lanok is a development agency based in South Africa's Western Cape. It receives 20% of its funding from the Provincial Government and implements projects on behalf of donor agencies such as NORAD, a Norwegian organization (Lanok, 2008).

criticized the stores for giving lip service rather than substantial support to disadvantaged farmers (Farmer Support and Development, pers. comm., March 24, 2006).

Despite the inappropriateness of foreign-led agricultural training sessions aimed at a homogenous class of large-scale commercial farmers, the South African government continues to welcome European "experts" because of its inability to fund its own courses (Farmer Support and Development, pers. comm., March 24, 2006). The examples of the failed potato crop and the corporate appropriation of the organic concept, however, strike down the "something is better than nothing" idea in the case of Genadendal. As the head of the farmer's association asserts, instead of coming in with their own ideas that don't even work, donors must first listen to the needs of farmers. Funding can be used most effectively under the direction of community members who have relevant contextual experience and a vested interest in project results (Farmer Support and Development, pers. comm., March 24, 2006).

In a similar way, preconceived notions that focus on the importance of commercial agriculture over gardening for household food production exclude the latter from governmental or other institutional support. The majority of money directed towards Genadendal agriculture goes to the commercial farmers. One group, The Genadendal Organic Gardeners, is trying to work around these constraints by mobilizing the people cultivating small plots to join together in a producers collective, in order to share resources and gain some political voice. At one point they were supported by an NGO project that provided funding for the cultivation of medicinal herbs, but since that funding ran out, all that is left of the project is a small nursery. Lack of follow through, commitment and inadequate funding for long-term projects are common themes of

employment generating plans organized by outside development actors. Another gardener was trained at the University of Stellenbosch to learn to raise trout in the Genadendal dam. He implemented the project and went every day to feed the fish. Things were going well until the Landbou Corporation (a development group) took on the operation as their own and replaced him. Currently the project is no longer running due to vandalism. He says, "I will do that again if I can get some money to do it." At the time of the interview his only employment was as "take-away shop" that had just enough business to stay open on Fridays and Saturdays. He had a large garden for eight years, but stray animals kept breaking the fence and he had problems with water and theft so he stopped six years ago.

The way forward

According to the local agricultural extension agent, the government simply assumes that people are not interested in producing food for the household and that is why minimal support is offered. As evidenced by the eighty gardeners interviewed for the study, this is not the case. It should also be noted that those eighty interviewees do not include all the people who have stopped gardening due to the previously listed constraints. The tendency of government workers to overlook the interest in and viability of small-scale agriculture can in part be traced to the global and national scale discourse perpetuating industrial farming as the most efficient and productive agricultural model.

The extension agent explained that, in the case of Genadendal, The Department of Agriculture did not merely fail to notice the widespread commitment to food cultivation, but that government

employees (himself included) had taken the assumption a step further, stating definitively that people no longer want to grow food. The situation was read in this way: the community is not as interested in vegetable gardening as they used to be, but many people have maintained a connection with the land and are making flower gardens in front of their homes. Since this does not address their food and nutritional needs, the Department of Agriculture set forth an intervention plan to encourage vegetable gardening. The following excerpt is from an interview with a Department of Agriculture employee and took place before visiting one of these schools,

The Department is targeting schools, especially primary schools to start the mindset with young children. So far there is a schoolyard garden in Bereaville, Genadendal, Riversronderend and two in Villiersdorp. The children are involved in all gardening activities so that they gain a more comprehensive understanding of agriculture. The hope is that these schoolyard gardens will foster long-term interest in agriculture as a career. Ideally, the children will become so excited about gardening at school that they will start small gardens at home. This may encourage families to switch back from flowers to vegetable gardens. Produce from the gardens will not only become part of the school feeding schemes, but will also be sold to the community to raise money for the following season's seeds. The selling of produce will be initiated by children selling to parents so that they can understand the financial benefit of gardening as well as the nutritional benefit and learning benefit from the experience. The Department is also creating agricultural social activities in schools by organizing study tours to farms and prisons where they are gardening to broaden knowledge and interest in

agriculture. Once children convince their families of the benefits of vegetable cultivation, the Department wants to move into communities and start up community gardens on a large scale. First they will target community organizations, like the Health and Welfare Committee, in order to identify a central plot. From there on people can expand to their own home gardens. Another project the Department is working on is a vegetable garden in a hospice and clinic in Hawston. They have provided all necessary tools and infrastructure, such as fencing, irrigation, seeds and compost. They have asked the local prisoners to assist with the ground preparation and planting and the staff to water and maintain the garden. The produce will go to the patients (2007).

Projects like these, in addition to more small grants to gardeners may go a long way to increasing local food production and food security. In order for them to be most effective, they must be supported politically and economically, which will require a re-orientation of institutional support and a greater appreciation for the possibilities offered by small-scale agriculture.

During my first trip to South Africa, when I conducted research in Genadendal over the course of a few long weekends, I gathered most of my information from Department of Agriculture employees and during interviews with a few of the Genadendal commercial farmers. I left South Africa under the impression that Genadendal was experiencing a decline in agricultural production due to the dying out of the older generation of gardeners, the lack of interest among young people, and the limited budgets of the Department of Agriculture. From what I heard, it seemed that if increased funding was available to Genadendal commercial farmers, they would

be able to raise the net production in local agriculture, but that the days of gardening family plots for household consumption were numbered.

It was not until my second trip to South Africa, during which I had the opportunity to live in Genadendal for a month and to interview local gardeners, that I begain to re-evaluate my thinking. At the beginning of my stay I was fortunate enough to meet a gardener who had grown up in Genadendal and recently had been working to set up an organic gardening collective. After spending a few days interviewing her and working in her fields, I asked her to help me with my research by introducing me to other gardeners and translating when necessary. We spent the following three weeks walking through the Genadendal villages, knocking on doors where she knew gardeners lived or where plots were cultivated, and talking to people about their agricultural experience and practice. It quickly became apparent that gardening still had a huge presence in Genadendal, that the interest in household food production was not dying out, and that there were even people who wanted to garden but had stopped or were unable to start due to the structural constraints discussed at the beginning of this chapter.

When we updated the local agricultural extension agent on our interviewing progress he encouraged us to tell each gardener to visit his local office so that they could fill out applications for seeds, fencing and other basic farming implements. He was surprised at the widespread interest and soon had a huge stack of grant applications on his desk. I knew that the regional office was understaffed and that he was extremely over-worked, so at first I was nervous that the he would feel overwhelmed by the huge task of processing all of the grants. Instead, when I went to check in with him, he was overjoyed. He pointed to the pile of paperwork and explained

that, even though the benefits may not be delivered until the following season under the new budget, he now had evidence to put before the Department of Agriculture proving the local interest in household food production. With this evidence, he would be able to make a case for the government to pay more attention to local food producers.

It is telling that both the extension agent who had spent his whole life in Genadendal, and I, a student of political ecology trained to identify and deconstruct discursive frameworks, accepted the assumption that gardening was no longer a desirable livelihood strategy in Genadendal – that people were too old, too busy, too tired, too lazy...etc. to garden as their parents had, when they now have the option of buying their food at the store. The confidence in a capitalist economy (under which a small percentage of the population produces food through industrial process for the majority of people who buy and consume the food) can be attributed to two related sources. The first is comprised of monied interests in the global agro-economy and the second is the same colonial narrative that justified the 1913 Natives Land Act to eliminate black competition and free up a cheap labor force for the developing mining and white agricultural industries. As discussed throughout the course of this thesis, these colonial and neo-colonial discourses inform both AgriBEE and the Land Reform and Agricultural Development program, which overlook the needs of small-hold agriculturalists and the most marginalized South Africans who, due to educational, bureaucratic and financial barriers, are unable able to access exisitng government initiatives. The discursive influence does not merely operate at the administrative and policy levels, however. Our experiences made it aparent that even on personal and interpersonal scales discourse can color the way in which we see a situation and test our ability to listen openly and honestly.

Informative fieldwork necessitates talking to as many people with diverse experiences as possible. Researchers commonly limit the integrity of their work by identifying the most vocal, the most educated, the most politically involved, or most institutionally recognized as potential interviewees. While the view point of relatively powerful and privileged participants is valuable, it should not be relied upon as representative of all stakeholders. Resarchers must commit themselves to seeking out the voices of women, youth, elderly, the poor and anyone else whose needs are not served by policy, otherwise they are more likely to perpetuate the same discourses over and over again. The importace of meaningful dialogue cannot be emphasized enough. Governments base policy on discourse rather than reality, because of a disconnect between researchers and the voices of marginalized people. Genadendal gardeners have a lot of suggestions for the engineers of South African agricultural transformation programs. The government must involve politically marginalized people, like these gardeners, in the development process for such programs if it is truly committed to serving their interests.

Chapter 7: Conclusion and Policy Recommendations

In this thesis, I have argued that environmental narratives condemning traditional small-hold farming as inefficient and unproductive in comparison to the type of industrial agriculture supported by the innovations of the Green Revolution have played a powerful role in shaping South African land reform and agricultural transformation. Policy makers and implementers assume that there is no interest left in localized food production for individual households or the community, which has meant that even the most resilient gardeners and small-scale farmers are struggling to continue cultivating their land for want of support. Historically, agricultural communities fostered self-sufficiency, but in the wake of Apartheid the new government must maintain its commitment to dismantling structural inequalities.

Even in places like Genadendal where invaluable resources such as arable land, fresh water, and agricultural know how can be found in abundance, the legacies of Apartheid and an unequal distribution of power continue to place barriers in front of people wanting to farm. Gardeners identified the migrant labor system, alcoholism, theft, jealousy, lack of capital, unresponsiveness of the regional government, and the unequal distribution of wealth and power within the community as specific constraints to agricultural livelihoods. The agricultural situation in Genadendal, therefore demonstrates that the national land reform program must go beyond redistributing white owned land to a small percentage of black and coloured South African farmers. Likewise, AgriBEE must expand its vision of agricultural transformation to one that includes a mixed farming economy, so that it can help realize its goal of sustainable economic empowerment for the truly disenfranchised.

In order to most effectively democratize access to resources, there must be a systematic deconstructing of the myth of the industrial farm and a reconsideration of the benefits of small-hold agriculture. This thesis traced the institutional privileging of large-scale farming to the influences of global capital and even further back to the narrative developed to justify the 1913 Natives Land Act. In 1994 when the ANC replaced the Apartheid government South Africans celebrated their new found citizenship in what they hoped would become a just and equitable nation. Almost a decade and a half later, the South Africans interviewed for this project express anger, frustration and disillusionment with the government and doubt its commitment to undermining structural inequalities.

The failure of the government to fulfill its initial promises stems from the fact that the transfer in power replaced white politicians with black ones, but in the end it seems that new ideas did not replace old ones. In other words, the post 1994 South African government continues to structure policy based on colonial discourses and neo-colonial capitalist agendas. The program for agricultural reform exemplifies this process as it serves the interests of big agro-business while overlooking the needs of small-hold farmers and disenfranchised South Africans who want to farm, but have been unable to surmount the financial and institutional challenges to access the necessary resources. As discussed in Chapter 4, land redistribution, as it was originally imagined before the transfer of power, addressed the situation of the latter, but now under the influence of the profit motive the program is inaccessible to the politically marginalized. Gendadendal agriculturalists not only have the experience to inform post-Apartheid reparations, but their

stories provide the much needed counter-narratives called for in political ecology and illustrate the power of discourse in suppressing truths while still influencing policy.

The acceptance and perpetuation of these discourses by global neo-liberal institutions and national policy makers have played a major role in making the goal of agricultural transformation the creation of an emerging class of black commercial farmers, demonstrating a commitment to the de-racialization of land-ownership and the agro-economy, rather than a pursuit of socio-economic justice and meaningful change (Greenberg 2004a, 2004b; Hunter, 2004; Levine and Weiner, 1997; Mather, 2002).

While many other political ecologists have discussed the political narratives surrounding desertification, deforestation and land degradation (Basset and Zuéli, 2000; Blaikie and Brookfield, 1987; Fairhead and Leach, 1995; Gray and Moseley, 2005; Leach and Mearns, 1996; Walker, 2006), this thesis shows that environmental narratives influence agricultural policy, as well. Most importantly, it demonstrates the ability of individuals and communities to change discourse by listening to each other and seeking out meaningful dialogue. Once Genadendal gardeners learned that people other than themselves recognized the value of their experiences, and trusted that they were being listened to, they took initiative, talked to each other, and brought their case forward. In reflecting and acting "upon the world in order to transform it," as Paulo Freire writes, these gardeners provide one more lived example of the theories expressed in his book, *The Pedagogy of the Oppressed* (Freire, 1986). Even beyond informing the South African political process, the struggles and determination of Genadendal gardeners remind international academic and activist communities, in the spirit of Freire, that in order to understand, create or organize, we must also listen.

Challenges for land reform in improving redistribution – policy recommendations

Addressing the Land Market

South Africa can dramatically improve its land redistribution program by restructuring the inappropriate economic regulations governing the land market. For example, by removing the Subdivision of Land Act, the government can reapportion large land holdings from inefficient, debt-ridden, ecologically damaging, white-dominated commercial farms to beneficiaries willing to pursue more sustainable agricultural systems (Levine and Weiner, 1997). Similarly, a property tax structured progressively and in proportion to number of land-holdings could disincentivize ownership of large, underutilized land parcels (ICG, 2004). In addition, reform beneficiaries should not be restricted from participating in land auctions where property transfers regularly occur, such as the sale of confiscated bankrupt farms.

Most significant, however, is the need to shift away from market-oriented land redistribution to a strategy that recognizes post-Apartheid agrarian reform as political process that has the ability to initiate a movement toward comprehensively restructuring the colonial landscape of "separate development" (Levin and Weiner, 1997). By doing away with the willing buyer/ willing seller model and market-determined pricing, the ANC will be able to access more land for redistribution. Although the government should also rethink its stance on land expropriation, independent of influence from multilateral lending institutions, it can reapportion in a less contradictory manner by targeting struggling farmers who are looking for a way out of

commercial agriculture, such as orchard owners in the Western Cape, or farmers practicing environmentally degrading agriculture, like the wheat growers battling erosion and rye grass in the Swartland (pers. comm., January 19, 2006). Furthermore, in the case of intransigent landholders with misused or neglected arable land, the government could assume control by enacting laws of eminent domain. An even more politically neutral strategy would be to jumpstart the transfer of 669,000 hectares of state land marked to be redistributed with a prioritization of applicants unable to presently access LRAD grants due to the program's market orientation.

Post Transfer Support

A meaningful commitment to the reintegration of land reform and rural development must recognize the constraints to small-holder farming, such as limited access to agricultural infrastructure and support services, insecure and fragmented land rights, over stocking and over cultivation, and an inability to access water supplies, transportation networks, and credit. If land redistribution recognizes the superiority of the sustainably cultivated small-holder farm over the industrial agriculture model, and promotes an alternative approach of the large-scale redistribution of small parcels of land, it should provide for post transfer support programs to equip new farmers with safety networks like weather insurance. As explained by Levin and Weiner, "[P]eople don't want to be 'developed' but do expect some state support in realizing their aspirations" (1997, p. 21). This being said, the state should reconsider the World Bank influenced decision to deregulate the economy in order to afford some protection to recent program beneficiaries who will be highly vulnerable in the "free" trade world market. Possible

revisions could be in the form of tariffs on agricultural imports already grown in South Africa, or the subsidization of a worker-owned label, identifying produce grown on redistributed land, modeled after fair trade projects.

While programs meant to ease the transition to the landed class and to alleviate risks associated with agricultural livelihoods are crucial to land reform's success as a program of empowerment, provisions such as agricultural extension services must avoid a top-down, technocratic, approach that values expert knowledge over experiential learning, despite its often times inappropriate and ill-adapted methods. In this way, technical state planning of land reform assisted by foreign money and staffed by development consultants can be reminiscent of colonial projects perpetuating myths of unproductive and irrational African farming methods. An effective reform program, therefore, must consult communities from the first stage of a project, devolving power and resource control for subsequent strategies of action (Levin and Weiner, 1997 and Hall, 2003). Land reform should be community driven, allowing municipalities to identify potential land beneficiaries and uses, as well as determine the types of post transfer support needed.

Even though state investment in local institutions could help to coordinate community participation, the process to date has, in the words of Levine and Weiner, been "an exercise in legitimization whereby regional structures become conduits for disconnected and often inappropriate ideas propagated with in the state bureaucracy" (1997, p. 260). Likewise, according to Hall, "[e]fforts to devolve land reform and other development interventions to the level of the local government have been problematic, as they have been characterized by the decentralization of responsibility without a commensurate devolution of authority and resources

from central government" (2003, p. 277). Furthermore, local authorities do not necessarily represent community interests, as in the former homelands many are left over from indirect colonial rule. In recognizing that exploitive power structures are not only a legacy of Apartheid, but are also rooted within the rural political economy (as evidenced by marginalized sectors of society, such as women), land reform must seek to systematically transform these institutionalized forms of oppression. Levin and Weiner suggest a "political program of democratic mass-based participation which requires a systematic and place based analysis of class and gender-based differentiation" (1997, p. 120). Whatever the method, it is apparent that "a comprehensive restructuring of the Apartheid landscape will require a broad, popular, and participatory rural reform program that is locally based but nationally and regionally articulated by a committed democratic state" (Levine and Weiner, 1997, p. 4).

Although South Africa has become formally integrated into the global political economy, it must not leave the welfare of its citizens vulnerable to the interests of the international class of profit-hungry capitalists. The national memory has not only recorded a history of oppression by external forces, but can also recall an equally powerful legacy of internal resistance, strength and courage. During the past decade, the tendency of the government to privilege neo-liberalists' persistent calls for deregulation, market liberalization, democratization, and development, over South African demands for justice, has led to declining levels of energy, hope, and inspiration. In attempting to redress crimes of displacement and marginalization, land reform has the potential to re-empower the nation's poor, for whom the rule of Apartheid has not ended.

Developments

Within the past couple of years, policymakers have begun to acknowledge the failure of LRAD to serve as a vehicle of social transformation and meaningful economic reform. At South Africa's 2005 National Land Summit, Thoko Didiza, the Minister for Agriculture and Land Affairs, attributed the "not enough process" of land reform to market-led redistribution and the willing buyer/willing seller policy. She explained that since implementing the program the government has found its initial faith in an altruistic commitment to land transfer to be misplaced, with many sellers being less than willing to sell? and others taking advantage of a strained government by exorbitantly increasing prices on land to be redistributed.

In response to concerns that land redistribution, at its best, merely assists emerging farmers in accessing land parcels without providing adequate post-transfer training and infrastructural support, the department has developed the Farmer Support and Development initiative with its subprogram, the Comprehensive Agricultural Support Programme (CASP). This new project aims to support farmers in areas of finance, information, technology transfer, market access, market development, and infrastructure. In 2004, it was implemented for the first time in the Western Cape Province after receiving a budget of R13 million from the National Department of Agriculture. All of the funds were spent on black farmers, with 70% going to LRAD beneficiaries (Dowry, 2005). This first phase focused on infrastructural provisions including water infrastructure, fencing, dipping tanks and stock handling facilities. According to the Deputy Minister of Agriculture and Land Affairs, the department will now begin to implement other basic services including technical advice, marketing information, training and capacity

building by allocating for agricultural inputs, mechanization programs, agricultural starter packs and market development initiatives.

Despite a slow start, the government seems to be taking small steps away from the LRAD's superficial 'de-racialization' of the agricultural sectors, toward a more extensive economic redistribution program. Awareness of the historically advantaged position of today's white commercial farmers and of the legacy of discrimination against black South African farmers that has prevented them from accessing start up capital from National Party institutions, such as the Land Bank and the Agricultural Credit Board, has prompted the development of the Micro Agricultural Finance Scheme of South Africa (Didiza, 2005). In his address to the National African Farmers Union, the Deputy Minister for Agriculture and Land Affairs explained this plan, MAFISA, as

a government intervention to spread micro-credit and saving services to economically active, poor rural people and households, small farmers and agri-business. It seeks to contribute to structuring the extension of financial markets and economic growth, increasing employment in the rural areas, reducing migration to urban centres, reducing poverty, and inequality in land and enterprise ownership with emphasis on women, youth, and disabled (Du Toit, 2005).

In regard to the risks involved in agricultural livelihoods that have excluded the economically vulnerable from participating in land reform programs, the government has investigated agricultural risk management policies, such as disaster prevention and drought relief, but at this

point has yet to fund insurance programs to protect farmers from hard-to-predict forces like weather and climate change. Such support systems are essential if Departments of Agriculture and Land Affairs projects are to include small-hold farmers and work against the narratives that exclusively promote industrial agriculture.

Land reform is just one example of the post-Apartheid government's failure to uphold the goals of the liberation movement and to resist the forces of economic liberalization and the domination of legislative processes by profit motives (Greenberg 2004a, 2004b; Levine and Weiner, 1997). At the same time, however, land reform continues to exist as a potentially powerful tool in deconstructing systems of oppression. By targeting historical legacies of land and resource appropriation, and the environmental narratives that in part legitimized these thefts, redistribution can undermine the perpetuation of economic and social inequalities that continue to pervade South African life in the second decade of independence.

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Appendix I

Questions for Genadendal Participants

- 1. What do you grow? (vegetables, livestock, flowers...)
- 2. What do you do with the food that you grow? Is it consumed within the household? Is it traded among neighboring households? Is it sold through local markets? Through regional markets?
- 3. If the food is consumed within the household, what percentage contribution does this make to the overall household diet? How does this vary seasonally?
- 4. Do you remember family members gardening?
- 5. How did you learn how to garden?
- 6. Why do you garden?
- 7. Do the reasons for gardening differ between different generations?
- 8. Do you garden alone or does anyone help you?
- 9. What are challenges to gardening in Genadendal? (i.e. access to resources such as water and fertile soil)
- 10. How do you overcome these challenges? (i.e. organic fertilizer inputs, crop rotation, intercropping)
- 11. What types of outside support could help you to overcome these challenges? (i.e. market access, subsidies...)

Appendix II

Agriculture Survey

Name/Date	Experience	Garden Plots	Crops and Livestock	Yield	Farming Operations
Gardener 1 43 Genadendal 22/7/06 Comments: Few	Gardened whole life – learned from mother who worked in same plot and grew same crops. Women in charge of gardens bc men are away	2 plots 20X40 meters (waypoints 256-259)	Beans, onions, potatoes, pumpkins 11 cows (keeps them in garden during off season, sells in emergency)	Mostly summer 20% home 40% extended family 40% sell	Tillage: Rents tractor from Co-op – mold board plow or uses horse drawn mold board plow, weeds by hand Gets seedlings from nursery (in town), potatoes from group by river or buys them, saves seeds and buys them Sells at Xmas and Easter from her house or her sister's. 1000R/season – 100R tractor – 50-70R horses, 200R plowing, pays people to water garden en
Gardner 2 55 Bereaville 29/5/07 Comments: 4 kie	Has gardened for 30 yrs. Mother gardened potatoes, sweet potatoes, beans, onions and sold amongst the people. She also had donkeys, cows and pigs. ds. Makes back the money wh	34 hectares en the weather is §	Same as mom	50% food consumed from store, 50% from garden. He sells 50% of produce and eats 50%	Plants one season. Ploughs with horses or tractor rented from the co-op for R150/hr. Uses manure from neighbors' cows and pigs. Uses 3 50kg bags of fertilizer at R200/bag. (mother also used fertilizer).

farming then – they knew/ loved the ground, learned to farm by himself (some	beans, gem squash. Stopped	gets pension, he gets disability.	Pays 12-15 mid. Aged people to help. Sprinkler system. Flood irrigation.
from Mom)	growing veg. for sale last year bc it got too expensive. For example, 1 kg of butternut seeds =R1,000	Has 23-24 pigs now. It costs R1,500/month to feed them.	No longer hires help. He and his wife raise and slaughter the pigs and sell them locally. Wants to start with cattle and chicken, but money is the problem.

Comments: Farming in 1985 (last 20 years). Worked at Epping Market checking veg. that came in, Worked for CT City Council for 20yrs. Apartheid system discouraged him from farming. Worked during week, only worked their land on the weekend. Opportunity for farming is greater today. He left because it was harder to farm. People want to farm. It's in their blood. People stop farming bc it's too expensive. If they can get some help there will be a vast difference. The only thing [holding them back] is support, financial support. **According to Recardo, gardeners have noticed the Department of Agriculture's involvement with the schoolyard gardens and have asked for similar support. He is now working to involve them in the food security program, which can provide them with start up capital such as seeds for one season.

Gardener 4 46 Genadendal 22/7/05 and 22/7/06	Has farmed his whole life. Stayed with grandpa who raised cattle (3-10 for milking) and veg (potatoes, onions, sweet potatoes near dam). GP was farm laborer. Grandma did marketing. Uncle looked after farm when grandfather worked away, only returning weekends.	34-40ha (use rights)	2-3 ha/crop onions, potatoes, butternuts, sweet potatoes, cabbage beans. =11-12 sows, 1 boar, cattle. Cutting back on veggies, more cattle – 3500-4000R/ head	Butternut contract with Tyger Brands. Veggies sold in Epping. Pigs and Cattle auctioned. 5-10% of food consumed grown – the rest is bought. 50% income from taxi, 50% from farming	Makes compost with manure and straw (helps w/pH). Uses fertilizers and pesticides (never needed before). Tills with tractor and mold board plow. Employs 10 permanent and 20 casual workers. Stars plowing in July. Plow 3xs. Late July starts planting potatoes (Harvests Oct/Nov) Again in Feb (Harvests May/June) – plants 3xs, then buys new seed.
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Comments: Young people don't farm bc it's too hard. Need \$ to farm – people who have \$ can farm. He likes to do farming. He loves it. He sold firewood to get \$ to farm. He had to buy 2 donkeys, then 2 horses. He used to use horses to plow for other people, to make mounds in potato field. First farming, firewood, then transport business, then started taxi business. You need cash flow for farming. Change in govt. meant no change in farming business. Investing in community but not in individual farmers. Govt. bought community 100ha of water rights. Lack start up capital. They have ground, water, labor fore. Some access to markets under Apartheid. You could be a member of Caledon Co-op but Boland Agri. Didn't allow them membership. Mostly old people were growing grain (wheat, maize and barley). 1970s and 80s were members of Caledon Co-op/ 9-10 farmers 40-50 ha, 300-600 ha. Planted in May, harvested in Dec. Sheep handling as well. They shared one harvester. Thinks ended bc of internal conflict. DuPlessis was last big farmer, but now are shop owners (had 600 ha). Communal land ownership is good so land can't be sold.

Gardener 5 37 Genadendal 22/7/05	Grew up farming. Farmed for 10 years. Generations of farmers in family	Rent land. Farm is 5 ha. He is farming new area. Little garden.	3 ha veg, (potatoes, onions, butternuts, beans, sweet potatoes, carrots, cabbage). 2 ha Proteas. Also cattle.	Sells veg at Epping (in bulk – middle people sell to supermarket), potatoes locally, Proteas at the airport and in Stanford for export market.	Tills with mold board plow, uses chemical fertilizers, some manure, insecticide (expensive). Employs seasonal workers. (up to 20)Planting from August, busy until April, usually hires women. (40-50R / day). Hasn't observed changes in land. It is very wet in the winter, erosion along river, sediments building up in river.
	ov. Small gardens before 94.				s to get loans. Now Lanok- Casodra-NGO, l. 40% of household is from Ag, 60% from other
Gardener 6		Stayed on same plot whole time.	Used to plant beans and store them in the attic		Planting starts in September. Used to plant everything with manure – kept cows in kraal at night to collect manure. Dug wholes to bury night soil.
Grayton. 50% of moved out in 19 of soil tests) 400 year. Water ma – no attempt at 19	of people in Genadendal have to 250s. Used to work in town, be 200 ha. There are some people nager used to distribute water	ittle deeds. Some tut then came back doing well. Used between different n't do ag. project i	al started declining want to keep Gena to farm. You can to build clay brick plots. In the 50s/6	dendal for future generati get credit in Caledon. 80 walls around garden. Kn 0s there was a big flood the	nted to clean up gardens, pushed coloureds out of ons, others want title deed to land. Last Germans % of Genadendal is agricultural land (they did lots ows his pump isn't working, so isn't planting this hat destroyed the canal system. The river is blocked they did the project outside of town on the only
Gardener 7 and 8 Genadendal	Son studied ag., joined, their father had started operation. Great grand father grew wheat	2 pieces of land, each had a 150-180ha plot, rented from gov.	Mostly wheat, cattle, some veg: onions, potatoes, sold in Genadendal Sheep; wool to CT distributers, meat to local	Stock theft problem: sheep, cattle in trucks	Highly commercialized. Own tractor and harvester. Sprayed pesticides. Used ag. consultants for methods and cultivars. 8-10 full time employees. Rainy season (april on) plough for next season. 50% planted, 50% fallow. Plant March/ April. Costs: diesel, seeds fertilizer.

abbatoir & butchery

owned by family or in CT.

Comments: Downfall, couldn't initially belong to Co-op until 80, but unlike white farmers didn't have access to credit for seeds etc. Had to pay upfront, subsidies to Co-ops supposed to support farmers. Late 80s wheat, diesel etc. v. expensive. 3 bad yrs in a row – saw no need to continue – stopped in early 90s. Afterwards, 4 shops, butchery, transport business, property development in Greyton. Would love to still farm but there are too many inhibiting factors.

Gardener 9 60/61 Genadendal 2 nd interview 16/7/07	Father used to grow roses and worked in orchards seasonally. Gardening since childhood. Parents also gardened, had pigs, cattle, donkeys.	Hired to garden for Wessels (owner of plot, in 80s, lived in house for about 15 yrs). Also 2 plots under	Sweet potatoes, potatoes, beans, cabbage, tomatoes, onions, limes, guavas, oranges, plums, pears	Mostly for domestic use	Saves his own seeds, buys manure. fertilizer and seeds.	Wessels buys
Gardener 10 69 Genadendal	Has gardened own plot for 23 years, worked on others for 18.	Works on two plots as well as her own – unpaid. Plots are owned by Daniel Wessels and Pieter Botha	6.4.1 1 1	Doesn't have to buy veggies in December.	org, but can't attend meetings bc of b	

Comments: On pension, takes care of daughter and kids. Sometimes fetch and sell wood Was part of an ag. org. but can't attend meetings be of bad leg. Gardener 4 is the chairman and helps the gardeners out with necessities, which they pay for later. Great difficulty with winter rains. River is clogged with debris. Aqueducts are broken – flood gardens. Municipality's promises to attend never fulfilled.

Gardener 11	The plot was his father's	Plants in	Potatoes,
70	so they've had access to it	Voorste-kraal	sweet potatoes,
Genadendal	for more than 70 years	bc of leaking	onions,
		aqeuduct.	pumpkins

Comments: Problems with aqueduct flooding gardens for last 10 years – ground too wet to work.

Gardener 12	Garden in family since	Works on	Onions,	Mixes manure into chicken coops, sometimes
46 <i>14/7/07</i>	moved into house 15 y/a	father's plot,	cabbage,	with soil, for the chickens to scratch up and to
Genadendal		father works	beans,	mix with the chicken manure. This gets put in a
*re-interviewed		on Preston's	pumpkin,	heap in the off-season and then is worked into the
with Father and		Aunt's and	potatoes,	garden.
Gardener 13		Douglas	tomatoes,	

Jacobs land corn.

Comments: Works for municipality, working for water – alien cleaning. Municipality hired private digger to make river deeper in 2006. Since the August flood, the river has been higher than the gardens. Contractor hasn't returned – no follow up. Must bring in front loader. It is alright in the summer, but not the winter. It is too wet for the canola which is grown for animal feed and green manure. Also uses guano and garden salt. Father is on pension, but before he worked on a farm an in the garden. Turns soil by hand – no tractor

Gardener 13 68	Father and mother lived from garden.	Bought land 23 y/a.	Potatoes, Onions, sweet	Tills with spade-can't get in garden with tractor.
re-interviewed		Gardening	potatoes	
14/7/07		whole time	_	
Genadendal				

Comments: Used to be a plumber in Parow, worked in garden on weekends. Parents used to live almost entirely off gardening and could support families. Seasonal farm work. Big onions and pumpkins, pigs fed on kitchen slop. Aqueducts get blocked so that they damup and each gardener has a turn to lead water to their gardeners via pipes, when the water system works. Used to get water from the dam in dry months but now the tap doesn't work. Canal installed 20 y/q but has not been maintained. Youth don't want to work in the gardens, rather have beer and rugby. Many work on the farm and don't have time, interest or energy to garden. Gardens are seasonal, farm workers get paid in cash. Needs fencing to keep out animals. Can't sit and wait for people to dish out. Teach a man to fish...

Gardener 14 70	Was grandfather	Carrots, onions,	Extras given to neighbors etc, some	Cleans aqueduct in his section himself
Genadendal	and father's	potatoes,	carrots given to soup	
	garden. It was	pumpkins,	kitchens	
	worked	tomatoes,		
	through until	lemons,		
	now.	oranges,		
		bananas,		
		bamboo		

Comments: retired, was supervisor on fruit farm, worked (in garden) on evenings and weekends. Municipality unlike old local council does not clean aqueduct – they were much better off with the old council; local person in Genadendal to deal with problems, local people employed by council to do such maintenance, paid with local taxes. Now only one rep for all villages, based in Caledon and local taxes go to Caledon. Local issues not brought to attention and dealt with. New municipality in ANC – many unfulfilled promises. River overflows onto his land, sometimes drowns his veg. Some people don't get water be the aqueduct is blocked. Water attracts mongoose that eat chickens. Water rises as more debris and rubbish collect in river. (There were huge puddles of water around the house and apparently they seemed under the house).

Gardener 15	Been living	Beans,
70	there since	potatoes, sweet
Genadendal	1970,	potatoes
	gardening	
	since 1976	

Comments: Retired, worked 14 yrs in local council

Gardener 16 50 Genadendal	More than 20 yrs farming (living since 1957). Father gardening before that. Various other gardens around town, but some flooded	Working 2 sister's round (Duminy family not interested), works Duminy family land, and own garden	Potatoes, beans, onions, pumpkins, 2 cows (1 w/ calf). 9 pigs		
•					
Gardener 17 36 Genadendal	Mother 79 y/o and her family before her were gardeners – sometimes employed people. Mother always alone, father died.	Mother used to have land across town, horses, mules, pigs, chickens, to much to handle on her own.	Tries anything, spinach peas, cropslaai, carrots, g. pepper, pumpkin, squash, tomato.	Used to sell extra veggies and employ people.	Operates organically. Neighbors swap seed. Plant out onions. Fruit used to be worth more than the house trees. Used to not be allowed to buy land in the flood zone, but could buy building. Mostly organic in valley except for bigger farms. Had to use tap water for gardens (was expensive). Used to have tanks and own water (broken now) want to water harvest.
Comments: House	ewife and art group (children'	's afternoon projec	et)		
Gardener 18 73 Gendendal		20 years on this plot	Potatoes, carrots, beans, lupis (collects seeds) oats/ lucene. Boer boontjies, sweet potatoes (testing out different varieties), onions		Horse tractor

Comments: Employed in transit, but now retired. Son is a driver, but lands above are farmed by him. He makes money to buy cattle. Grandparents from Elim, was born in Elim, been in Genadendal 34 yrs. Returned on weekends. Parents stayed in Elim, v. cut off. Hired a farm in Elim – strawberries, carrots, cabbage, potatoes. If aqueduct was opened could get water from dam – everyone should help clean aqueducts. People returning to gardening 30 y/o on average. Men need to get together, talk about issues and make plans. Each should contribute work towards maintenance.

Gardener 19 76 Genadendal Comment: Wants	20 years on current plot, taken 2 gardens over, just expected to keep clear in return.1 garden of house worked by others before him	ım – v. good for po	Sweet potatoes, beans, potatoes, onions, pumpkins, 5 cows, 2 pigs. btatoes and onion.		Ploughs manure into ground.		
Gardener 20 22 Genadendal Comments: For 1	Grandfather had garden, but now used by Theunissen for cows and horses	Plot owner – J. Claassen, also owns pigs	10y/a raised pigs for Claassen, who has asked for his help again	ih ago.			
Gardener 21 59 Genadendal 20/1/07	30 yrs gardening		Potatoes, green beans, cabbage, pumpkin, onions, squash, beet root, carrots, watermelon, sweet potatoes. Wife has flowers	All for home consumption, other job – truck driver, only in garden on weekends. Wife works in garden during week. Stores pumpkins, green beans, onion, for later consumption. 25% of food from garden	Sept/ Dec, Jan-April		
Comments: wife and 4 kids, 2 live in Genadendal							
Gardener 22 61 Genadendal20/1 /07		1 garden borrowed from Benjamin Benkman, 2 gardens for himself.	Potatoes, green beans, potatoes, pumpkins, cukes, squash, butternut, gem squash, mealies, sweet potatoes.	1 sac potatoes= 10 kg= 23R, 1 pocket lasts for 1 week. 50% for home consumption, 50% for sale. Saves some for seed. 40% of food from garden, 60% from shop.	2 crops of potatoes, plows with horse loaned from someone.		

Comments: Wife and kids live in Cape Town, Sister and 1 kid, 3 grandchildren, girlfriend and 2 kids (7&12) Comes from time to time on weekends – no other job Gardens as a hobby – sister's son may keep gardening. Cleans aliens for Fynbos project (6 months/year). Says 90% of gardeners are men.

Gardener 23	Gardening for 8 yrs- had	2 garden plots.	Potatoes,	30% on seeds, 40% for	Sept-Dec. June- April. Uses donkeys and
58	to work garden or lose it		sweet potatoes,	house consumption,	implements, manure, chemical fertilizers, but no
Genadendal	to someone else. Leased		butternut,	30% for sale. 80% of	pesticides.
20/1/07	on farm before.		pumpkin,	food from shop. 20%	
			green beans.	from garden. Loses	
				crops to cattles - only	
				makes a little \$	

Comments: wife, two kids (separate house). Seasonal pruning of fruit trees, harvesting fruit, busy w/ fruit now. Weekends and evenings in garden. Wife helps him on the weekend.

Gardner 24 Bereaville 26/5/07	Watched and learned from other people. Farm worker for 2 years but	Grandma inlaw's plot, but she has	Sweet potatoes, beet root, onions,	Would like to sell vegetables.	Uses fertilizer, 1 bag = 60R Seeds=50R (5R/bag)
	different work – fruit farm, driving tractor.	moved and now he's taking care of it. Wants to plant whole garden, can use neighbor's garden in summer (used for cow in winter)	potatoes. Wants to also plant, pumpkins, butternuts, green beans, gem squash. Has calf that spends the night in the garden, would like more cows		Gets potato starters from neighbors.

Comments: Born in George, moved to Bereaville, went to school there. Plot was planted a long time ago, but grandma's husband died and the next generation wasn't interested.

Gardener 25 38 Bereaville 26/5/07	Has gardened since childhood. Started with father everyday after school, took over after father's death. Plowing with son when	Garden 6 plots, works with Jim Bailey	Potatoes, pumpkins, sweet potatoes, carrots, beets, maize, feed. 7 horses	Sells and keeps for own consumption, shares with owners. Still buys produce	Buys fertilizer, Used to buy pills to keep snail off cabbage, but now it's too expensive. Keeps small potatoes for seed potatoes. Sows horse feed during the winter (takes sourness out of the soil).
	interviewed		norses		

Plows also for other people (100R) about 6 plots. Makes and sells firewood. Works on fruit farm (6yrs), but retiring in June

Gardener 26 64 Genadendal 28/5/07	Gardening this plot for 3 years. Rented land in George from commercial farmer, which he gardened for 30 yrs. Also raised cattle and pigs there. Taught himself – no one in family gardened. Previously painter, now on pension. Wife helps and is also on	Bought Plot 3 years ago. Moved from George bc of theft and the cost was1000R/ month compared to 200R/month in G.	Beetroot, onions, carrots, g. beans, feed for cattle, lupines, potatoes, sweet potatoes, pumpkins, potatoes, gem squash, 1 sow and 8 piglets	Produce for household consumption. 50% of food eaten is from garden, 50% is bought. Buy v. little produce after harvest and are able to save some veg. into next season	Buys seeds and manure (donkey). No fertilizers or pesticides. No plow uses fork (Doctor told him to exercise after having a bypass and he'd rather exercise and be productive in the garden than walk around the block). Rotates Lupine with potatoes.		
	Wife helps and is also on pension.	G.	and 8 piglets.				
Comments Municipality descript learn equality in good condition, it is a struggle to viotation in the symmetry							

Comments: Municipality doesn't keep aqueduct in good condition, it is a struggle to water in the summer.

Gardener 27	Grandfather was a small	Has two plots.	2 seasons	Produce for household	Plants two seasons.
Genadendal	farmer in Belville,	A wet one and	Summer:	consumption, but if	
13/7/07	cultivated for own	a dry one. Has	beans, squash,	there is too much, sells	
	consumption. Mother	been	onions etc	extra at shop. Will	
	gardened so she has	gardening	Fall: peas etc	also sell other's	
	gardened her whole life.	them since she		produce. From	
	Grew all veg, fruit cows	married and		September to January	
	and horses. Worked in	moved to		doesn't have to buy	
	garden with own children	Genadendal		any produce.	

Son (Clinton 40) wants to be a part of the butternut contract. He hires a plot of land. First started with 4 people (one was in town, another worked away). There were disagreements when they had to split the money from Tyger Brand. Must be on his own and hire help when he needs it. Clinton tried raising cattle on family's "wet plot" but someone hurt the calves and they died. He needs start up capital. The wet plot is on the other side and is difficult to manage if you don't have a car. Now Doreen may resume gardening wet plot. Doreen belonged to the group of Boers, but they are skeptical of women farmers so she left. She would like to plant with women, to teach the younger women. They need strong women leaders. Projects like the nursery have failed. Is currently helping her daughter run the shop and working with the Faith Based Alliance. There are 20 entrepreneurs and a pastor who handles the money. Must send Elgin College to help entrepreneurs. People have started shops and received R3000 each for start up capital. She has read about African women who start up a business at 70. "A few people are strong enough to go on their own". She worked as a catering supervisor at UWC for 13 years

Gardner 28	Produced mostly for	Bought manure on the farm
Genadendal	domestic use	Kept some seeds, bought others
70		Continuously plants potatoes
16/7/07		Bought generator to pump for one garden

Worked as a plumber. Started gardening after retirement. Still does repair work and welding. Would like to learn about refrigeration be repairman they hire to help at the store comes from Caledon and is expensive. There is a problem with the scarcity of irrigation water and with theft. Water is scarce now that the town is expanding Parents stayed in town, they didn't garden.

Gardner 29 Genadendal 62 14/7/07	Grew up on a farm. Father was farm worker who had personal gardened which he worked on the weekends. Grew pumpkins, potatoes,	2 horses, 3 calves. 5 garden plots. Owns 1, 1 is in process of being put in	Plants 2 seasons. September: potatoes, pumpkins, onions (for	R100 20k of potatoes. R110/ pocket. R175 for cattle feed for 3 weeks – buys from Co-op in Greyton, has to pay	Can plant potatoes 2xs if you want to make \$, 3xs for own consumption. Still waiting on \$ to buy more cattle. Buys chemical fertilizer and uses manure, but no pesticides.
	onions, beans, cows, pigs, chickens (was organic – no chemical inputs). Father lost his leg, so he	his name. 3 are other people's gardens (they are all still in	self). December: potatoes. Starting to plant beans for	more for delivery since he doesn't have a truck. Eats 50%, sells 50% depending on season.	There are different kinds of potatoes, has to decide which kind is best to plant in which plot, because each plot has a different kind of soil.
	helped in the garden until he moved off.	the village but don't want to garden- young guys aren't interested.)	depending on season. He hardly ever buys veg, just the stuff he doesn't plant (can store for 3 months). Sells to friends	Rotational planting. 1 year plants something that grows above the ground (i.e. beans) next year plants something that grows beneath the ground (i.e. potatoes).	
		Permission to use in exchange for		through word of mouth.	If something doesn't work on one plot, try it on another.
		veg. Has been gardening there for the			Saves pumpkin seeds unless they are sick.
1076	1 11 1 1 1 10 10	past 9 years.	1: 20	T 1	

1976 moved to Genadendal where his wife is from. Stopped drinking 30 years ago. Is an electrician. Father also drank, but stopped before he dies. Have to look forward, don't blame, you make problems for yourself if you stay in the past. There is no one to help us, need vehicle. When he is at home (no longer working away) will have more time to plant what he wants. Now he only does it for survival. Doesn't ask to be a millionare, if there is just someone to come and help us to survive. Just need a little push. We the small ones. If you get a little bit, then it's easier.

Gardener 30 Born in 12/6/53 in Genadendal (still lives in	Family loves gardening. Parents are written about as gardeners in Dr. Bali's book. Has worked in the	Still gardens same plot as his parents.	Carrots, potatoes, cabbage, pumpkin,	Has shop, "All in Small Beginnings" sells produce there. Hires building for	"Our ground is very good for that veg". Doesn't use chemicals. Uses compost – pigs, horses, cows, chickens – the "best way".
same 300 y/o house on Berg Street)	garden since childhood. Gardened after school, children help him now.	3 ha., 3plots 1 in front of river, 2 and 3	onion, tomatoes, beetroot,	shop. Started 2 y/a. Sells anyone's veg. 10% of household	Starts planting in July until September and then again in January/December until March.
14/7/07	•	after river. Biggest part family plot, smallest – municipality gave to him.	spinach, kroopskaay, sweet potatoes, Chickens, Cows.	consumption from garden. 20%-30% when he was young.	Rotational planting Plants potatoes 2xs. Beans 3-4xs Pumpkins, butternuts, gem squash 2xs Hires tractor from Co-op 100R deposit, pay/hr.

Grown up with veg – parents didn't work outside, only in gardens, sell to people, give to people in CT in exchange for groceries, clothes. Current problems with animals that people don't take care of and with water. In the past water wasn't a problem. "They must open the water channels. That's why most people have stopped – water and animals. If the state can give us as small entrepreneurs a good feed back or start (wire, \$, tractors_ then we can do this as a go on thing. They must help us with the water to open the channels". Would like to buy pigs and chickens. Money is the problem. Need to buy again. Was in need of money so he had to sell them.

Gardner 31	Gardening for 8 yrs.	3 plots, owns	Green beans,	50% sell, 50% eat	Plants August/September
33	Father and mother were	one, gardens	potatoes,	Sells in Genadendal	Plants potatoes again in March
Genadendal	gardening. Worked with	others' plots in	pumpkins,	and Greyton by word	Plants potatoes 3xs
Berg Street	him when he was	exchange for	onions,	of mouth	Uses his animals' manure, also buys guana and
14/7/07	younger. Has 2 kids,	veg.	tomatoes,	In winter, buys veg,	other synthetic inputs for aeration bc ground is
	younger one works in the		squashies, 2	but otherwise lives out	wet. Uses garden waste to feed pigs.
	garden, the other spends		horses, 2 pigs,	of garden. Eats and	Rotates crops.
	his time in the game shop		1 milk cow	sells pigs.	Saves bean and pumpkin seeds
			(will sell		Only buys tomato, potato (every 3 rd time) and
			makes for		onion seeds
			meat)		

Working for water program in the mountains – in the garden weekends and evenings.

help in the garden.

Gardener 32 66 (receives first pension in August) Genadendal Berg Street 14/7/07	Worked in orchards in Cerres picking fruit and pruning. cultivated own garden on weekends. Parents gardened – learned from them, father worked on corn fields. Moved to Cerres in the 60s. Father had donkeys, sheep, cows.	Sweet potatoes, marrows, cucumbers beans, onions, potatoes pumpkins squashies. No animals here.	Doesn't sell veg. Family doesn't like veg – gives away to people, gardens to keep busy.	Plants 1 season. Saves squash seeds. Buys chicken fertilizer.
Problems with thi	eves and with legs.			
Gardner 33 Genadendal Berg Street 14/7/07	Gardening ever since he was young. Helped parents in their garden (working same Bree Street plot, lives in same house). Parents had 2	Potatoes, sweet potatoes, carrots, pumpkins (main thing).	Just for own consumption	Gets fertilizer, calcium, from farms (doesn't buy). "Organic is better for us". Saves seeds – must buy, too expensive form shop- must be female seed, will grow more.
	donkeys and plow, cows and chickens. Children			Can plant potatoes 2 or 3 times.

Father worked for Municipality. Works for railroad. Gardens on the weekend.

Jacoba gardened with family growing up and now Bertram helps	7 plots	Potatoes, pumpkins, carrots beet root, tomatoes, cabbage, beans, sweet potatoes, onions, geese, 2 cows,	Sells locally Most vegetables consumed are from the garden 20% yield for home consumption	Saves pumpkin seeds Uses animal manure and buys fertilizer Rotational planting Plants all year round
		chickens, pigs,		
	family growing up and	family growing up and	family growing up and now Bertram helps pumpkins, carrots beet root, tomatoes, cabbage, beans, sweet potatoes, onions, geese, 2 cows,	family growing up and now Bertram helps pumpkins, carrots beet consumed are from the root, tomatoes, cabbage, 20% yield for home beans, sweet potatoes, onions, geese, 2 cows,

Jacoba also does domestic work and her brother receives a pension, but her family only worked in the gardens. Canals aren't working so uses house tap to water the garden – costs \$.

the garden – costs	5 . .				
Gardeners 36 and 37 Pensioners Genadendal 16/7/07	Gardening since childhood. Parents gardened, plowed with donkeys, had pigs, chickens.	1 plot, same as parents	Potatoes, sweet potatoes, green beans onions, carrots beetroot cabbage	Sells produce to community, but doesn't make enough money to cover the cost so buys seeds with pension. Only buys veg. in off season	No plow – tills by hand Buys cow manure Saves pumpkin seeds, buys the rest Plants 2 seasons
Father worked in	orchards, so does William (3	days a week pruni	ng)		
Gardener 38 66 Genadendal 16/7/07	Gardening since childhood. Parents gardened, plowed with donkeys, later with horses. Worked seasonally in orchards and veg. farms, in gardens in off season and in on the weekend or wasn't a problem.	Had 3 gardens in Vlei. When husband fell ill last year, stopped. Recently died - gave gardens to Moseses	Potatoes, pumpkins, corn, carrots, tomatoes, beans, 6 pigs, milk cows – made butter for self	Veg for sale and household consumption	Saved seeds Used manure Didn't buy fertilizer Fed pigs on garden waste 3xs for potatoes
	wash ta problem.				

Gardeners 39 Worked in CT, in onion and 40 fields, in orchards

Genadendal 16/7/07

Gardener 41 Genadendal 16/7/07	Has had small veg garden since the 70s. In laws and own parents had gardens. wife worked on farms. Works as a driver.	1 plot	Pumpkins, squash, gem squash, carrots, onions		Buys fertilizer and seeds. Sometimes save seeds.
Gardener 42 71 Genadendal 16/7/07	Parents gardened, has gardened since childhood.	2 plots	Plants everything, including flowers which he sells a lot of on Easter weekend	People stole his animals so he sold the rest. Sells veg to community	Buys fertilizer and compost, gets manure from people. Buys seeds, but replants own potatoes Uses hand plow
Pensioner. Work	ed in CT at a bakery and an al	oattoir. Gardened	on weekends.		
Gardener 43 76 Genadendal Vlei 16/7/07	Gardening since childhood. "It's in the family". Same 2 plots, same house, grows same things. Family had pigs.	Was using plot in the back, but there was a flood. Will try again to plant it as a wet garden with pumpkins, tomatoes	Milk cows – makes butter for self. Potatoes, onions, beans, lettuce, carrots, sweet potatoes, cabbage	Sells a little bit to the community.	Uses her animals' manure in the garden. Doesn't buy fertilizer. Rotational planting Plants potatoes 3xs Replants sweet potatoes Saves bean seeds Tills by hand Green manure Compost
Gardens with hus Somerset.	sband, he worked for the Mun	icipality. Both are	•	ner gardened for "European	ns" in Grabouw. Johanna was a domestic worker in
Gardener 44 71 Genadendal Vlei Road 16/7/07	Gardened with father, both work(ed) in orchards and were expert pruners.	1 plot, also planting at church	Plums, oranges, bananas, pears, figs, beans, potatoes, sweet potatoes, marrows, pumpkins, tomatoes fancy lettuce, cabbage, cucumbers, chickens,	Had a lot of pigs, but got too old. Sells chickens – can't buy food for them everyday. Gives fruit to children. Sells eggs and veg to community if there is extra. Sells to shops if asked and to old age home.	Doesn't buy fertilizer, has saved manure Tills by hand Rotates Canals work
Gardener 45 58	Gardening since childhood.		Cabbage, sweet potatoes,	Sold to community, but now only has a small	Plants right through Plows with horse, previously with oxen

	er. Peter is a builder and gard an start again if the dam is fix		green beans, pumpkins, butternuts beet root carrots me – 3 days/week.	garden for his family. . Hasn't planted since a gu	Buys fertilizer, uses cow and horse manure y broke the dam 2-3 y/a. Lost a lot of money,
Gardener 46 and 47 Boschmanskloo f 17/7/07	Kennedh grew up helping his parents in the garden. Lorina grew up on family farm in Breckenveld. She worked with the cattle. They had a mechanized dairy.	2 plots. Kennedh's father past away, now his land	4 cows, pigs, chickens, horses, potatoes, pumpkins, gem squash, spinach, parsley, eggplant, onions, lettuce	Both have big families, divide produce amongst them. Sells the little that is left over	Saves seeds Uses animal manure, doesn't buy fertilizer, was same with parents. Hires tractor to plow, sometimes pays "a Rasta" to plow with his horse Afraid to milk the cow – it kicks

Kennedh was an electrician in CT, had a house and garden plot there. Lorna worked where they make potato bags, but the factory moved to Durban. Applied for grant to start a piggery with 6 other local guys. It was supposed to start two years ago, but there is problems with red tape, "syndicates" and elite groups. "Never see the papers coming back". Chose a name, filled out the forms last year, no feed back. Need training. Went to the library and checked out a book on raising pigs. "We've got ground, Recardo is going to make plans". Need to register. When the registration papers come back then they can apply. Don't receive money from the grant – only the physical capital. Wary of shareholding projects. What if there is a fall out?

Fred worked on a farm for	Diana has a	Sweet
2 years. Grew up	kitchen	potatoes,
gardening with his family.	garden. Have	beans,
"We love gardening".	had current ha since he applied for it 8 y/a.	tomatoes, watermelon, carrots, beetroot, cabbage, pumpkins, cauliflower, parsley, broccoli, celery, pigs, cows, horses, boks (would like to milk them), chickens
	2 years. Grew up gardening with his family.	2 years. Grew up gardening with his family. "We love gardening". kitchen garden. Have had current ha since he applied for it 8

Uses animal manure and buys organic fertilizer Used to plow with horses, now hires tractor.

Diana has a confectionary. Fred worked in Cape Town for a shipping company. Went for early retirement this December so that he could return to Genadendal and work with the piggery project. "We had big dreams doing this business". When he lived in CT, only returned every other weekend. Diana stayed home, but didn't work in the garden – he hired help. Land next to him has been worked for 20 years, but people won't let him use it. "Small farmers need a mind set change" – elite group in control of Genadendal agriculture. Other farmers need to be schooled in business, must have marketing skills. Water is another problem. He is lucky be he has his own pump, but others are not so lucky. "the means is there, the skills is there, but people are stilled scared". They're scared of the syndicates. "There are lines here" (Anna). We in need of money for funds, the majority of us need training. A fear that I have – "Transformation". What happens after "Transformation?". "What happens to our piece of land?". Under old system hired land under a 20 yr contract, since 5 years ago have to re-apply every year. Not everyone know about Recardo. "If Agriculture can put something in the local papers…" The farmer group believes that Recardo is only for them. "If we can get rid of the middlemen…" "Why do projects fail? People not skilled..can't pay yourself with the funding".

Gardener 50	Started working on a farm	Small garden	Personal	Planted Cabbage	Uses manure, doesn't buy fertilizer.
Boschmanskloo	at 16, left at 18 to work	and 5 ha plot	garden:	cauliflower, broccoli	
f	for police. On the farm		pumpkins,	for the frozen food co.	
17/7/07	learned to plant veg -		potatoes,	until it went under –	
	potatoes, pumpkins,		squash	lost R35,000. Now	
	onions, sweet potatoes,		40pigs, 1 ox 1	growing chilies for Pick	
	cabbage, cauliflower,		sheep,	and Pay. Sells from	
	beans, gem squash,		chickens,	personal garden to the	
	cucumbers, beet roots,		geese	community. Aucitons	
	peas			pigs	

Born in Greyton. Worked as a police officer from when he was 18 until he was 50. Started in Gendendal, then went to Grabouw. Also in piggery project.

Gardener 51	Gardening since	Gardened	Potatoes,	Uses pigs' manure in rose garden.
Boschmanskloo	childhood. Father was a	family plot,	sweet	Buys fertilizer and seeds.
f	gardener, sometimes	lives in same	potatoes,	
17/7/07	gardened for other people,	house	beans, gem	
	also worked on the farms.		squash,	
			pumpkins,	
			2 pigs	

Too old to garden now – arthritis, heart problems. Did domestic work and worked on the apple farms. Problems with water.

Gardener 52 Retired- on pension Boschmanskloo f 17/7/07	Father was foreman on veg farm. Had family gardened, all trained by father. Grew roses and veg for white family.	Chickens, potatoes, beans, sweet potatoes, eggplants, tomatoes, cabbage pumpkins, butternuts	Sells veg in community. Only buys veg in off season. Sold pigs.	No fertilizer Green manure Buys seeds every season
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Born in Greyton. Worked as a cook on a boat from when he was 33 until he was 55.

Gardener 53	600x100m	Potatoes,	Sells to community,
Genadendal	By Anna's big	pumpkins	otherwise eats. Only
18/7/07	plot	green beans,	buys veg in off season.
		onions,	Sold all horses and
		squash,	cows.
		tomatoes	

"There is so many people who is interested in getting a living on their own". The problem is getting water down from the dam. The Genadendal farmers "have a tractor but they charge a lot of money. That tractor is for the community. There are four tractors in the village. There is as mall one for small gardens. They say they must use the big tractor," but it can't take the corners. The old system of irrigation brought the water into the furrows. He cleaned the Berg Street channel and now the gardeners there are growing again. Came back in 1993 with the idea that he was going to work for himself. Needs the money to put up a proper fence. "If we can get the \$ from the government, people will start gardening again. All this land is just lying here". Was leaving the village to go back to Grabouw where he was working in cold storage, but is currently staying on because Jacobus Du Plessis hired him to help with a restoration job. "There is no work for the youngster," there should be a packing facility. Most of the people are going outside for work because there is no work for them here.

Gardener 54 Father gardened Bought a big Used pig manure on the garden and also bought Genadendal plot before he organic fertilizer. Finds it better to buy seeds each season, especially potatoes.

Voorstekraal

18/7/07

"One big problem – the water. In the summer time that little dam is so small. You spend all your money on your land, then the drought comes". The canals aren't proper. Just started working on his own as a contractor. For 2 years he had a construction business with a friend, but it didn't work out, because the friend wasn't honest. He lost a lot of money. Before returning to Genadendal, he was "a tradesmen in town for all my years", working as a machinist in the furniture business. He had done an apprenticeship in a factory. He returned to Genadendal 6 y/a because his boss sold the business – he was having problems with the unions. He started with a big bit of land and the pig business. When he was in town, he returned on the weekends and worked on the gardens. He also hired farm workers from Genadendal, because his family doesn't work in the gardens. Hasn't sold much because of the water problems. "If it hadn't been for the water, there wouldn't have been another cause why I couldn't have made a living out of it.

Gardener 55	Butternuts,	Normally buys seeds	Uses animal manure. Buys calciem
60	beans, squash,	from Genadendal	
Genadendal	pumpkins.	farmers or goes to the	
Koringland	Used to have	Co-op. Uses	
Kloof	animals, still	Genadendal Abbatoir,	
18/7/07	has sheds.	kills, eats animals	
		himself. Veg. for home.	

There are advantages to having a garden in Genadendal. There is a problem with water. Forced to use water from the house. Always have problems with the dam and breakages. The Municipality doesn't clean it. If you approach them, there is no response – I've been there more than once. Hasn't planted for one and a half years – "water is my problem". "It is an advantage to have livestock, when you don't work, it can keep yourself busy". Never had water problems except for the past 2 years, not allowed to use house pipe. Worked as an estimator for a sign company in Cape Town, is on a disability grant. Wife has pension. Stayed in Mitchell's Plain, wife inherited this place. Time and money is tight in Cape Town. The only thing you need to buy here is tea and sugar. He eats from the garden all year round.

Gardener 56 d.Heyder 39 Genadendal

18/7/07

Cows, Chickens, Trout, butternut, green beans pumpkins, beetroot

> "You name it, I plant it"

Uses animal manure. "Everything was organic". Potatoes 2xs.

Bought seeds.

Trout was an experiments, went to Stellenbosch. Had project, but they were corrupt with me. Went through training and after that was doing well. After that the Landbou Corporation took it over. Throw me out. I had been there every day feeding the fish. People started vandalizing. Project is no longer running. "I will do that again if I can get some money to do it". Cows are hard work, always get thefts, it's one of the big problems". Had a big garden, but there were problems with water, thieves, stray animals breaking the fences. To fence the property, it's a lot of money. Would like to start again. Planted for more than 8 years. Had chickens as well, for meat and for eggs. Sold eggs to the people and the meat. Stopped 6 years ago. Unemployed, has a take away shop, but it is only open on Friday and Saturdays, because there is no business during the week.

Gardener 57 Gardening since Genadendal childhood, but has only 18/7/07 had garden for 3 years. Potatoes, sweet potatoes, carrots, beetroot, cauliflower, pumpkins,

gem squash. 1

Cow manure and organic fertilizer (chicken

manure). Saves seeds. Potatoes 2xs.

pig.

Worked doing "chores". Father was farm worker. Gardened on Saturdays. Had pigs when child. Sometimes sold, gave to community. Problems with water since the dam broke.

Gardener 58 Grew up gardening with father and sister.

7 chickens. Had cows. Uses animal manure and ashes. Saves seeds, not oninons

Hires tractor.

Genadendal 18/7/07

Sold cows, municipality was a problem. If they saw cows on the street, took them away on a lorry – expensive to pay the fine and reclaim. Was working by brick makers, making pine tree poles, but all the trees have been cut down. Is a seasonal farm worker. Children help in garden. Wife is a domestic worker on a farm. Father was a farm worker in the corn and onion fields and worked with sheep and cows. Father, worked in the garden on the weekends, so he worked in the gardens after school.

Gardeners 59 Gardening since children. and 60 Genadendal 18/7/07

n. Had 2 gardens. Gave away one plot. Pumpkins, potatoes, green beans, spinach, cabbage, Sold to old age home.

Uses manure. Buys fertilizer, saves seeds one time.

cabbage, cauliflower, beetroot, lettuce, doves, chickens, cows.

Problems with water. No fence – theft. Stopped gardening 6 years ago, still want to go on - if the water problem is fixed, will go back. Cows were stolen, but getting chickens again.

Gardner 61 Genadendal 18/7/07	Father taught him about gardening. Also worked on nearby onion farms	"rich garden"	Potatoes, peas, pumpkins, potatoes, onions, sweet potatoes, carrots, cabbage, beetroot, broccoli	Sold to community Buys veg in winter	Uses manure, gets from friends. Plants 2xs a year Buys seeds each season
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Father worked on corn fields and with sheep and cows. Worked in the gardens on the weekends. Water is the problem. Has another garden, but now is growing in front of house and son's house next door. Using house water. Stopped in bigger garden 2 y/a, when there was no water left in the dam. No animals, but had chickens, pigs, cows (milked themselves) and a donkey (to plow) when young. Also plowed bigger gardens with donkeys. If water is fixed, will start in big plot again – now it's a waste of time

Gardeners 62	Gardening since	In front of	Used to have	Normally gave extra	Puts manure on garden.
and 63	childhood.	house, gave	chickens, now	away	
64		land back to	people		
Genadendal		council	complain		
18/7/07					

Lives in father's house. Looking after cattle, donkeys, pigs. Grandfather had big garden in Voorstekraal, had fruit trees, dried fruit, peaches, pears, apples, quince. Grandfather worked in CT. Stayed with grandmother. Planted beans, mealies, peas, onions in Genadendal. Got knowledge from grandparents. Learned to grow roses from his uncle. Working in CT 17-57 y/a. Worked his way up in electricity, from a meter reader, to an inspector, to organization and methods where he did surveys. Hiring out house in CT. Now mostly grows flowers, a little veg (onions and peas). Has to use house water. Looks after neighbor's – it's a holiday house. Use to plow with horses and donkeys. Doesn't have time for animals, still goes to stay in Cape Town.

Gardener 64 Genadendal 18/7/07	Grown up gardening with parents.	Gardens same plot, lives in same house	Horses, cows, 1 chicken. Beans, pumpkins, potatoes, sweet potatoes, squash, carrots, tomato, butternut, beetroot, cucumbers,	Sells to community Now hires people to garden for her – stopped herself 6 y/a when husband past away.	Hires tractor Uses manure – doesn't buy fertilizer. Potatoes 2 times Saves seed
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onions

Mother washed for other people. Had pigs, horses, cows and chickens. Ironing for people. Gets R200/month for looking after child.

Gardeners 65	Own plot (on	25 pigs	Sells to community –
and 66	the way to	(started with	butchers himself. Sold
Genadendal	Greyton)	2). Used to	in March, usually sells
20/7/07	-	catch and sell	around Xmas. Buys
		dried Snoek.	food, expensive. Not making \$ - just a hobby.
Gerrit is a cabinet maker. Husband loves pigs.			

Gardeners 67 and 68 Genadendal 20/7/07	Has garden plots in the Vlei, but at the moment is just busy in the backyard.	Chickens, love birds, cockatiels, "1 big fish in a dirty tank). Dahlias, cactus.	Wants to raise for sale, but there is no space. Sells baked goods and dahlia's at Greyton Market and at the Winter Festival, the Heritage Festival, The Rose Festival.
			R10/dahlia.

Is renting house, and doesn't know where his big plot is. The municipality is supposed to show them, but there is no support. Wants to do gardening. Harold grew up in the Karoo and the Transkei. Came to Genadendal through a friend. Bought small plot in Bereaville, but it was too small so they sold it back. Can't even think about buying a place of their own, even as cheap as R15000. Baking is not a business, just to buy bread, to support the family. Greyton Market Stall is R5/month and 10% of day's taking. Gertrude also makes jams and cans to sell in September. She gets fruit to surrounding farms, but they will only sell the fruit to her if they've met their contract quotas. Has to go season to season, planting own fruit trees is too expensive – planting veg is an everyday thing. Has to use Municipal water, has already had water cut 3xsfor using too much.

Gardener 69	Family gardened, husband	Carrots,	Saves seeds
Genadendal	also gardened when he	beetroot,	Uses tap water
20/7/07	was young.	onions, beans,	Gets manure from cows.
		pumpkins	

"There's such a lot of agricultural ground. There are so many people that is in need...I only make a small garden to provide for myself and my family". Problems with hands – was a caterer. "he's the teacher, I'm the person who works". Husband teaches at the highschool.

Gardeners 70	Looked for	Potatoes,	Uses pig manure, sometimes buys fertilizer
and 71	family plot,	pumpkins,	(inorganic).
Genadendal	did research &	carrots,	Saves some seeds
20/7/07	found it when	beetroot,	
	he saw an old	onions,	

pear tree, but parsley, celery, now someone else is peppers, gardening it. parsley, celery, tomatoes, g. peppers, beans, 2 pigs

Was in cape Town for 45 years, came back 6 years ago. Gave plot back to Municipality, otherwise would have had to pay. Paid R50 for another plot, but didn't plant when he realized there was no water. "Don't get any support".

Gardner 72 Genadendal 20/7/07	Farm worker, pruning and veg. Started when he was 9 y/o – when there is no food and no \$, children must earn for themselves. Parents also worked on farms.	Planting in the back yard where he boards, uses house tap.	Beans, onions, potatoes, sweet potates, green beans, pumpkins, squash, carrots, 1 pig	Sells to community, the money he earns is little. Buys veg in winter.	Saves seeds, buys some like new potatoes after he's planted them 2 times. Uses guana, salts.
Duahlama rrith ar	aimaala kuaalsima tha rriinaa arra	mri timaa baa ta atam	t again with fanain	way Wantad to stout and ani	na muchlamia vyotan. Haa mlantadin athan

Problems with animals breaking the wires, every time has to start again with fencing. Wanted to start gardening, problem is water. Has planted in other people's plots, but as soon as he has it looking nice, they take it back.

Gardener 73	Seasonal work in	1 plot	Pumpkins,	Sells from garden to	Used cow manure
and 74	orchards. Husband works		potatoes,	community and	Gets water from canal
Genadendal	in Greyton as a gardener.		tomatoes, gem	sometimes in Botriver	Buys fertilizer mostly from people who have
20/7/07	Families gardened.		squash, carrots	to people she works	cows, or work on farms. Rats eat seeds, must
	_		_	with.	buy each season.

The last of 8 cows was stolen last year. Only problem they have now is the animals – don't have a fence.

8	Genadendal 20/7/07	farm workers. Picked	house		have big family	Saves seeds Doesn't spend any money on garden, except she waters the garden from the house.	that
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Husband passed away three months ago – now going to make small garden. Grandparents had cows and pigs. On pension.

Antoinette was a domestic worker in Cape Town came back 1-2xs/month, retired 3 y/a. Husband stayed in Genadendal.

Gardner 78	Gardening since	1 plot in Vlei	Potatoes,	Gardened for house and	Saves seeds
65	childhood. Farm worker		onions, sweet	family	Plants potatoes 2xs
Genadendal	 orchards and onions. 		potatoes,		Uses manure and buys guana

died

20/7/07 pumpkins, gem squash,

Stopped gardening 2-3 y/a bc no water. 2 pigs on the property, but don't belong to them.

Gardener 79	Grown up gardening –	Onions, beans,	Buys veg in off season	People give manure to me
34	same plot in back of	potatoes,		Uses dish, bath, laundry water
Genadendal	house. Mother worked on	pumpkins (has		
20/7/07	farms, fruit and veg.	problem with		
		cut worm)		

Husband works in Cape Town as a truck driver, but returns home in weekends, helps in garden, but it is mostly hers. Children also help.

Gardner 80 56 Genadendal 24/7/07	Parents gardened on weekends David worked on onion farms.	Had more than 3 plots, now has 1	Potatoes, sweet potatoes, beans, tomatoes, onions cabbage, mackatan, gem	Produce is for home consumption. Sold last cow 4 or 5 y/a bc of theft, and slaughtered last pig.	Uses compost, pig and cow manure – no inorganic fertilizer, gets it for free from other people. Potatoes 2xs. Saves seeds. Garden in back is watered from house.
			•		Garden in back is watered from house.

Stopped gardening because of water problems. Norman Smith put cows on 2 of his plots. Oompie used his digger to deepen the river bed, but now water is too far down to get to the gardens. Went to the Municipality to complain about water problems, but no one helped. Fixed furrow on his own, but water escaped through the cracks in the cement. On disability grant. 2006 Flood wiped out gardens.

unough the cracks in the cement. On disability grant. 2000 Flood wiped out gardens.					
Gardener 81	Started with grandfather	Had 2 gardens,	Pumpkins,	Stores produce for a	Uses water from house.
Genadendal	(lived with grandparents).	but bc of water	beans,	long time.	Uses manure, buys guana and inorganic
24/7/07		problems is	potatoes,	Sells to community –	fertilizer.
		gardening in	onions,	people love green	Saves and buys seeds.
		yard – too	beetroot,	beans. Uses money	
		small to grow	carrots Few	from garden to pay for	
		what he wants.	chickens, three	water, uses grant money	
			donkeys	to pay for garden inputs	
Lived and worked	in Grabouw in the orchards u	ıntil 1993 when he	got sick, and was	s forced to leave. Returned	to Genadendal and worked as a day labour

Lived and worked in Grabouw in the orchards until 1993 when he got sick, and was forced to leave. Returned to Genadendal and worked as a day labourer. Started receiving his disability grant in 1997. Wants to start gardening again.

	_	• 0	C	2 2		
Gardeners 82 and 83		Grew up gardening with father who was a farmer	Has a big plot.	Potatoes, carrots, gem	Sells to community if there are leftovers.	Waters from small dam. Uses manure, guana, salt, sprays cabbage
76					there are letto vers.	
		and worked on the farms,		squash,		Saves seeds
Genadendal		gardened on weekends		pumpkins,		
24/7/07		Henry also worked on the		butternuts,		
		farms before he married		beetroot,		
				cabbage,		

cauliflower, watermelon, parsley

Water is the problem. Wants to start planting again. In need of a pump. Wants to try and buy himself one. Both grew up in Rivieresonderend, but Louisa was born in Genadendal. Moved to CT where Henry worked as a driver and Louise worked at Shoprite. Had a small flower garden in CT. Moved back to Genadendal after retiring. Problems with animals, water.

Gardener 84	Grew up gardening with	Has plot from	Pumpkins,	Father sold potatoes	Uncle gave her manure
36	parents, sisters and	parents in the	squash,	and onions to	Has pumpkin seeds saved.
Genadendal	brother.	Vlei, but	potatoes, green	community	Bought onion seeds from farmworkers.
24/7/07		brother wants	beans, onions	•	_
		to start			
		cultivating it.			
C 41 1.	1 .1	1 C	***	1 · .1 · .	

Currently working, but has to stop to stay at home and care for someone. Wants to start gardening this August behind her house where they previously had a pig. Brother works as a driver for the Municipality.

Gardener 85	Son gardens with 2	Has flower	Potatoes,	Uses manure
Genadendal	grandchildren. Husband	garden. Flood	beans, carrots,	Saves seeds – only buys onions, cabbage, carrots
24/7/07	is too sick to garden.	took away big	onions.	 sometimes gets seedlings from farmworkers.
	Parents gardened	plot – no soil		Uses water from house.
		left, only		
		stones		

Son was living in the back, but his house burnt down. Is going to rebuild and start gardening again. Is currently working in CT. Neighbor has rubbish in their yard.

Gardeners 86	Parents farmed, had	Beans,	Sells to community	Guana, no fertilizers
and 87	cattle. Both do seasonal	potatoes,		Buys seeds each season
Genadendal	farm labor.	pumpkins,		
24/7/07		onions, gem		
		squash,		
		butternuts,		
		sweet potatoes		

If there is any help for them moneywise...even if they have to pay it back...the problem is that lots of our people are heavy drinkers so they might spend the money...there is lots that they wan to do...if you can get help you must start to work. Water is a problem. They get it from the river, but during the summer there is not enough. Every year they have a loss bc of stray cattle and water. Would like to have a big plot by Paulie's. David America is Sarie's brother. Sarie wants to garden separately from Karoul bc Karoul works with his brother. David promises to help Sarie garden their parents land, but he doesn't come through.

Gardener 88	Parents, sisters, brother	Only has	Beans,	Grows for home	Plants 1x a year – in September
Genadendal	gardened. Helped	house garden,	pumpkins,	consumption or gives	Saves seeds
24/7/70	husband garden, but now	brother is	onions,	away.	Picks up manure in bushes, buys salt (calcium?)
	he has a back problem so	working in	potatoes		Uses house water for garden in the evenings.
	she has taken over.	parents' plot in			
	Father and mother were	vlei.			

farm workers, worked in their gardens after school.

Husband works of	n railroad. Used to look after	old people in CT, sta	iyed with them, came	e home at the end of the	month. Stopped 6 yrs ago –	receives pension.
Gordonar 80	Huchand did gardening in	Husband had a R	eens For	home consumption I	Isas donkay manura	

Gardener 89 Genadendal 24/7/07	Husband did gardening in Grabouw. After his death 11 y/a, continued in the garden.	Husband had a big garden, now gardening in yard & daughter's yard across the street	Beans, potatoes, sweet potatoes, carrots, pigs, chickens- loves animals	For home consumption Gives flowers to Church and people having parties. Sells for R5 during Easter.	Uses donkey manure When she cleans out the sty, mixes the pig manure with straw and uses it Sometimes saves pumpkin & bean seeds Buys fertilizer in Greyton Has to pay for house water, sometimes it's very heavy. Hires boy for digging some Saturdays. Daughter helps be only works seasonally at
					Cromco.

Worked at Appleweight farms in Grabouw as a cook, husband worked as a gardener. Built house in Genadendal on the weekends.

Gardeners 90	Small house	Pumpkins,	Plant just for house,	Use manure
and 91	garden. People	peas, potatoes,	give extra to neighbors	Water is a problem in the summer, the dam is
83 and 61	who lived in	sweet potatoes,	and freeze.	small
pensioners	the house b4	carrots, celery,		
Bereaville	them gardened	beans, corn		
26/7/07	the larger plot.			
	Want to hire			
	someone to			
	garden it for			
	them			

Old, can't garden anymore. Husband has back problems. Wife does digging. Worked in CT, she in a clothing factory, he was a brick layer. Moved back to Bereaville 16 y/a.

Gardeners 92 Wife's family gardened. Wife's family and 93 Husband has been gardening for 15 years. 26/7/07 He learned from her, from experience and from asking the old people	horses, s. potatoes, potatoes, g. beans, butternuts, gem squash, chilies,	potatoes last year, locally and in Hawston	Save seeds Feed pigs garden waste Use house pipe to water
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Jacobus is from Mossel Bay. He and Malie worked for Sunlan (?) Properties in Cape Town. Then they moved back to Bereaville, to Malie's family's plot. Worked for Working for Water, Jacobus was a driver. Malie started Genadendal Natural Products 5 y/a) which makes home décor from the invasive black wattle (iron frames are made in Riviersonderend), which they had been removing from the mountains with Working for Water. Now employ 12 people, export internationally to the UK and US, and have made enough money to purchase a baakie, which they also use for the gardens. Started business with one horse

Gardeners 94, 95 and 96 74, 78, and 35 (grandson) Bereaville 26/7/07	Gardening since childhood	1 garden c work, both are n	Chickens, potatoes, sweet potatoes, pumpkins, onions, cabbage, broccoli, cauliflower, beetroot, celery, spinach, brinjals, peas, chiles, green beans, g. peppers, cucumbers ow on pension. Ha	Buys veg in winter Sells to community d pigs, cow, but sold them	Buy guana Saves seeds (including beetroot and carrots) Uses manure Plants 2 seasons Hires tractor for R130
Gardener 97 47 Bereaville 26/7/07	Gardening since age 10 Learned from uncle rer and mechanic in CT, afterv		Beans potatoes, sweet potatoes, carrots, cauliflower, beetroot, tomatoes, parsley, celery, cabbage, onions, gem squash	Sells to community	Mostly plants own seeds Plant potatoes twice Uses chicken manure – doesn't buy fertilizer Hires tractor both planting seasons \$ from garden covers tractor Water is a problem – sharing from furrows isn't organized – people cut the water off.
Gardener 98 36 Bereaville 26/7/07	Gardening since he was 15. Learned form grandfather. Had goats, donkeys, milked both, made butter and cheese. It was his work after school every day. Works in orchards, corn and veg farms		Potatoes onions carrots cabbage tomatoes pumpkins	Sells veg, keeps \$ for seed	Doesn't have animals or enough money for a tractor so tills by hand. Waters form furrow Saves seeds Uses manure (collects from around)

Gardener 99 33 Bereaville 26/7/07	Gardening with grandfather since young, started with donkeys to plow. Used manure from chickens and donkeys, sold eggs		Chilies, potatoes, garlic, parsley, beetroot, gem squash	Sells to shops, to community, in Greyton shops. Makes up soup packets.	
3 years, stopped Gardener 100 26 Bereaville 26/7/07			Horses, donkeys Potatoes, sweet potatoes, pumpkins, beans onions	e hostel, security in George Sells to community Initially support by	Plows with horses/ donkeys Saves seeds Uses manure Water from furrow Potatoes twice Have seedling nursery. Want to get into herb
(all pensioners – late 50s, early 60s)	organic courses. Susan worked on onion farm, and has flower garden. Anne started to learn at 11 when she worked on commercial farm with dad, worked on onion farm, planted broccoli and cauliflower. Since '87 worked as supervisor in cellar, vineyards, orchards. Has also done domestic work for a British family in Cape Town. Learns by stealing with her eyes.	Theunissen's cows, plots owned by others – Curis Swartz, Terence Ess, Nel family, Duminy family (old people who don't farm, who have allowed this group to use land.	beans, broccoli, onion, cabbage, carrots, tomatoes, peppers, pumpkin, potatoes, sweet potatoes, cauliflower, leeks, granadilla, celery, parsley, rosemary, thyme, oregano, mustard, chilies, cherry tomatoes, lavender,	NGO which funded nursery and office for production of Buchu, but crop failed and so did support. Need money and advice, want to employ people but don't have the money (started with 20 people in the organization) Business plan asks for R1,500,000	rave seeding nursery. Want to get into herb cultivation, olives, buchu. Fetch water with buckets – aqueduct not working. Want to put in lettuce varieties, begin indoor herb cultivation, need more infrastructure – tables, irrigation (wants pump, but not to pay for electricity), plow,

buchu, Betadene (sores), Borax (high blood pressure), guava.