

A CRITICAL ANALYSIS OF THE GQUNUBE GREEN ECOVILLAGE PROJECT

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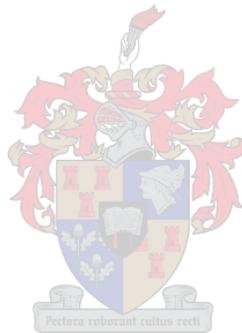
**Thesis presented in partial fulfilment of the requirements for the
degree Master of Philosophy, MPhil Sustainable Development Planning
and Management at the University of Stellenbosch**

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DECLARATION

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



ABSTRACT

The word 'ecovillage' is evocative of a kind of human settlement that exists in complete harmony with nature and examples of such settlements are indeed in existence almost everywhere in the world, some nearly half a century in the making. The Gqunube Green Ecovillage near East London can hardly be described as one of a proliferation of such settlements in South Africa, but it is anticipated that an examination of that project will contribute to the limited academic literature on the topic of sustainable human settlement.

In Chapter 1, this thesis introduces the Gqunube Green Ecovillage and, in the following six chapters, traces its origins and demonstrates how models for 'ideal' human settlement developed. It explains how and why an international ecovillage movement reached South Africa and how Reverend Roger Hudson responded to that movement by starting the Gqunube Green Ecovillage in South Africa. The conclusion is that Reverend Hudson has achieved his primary objective, namely the establishment of an ecovillage, but the challenges described in this thesis have been significant.

One of the most significant potential stumbling blocks to the future smooth management of Gqunube Green is its own regulatory environment that dictates the relationship between the settlers and their ecovillage. The proposed sociocratic management style, combined with a strongly spiritual, eco-theological objective, is driven by a strongly worded and rule-orientated ecovillage constitution that is shown in Chapters 2 and 3 to have the potential to both alienate and unite the inhabitants of the Gqunube Green Ecovillage – depending on how it is interpreted and enforced.

The external regulatory environment, both enabling and restricting development, is analysed in Chapter 4. National, provincial and local government legislation,

policies and guidelines intersect to influence the progress of the Gqunube Green Ecovillage, creating opportunity for controversy between conservationists and developers. However, the debates between the various interest groups over the appropriateness of various development options for the east bank of the Gonubie Estuary were largely incidental and somewhat irrelevant to the delays in the development of the Gqunube Green Ecovillage that are described in Chapter 5. Although bureaucratic delays in the formal process of development have restrained the full rollout of the ecovillage project, the Gqunube Green Ecovillage was eventually established at the end of 2005 and the chronology leading to this milestone is described in Chapter 5.

Chapter 6 of this thesis examines the timing of the Gqunube Green Ecovillage project within a changing and enabling paradigm shift, enabled by cooperative local government and efforts at the integration of legislation and policy to align with the constitutional aims of sustainable development. The concept of an ecovillage is not always acceptable to everyone as the ideal development model, especially when big business has a stake. However, it has been argued that the very fact that the establishment of an ecovillage has succeeded where big business was about to establish itself is a victory in itself for the founders of the Gqunube Green Ecovillage.

OPSOMMING

Die term "eko-dorp" laat mens dink aan die soort menslike vestiging wat bestaan in algehele harmonie met die natuur. Voorbeelde van sulke vestigings bestaan inderdaad amper regoor die wêreld, en van hulle is al in 'n proses van ontwikkeling oor die afgelope vyftig jaar. Die Gqunube Green Ecovillage, in die omgewing van Oos-Londen, kan nie naastenby beskryf word as een van 'n menigte van soortgelyke vestigings in Suid-Afrika nie, maar dit word verwag dat 'n ondersoek van hierdie projek sal bydra tot die huidige beperkte akademiese literatuur op die onderwerp van volhoubare menslike vestiging.

In Hoofstuk 1 van hierdie tesis word die Gqunube Green Ecovillage voorgestel en in die volgende ses hoofstukke word hierdie eko-dorp se oorsprong nagespeur om aan te dui hoe sulke modelle van 'ideale' menslike vestigings ontstaan het. Dit word verduidelik hoe en waarom 'n internasionale eko-dorp beweging Suid-Afrika bereik het en hoe Eerwaarde Roger Hudson hierop gereageer het deur die vestiging van die Gqunube Green Ecovillage in Suid-Afrika. Die gevolgtrekking word gemaak dat Eerwaarde Hudson sy primêre doel bereik het, naamlik die vestiging van 'n eko-dorp. Die uitdagings, soos beskryf in hierdie tesis, was egter aansienlik.

Een van die mees betekenisvolle potensiële struikelblokke voor die toekomstige gladde verloop en bestuur van Gqunube Green is sy eie regulerende omgewing wat die verhouding tussen die setlaars en hulle eko-dorp voorskryf. Die voorgestelde sosiokratiese bestuurstyl, gekombineer met 'n sterk geestelike, 'eko-teologiese' doel, word gedryf deur 'n sterk-bewoorde en reël-geïntereerde eko-dorp grondwet. In Hoofstukke 2 en 3 word getoon dat hierdie grondwet die potensiaal besit om die setlaars van die Gqunube Green Ecovillage te vervreem of te verenig - afhangend van hoe die grondwet geïnterpreteer en toegepas word.

Die eksterne regulerende omgewing, wat ontwikkeling beide moontlik maak én beperk, word in Hoofstuk 4 ontleed. Nasionale, provinsiale and plaaslike regerings se wetgewing, beleide en riglyne is deurweef om die vooruitgang van die Gqunube Green Ecovillage te beïnvloed, en om geleentheid te skep vir omstredenheid tussen bewaringsgesindes en ontwikkelaars. Die debat tussen die verskeie belangstellende groepe oor die toepaslikheid van verskeie ontwikkelingsopsies vir die oostelike wal van die Gonubiemond was oor die algemeen toevallig en het min verband gehou met die verdragings in die ontwikkelings by die Gqunube Green Ecovillage wat in Hoofstuk 5 beskryf word. Alhoewel burokratiese verdragings in die formele proses van ontwikkeling die volle ontknoping van die eko-dorp projek gekortwiek het, is die Gqunube Green Ecovillage uiteindelik gevestig aan die einde van 2005. Die kronologie wat gelei het tot hierdie mylpaal word beskryf in Hoofstuk 5.

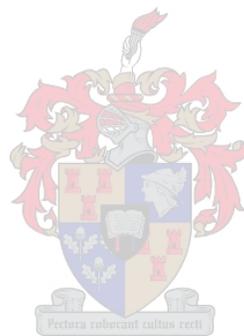
Hoofstuk 6 van die tesis ondersoek die tydsberekening van Gqunube Green Ecovillage projek binne 'n veranderde en bekwame voorbeeld verskuiwing, wat in staat gestel is deur samewerkende plaaslike regering en pogings deur die integrasie van wetgewing en beleide te rig met die grondwetlike doelwit van volhouende ontwikkeling. Die konsep van 'n ekologiese dorp is nie altyd aanvaarbaar deur almal as die ideale ontwikkelings model nie, veral as groot besighede 'n aandeel het. Nogtans word daar geargumenteer dat die slaag van die vestiging van 'n ekologiese dorp waar groot besighede hulself wou vestig, 'n oorwinning is op sy eie vir die uitvindings van die Gqunube Green Ecovillage.

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INTRODUCTION

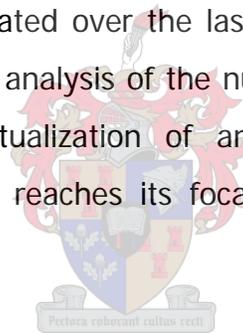
An intrepid group of like-minded people from various parts of South Africa are building a village near East London in the Eastern Cape. It is a human settlement that is modelled on similar such endeavours that have evolved with varying degrees of success in almost every part of the world but with few successful existing examples in South Africa. The settlement, styled 'ecovillage', or 'sustainable village', located itself on the banks of the Gonubie Estuary at the edge of the city several years ago. This thesis examines the following aspects:

- The development of the ecovillage concept, from an idea in the minds of people in disparate communities across the world to practical application at Gqunube Green.
- The origins of the Gqunube Green Ecovillage within an historical and geographic context and within a changing democratic dispensation.
- The Gqunube Green Ecovillage in comparison with other, similar such projects in South Africa and abroad.
- The internal and external regulatory environment that guides the relationship between the residents and their ecovillage and dictates the pace and character of development in the Buffalo City Municipal area.
- The prospects of Gqunube Green's success in the context of competition and conflict between competing interests.
- Spirituality and eco-ecclesiology, or eco-theology, as a theme in the development of Gqunube Green.

It is hoped too, that this thesis will contribute to the literature on ecovillages, meagre as it is, and provide insight into a particular example of a promising ecovillage as experienced by some of those who have committed themselves in varying degrees to it.

METHODOLOGY

Mainly qualitative research methods were used to construct Chapter 1, relying extensively on information obtained from the Internet and also from relevant literature, mainly in the form of academic papers. The relevant literature was reviewed and, where relevant, sources and extracts have been quoted. Information about the development of ecovillages is contained in the main on a plethora of Internet websites that advertise ecovillages. However, an assessment of these websites revealed a relatively homogeneous format of presentation, extensively describing the concept of the ecovillage in the context of environmental degradation, social disintegration and economic crisis. Generally lacking from these websites are descriptions of the experiences of thousands of settlers, accumulated over the last few decades. These minutiae are to be gleaned from careful analysis of the numerous websites. This chapter begins with a broad conceptualization of an ecovillage and then focuses progressively narrower until it reaches its focal point on the Gqunube Green Ecovillage.



Chapter 2 again uses mainly qualitative research methods, relying extensively on information obtained from the Internet. However, the literature used to write Chapter 2 was relevant primarily to the Gqunube Green Ecovillage and therefore location-specific. The relevant literature was reviewed and, where relevant, sources and extracts quoted. Chapter 2 incorporates qualitative aspects in interviews with various stakeholders, including several people closely associated with the development. The objectives and mission of the project are discussed as contained in the Gqunube Green Ecovillage Constitution and the Constitution is frequently quoted. However, the Chapter also describes the physical and human resources, assets and liabilities of the proposed project, obtaining insight from the people who were interviewed and from statistical information that

creates an analytic picture of Gqunube Green. The emphasis is on describing the model under construction and on the resources needed to complete it.

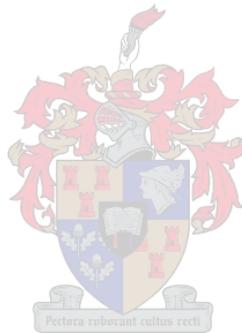
Chapter 3 relies to a greater extent than Chapter 2 on information obtained from the Gqunube Green Constitution, which is quoted where relevant. However, the main difference in focus between Chapter 2 and Chapter 3 is the introduction of the human element, the co-existence of people within an environment that is apparently overtly self-regulated. It was important to reveal the proposed management regime of the Gqunube Green Ecovillage, without too much description and explanation, simply to demonstrate that Gqunube Green is a human settlement that is generally distinct from any other by virtue of its sociocratic rule-making system. It also hints at the possible weaknesses of a strongly regulated and unique management system if its consequences are to compel unaccustomed behaviour from its inhabitants. Regulation and control and its possible effects on the inhabitants of Gqunube Green is a theme that runs throughout the thesis and the transition from Chapter 3 to Chapter 4 is a shift from self-regulation, or the effects of an internal regulation system, to the effects of an external (local, provincial and national) regulatory framework on the Gqunube Green Ecovillage project in general and the inhabitants of the ecovillage in particular.

Chapter 4 relies extensively on information obtained from the Buffalo City Municipal policies and legal documents, and on interviews with officials and settlers at Gqunube Green. The Buffalo City Integrated Development Plan is the central document influencing planning, but it is influenced by a significant number of policies and legislation that sometimes confuses and contradicts, leaving spaces for creative interpretation and vacuums for individuals to gain advantage where competing authorities are and have traditionally been unable or unwilling to assert themselves. These policy and legislative instruments were examined and analyzed, sometimes with the assistance of their authors and in

the light of competing interest groups whose representatives were interviewed where possible. The main problem with this methodology is that circumstances were always changing and events were overtaking one another. One experiences difficulty, when describing a work in progress, closing one's argument or reaching a final conclusion because, no sooner had an event taken place and been described when it was overtaken by new events and what appeared to be relevant and worthy of analyzing subsequently appeared insignificant. This often resulted in having to alter the tense when an anticipated event, described in the future tense, suddenly occurred and accordingly had to be rewritten in the past tense.

Chapter 5 relies on mainly on information obtained from interviews with the Gqunube Green settlers who were quoted where necessary. The Board members of the Christian Ecovillage Trust were initially reluctant to discuss the project, or to reveal information that might have been the subject of Board meetings. It had been the original intention to interview each of the Board members and they subsequently agreed to be interviewed for the purposes of an academic project. However, the initial concern expressed by several members of the Board about privacy issues was considered and it was decided that the aims of this thesis were achievable without interviews with members of the Board of the D T Hudson Christian Ecovillage Trust. An interview with Reverend Hudson was regarded as sufficient to obtain an understanding of the role and origin of the Board. Chapter 5 concluded that regulatory 'proceduralism' had been the main reason for the delayed development and interviews with various aspirant settlers suggested that they had not been kept adequately informed as to the reasons for those delays. However, in spite of the problems associated with delayed development that were apparent from interviews, Chapter 5 also sought to chronicle a series of events that had led to the achievement of one of the main aims of the Christian Ecovillage Trust, namely the establishment of the Gqunube Green Ecovillage.

Chapter 6 includes a mixture of quantitative and qualitative research methods, relying extensively on literature and again on interviews. Whereas Chapter 5 is mainly a chronicle that ends with an event that signifies the establishment of Gqunube Green as an ecovillage and the fulfilment of an objective, Chapter 6 speculates about the future of the project. Chapter 6 is the final chapter and is concerned primarily with conflict. It draws on the theory of changing value systems by various authors to explain how the Gqunube Green Ecovillage occupies a position in time as well as a geographic locality. It explains that timing is arguably as important for the success of the project as the hard issues like finance, resources and enabling legislation and policy. It concludes that a project that is correctly timed will invariably find an appropriate regulatory system in which to develop.



CHAPTER 1

THE ECOVILLAGE CONCEPT

Introduction

This chapter examines the ecovillage movement, explaining where and how it started, how and why it spread. It highlights examples such as Auroville in India and Findhorn in Scotland and then focuses on the ecovillage movement in the South African context with a comparison of the Gqunube Green Ecovillage near East London and the Tsilitwa Sustainable Village near Qumbu, also in the Province of the Eastern Cape. The chapter begins with a general discussion of the roots of the ecovillage movement and its gradual spread across the globe, from its inception as a loose association of like-minded individuals to an international movement with a discussion of ecovillages in the South African context, before focussing on the establishment of Gqunube Green. The comparison between Gqunube Green and Tsilitwa is enlightening in that Tsilitwa, as an example of a successful ecovillage in an impoverished rural setting, would probably serve as a model for Gqunube Green rather than visa versa. Although the concept of an ecovillage is generally well understood, creating an ecovillage is not an event but a process, with many variables that make each ecovillage unique and distinct. This chapter will elaborate on this contention.

Why Ecovillages?

According to the Global Ecovillage Network website, ecovillages “integrate various aspects of ecological design, permaculture, ecological building, green production, alternative energy, community building practices, and much more” (<http://gen.ecovillage.org/about/wiaev.php>, accessed: 2006, August 30). Ecovillages are comprised of urban or rural communities who strive to integrate a

supportive social environment with a way of life that impacts as little of possible on the natural environment and utilises energy as efficiently as possible. Ecovillages are a fairly new phenomenon in South Africa, and particularly in the Eastern Cape Province. The motivation for ecovillages is the choice and commitment to reverse the gradual breakdown of supportive social and cultural structures and the upsurge of destructive environmental practices on our planet. As the twentieth century draws to a close, "environmental concerns have become of paramount importance" and "we are faced with a whole series of global problems that are harming the biosphere and human life in alarming ways that may soon become irreversible" (Capra 1996, p. 5). The extent and significance of these problems is evident in abundance from a plethora of dedicated websites such as the World Environment Organization and from popular magazines such as World Watch (<http://www.world.org>, accessed: 2006, August 30) and Time Magazine (<http://www.time.com>, accessed: 2006, August 30).

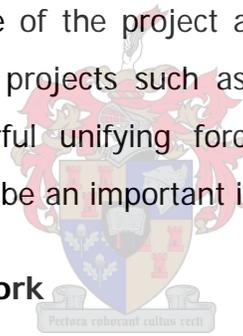
In the Eastern Cape, people have lived in communities close to nature with supportive social structures for centuries. "In most pre-industrial cultures, the earth was treated with great reverence and honour as the source of life and the cyclical view of reality common to most traditional cultures emphasized the renewal brought with each passing year and the obligations of each generation to pass on lands that were as fertile as those received from their ancestors" (Norberg-Hodge, Goering et al. 2001, p. 43). However, evidence is that these social structures are disintegrating and nature is no longer able to sustain the burgeoning rural and urban population. "The sense of despair in many rural communities is exacerbated by a barrage of media and advertising images emphasizing the glories of 'modern life', and which implicitly send the message that rural ways have no place in a future that will be, above all else, thoroughly high tech" (Norberg-Hodge, Merrifield et al. 2000, p. 32). In the South, the overly glamorous lives depicted in films and television lead children in particular

to see their own rural ways of life as primitive and boring by contrast. Village life, already undermined by global economic forces, can easily seem like an anachronistic dead-end, while location-specific social institutions and cultural practices can appear pointless and hopelessly out-of-date. This is particularly true of large parts of the areas previously designated as Bantustans – the former Republic of Transkei and Republic of Ciskei in the Province of the Eastern Cape.

One of the key factors behind the drive to develop ecovillages is to restore the links between people and the earth and between people themselves. The social cohesion within traditional communities and their relatively harmonious relationship with the natural environment were probably the consequence of evolutionary processes rather than a deliberate and intentional survival strategy. “The dominant Western view from colonial times to today portrays traditional farmers as backwards and irrational, as impediments to agricultural developments. However, their studies support the view that traditional systems are the only time-tested models of sustainable agriculture” (Norberg-Hodge, Goering et al. 2001, p. 54). Admittedly, people living in related clans and tribes grouped together for defence and occupied areas that were in places protected by royal decree. Modern ecovillages differ from the traditional or ancient villages in many respects, but most importantly because the settlers *intended* to create communities that are connected to the Earth in ways “that ensure the well being of all life forms into the indefinite future” (<http://gen.ecovillage.org/about/wiaev.php>, accessed: 2006, August 30). Arguably, the preservation of all life-forms into the indefinite future was not the primary intention that drew ancient communities together in times when the potential for growth and the natural resources appeared to be unlimited. However, now that the limits to growth are apparent, it is the preservation of life forms into the indefinite future is one of the purposes that draw communities together to establish modern ecovillages.

Another purpose for the creation of an ecovillage is to unify people. Auroville, in India, was created as a project to realize human unity in diversity. "The purpose of Auroville is to realize human unity" (<http://www.auroville.org>, accessed: 2006, August 30). For example, the people living at Auroville come from approximately thirty-five nations and are from all age groups, from all social classes, backgrounds and cultures, representing humanity as a whole. The population of the township is constantly growing and currently numbers around 1,700 people of whom about one-third is Indian. Auroville is recognized as the first and only internationally endorsed ongoing experiment in human unity and transformation of consciousness and sustainable living. The significance of Auroville is its size, it's success in achieving its objectives over a significant period and that it does not have a European character or origin. It differs from the majority of similar such projects in the sheer size of the project and its basis in Eastern religion. The lesson from Auroville for projects such as Gqunube Green are that eco-ecclesiology can be a powerful unifying force and the spiritual aspect of community building appears to be an important ingredient of ecovillage life.

The Global Ecovillage Network



Modern communities are therefore gathering to design and inhabit ecovillages as living models of sustainability. Ecovillages are built on the three dimensions of social/community, ecological/environmental and cultural/spiritual. "Ecovillages represent an effective, accessible way to combat the degradation of our social, ecological and spiritual environments and they show us how we can move toward sustainability in the 21st century" (<http://www.un.org/esa/susdev/documents/agenda21/index.htm> accessed 2006, August 31). However, as an international pressure group, ecovillagers and protagonists of the ecovillage culture would arguably not have been able to spread their ideas without the Global Ecovillage Network. "The Global Ecovillage Network, is a confederation of people and communities all over the globe that

meet and share their ideas, exchange technologies, develop cultural and educational exchanges, directories and newsletters, and are dedicated to restoring the land and living 'sustainable plus' lives by putting more back into the environment than we take out" (<http://gen.ecovillage.org/about/wiaev.php> accessed 2006, August 31).

The main aim of the Global Ecovillage Network is to support and encourage the evolution of sustainable settlements across the world through communication, networking and voluntary exchange programmes, mainly in Europe, Africa and Oceania. The stated vision of the Global Ecovillage Network is for "a planet of diverse cultures of all life united in creating communities in harmony with each other and the Earth, while meeting the needs of this and future generations" http://www.gen-europe.org/about_us/index_press.html accessed 2006, August 31). Its mission is "to create a sustainable future by identifying, assisting and coordinating the efforts of communities to acquire, social, spiritual, economic and ecological harmony. It encourages a culture of mutual acceptance and respect, solidarity and love, open communications, cross-cultural outreach, and education by example" http://www.gen-europe.org/about_us/index_press.html accessed 2006, August 31). "The Global Ecovillage Network also serves as a catalyst to bring the highest aspirations of humanity into a practical reality" http://www.gen-europe.org/about_us/index_press.html accessed 2006, August 31). It can be argued that the Global Ecovillage Network prompted and influenced all ecovillage development, even if only indirectly through the communication of so-called best practices, developed elsewhere on the globe through trial and error and passed on through a vast and growing network of people who ascribe to the objectives of Global Ecovillage Network. Those stated objectives are:

- To support the development of ecovillages around the world
- To build strong international, national and regional networks of ecovillages

- To create an organizational structure capable of linking grassroots ecovillages and projects into a strong, participatory worldwide movement
- To develop Living and Learning Centres worldwide, to promote hands-on participatory education in sustainable living
- To support worldwide development of whole systems and experiential learning
- To advocate for sustainable communities in public forums
- To partner and collaborate with organizations and people who share this vision

"There *are* solutions to the major problems of our time, some of them even simple, but they require a radical shift in our perceptions, our thinking and our values" (Capra 1996, p. 5). "We are now at the beginning of such a fundamental change of worldview in science and society, a change of paradigms as radical as the Copernican revolution. But this realization has not dawned on most of our political leaders. The recognition that a profound change of perception and thinking is needed if we are to survive has not yet reached most of our corporate leaders either, or the administrators and professors of our large universities" (Capra 1996, p. 5). The Global Ecovillage Network has, for more than thirty years, been spreading what Capra regards as the new paradigm. This new paradigm is the holistic worldview, where people have started seeing the world as an integrated whole rather than a dissociated collection of parts.

The Gaia Trust

One of the roots of the modern ecovillage movement is in the Scandinavian countries where, between 1982 and 1989 where the Norwegian Nordic Alternative Campaign worked to link one hundred grass roots movements with the scientific community to solve global social and environmental problems. The

campaign was able to secure significant amounts of funding to fund the project in Norway. However, spiritually based projects had existed as early as the 1960s in Scotland, India, the United States, Sri Lanka and in Burkina Faso. The reality is that “it takes significant amounts of money and initiative to start an ecovillage and the length of time for which external agencies are willing to commit funds is also critical to success. For real social and natural resource change, development projects must be of realistic lengths” (Pretty, Guijt, Schoones and Thompson 2000, p.141).

“Projects of less than five years’ duration have a much greater chance of failure than those of five to ten years or more. Just as local communities take long-term and sequential view of resource use and management, so must projects and governments” (Pretty, Guijt, Schoones and Thompson 2000, p.141). It is, of course true that individuals are able to make small positive changes that collectively impact on and improve the way that communities interact with their environment. However, large-scale ecovillage projects are labour-intensive and expensive. Sufficient funding is therefore critical and the Gaia Trust has supported such projects all over the globe. The Gaia Trust is a Danish charity founded in 1987 with “the objective of promoting a global consciousness of an idea that the whole planet is a living organism and that humankind is a part of that whole” (<http://gaia.org/gaiatrust/index.asp> accessed, 2006, August 31).

The Growth of the Ecovillage Movement

The publication of Rachel Carson’s *Silent Spring* in 1962, warning of the dangers to humans and to wildlife from toxic pesticide residues, is widely regarded as the spark which kindled the environmental movement as it is known today. “However, it was not until some time after this, in the 1970s, that serious philosophical reflection about ethical issues raised by human action in the non-human natural world commenced” (Palmer 2003, p. 15-16). In 1971, the first

conference on environmental philosophy was held at the University of Georgia in the United States. Global Environmental Network was one of the Gaia Trust's main projects but it no longer provides funding and its focus has shifted away from starting up ecovillages, to completing existing projects that demonstrate potential. One of the most important impacts that the Gaia Trust had on the global community was its commissioning of the In Context magazine in the 1990s. In Context created a forum for the first time for like-minded people to communicate and it published best examples of ecovillages around the world. It appeared from the responses to the magazine, many exciting and vastly different communities existed around the world. From the mid-1980s to the present time, research, publication and teaching in environmental ethics has rapidly expanded.

People from diverse countries appeared to share a common vision that suggested that an ecovillage culture and lifestyle was feasible. The Auroville "Universal City" that was started in India in 1969 was arguably the first ecovillage. However, it was only in Denmark in September 1991 that the Gaia Trust prompted a convention to develop a strategy to spread the ecovillage concept. In 1993, the Gaia Trust brought together a number of established and embryonic ecovillages to form the Danish Association of Sustainable Communities. In 1994, a second meeting took place in Thy in Denmark where the GEN was informally initiated. In 1995, the Global Ecovillage Network established its website and a conference held at Findhorn in Scotland was called "Ecovillages and Sustainable Communities for the 21 Century". The conference lasted one week and was attended by more than four hundred delegates from forty countries. The Findhorn Conference was the largest meeting of ecovillage enthusiasts that had ever been arranged and it was an indication that the concept had caught on.

At the Findhorn Conference the decision was taken to establish three autonomous regional networks to cover the globe geographically. One of these administrative centres was at Crystal Waters in Australia where Max Lindegger was one of the founder members of Global Ecovillage Network. The Findhorn Conference was the biggest eco-conference ever held and its significance for the spread of the ecovillage concept cannot be over-emphasized. The influence that the Findhorn Community has had on the ecovillage movement can also not be over-emphasized. It was started in 1962 by a husband and wife team, their three children and a family friend who, with shared spiritual beliefs and very little money, arrived at Findhorn where they lived in a caravan and grew vegetables to feed the family. The success of their project has become a cornerstone of the ecovillage movement.

An important aspect of Findhorn and Auroville's influence is that it brought spirituality to the ecovillage movement. "The Findhorn spirituality is based on the values of planetary service, co-creation with nature and being attuned to the divinity within all beings. They believe that humanity is engaged in an evolutionary expansion of consciousness, and seek to develop new ways of living infused with spiritual values. They have no formal creed or doctrine but recognize and honour all the world's major religions as the many paths to knowing our own inner divinity" (http://www.findhorn.org/home_new.php accessed 2006, August 31). In practical terms, it was believed that people could intuitively contact the over lighting spirits of plants (divas) who provide guidance. The success of the early Findhorn vegetable project has been attributed to divine intervention because the barren sandy soil of the Findhorn Bay Caravan Park grew huge plants, herbs and flowers and a small community developed, all committed to God's will and to expanding the garden in harmony with nature. In 1972 the community was formally registered as a Scottish Charity under the name The Findhorn Foundation and by the 1980s it had grown to approximately three hundred members. "The shift towards green design began in the 1970s

and was a pragmatic response to higher oil prices and resulted in the rise of the solar house movement – homes built to use clean renewable energy from the sun” (Roaf, Fuentes and Thomas 2001, p. 1).

Ecovillages in South Africa

An ecovillage in South Africa apparently means different things to different people. Some associate ecovillages with gated golfing and polo estates inhabited by the idle elite and, at the other extreme, some people associate ecovillages with anarchists and prophets of doom. In reality, settlers in most ecovillages are drawn from a wide spectrum of society. Most ecovillages in South Africa are relatively new and are in the process of being formed. The Lynedoch Ecovillage at Stellenbosch, established in 2000, is probably “the first ecologically designed, socially mixed intentional community in South Africa” (<http://www.sustainabilityinstitute.net> accessed 2006, August 31). The uniqueness of Lynedoch is its intentional attempt to mix poor and middle class people in a social experiment – a social mix that is conspicuously absent from similar such developments elsewhere in South Africa. One of the earliest ecovillages in South Africa is Tiholego Ecovillage near Rustenburg in the North-West Province that was started in 1991, the Oudemolen Eco Village in central Cape Town had its first residents in 1996 and the Bloemendal Farm Ecovillage on the outskirts of Cape Town had its first residents in 1998. Midrand EcoCity in Midrand was established in 1999 and the first adobe house at the Lynedoch Ecovillage was completed in 2005. In the Eastern Cape, people first started living at Khula Dhamma near Haga Haga in 2003, but the most significant development in the Eastern Cape is the Tsilitwa Sustainable Village near Qumbu. Tsilitwa Sustainable Village was developed by Sustainable Villages Africa (Proprietary) Limited.

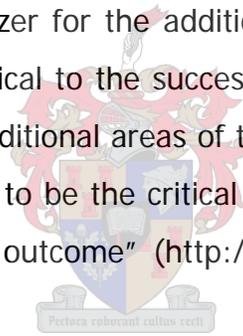
In the African context, the sustainable village holds the potential to help rural people. The colonial legacy left rural areas, particularly in the Eastern Cape, under-developed and functioning as a pool of unskilled labour for urban areas. Current government spending on infrastructure through the Municipal Infrastructure Grant and other projects tend to make the assumption that underdevelopment can be redressed through capital-intensive infrastructure programs. These infrastructure programs are funded by the state and the fear is that the communities who stand to benefit from them will never be self-sufficient enough to be able to maintain that infrastructure, resulting in an endless financial burden on the state and perpetuating reliance on handouts. The danger is the infrastructure programs create 'white elephants' where inappropriate and unsustainable state intervention has led to precisely the opposite of the intended effect. Current examples of such inappropriate interventions are the Lusikisiki solid waste site, where the location of the site is some distance from the village, thus making it too expensive for operators and the public to use, and the storm water outlet in Port St Johns that was intended to drain storm water from the village into the Mzimvubu estuary, but soon silted up and became an unsightly refuse dump that pollutes the estuary. The concept of a sustainable village, or an ecovillage, includes a strategy to place vulnerable communities in the position where they can fund their own development with the minimum of infrastructure.

The founders of Sustainable Villages Africa had some experience of rural development in the Eastern Cape, having worked there for the Council for Scientific and Industrial Research and their objective was employment creation to enable the rural development sector to compete with the formal sector through a strategy of using appropriate technologies and sustainable practices by individuals and groups working together. Funding for Tsilitwa came from the Department of Environmental Affairs and Tourism and the Dutch Government and the emphasis was on providing this deeply rural area with adequate

electrical power and access to better systems of water supply to revitalize latent economic activity. "The emphasis in any sustainable village or ecovillage project is on energy, water and sanitation, combined with the latest in sustainable techniques and technology" (Pretty, Guijt, Schoones and Thompson, 2000, p.125). "As far as sustainable is concerned, a sustainable village is therefore one that has full water supply and sanitation provision such that the human waste products of the village can be processed to produce energy for the village. In the rural areas, where cattle and sheep farming are the main farming activities, human waste can ideally be combined with animal waste. The ideal is to use energy as creatively as possible" (<http://www.sva.co.za> accessed 2006, August 31).

The Tsilitwa Sustainable Village has actively built on the traditional concept of land ownership, in terms of which a headman or chief would allocate land for occupation by a family who would never own the land but who would have a right to live on and reap the fruits of that land as long as they subjected themselves to the traditional leadership of the chief or headman. Agricultural land would be granted to the subject directly adjoining his homestead. "This small piece of land, usually not less than 50m X 50m in extent, when farmed correctly, is more than adequate to support the entire family" (<http://www.sva.co.za> accessed 2006, August 31). The reasoning that went into the Tsilitwa Sustainable Village was that an adequate income could be generated from the relatively small allotments of land, if the farmer was taught to farm it more intensively and if adequate water could be located close by. "The most successful institutions are those that start their projects small and cheaply. They promote uncomplicated design and do not try everything at once. Technologies promoted tend to be low risk to farmers, easy to teach and demonstrate and tested under local conditions (Pretty, Guijt, Schoones and Thompson 2000, p.141).

Sustainable Villages Africa (Proprietary) Limited entered into an agreement with the Department of Environmental Affairs and Tourism to develop three homesteads as models of how intensive farming methods, when combined with adequate water supply, could transform a relatively small patch of land into a commercially viable food producing enterprise. However, Sustainable Villages Africa (Proprietary) Limited went further and joined forces with the Tsolo Agricultural and Rural Development Institute to extend the model to twenty households and providing training to an additional forty families while remaining within the original Department of Environmental Affairs and Tourism budget. Commitment to the concept of and funding for the sustainable village is not limited solely to the Department of Environmental Affairs and Tourism. The Eastern Cape Provincial Department of Agriculture committed resources in the form of seeds, tools and fertilizer for the additional forty households. "Clearly, intervention and funding is critical to the success of a sustainable village, but in the context of the rural and traditional areas of the Eastern Cape, the adaptation of traditional methods appears to be the critical ingredient to ensure community participation and a successful outcome" (<http://www.sva.co.za> accessed 2006, August 31).



The Gqunube Green Ecovillage

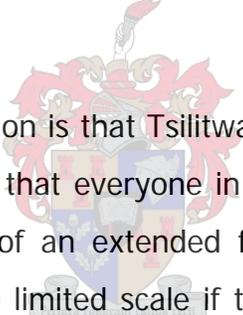
Gqunube Green was established as an ecovillage by the Christian Ecovillage Trust "to explore and promote a way of life that is environmentally, socially, and financially sustainable and informed by the Christian calling to be good stewards of creation" (http://www.gqunubegreen.org/main.php?l_body=purpose, accessed 2006, August 31). It is an ambitious endeavour to transform part of a small, relatively undeveloped piece of land on the eastern outskirts of East London, into a village inhabited by likeminded people wanting to live by, and achieve the objectives set out in the Constitution of the Gqunube Green Ecovillage. Whether one refers to Gqunube Green as an ecovillage or a

sustainable village is irrelevant. Both descriptions refer to the same conscious decision by a community to live together in a particular manner. It differs from the Tsilitwa Sustainable Village in the important sense that Gqunube Green is situated in a formal area, inhabited by relatively affluent white people on private land, as opposed to the poorest of the poor blacks living on state-owned land who rely on their small plots to produce the food on which they rely for their very existence.

The similarities between the Tsilitwa and Gqunube Green projects are significant and worth mentioning, despite the respective groups coming from such different backgrounds. The founders of the Tsilitwa Sustainable Village discovered the key to the success of a village-based project was for the entire village to be regularly consulted in all phases of the project. In the case of Gqunube Green, communication about events and developments was in the form of a newsletter that was infrequently circulated to subscribers and it has to be conceded that communication between the project's management and its subscribers could have been much better. In the case of Gqunube Green, expectations, which were created in the minds of several of the earlier aspirant settlers that they would be able to build houses and settle at Gqunube Green as far back as 2003, were unrealistic. However this has to be attributed to poor communication between the project's founders and the aspirant settlers. As a consequence, several of them gave up their wait and subsequently had nothing more to do with Gqunube Green (Various interviews with Mary Burseley and Derek Puchert).

The founders of Tsilitwa devoted a lot of time and resources to managing the process of community facilitation. Of course, it was much more difficult for the founders of Gqunube Green to do so because the settlers were a diverse group with little or no links to one another, many of them scattered across the Republic of South Africa and from different cultural and religious backgrounds. However, at Tsilitwa the people were relatively homogenous and the village had been

established for hundreds of years. The other advantage for the founders of Tsilitwa was that the villagers were mostly living in abject poverty and their need to work together as a forum and a community was driven by desperation. The need to survive would be more important for the villagers of Tsilitwa than the altruistic ideal of sustaining the Earth's resources that most Gqunube Green residents would espouse as being a priority for choosing to live there. For the people of Tsilitwa, the choice of where to live is a relative luxury they mostly do not have and they accordingly have to make the best of their current situation. These divergent ideals also express the underlying reality, that Gqunube Green, like many similar such ecovillage project elsewhere in South Africa, are orientated around middle class values, focused on environmental futures that either ignore the poor, or play lip service to the social and economic dynamic that constitute sustainability.



Like Gqunube Green, the intention is that Tsilitwa will be made up of sustainable homesteads. The difference is that everyone in the Tsilitwa Sustainable Village will be a farmer and be part of an extended farm, whereas the residents of Gqunube Green may farm on a limited scale if they so desire, but they are not compelled to do so. The design of each home at Tsilitwa and at Gqunube Green has to be carefully done but for different reasons. At Tsilitwa it is "to ensure that the future farming practices are done with minimum inputs and greatest yields for the households" (<http://www.sva.co.za>, accessed 2006, August 31), whereas homes at Gqunube Green are designed to be energy efficient and to promote sustainability in terms of their impact on the environment. Both projects promote the use of permaculture methods. "Permaculture is an ethical design system for food production, land use and community building. It creates productive and sustainable ways of living by integrating ecology, landscape, organic gardening, architecture and agroforestry. The focus is not on these elements themselves, but rather on the relationships created among them by the way they are placed together; the whole becoming greater than the sum of its

parts” (<http://en.wikipedia.org/wiki/Permaculture>, accessed 2006, August 31). However, the Gqunube Green settlers will not be trained as the Tsilitwa settlers were in conservation farming concepts and techniques. However, the Gqunube Green settlers must attend three courses on subjects selected by the founders before they are eligible for a site at the Gqunube Green Ecovillage.

Sustained financial support, as already mentioned, is critical to the success of an ecovillage. The D T Hudson Charitable Trust purchased the land on which Gqunube Green was founded for the specific purpose of establishing an ecovillage. The D T Hudson Charitable Trust was established by Duane Hudson who stipulated that the funding for Gqunube Green was made available to “to bring into being an ecovillage that models sustainability in all its aspects”. The money was made available interest-free, but the development has to generate sufficient funds to replicate itself and establish other ecovillages. This means that Gqunube Green was intended to be a flagship development of a kind that will eventually roll out to the remotest areas of the Eastern Cape Province. It also means that the gift must be passed on by the inhabitants of Gqunube Green who, having received an opportunity to live in harmony with nature would have to teach others how to do the same elsewhere. A further requirement of the D T Hudson Charitable Trust was that Christian unity had to be promoted. No financial support is provided for any settler.

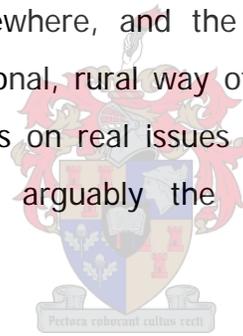
The crucial difference between ecovillages, whether in South Africa or anywhere else, is their location. Tsilitwa and Gqunube Green are examples of rural sustainable villages, although the emphasis at Gqunube Green is less towards organized farming and more towards sustainable living. Other ecovillages can be described as rurban – “It’s is not really urban. It’s not really suburban. It’s rurban” (<http://www.wordspy.com/words/rurban.asp> accessed 2006, August 31). Or, in the case typical of rural regeneration projects, many exist in an urban environment. At Tsilitwa, a very important aspect of the sustainable village is a

fully functional farming cooperative. The advantage of a cooperative is to afford each farmer an opportunity to share in equipment and facilities that he or she would not be able to afford to purchase. A cooperative was apparently not envisaged at Gqunube Green, possibly because farming was not considered to be the primary activity in the ecovillage, but at Tsilitwa the cooperative is a support structure for the small farming operations in the village that could not function without it. The cooperative model has also been used elsewhere in the Eastern Cape as a poverty alleviation strategy. The Eastern Cape Provincial Primary Nutrition Project (also known as the School Feeding Scheme), for example, uses the cooperative model to enable communities, manufacturers and suppliers, with the assistance of the Department of Education, to form cooperatives to produce food in the vicinity of the schools where the children from those communities are educated.

Conclusion

It can be seen that one of the key factors behind the drive to develop ecovillages is to restore the links between people and between people and the earth. The process was prompted in the 1970s by the oil crisis and the concern since the 1960s amongst academics and like-minded people living mainly in the northern hemisphere that the Earth's resources were being used up faster than they could be replenished. Networks developed, aided globally in the 1980s by the Global Ecovillage Network through conferences and the media, and funding was forthcoming that proved critical to the establishment of ecovillages. By the 1990s the term 'ecovillage' had gained currency as "a human scale, full-featured settlement in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development and can be successfully continued into the indefinite future" (<http://ecologicalsolutions.com> accessed 2006, August 31).

It is apparent from this definition of an ecovillage, that it is sufficiently generalised to fit any ecovillage development, anywhere in the world. However, 'the devil is in the details' and the comparison between the Gqunube Green and Tsilitwa was made to emphasise that two distinct benchmarks exist in the South African ecovillage context, the first consisting of developments based on middle class values driven by environmental concerns and the second driven by a sheer need for survival. Two commonalities are that international and local experience has shown that both kinds of developments need sustained intellectual and financial resources in order to thrive and replicate themselves, and both kinds of developments are prompted by self-preservation. The Gqunube Green model appears designed to preserve a middle class lifestyle for a relatively few, mainly whites, that impacts less on the natural environment and that can be replicated as middle class enclaves elsewhere, and the Tsilitwa model is designed to provide support for the traditional, rural way of life of millions of mainly black peasant families with emphasis on real issues of poverty, social cohesion and environmental degradation – arguably the tangible issues of sustainable development.



CHAPTER 2

THE GENESIS OF GQUNUBE GREEN

Introduction

The Gqunube Green Ecovillage was the brainchild of Reverend Roger Hudson, but it had its roots in much more modest endeavours in other areas of the Eastern Cape. The success to date of Gqunube Green can be attributed in no small part to Reverend Hudson's perseverance and the Christian Ecovillage Trust that was established in 2000 to bring into the ecovillage into being. This chapter is largely descriptive of Gqunube Green and the concept of ecotheology. It will question the prospects of Gqunube Green succeeding in joining people from different Christian denominations and others of different, or with no religious beliefs, into an ecovillage. "Diversity is a strategic advantage if there is a truly vibrant community, sustained by a web of relationships" (Capra 1996, p. 303-304). If the community is fragmented into isolated groups and individuals, diversity can easily become a source of prejudice and friction. But, if the community is aware of the interdependence of all its members, diversity will enrich all the relationships and thus enrich the community as a whole, as well as each individual member. In such a community, information and ideas flow freely through the entire network and the diversity of interpretations and learning styles – even the diversity of mistakes – will enrich the entire community. Since the settlers of Gqunube Green come from such diverse backgrounds, it is questionable whether or not they can achieve the outcomes expected of them.

Physical and Geographical Attributes

Gqunube Green is comprised of Farm 792 and 793, agricultural holdings covering that were formerly known collectively as Gonubie View Farm. It is situated on 2.1 kilometres of the east bank of the Gonubie Estuary, on ninety-seven hectares of gently sloping hillside east of East London with a view of the Gonubie Estuary, the Indian Ocean, the East London suburb of Gonubie and the city of East London beyond that. Gonubie is an Anglicization of the correct Xhosa spelling of the word 'Gqunube', which is the name of an indigenous blackberry plant. Gqunube Green will, when completed, consist of sixty-eight homes, built according to an explicit set of specifications founded on ecological building principles and choice of material. The houses will be located in four clusters, each descriptive of the areas in which they will be located:

- Lagoon View – a cluster on relatively steep ground overlooking the mouth of the Gonubie River, set in a wooded area
- Wetlands Loop – a cluster of houses overlooking a natural wetland, set against a gentle grassy slope
- Wilderness Rim – a cluster of houses overlooking the inland areas of East London and the steeper slopes of the wider curves of the Gonubie River
- Limestone Ridge – a grassy cluster on natural limestone with a view inland where the commercial centre will be built

A total of 45 hectares, comprising 46% of the area of Gqunube Green, has been allocated for grazing lands and 32 hectares, comprising 33% of the area of Gqunube Green, will remain under indigenous forest. The hilltops are covered with coastal grassland that is currently grazed by a herd of Nguni cattle in accordance with the concept of holistic land planning and management. In fact, one of the stated goals of the ecovillage is to practice holistic land planning and holistic grazing planning. A total area of 7.7 hectares, comprising 7.9% of the

area of Gqunube Green, has been earmarked for croplands and orchards. The indigenous forests, mostly pristine, are situated on steep river slopes. The remaining 21% of the land has been set aside for three kilometres of roads, the training centre, the village centre and the retreat centre. Five or six kilometres of recreational hiking trails will traverse the entire development. Since farms 792 and 793 were originally zoned for agricultural purposes, it was necessary to apply to the Department of Agriculture for rezoning and to the Buffalo City Municipality for subdivision to provide for the proposed change in land usage. The necessary application was submitted to the Department of Agriculture and the Buffalo City Municipality in 2001 and provisional approval was granted in 2002. Full approval was granted in November 2005. It should be emphasised that, although the concept of an ecovillage is generally well understood, creating an ecovillage is not an event but a process with many variables that make each ecovillage unique and distinct from the next one.

The Mission of the Gqunube Green Ecovillage

The Constitution and Homeowner's Association Agreement has been repeatedly amended, an indication that the Gqunube Green Ecovillage is very much a work in progress, but the aims and objectives are ineluctable and the core values remain uncompromised. For several reasons, Gqunube Green is the first ecological village project of its kind in the Eastern Cape Province. It is a local living economy in progress and Reverend Hudson has sought through Gqunube Green to mainstream an ecologically sound and feasible alternative to conventional suburban and rural development. He envisaged Gqunube Green becoming an educational centre to build awareness of sustainable living and where practical skills could be taught. The Gqunube Green Ecovillage exists to promote sustainability that "builds the Triple E's of Ecology, Equity and Economy,

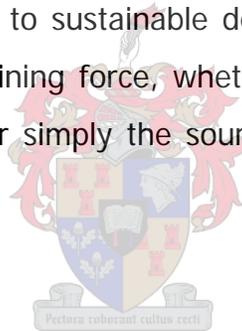
and integrates a Christian spirituality of love for God's creation" (<http://www.gqunubegreen.org> accessed 2006, August 31).

According to the Gqunube Green Statement of Mission, it was established as an ecovillage by the Christian Ecovillage Trust to embody a way of life that is environmentally, socially, and financially sustainable and informed by the Christian calling to care for God's creation. "Environmentalists and people of faith have had limited contact since the start of the modern environmental movement, but it is an emerging trend. Spiritual traditions, from large centralized religions to local tribal spiritual authorities, are beginning to devote energy to what some see as the defining challenge of our age: The need to build just and environmentally healthy societies. The quickening of religious interest in environmental issues suggests that a powerful new political alignment may be emerging that would greatly strengthen the effort to build a sustainable world" (Gartner 2003, p. 152).



The Gqunube Green Ecovillage can trace its roots to an ambitious project in the 1990s when Reverend Roger Hudson, who was a minister of religion and relative of Duane Hudson, recognized the opportunity to convert the glebe lands of the various Methodist mission stations in the Eastern Cape into permaculture gardens for the benefit of the local church members. Traditionally, the glebe lands are the agricultural lands surrounding churches and they have their roots in feudal times. Unfortunately, this farsighted initiative by the Khanya Programme Committee was hamstrung by competing claims for the glebe lands and by obstacles that eventually ruined the concept and sent the Committee back the drawing board.

Reverend Hudson is the Executive Director of the Christian Ecovillage Trust and it was he who initiated and funded the project. The Trust was established as a non-profit section 21 company and Reverend Hudson participated in permaculture design initiatives for several years before initiating the Gqunube Green project in 1999. The stated purpose of the Trust, according to the Constitution, was to 'establish, promote and support ecovillage development in South Africa and beyond' and one of the unique aspects of the Gqunube Green Ecovillage is its foundations on the ecclesiastical interpretation of the optimum relationship between people and their natural environment. This is the concept that can be described as eco-ecclesiology or ecotheology. Gartner regards religion as an orientation to the cosmos and to our role in it, offering people a sense of ultimate meaning and the possibility for personal transformation and celebration of life. It is linked to sustainable development because "it offers a means of experiencing a sustaining force, whether as a creator deity, an awe-inspiring presence in nature, or simply the source of all life" (Gartner 2003, p. 153).



The Objectives

The Christian Ecovillage Trust was created to bring into being the Gqunube Green Ecovillage. The stated objectives of the Christian Ecovillage Trust are:

- To bring into being the Gqunube Green Ecovillage
- To show an example of sustainable food production and living
- To develop a Learning Centre at Gqunube Green teaching sustainable living as an expression of good stewardship of God's creation
- To promote reconciliation amongst Christians of differing denominations
- To pass on the gift by forming another Ecovillage

Objective 1 – Bringing into being the Gqunube Green Ecovillage:

The first objective of the Christian Ecovillage Trust, to bring it into being, has been completed and the Gqunube Green Ecovillage has been established. Permission has been granted by the local authority to commence development, but the project has insufficient financial resources at present to do so. Reverend Hudson is engaged in negotiations with banking institutions to provide a development loan to enable infrastructure to be built.

Objective 2 – Showing an example of sustainable food production and living:

The second objective of the Trust has yet to be accomplished, since privately owned plots have yet to be sold and, with the exception of farming with Nguni cattle, sustainable food production has therefore not commenced.

Objective 3 – To develop a Learning Centre at Gqunube Green to teach sustainable living as an expression of good stewardship of God's creation



The construction of the Learning Centre at Gqunube Green commenced and is well underway. The centre is envisaged for courses to train residents and visitors on topics related to sustainable development and are based on a triad of overlapping circles that will be the spiritual and learning centre of the village. There will also be a retreat centre where residents can meditate and receive spiritual communion, and the village or community centre that will be the heart of the community, serving as a nerve centre for the co-ordination of all activities affecting the ecovillage.

The Christian Ecovillage Trust decided not to refer to the spiritual centre at Gqunube Green as a church, but to call it the Pavilion instead. The Training Centre consists of the farmhouse complex and the Tri-Circle church building. It

was intended that the Tri-Circle building would become the central focus of the life of everyone living at Gqunube Green, as a meeting place, a place to commune, for work parties, training and retreats. It was intended that the Tri-Circle be hired out for various purposes. However, the focus will be on reflecting the rhythm of life at Gqunube Green. Daily Office will take place there and the Eucharist (breaking bread) will be celebrated there once a week. Through this and other ceremonies, it is intended that care for the earth and neglect of the planet be brought before God.

Working on the assumption that the Holy Spirit is impacting on all that takes place at Gqunube Green, whenever a change occurs, residents will mark the moment. From the birth of animals to their deaths, from the blessing of new seed to the slaughter of meat, from the planting of new crops to their harvesting, all such events will be brought into the Tri-Circle. By the end of 2005, progress on the construction of the Tri-Circle had progressed, after a slow start, to the point where it was clearly the focus of the project that it had been intended to be. The difference between the Tri-Circle and other churches is that it will lay heavier emphasis on care for the earth. The idea is to teach by example that all churches can do something in their various forms and in rural areas churches could be encouraged to emulate the Gqunube Green Tri-Circle model. The building is the first of its kind in the World (<http://www.gqunubegreen.org> accessed 2006, August 31).

Objective 4 – Promoting reconciliation amongst Christians of differing denominations

The promotion of reconciliation amongst Christians of differing denominations, as the fourth objective, is probably one of the most difficult objectives to measure and will be one of the last of the objectives to be met. One of the clear challenges will be the fact that settlers have not been chosen or vetted on the

basis of their adherence to Christianity and some have even professed to be non-believers (Interview with Mr Jeff Anderson: 2006, June 7). Gqunube Green does not intend to prevent atheists from settling (Interview with Dr Brian Wilkinson: 2003, August 15) at the ecovillage but the religious beliefs shared amongst members of a group are an especially strong unifying force. Sacred meaning is one of the deepest bonding forces societies possess. Where sacred meaning is absent, societies tend to disintegrate. He explains that religious institutions and leaders can bring at least five strong assets to the effort to build a sustainable world:

- The capacity to shape cosmologies (worldviews)
- Moral authority
- A large base of adherents
- Significant material resources
- Community-building capacity



It is probably true to say, that misinterpretations of religion by environmentalists, and of the environmental movement by people of faith, are manifestations of the centuries-long growing chasm between science and spirituality, a chasm that widened by the twentieth century. “In the three Western monotheistic traditions – Judaism, Christianity and Islam – morality has traditionally been human-focused, with nature being of secondary importance and with God transcending the natural world. Thus, the natural world can be seen as a set of resources for human use” (Gartner 2003, p. 161).

Objective 5 – Passing on the gift by forming another Ecovillage

The Gqunube Green Ecovillage is closely associated with an ecovillage situated at Mooiplaas Mission, approximately forty kilometres east of Gqunube Green. However, the Mooiplaas ecovillage is by no means a replication of Gqunube

Green and preceded the Gqunube Green project by several years. It was established as part of the Khanya Programme and its creators hoped it would provide lessons that might later be put to good use at Gqunube Green. Nonetheless, according to Gary Atherstone (Interview with Mr Gary Atherstone: 2006, April 20), the Mooiplaas Mission project is failing for various reasons and Gary, in response to the challenges at Mooiplaas Mission has moved away to the nearby Mooiplaas village where he is actively engaged in mentoring the local residents in permaculture principles. "Permaculture is built upon an ethic of caring for the earth and interacting with the environment in mutually beneficial ways and we can no longer achieve those aims the Mooiplaas Mission Project because it is not sustainable in the long run" (Interview with Mr Gary Atherstone: 2006, April 20).

Environmental Resources and Challenges

"The environmental crisis is in many ways a design crisis. It is a consequence of how things are made because buildings are constructed and landscapes are used. If we build a rich enough set of ecological concerns into the very epistemology of design, we may create a coherent response to the environmental crisis" (Van der Ryn and Cowan 1996, p. 9). As at the Tsilitwa Sustainable Village, the Gqunube Green settlers had to take the land as they found it and at Gqunube Green they found that significant portions of the farms had been invaded by alien species such as Port Jackson Willow, Bluegum, Inkberry and Lantana shrubs. "Ecological design is any form of design that minimizes environmentally destructive impacts by integrating itself with living processes and ecological sustainability is the task of finding alternatives to the processes that got us into trouble in the first place. It is necessary to rethink agriculture, shelter, energy use, urban design, transportation, economics, community patterns, resource use, forestry, the importance of wilderness and our central values" (Van der Ryn and Cowan 2003, p. 162)

The property was also infested with ticks, a problem that prevails in the coastal belt along the entire length of the Eastern Cape. However, the benefit of significant numbers of Bluegum trees at Gqunube Green is that Bluegum trees present an excellent source of wood for those who intend using that wood for building their homes. Eucalyptus trees are also a resource for construction and can be used as columns and roof trusses in houses. The disadvantage of this timber is its density that equates to its weight, but this also means it is durable and provided it is protected from damp or rain, it should last for many years (Interview with Alice Ford). Wattle and Port Jackson willow (a type of acacia) is also plentiful at Gqunube Green and the latter has been discovered to be a good source of grazing for the cattle and used to supplement grazing towards the end of the winter dry period. The Wattle can be used as the framework for a Wattle and Daub house. A technique called "cob" construction uses stacked short timber lengths for building walls.

A further challenge for the settlers of Gqunube Green is to rehabilitate significant impacts on the land from both legal and illegal sand-mining activities in the recent past that have left numerous excavation sites that contribute to soil erosion. With the exception of the area in the vicinity of the Learning Centre, the sands of Gqunube Green are deficient in clay. This means that clay, once depleted on site, has to be transported to Gqunube Green for building. A small sabunga borrow pit exists on site at Gqunube Green. Sabunga is decomposed dolerite and it is excellent for creating compacted fill beneath structures or as a surface for gravel roads. The sabunga pit is a useful resource for creating platforms upon which to build but one of the long term planning objectives of Gqunube Green will therefore have to be an examination of methods for eventually rehabilitating the sabunga pit.

One of the four neighbourhood clusters on Gqunube Green has, for obvious reasons, been named Limestone Ridge. However, hydrated lime has the property of waterproofing a structure by virtue of the continued growth of the crystalline structure of the lime, but it does not have great strength. It is also used as paint in the form of lime wash. There is also no agricultural industry in the area that produces compacted straw bales for building walls, but it might be feasible to use long thatch grasses of which there is no shortage growing in the vicinity of Gqunube Green and within the ecovillage itself. Hay bales do not provide suitable material.

Human Resources

Two of the most enduring resources at Gqunube Green are Mrs Alice Ford and Mr Simanga Booi. Alice has managed the administration of Gqunube Green since 2002 and was once employed by Jane Goodall to study chimpanzees in East Africa. She met a South African from East London, married him and made her home there. Alice is a biologist and passionate about permaculture. She is a Christian worshipping at the Victorian Methodist Church where she met Reverend Hudson. Alice spent ten years in tick research for the South African Bureau of Standards where she worked towards finding more efficient poisons to rid cattle of ticks and thereby prevent chemical injury to birds such as Oxpeckers. According to Alice, "the 'Holistic Management' system of cattle control, the reintroduction of Oxpeckers, the use of the correct chemicals and the integration of cattle with tick eating chickens are the most important strategies to keep ticks under control. Alice is an enthusiastic advocate for the use of Nguni cattle and encourages an appropriate dipping programme with the correct chemicals" (Mrs Alice Ford: Various interviews).

Although Alice is officially the administrator and bookkeeper at Gqunube Green, she is also performing a number of functions that include designing and working

in the permaculture garden and around the Learning Centre. Alice was foremost in performing the preliminary survey work for the ecovillage sites with Reverend Hudson and assisted with showing the sites ever since. When courses are run at the Learning Centre, Alice is either working in the background, or assisting with teaching permaculture. When Reverend Brian Wilkinson, the previous manager of Gqunube Green left, Alice was appointed to by the Christian Ecovillage Trust to take over his duties on the understanding that a replacement would be found for him within three months. However, more than twelve months after his departure, Reverend Wilkinson's replacement had not been forthcoming and Alice had taken upon herself all of Reverend Wilkinson's former duties and much more. For much of Gqunube Green's existence to date, Alice Ford has been its public face and there is little at Gqunube Green that does not reflect her hard work. However, on account of the cash-flow constraints that plagued the project from the beginning, Alice's efforts were generally not rewarded financially and it is a labour of love that keeps her in her role as the caretaker of Gqunube Green.

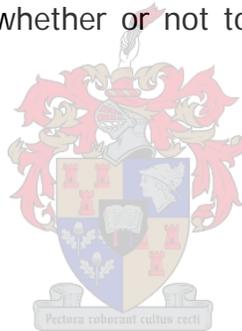
Mr Simanga Booi was on Gonubie View Farm, the predecessor of Gqunube Green, from 1983. He continued caring for the Nguni herd and performing odd tasks at the behest of Alice and the Christian Ecovillage Trust. When the Christian Ecovillage Trust purchased the farms in 2000, Simanga stayed on. His knowledge of indigenous systems made him a great asset to the project. Except to walk to the farmhouse and carry water back by wheelbarrow and make use of the toilets at the farmhouse, Simanga has lived on Gqunube Green without access to running water or sewage. Measures have been put in place to improve Simanga's living conditions and he will be provided with a home at Gqunube Green that he will participate in building. It was explained to Simanga by the members of the Christian Ecovillage Trust that he would not be the owner of the home that he is to occupy, the property being reserved for him during his tenure and then passed on to his successor. Simanga indicated that he would eventually relocate to his family home near Peddie. One of Simanga's objections

to living at Gqunube Green was that he would have been relocated to a proposed staff village in the farm section of Gqunube Green because the most likely permanent workers living on the property would be farm workers. The farm workers village, in line with the policy of low-visibility and low aesthetic impact buildings, is on the low-lying area of the property and Simanga, being a Xhosa, insisted on living as the Xhosas traditionally do, on the high ground (Mr Simanga Boo: Interviewed 2006, May 28).

It was obvious from Simanga's response to questions about the objectives of the Gqunube Green project, that he had little real understanding of the intention behind creating an ecovillage. He was 59 years old in 2006 and had been employed as a farm labourer by the Mendelski family, the previous owners. Since he had been retained by the Christian Ecovillage Trust to care for the cattle herd, he understood that the farming operation would continue. However, it was apparent that Simanga's understanding is that houses would be clustered at various areas on the original farms and occupied, mainly by whites. It is a fact that the majority of subscribers to the ecovillage are whites and Alice ascribed this tendency to the fact that the strategy had been from inception to populate Gqunube Green by word of mouth. Although only two black couples have expressed an intention to settle at Gqunube Green, there is no obstacle restricting people from settling at Gqunube Green on the basis of race. The incongruity is blatant and there does not appear to be any strategy or even realisation of the need to balance the racial equity in Gqunube Green. According to Alice, with the exception of the academic courses run at Gqunube Green that were designed to ensure that only those with a genuine interest in sustainable development were made offers by the Christian Ecovillage Trust to purchase properties, there had been no effort to socially engineer Gqunube Green. However, the consequences thereof are clear and since he generally sees only white people coming and going at Gqunube Green, they were not lost on Simanga either.

Conclusion

Gqunube Green could be perceived as ecological design in progress, ecological design being defined as “any form of design that minimizes environmentally destructive impacts by integrating itself with living processes” (Van Ryn and Cowan 2003, p.18). There are environmental challenges, but the biggest challenge in assembling such a diverse group as the settlers of Gqunube Green appears to be the management of possible competing values. “These include questions about what is considered to be valuable, from where does such value come and how people should act in the nonhuman natural world?” (Palmer 2003, p.16). The difficulty therefore for the architects and eventually the management of Gqunube Green appears to be how to make ethical decisions where perceived values come into conflict and whether or not to act in order to preserve some values over others?



CHAPTER 3

MANAGING GQUNUBE GREEN

Introduction

Living in an ecovillage requires from the settlers that they adhere to rules designed to achieve the aims of sustainability and Gqunube Green is no exception. This chapter examines the Sociocratic organizational structure of the Gqunube Green Ecovillage, comparing it for example with Tsilitwa and Lynedoch. The question is whether or not the Board of the Christian Ecovillage Trust, the entity responsible for ensuring that the objectives of the Gqunube Green Ecovillage are met, will be able to steer and guide the project in the long term? It will argue that, in spite of the fact that the original objectives of the project were set out in the Gqunube Green Ecovillage Constitution, it cannot and has in fact not remained a rigid document. The fact that the Constitution as a living document is currently in the twentieth draft reflects the need for constant amendment to cater for contingencies. It will also argue that contingencies necessitating changes in the Constitution, unforeseen at the first drafting of the Gqunube Green Constitution, may have steered the project in direction that is quite different from the one that Reverend Hudson initially intended.

The Intention in Creating Gqunube Green

According to Mrs Alice Ford (Various interviews between 20 February 2003 and 31 August 2006), "the intention in creating Gqunube Green was always to make people live in close community, relying on one another for their mutual well being. As far as practicably possible, it was the intention to settle residents with as wide a range of skills and talents as possible in order to encourage synergy and dynamism". Through building a wide skills base, it is intended that residents

would learn to depend on one another for the production of goods and services for the benefit of the village as a whole. The Village Centre is intended to be the hub where skills and services would be sold or exchanged to sustain economic activity. There would be no legal or contractual obstacles to residents who wished to dispose of their properties, thus opening the ecovillage to new prospective residents. In the first e-Update, a newsletter that Reverend Hudson started and that was communicated to all aspirant settlers, on average twice a year, it was explained that one of the patterns contributing to the growth of social capital is that of community and community was described as a “convivial, day-to-day gathering of people of all ages and kinds to maintain family and friendships, transact business, establish neighbourhoods and join a common purpose”. Community was further described as being “at the root of what it means to be human and constitutes one of the most critical components of social capital”.



The Sociocratic Circle

The management of the ecovillage was intended by Reverend Hudson to follow the sociocratic decision-making method or, more specifically, the Sociocratic Circle Organizational Style, in terms of which the ecovillage is managed on the basis of decision-making through the principle of consent by descending circles of decision-makers through organized meetings. The principle of consent means that a decision has been taken only when none of the circle members who constitute a quorum at a meeting have any serious objection to that decision. In the context of Gqunube Green, the ‘circle’ is similar to what is more commonly understood as a ‘committee’. Under the sociocratic system, there would be three levels of circles: the Task Circles, a General Circle and a Top Circle. The Association would use the Circles and sociocracy to set policies and rules efficiently. The Circles, acting as set out by this Constitution, manage and control the business and affairs of the Homeowner’s Association, with full powers

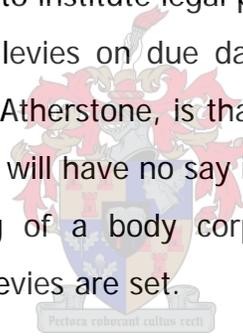
of management, and exercise all powers of the Homeowner's Association. The General Circle makes regulations, bylaws and rules not inconsistent with the Constitution and Bylaws, in furtherance and promotion of the objects of the Homeowner's Association and for the better management of the affairs of the Homeowner's Association, for the advancement of the interests of its members and to assist it in administering and governing its activities generally.

It can be argued that the imposition of a sociocratic style of management on Gqunube Green is comparable with the management approach that was designed for Tsilitwa, where the organizational structure was designed with staffing from the top down. At Tsilitwa, key executives were appointed in the same way that the Christian Ecovillage Board was created to establish Gqunube Green. At Tsilitwa, the establishment of operational posts followed the appointment of key executives as they were needed and training was conducted at the various levels. At Gqunube Green it could be argued that the staffing of management circles can be equated with operational posts and that the Christian Ecovillage Trust can be equated with the kind of development company that controlled the development of the Lynedoch Ecovillage, namely the Lynedoch Development Company. Simply stated, activities have to be properly directed and operational requirements demand proper rules and management such as is evident in the management of Gqunube Green, Tsilitwa and Lynedoch.

It can also be argued that the principle of consent in a sociocratic rule-making system very similar to democratic consent, the only difference being that democratic consent is measured in terms of the number of people who indicate their support for a decision, whereas sociocratic consent is based on the absence of any serious objection to that decision. It seems very likely, according to Jeff Anderson and his wife, Jean (Mrs Jean Anderson: Interviewed 2006, June 7), that the democratic system of rule making will prevail and that the sociocratic

system is unlikely to be used unless homeowners take a strong stand to use it instead of the democratic system.

Meetings of the different Circles have to be held at least once every quarter, unless all members unanimously waive the holding of the meetings and a meeting of a Circle would be legally constituted if only two members were present. Each plot owner must pay a levy and the General Circle sets the levies, based on what it considers necessary to enable the various Circles to carry out their respective functions. The levy payable by each owner is determined at the appropriate time by the Land Management Circle in consultation with the General and Top Circles of the Association and the Christian Ecovillage Trust. The Association also has the power to institute legal proceedings against any member who does not pay his or her levies on due date. The concern expressed by many, including Anderson and Atherstone, is that the average settler who is not a member of the General Circle will have no say in how the levies are set. This is different from the functioning of a body corporate where everyone with a property has a say in how the levies are set.



It is suggested that decisions relating to the setting and collection of levies will be as difficult for the General Circle as those decisions would be for the Body Corporate or Homeowner's Association of any group of residents under voluntary governance, if not more so. This appears especially relevant in light of the Christian Ecovillage Trust's declared intention not to attract homeowners on the basis of their ability to pay their levies, but based instead on their apparent commitment to contribute to sustainable living at Gqunube Green. The challenge for the General Circle is to generate sufficient income to fund the ecovillage and to enforce measures against non-compliance if residents revert to the courts for relief. The intention after all is for the sociocratic circles to facilitate cohesion and not to alienate residents and generate litigation.

The Task Circles

The Task Circles would manage the following aspects of Gqunube Green Ecovillage:

Architectural and Environmental Design Circle

Covenant Compliance

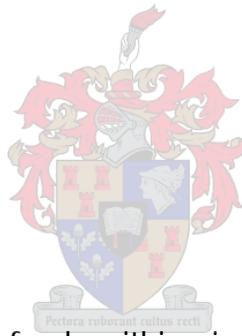
Economic Development

Facility Maintenance

Finance

Land Management

Social and Pastoral



Each Task Circle would operate freely within given parameters in its own area of responsibility for the ecovillage. Each would be responsible for educating its own members in its work and keeping its own records. Participation in any of the Task Circles is to be voluntary and the chair and a representative for membership of the General Circle must be elected by 15 January each year.

The tasks of the respective circles are set out as follows:

The Architectural and Environmental Design Circle

The object of this circle is to establish standards to protect and enhance the environmental quality, visual beauty, and property investment value of Gqunube Green Ecovillage. The Circle would promote maximum energy independence and process requests for architectural and environmental design changes in respect of all buildings at the ecovillage. It was clear from the outset that many prospective residents, including Derek Puchert, had reservations about the rule compelling them to commence building within one year of taking transfer of their properties. Opposition to this rule was based on the fact that residents, for various reasons, needed more time to plan for and build their homes. Although this rule was subsequently relaxed, it remains stringent enough to place prospective residents under pressure to consider their building options soon after taking transfer. It is also likely that much debate will be generated on the subjective issues such as environmental quality and visual beauty.

The relatively low selling price of the plots at Gqunube Green, compared to the relatively expensive property values in the vicinity, makes Gqunube Green attractive for anyone seeking an investment in property. One of the objects of the Architectural and Environmental Design Circle is to protect and enhance the environmental quality, visual beauty, and property investment value. The Christian Ecovillage Trust therefore envisages that prospective residents would have property investment as one of their primary considerations for moving to Gqunube Green, another obviously being the choice to live in a sustainable way. However, the Christian Ecovillage Trust also has a duty to weed out those with intentions to purchase property at Gqunube Green for the sole purpose of making a quick profit. It might have curtailed much speculative investment if the Christian Ecovillage Trust had placed restrictions on the sale and resale of plots at Gqunube Green. Actually, the only restriction to curtail blatant profiteering in

property at Gqunube Green appears to be a restriction on the ownership by any one person of more than one plot.

Plot owners intending to build are required to engage in a preliminary discussion of their intentions with the Architectural & Environmental Design Circle before engaging an architect. Incidentally, two of the Christian Ecovillage Trust Board members, Mr David Muller and Mr Ronald Begby, are architects. "The world needs a new profession of ecotects, or archineers or engi-tects, who can design passive buildings that use minimal energy and where the energy that is used comes from renewable sources if possible. This is the only way forward and the decisions we make on the drawing boards in comfortable offices change the global environment" (Roaf, Fuentes and Thomas 2001, p.9). "The 'ecohouse' and 'eco-architecture' is part of the larger ecology of the planet and the building is part of a living habitat" (Roaf, Fuentes and Thomas 2001, p. 9). Clearly therefore, ecohouses are closely connected to their site, society, climate, region and planet. According to Dr Wilkinson, experimentation with housing is encouraged at Gqunube Green and Sustainable Building is one of the modules offered to prospective settlers at Gqunube Green. However, in spite of the potential for constructive experimentation, it is really to soon to predict what the dominant building style at Gqunube Green will be.

Site and layout plans for all constructions and/or alterations to their land have to be submitted to this Circle before submission for approval by the Buffalo City Municipality. The Architectural and Environmental Design Circle is empowered to appoint people from time to time as agents to perform these functions. The Circle is concerned with issues that would not be central to any development outside of an ecological village context. This is because "buildings are the single most damaging polluters on the planet, consuming over half of all the energy used in developed countries and producing over half of all climate-change

gasses" (Roaf, Fuentes and Thomas 2001, p.10). The responsibility of the Architectural and Environmental Design Circle is critical if it seriously believes, as Roaf, Fuentes and Thomas do, that it is the responsibility of our generation to adapt our buildings to ensure that we can stabilize climate change, that we can live without fossil fuels and that our buildings should not unsustainably pollute the environment.

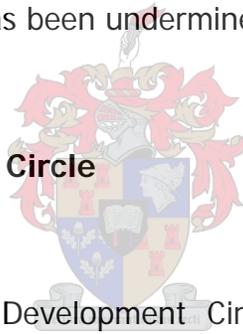
Fire safety distance lines and other criteria contained in the National Building Regulations are applicable. Coverage is limited to a maximum of 30% of the total site area of each plot and roof overhangs are not permitted. The height of buildings is restricted to a maximum of two storeys, inclusive of a basement and no part of the structure may extend above a horizontal plane located seven meters above the highest point on the site. This is to ensure that the development as a whole does not extend above the lines of the ridges and that it blends into the natural surroundings. The disadvantages of this precaution are that some residential dwellings will not have the views of the Gqunube River and the sea that they might have had if they had been sited higher on the ridges. Steeper slopes necessitate retaining structures that have to be designed and certified by a registered engineer. All private plots are restricted to one family dwelling being erected thereon and this provision has to be written into the Title Deeds.

The Covenant Compliance Circle

The object of the Covenant Compliance Circle is to ensure fair and timely enforcement of all the Covenants. These include the Statement of Mission, Goals and Proposal, Constitution and Bylaws. All plot owners are required to respect any reasonable determination made by the Covenant Compliance Circle as to whether or not the provisions of any bylaws have been breached: The bylaws

provide that any dispute as to whether or not a decision of the Covenant Compliance Circle was correct has to be referred to the Top Circle or those delegated by the Top Circle, whose decisions are binding on the residents of all plots. The role of the Compliance Circle is probably one of the most difficult, since it requires a strict policing role in a situation where new precedents will be set every day and there is no impediment to anyone disaffected by the Covenant Circle's decision from approaching a court for alternative relief. The real challenge will be to encourage all residents to give and demonstrate their support to and for the Covenant Compliance Circle. The Covenant Compliance Circle will need the services of residents with knowledge of alternative dispute resolution and it will be critical that the role of this Circle is always supported and not undermined. It will arguably be extremely difficult, once the Covenant Compliance Circle's authority has been undermined, for it to assert itself again.

The Economic Development Circle



The object of the Economic Development Circle is to initiate and promote economic activity for the financial and social benefit of the Association, the residents of Gqunube Green and the greater community within the parameters of the Covenants. It was envisaged that Gqunube Green would have a Commercial Centre. The Economic Development Circle is responsible for this function and applications for business approvals must be submitted to the Economic Development Circle for approval (or to such persons who shall from time to time be appointed as agent on behalf of the General and Top Circles). Applications have to contain detailed proposals for the conducting of any business from any plot within or on the common property of the Gqunube Green Ecovillage.

The Facility Maintenance Circle

The first object of the Facility Maintenance Circle is to provide for inventory, preventive maintenance, repair, and security of buildings and equipment held in common. Its second objective is to facilitate the homeowner waste pick-up and recycling programme and thirdly, promote well-maintained residential exteriors.

The Finance Circle

The object of the Finance Circle is to ensure integrity of the fiscal and administrative systems and the appropriate operation of the financial transactions of the Homeowner's Association within the parameters of the Covenant. While minimising expenses, the Circle has to meet generally accepted accounting standards, manage the Homeowner's Association's cash and records to the advantage of the organization in all its transactions and take appropriate measures to collect revenues due. The Finance Circle is responsible, once a year, for producing an income and expenditure account and present it to the General and Top Circles and Annual General Meeting in respect of the preceding financial year of the Association. The Finance Circle also has to produce an audited balance sheet made up as at the last financial year of the Association and a report of the finances of the Association during the year under review.

The Land Management Circle

The object of the Land Management Circle is to ensure that land management activities are carried out so as to preserve and restore biodiversity, quality and abundance of natural resources and balance of natural systems in accordance

with the Covenants. It must also ensure that outdoor amenities, such as roadways, pedestrian paths and trails, are maintained to support community life. For example, unless the Land Management Circle permitted it, no buildings or bush clearing, or development of any kind would be permitted in the nature conservation area, with the only exception being the Learning Centre. The Gqunube Green Ecovillage consists of seventy-two freehold sites and right of reasonable access to common ground is the responsibility of the Land Management Circle.

Buildings and outbuildings related to sustainable agriculture are limited in terms of the Constitution to a maximum of 2.5% coverage of the size of Farm 792. Other infrastructure related to sustainable agriculture, such as shade cloth nurseries and/or aquaculture ponds and support structures are similarly limited to a maximum of 10% of the size of Farm 792 and have to be environmentally designed, constructed and positioned as determined by the Christian Ecovillage Trust staff after consultation with the Land Management Circle and Homeowners Association. Farmlands at Gqunube Green are comprised of four of the sites amongst the residential lands on Farm 793, ownership of which will be retained by the Christian Ecovillage Trust and leased to residents of the village for farming activities. The rest of the land between the residential sites on Farm 793 with the exception of the areas designated as indigenous forest is for farming purposes. The whole of Farm 792, near the river, have been earmarked for commercial farming activities.

The plots contained in the Plan of Gqunube Green and the common property contained therein must always be used, managed and controlled so as to conform to the principles of:

Care for the Earth

Care for People, and

Sharing of Surplus

According to the Principles of Use surplus knowledge, stock, goods and services must be shared. Provision for the sharing of surplus suggests a cooperative arrangement, but it does not provide for the establishment of a cooperative at Gqunube Green. Specific provision is made for the enjoyment of flora and fauna, which is to be respected at all times and utilized in such manner as to preserve the environment with full recognition of the environmental sensitivity of the area. Residents are expected to adhere to the overall property policy and design in relation to general landscape, reforestation, forestry, agriculture and aquaculture. Permission has to be obtained from the Land Management Circle for certain activities such as the use of non-lethal traps, hunting and fishing.

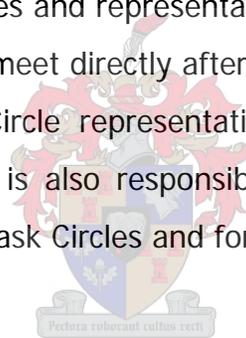
The Principles of Use determine the rules of access to Gqunube Green. For example, residents are not allowed to obstruct or disrupt access to the common property or the surroundings and permission has to be obtained from the Land Management Circle to light a fire at Gqunube Green, although braai fires in designated areas or in a safe braaing device are excluded from this rule. Protection of the environment is clearly a priority and residents are required to obtain permission from the Land Management Circle to remove a living or a dead tree on their plots or on the common property. The principle of Care for the Earth is encapsulated in what has been termed the Best Endeavours to Preserve Principles of Use. This principle, based on section 24 of the Constitution, dictates that residents have to use their best endeavours, now and at all times in the future, to preserve the principles stated above for use or activity over a plot or the common property at Gqunube Green.

The Social and Pastoral Circle

The object of the Social Circle is to foster a spirit of community, neighbourhood collaboration and the resident's ongoing understanding and knowledge of Gqunube Green's goals and objectives. It is also responsible for public relations.

The General Circle

The responsibility of the General Circle (Management Committee) is to manage the general operations of the entire ecovillage. Membership must consist of the chairs of each of the Task Circles and representatives from the Task Circles. The first meeting of the year must meet directly after the annual Task Circle elections and Chairpersons and Task Circle representatives have to elect the General Manager. The General Circle is also responsible for promulgating regulations recommended by the various Task Circles and for financial reporting.



The Top Circle

The Top Circle must consist of the General Manager, two representatives elected from the General Circle, the executive officer of the Christian Ecovillage Trust and the Director of the Gqunube Green Learning Centre, and two Christian Ecovillage Trust representatives as chosen by the Christian Ecovillage Trustees and other persons invited by the Top Circle because of their special expertise in areas vital to ecovillage. The first Chairperson of the Top Circle had to be the Executive Director of the Christian Ecovillage Trust, or his nominee, who had to hold office as such until the first Top Circle election when he would retire as Chairperson, unless re-elected, but continue as a Top Circle member.

The Top Circle membership has to be elected at the first meeting of the General Circle and that occurs after the elections held by the Task Circles. Elected members of the Top Circle hold office until the next succeeding Task Circle elections, but they are conditionally eligible for re-election. If a vacancy occurs in the Top Circle prior to the next round of annual elections at Task Circle level, a person nominated by the remaining members of the General Circle must fill the vacancy. If a vacancy occurs in the General Circle prior to the next round of annual elections at Task Circle level, a person nominated by the Task Circle from which the General Circle member originated must fill the vacancy.

The Ineluctable Rules

The provisions relating to circles meetings come into effect after seventeen private plots are transferred. However, this does not mean that meetings of the Christian Ecovillage Trust, or existing members and the Christian Ecovillage Trust that occurred before seventeen plots were transferred were not proper meetings. Meetings that took place before seventeen plots were transferred, carrying out the work of the Task, General and Top Circles and other duties and obligations required of them, are binding in terms of the provisions of the Constitution and Bylaws.

Notwithstanding the autonomy of the various hierarchal circles and their respective powers, the Constitution sets out basic ineluctable conditions relating to the ownership of the whole or portions of the respective farms. One such condition dictates that Farm 792 will remain registered with the Christian Ecovillage Trust, to be used for sustainable agricultural purposes, and the portion of Farm 793 that is not laid out as private plots, or for co-housing units, must

also remain registered in the name of the Christian Ecovillage Trust. The Christian Ecovillage Trust must therefore retain control over all land except privately owned plots within the Gqunube Green Ecovillage. The Constitution provides that Farm 793 has to be used for sustainable agricultural purposes, except for those portions that are covered by indigenous forest which have to be preserved as a nature conservation area.

The Constitution may not be amended except with the written consent of the Christian Ecovillage Trust and the unanimous written consent of the owners of all of the private plots in the Gqunube Green Ecovillage. Furthermore, no amendments to the Constitution are valid unless passed by a two-thirds majority of the members present and voting at the meeting at which that resolution is proposed. Every member present in person or by proxy has one vote for each of the sixty-eight private plots or co-housing units registered in their name (if a plot or co-housing unit is registered in more than one person's name, then they jointly have one vote). However, the Christian Ecovillage Trust as the owner of the Learning Centre and the remainder of Farm 793 has a vote equivalent to one third of the sum of the number of private plots and co-housing units, plus one. The Executive Director of the Christian Ecovillage Trust would cast these votes after consultation with the Christian Ecovillage Trust Board.

It is apparent that the creator of the Christian Ecovillage Trust envisaged that the Trust would always retain control of Farm 792 and that the balance of Farm 793 not under private ownership would always be registered in the name of the Christian Ecovillage Trust. An amendment to the Constitution is theoretically possible if at least two thirds of the owners of the sixty-eight private plots or co-housing units vote for such an amendment, but the Christian Ecovillage Trust may always veto the amendment by withholding written consent to put the issue to the vote. Although control of Gqunube Green by the Christian Ecovillage Trust

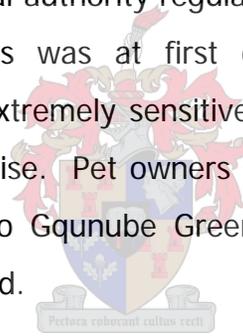
is a source of concern for some prospective residents, it has not influenced the decision by the majority to settle there.

Environmental measures relating to the way in which houses are built are non-negotiable. Each resident, for example, has to ensure that they provide for a rainwater tank to supply potable water. A site-based composting system has been installed at Gqunube Green for the recycling of grey and black water and it is mandatory that each dwelling have its own composting system and that filtrate from the system should be utilized on the plot where it has been installed. It is also expected that residences should utilize a solar heater for purposes of domestic hot water heating. For cooking, it has been recommended that the appropriate connections be installed for the use of propane gas or that a similar environmentally friendly technology be used. In addition, the use of water-saving showerheads, dual flush toilets and biodegradable paint has also been recommended. These are all energy-saving measures that underpin the ethic of sustainable development. For example, according Ralf Otterpohl, one person produces about 500 litres of urine and 50 litres of faeces per year (blackwater). Today, the same person, having access to tap water, produces in the range of 20000 to over 100 000 litres of wastewater (greywater). If the blackwater could be collected separately with low dilution, it can be converted to safe natural fertilizer, replacing synthetic products and preventing the spread of pathogens and water pollution. "Ecological wastewater management will play a key role in the quest for an efficient use and reuse of water, long-term soil fertility and protection of the natural waters" (Otterpohl 2000, p.18).

The owners of private plots and their family and guests have conditional access to the remainder of the property outside the agricultural areas for recreational purposes. This includes access to the Gonubie River and designated hiking trails and roads. Owners are allowed to rent their properties out and the rental

resident then has to fully participate in any of the Task Circles of the Homeowners Association and further the objects and interests of the Association, observe the Constitution and all by-laws, regulations and rules made by the Association. The only difference between an owner resident and a non-owner resident is that the latter does not have a right to vote at an Annual General Meeting.

All residents of Gqunube Green are required to comply with a recycling program and restrictions exist in respect of the keeping of certain animals. In accordance with the principles of use, residents may, with the consent of the General Circle only, keep certain domestic animals or fowl on a plot or on the common property subject to the provisions of local authority regulations and the Land Management Circle. The keeping of dogs was at first completely prohibited, but the companionship of pets is an extremely sensitive issue and the rules have been amended to create a compromise. Pet owners will be allowed to keep the pets they had when they moved to Gqunube Green but would not be allowed to replace them when that pet died.



Conclusion

It can be concluded from the rules and bylaws contained in the Gqunube Green Homeowner's Association agreement, that the theory behind the ecovillage is rational and analytic. However, the tone of the document suggests a slightly authoritative style of management, perhaps as a result of the legal nature of the document. Regardless however of the wording, partnership is required to ensure the success of the Gqunube Green ecovillage project. The conclusion must be reached that the establishment of an ecovillage requires strong leadership and an effective management system, whether that system professes to be sociocratic, democratic or for that matter, authoritarian in inclination. Clearly,

ecological living entails breaking with traditionally harmful and high ecological impact lifestyles and it is going to take willfulness by the drivers of the project to achieve their objectives. However, it can be seen from the content of this chapter that, in spite of the need for diligent enforcement of generally applicable rules and guidelines for ecovillage development, compromises might have to be made. Such tradeoffs are testimony to the fact that even the most stringently ecologically designed human settlement remains just that – a human settlement – and people will invariably adapt the rules to suit their human needs.



CHAPTER 4

THE REGULATORY ENVIRONMENT

Introduction

This chapter will examine the municipal and legislative context in which Gqunube Green is located. The Ecovillage is situated at the intersection of various policy instruments, primarily the Buffalo City Municipality Integrated Development Plan, the Buffalo City Spatial Development Framework, the Quenera Spatial Development Initiative, the Subtropical Thicket Ecosystem Planning Project and the Land Use Management Guidelines. Each of these plans contains policies that impact, either directly or indirectly, on Gqunube Green Ecovillage. The extent of that influence has translated in no small extent to delays in the ecovillage project.



The Buffalo City Municipality

There are many pressures on the biophysical environment in Buffalo City. One such pressure is the increased development pressure, especially along the coastline, estuaries and rivers. Gqunube Green Ecovillage is located on the coastline and on an estuary and is therefore a high profile development in terms of the kind of development that the Buffalo City Municipality is intent upon managing properly. A Spatial Development Framework for the Buffalo City Municipality was consequently compiled to support the development vision, objectives and strategies identified in the Buffalo City Municipality's first Integrated Development Plan in 2002. In terms of section 26(e) of the Municipal Systems Act, the Spatial Development Framework is a legally required component of the Municipal Integrated Development Plan. A review of the Integrated Development Plan in 2005 acknowledged that the greatest threat to

Buffalo City Municipality's objective of building sustainable communities was growing unemployment and the effect that it had on resident's ability to pay for services. It was further acknowledged that, unless strategies were developed to deal with this problem, the Buffalo City Municipality would soon be faced with a huge burden of indigent subsidies.

The Buffalo City Municipality Integrated Development Plan

The Buffalo City Municipality's Integrated Development Plan referred to several issues that impact on Gqunube Green. The lack of infrastructure east of the Gonubie Estuary is a factor that mitigates against further development in that area when the Buffalo City Municipality's policy is geared mainly towards providing infrastructure in areas such as Duncan Village and Mdantsane, where large populations are in need of community services and infrastructure. It is therefore clear that the East London residential area is not set to expand eastwards towards and beyond Gqunube Green, begging the question why, since the Buffalo City Municipality's stated intention is to draw emerging farmers into commercial markets, the east bank of the Gonubie Estuary was not earmarked for that purpose? The answer is apparently that the Buffalo City Municipality's Integrated Development Plan recognised, as a weakness and a threat, that agricultural development in rural areas is impeded by infrastructure backlogs and that a weak consumer demand, coupled with high transportation costs to major national markets, hinders businesses. Similarly, the agricultural potential at Gqunube Green and the surrounding farms for commercial purposes is relatively poor. Most of the area comprises land previously used for intensive agricultural purposes decades ago that is consequently badly denuded, thus creating a challenge for the Gqunube Green settlers to revive the agricultural potential.

The Buffalo City Municipality's Integrated Development Plan acknowledges that the outlying rural areas have basic under-developed facilities or none at all.

Gonubie High School in Gonubie and Lillyfontein Primary School, approximately six kilometres from Gqunube Green, are the closest government schools. The nearest library, police station, fire station, cemetery and post office are in Gonubie and the nearest hospitals are in East London. However, the irony is that one of the primary attractions of Gqunube Green for prospective residents is the very fact that it is located in an area definable as a marginalized peripheral area and pioneering spirit is evident to the extent that the first seventeen plot owners are referred to as 'The Pioneers'. Prospective residents with financial means take for granted that transportation costs to work and back might be relatively high, but unlike the marginalized poor living in Buffalo City Municipality's townships, travelling costs do not impact on their ability to provide food, shelter and basic needs for themselves and their families. However, the dilemma for those who have chosen to live at Gqunube Green despite having to travel significant distances to work and back, is the size of their environmental footprint. It is a contradiction that those claiming they are converting to a lifestyle that reduces their environmental footprint, may actually increase their environmental impact by having to travel further to work and back. The challenge is in their ability to find work, access economic information, or run businesses from home or close to home.

The Buffalo City Municipality has a severe problem maintaining its water and sanitation system - primarily because maintenance has been neglected and new housing has placed increased strain on the system. Water supply is from dams around King William's Town and East London and, according to the Buffalo City Municipality Integrated Development Plan, a new raw water source needs to be identified and developed by 2010 if the basic service backlogs are to be addressed and if there is to be significant future industrial development. The question is then why the Buffalo City Municipality would give approval for a development such as Gqunube Green, when many more urgent developments should have been given priority? The answer lies partly in the fact that Buffalo

City's water shortage is not because of a lack of water in dams, but rather through poor water demand management. Buffalo City has had a relatively large incidence of water loss or non-revenue water, a fact that is acknowledged in the Integrated Development Plan as a threat. This occurs either through leaks, billing inaccuracies, users who are not on the database, or illegal connections. The result is an unnecessary demand on water resources, wastage of water and loss of income. Gqunube Green will connect to the Buffalo City Municipality water main and, by agreement with the authorities the sewerage system will remain independently managed.

The Buffalo City Municipality Spatial Development Framework

The Buffalo City Municipal Council approved the Buffalo City Municipality Spatial Development Framework in 2003 and it accordingly has the status of a statutory plan. It is intended to guide the Buffalo City Municipal Council in all decisions on spatial development and land use management. However, the Spatial Development Framework is not prescriptive and is intended to serve as a planning tool to guide the Council in decisions on land development and in developing policies and principles in the management of spatial development in Buffalo City. It is intended as a tool to guide the relevant authority when dealing with land development applications and forms the basis of a new Land Use Management System. The Buffalo City Municipality Spatial Development Framework is further intended to provide a clear and logical framework for spatial development and to guide Council as to where it would be appropriate to channel public funding in the short to medium term. The Spatial Development Framework would also provide the private sector with an indication as to where it would be appropriate to invest. It therefore stands to reason that the Buffalo City Municipal Council must have been guided the Spatial Development Framework when it approved the Gqunube Green Ecovillage and neighbouring developments.

According to one of its authors, Mr Alan Carter, “the Buffalo City Municipality Spatial Development Framework was designed to facilitate the social, economic and environmental sustainability of the area and in the rural context, to provide a framework for dealing with key issues such as natural resource management, land reform, subdivision of rural land and the conservation of prime and unique agricultural land” (Interview with Mr Alan Carter: 2006, April 20). Therefore, it must be assumed for the moment that the ‘estatification’ of the east bank of the Gonubie Estuary was part of the Buffalo City Municipality’s investment strategy and that the decision to rezone the majority of land there from agricultural to resort and residential was achieved in terms of the guidelines set out in the Spatial Development Framework. The word ‘estatification’ is often used to describe the partitioning of agricultural land into polo and golfing estates.

Gqunube Green consists of many No-But areas. The No-But areas were one of the most significant aspects of the Buffalo City Municipality Spatial Development Plan where, in terms of broad environmental constraints and other environmental reasons (including legislation), development is not desirable but also not excluded. Any proposed development within a No-but area should be viewed with caution and should include a thorough evaluation of three factors before designating an area for future development or change in land usage. These factors are local environmental conditions and limitations, legislative restrictions and requirements and current and future environmental projects. Where proposals are submitted to develop No-But Areas, the municipal Integrated Environmental Management Unit is obliged to conduct a site assessment and identify local environmental constraints such as slopes, proximity to water resources, indigenous vegetation, protected areas and similar such features. In terms of the assessment of the environmental implications of Spatial Development Framework project proposals within Buffalo City Municipality, the Buffalo City Municipality Integrated Environmental Management

Unit should review all project proposals. It must be determined whether the proposed project is a listed activity under the Environmental Conservation Act, therefore requiring an Environmental Impact Assessment. They must also ensure that the development proposal does not conflict with the development guidelines associated with the Subtropical Thicket Ecosystem Planning Project mega-conservancy network areas and with the Metropolitan Open Space System designated areas.

Development in the Urban Edge

According to the Buffalo City Municipality Integrated Development Plan, in suitable areas where water soils and topography could sustain 'urban agricultural environments', mixed agricultural and residential uses such as those proposed by the Christian Ecovillage Trust would be located. After evaluating a number of alternative strategies, the Buffalo City Municipality adopted a broad spatial development scenario identified as Building on Urban and Rural Strengths. For the purposes of this Spatial Development Framework, this overall concept was accepted and endorsed as strategic direction provided by the Municipal Council. One of the objectives was to pro-actively manage land use to achieve sustainability in urban, peri-urban & rural areas. It was specifically proposed that market garden living environments be supported where commercial scale agriculture could be sustained and that such a conceptual framework would enable a close relationship to develop between urban and rural settlements. Gqunube Green is situated outside the Urban Edge, in the transition zone between urban and rural (rurban), and its market garden living environment is therefore perfectly in line with the policy of the Buffalo City Municipality.

The function of the Urban Edge is explained as a growth management tool and as a conservation tool. As a growth management tool, the Urban Edge is understood to limit sprawl and the outward growth of urban areas, in favour of

densification and to ensure the more efficient use of resources and land within the urban area. As a conservation tool, it is understood to exclude certain elements of the environment from the urban area in order to protect or preserve them. As part of the effort to consolidate the urban area and achieve a more compact city, the Spatial Development Framework proposes that beyond the Urban Edge lower density rural development will be favoured. The Urban Edge defines the zone within which the municipality will endeavour to upgrade levels of infrastructure over a period of time and according to available resources. Beyond the Urban Edge, it is envisaged that rural communities will enjoy lower density environments with basic infrastructure and social facilities and residential occupation will also be allowed if they form part of Resort developments where individual ownership of land is not permitted.

The Gqunube Valley Eco Golf Resort has become the focus of the debate about the Urban Edge. It covers 429 hectares of agricultural land, consisting of seven farms that are currently privately owned and the sale of which to the Billion Group is dependent upon whether or not the rezoning and sub-division application is successful. Critics of the proposed 1.6 billion rand Resort took the view that this development was neither 'Eco' nor 'Resort'. Proposed is an 18-hole champion golf course and clubhouse, 790 residential housing sites, 15 Golf Chalets, a Five-Star Hotel of 70 rooms (managed by an international hotel chain) and a Lodge of sixteen rooms. It was apparent to critics that the prime function of the development is residential housing for a gated community that would maximize profit for the Billion Group and restrict access to residents and guests only. Critics were of the view that the golfing development was precisely the sort of development that is advocated within and adjacent to an Urban Edge and not outside the Urban Edge. However, this is purely a technical edifice, since a slight adjustment to the Urban Edge boundary to include the farms constituting the Gqunube Valley Eco Golf Resort would effectively make the development

'acceptable'. This is one aspect of the current debate in respect of the Gonubie Urban Edge.

The Gonubie Estuary Management Forum

The Buffalo City Urban Edge along the Gonubie Estuary is the subject of considerable controversy, much of it channelled through the Gonubie Estuary Management Forum. The Gonubie Estuary Management Forum was formed in 2004 in response to applications for rezoning of properties on the East Bank of the Gonubie Estuary. The Gonubie Estuary Management Forum's concern was directed primarily at the Billion Group's submission of a proposal for a residential housing development with a golf course and hotel on the east bank of the Gonubie Estuary. According to the Gonubie Estuary Management Forum Newsletter dated 17 August 2005, it "welcomed development in keeping with the beauty of the natural environment of the area that would contribute to the long-term sustainable use of the estuary as a natural resource, but it viewed the proposed Billion Group developments as inappropriate". According to the Gonubie Estuary Management Forum, the proposed developments were in glaring contradiction of the Buffalo City Spatial Development Framework Plan, Urban Edge and Golf Course Guidelines and the National Environmental Management Act. According to the Gonubie Estuary Management Forum, "these proposed developments would negatively effect on town planning, promote undesirable urban sprawl and ribbon development along the coast and estuaries and translate into immense cost to the rate payers of the Buffalo City Municipality without many tangible benefits" (Interview with Mr John Watterson: 2005, October 10).

The Gonubie Estuary Management Forum argues that the extension of the Urban Edge across the Gonubie River will deprive every ratepayer of their say in the planning of Buffalo City and the equitable and efficient use of the municipality's revenue. The Gonubie Estuary Management Forum has become a formidable

pressure group and its committee holds regular meetings in order to keep abreast of current and proposed developments in the Quenera area. The Quenera Estuary lies to the west of the Gqunube Estuary and includes the village of Gonubie. It is actively involved in the planning process with Buffalo City's Planning department and the consultants appointed in the planning process. It finds its legitimacy and effectiveness in its substantial membership and the Buffalo City Municipality's planners welcome and encourage the kind of public participation that the Gonubie Estuary Management Forum creates. This cooperation between the municipality and public interest groups is evidence of what has been termed developmental local government. "Developmental local government is local government committed to working with citizens and groups within the community to find sustainable ways to meet their social, economic and material needs and improve the quality of their lives. Developmental local government is an official policy objective and broad strategic framework" (Parnell and Pieterse 2002, p.79).



The Gonubie Estuary Management Forum proposed that an appropriate Urban Edge should be defined by the course of the Gonubie Estuary as a suitable and effective natural geographic boundary. One of the Gonubie Estuary Management Forum's concerns about any extension of the Urban Edge beyond the Gonubie Estuary is the envisaged increase in rates that would be required to develop, support and maintain the elongated infrastructure that would be required to services the East bank of the Gonubie Estuary. At present, the Urban Edge follows the course of the Gonubie Estuary for some way from the mouth and then travels up the east bank, along the northern boundary of Gqunube Green. The Gonubie Estuary Management Forum's view is that there is sufficient open space within the existing city limits of East London, instead of what it envisages as inefficient fragmented development. There is some merit in the Gonubie Estuary Management Forum's concerns because development on the east bank of the Gonubie Estuary that lies inside the Urban Edge will have an impact on

rates, unless agreement can be reached between residents on the east bank and the Buffalo City Municipality to pay for services.

Another of the Gonubie Estuary Management Forum's concerns is that linear urban development along the relatively unspoiled coastline will result in aesthetic degradation and the spoilt views of the magnificently natural Gonubie Estuary. However, the Gonubie Estuary Management Forum's concerns about the degradation of the coastline in the vicinity of Gonubie do not affect the Gqunube Green Ecovillage development because it is situated well back from the coastline and the location of residential units has been carefully designed to avoid what the Gonubie Estuary Management Forum terms "aesthetic degradation" (Mr John Watterson: Interview 2005, October 10). The majority of the sites at Gqunube Green do not have a view of the Gonubie Estuary and are therefore also inconspicuous from the estuary and beach. The third concern is that the utilization of the areas on the East Bank that currently fall inside the Urban Edge for suburban housing would have social implications in terms of employment opportunities in both the agricultural and tourism sector. The Gonubie Estuary Management Forum appears to make the assumption that employment opportunities in the non-existent agricultural and tourism sector will exceed opportunities in a residential development. Therefore, since the area in question has very low agricultural potential and no tourism infrastructure currently exists, the argument that employment opportunities would suffer from a residential development does not make sense.

According to the Gonubie Estuary Management Forum, the demand for development land does not justify leapfrogging the Gonubie Estuary. The Gonubie Estuary Management Forum cites the many under-utilized and unoccupied properties between Gonubie and Beacon Bay itself as the reason west bank of the Gonubie Estuary should be developed before development is allowed on the east bank. The problem with that argument is that the east bank

of the Gonubie Estuary has all the features, such as unrestricted proximity to the estuary and open grassland suitable for golf course development, for example, that cannot be found anywhere on the west bank. The undeveloped attraction of the east bank, regardless of whether it is inside or outside the Urban Edge, is what has prompted the Billion Group and others to apply to the Buffalo City Municipality for rights to build resorts there and it is that same undeveloped attraction of the east bank that the Gonubie Estuary Management Forum is determined to protect from developers. A further reason that the east bank of the Gonubie Estuary is attractive to developers is its relative remoteness from any informal housing developments and townships. Mzamomhle is a sprawling squatter village on the coastal strip in Gonubie and one of the main reasons that under-utilized and unoccupied sites in Gonubie exist can probably be attributed to their proximity to Mzamomhle. Another reason is that the Buffalo City Municipality has no clear plans to develop Gonubie.

The Gonubie Estuary Management Forum took it upon itself to appeal directly to the Premier of the Province of the Eastern Cape to protect the Gonubie Estuary against a development on the west bank of the Gonubie Estuary, known as the Estuary Development Extension. The proposed development was another by the Billion Group and was approved in respect of land clearly falling into the definition of a No Development Zone. The Gonubie Estuary Management Forum argued that the development made a complete mockery of the Buffalo City Municipality's planning process because it simply ignored the guidelines and approved the development. For the Gonubie Estuary Management Forum, "the subdivision opposed National Coastal Zone Management principals and objectives and indicated scant regard for the environmental sensitivity of the area". (Mr John Watterson: Interview 2005, October 10).

The fact that the Buffalo City Municipality's Directorate of Town Planning approved the Estuary Development Extension, in spite of strong objections and

without any attempt to address the concerns of the objectors, appears to be an indication that the Buffalo City Municipality does not always adhere to or follow the advice of the Gonubie Estuary Management Forum. According to Gonubie Estuary Management Forum, approval of this proposal by the Directorate of Town Planning, given the policies and guidelines for such an area, would indicate that the Town Planning Directorate had given in to development pressure, or was not fulfilling its planning role at all. The conclusion of the Gonubie Estuary Management Forum was that the Directorate had been put under undue pressure to make them ignore policy. "The most important lesson that we can learn from planning theory is that the effects of actions (or development proposals) can be accurately and objectively predicted. Most decisions on conservation, planning and development are to a large degree subjective and influenced by personal interests and prejudices" (Claassen 2002, p.11).

Two dogmas that plague development planning in the post-apartheid South Africa are the 'Competitive City Approach' and the 'New Managerialism'" (Harrison 2002, p.4). This dogma might explain the Buffalo City Municipality's approval of an apparently inappropriate development at the behest of a significant investor. The Billion Group has also invested significantly in a shopping mall development in Mdantsane, an economically depressed area. In terms of Harrison's Competitive City approach, the main aim of planning and urban management is to make the city attractive to investment. According to Harrison, the notion of the Competitive City is increasingly framing ideas about planning and planning is seen as a means to achieve competitiveness. It can therefore be argued that Buffalo City's apparent support for the Gqunube Valley Eco Golf Resort is driven by the need to compete with similar such developments in other areas in order to attract investment to the city, or to 'reward' the Billion Group for its investment in Mdantsane. In any event, it sets a poor precedent in terms of transparency and the public participation process.

Finally, instead of a golfing estate, the Gonubie Estuary Management Forum proposed the co-coordinated establishment of a nature conservancy with the landowners abutting the Gonubie Estuary, including Gqunube Green, extending from the river mouth to five kilometres from the high water mark. Gqunube Green Ecovillage is already a conservancy, but the Gonubie Estuary Management Forum is proposing a conservancy on a much larger scale, incorporating most or all the farms situated on the east bank of the Gonubie Estuary and the Gqunube Valley Eco Golfing Resort. The Gonubie Estuary Management Forum proposes that housing densities should not exceed 1 unit per 10 hectares and that all housing should be appropriately positioned to minimize visual and environmental impact, preferably in clusters at least 100m from the high water mark, as opposed to the 75 metres that is currently planned. All houses should be single storey structures, away from the skyline as viewed from either bank of the estuary and coast. This is exactly the kind of development that is epitomized by Gqunube Green, with severe limitation on plot sizes and the remaining land jointly managed by a body corporate in association with the conservancy. The Gonubie Estuary Management Forum would accept a hotel, on condition that it is appropriately positioned and provides accommodation, evening entertainment, restaurant and conference facilities and a central environmental education centre and management offices for the conservancy.

The Quenera Local Spatial Development Framework

The Quenera Local Spatial Development Framework Plan is relevant to the entire area of the west bank of the Gonubie Estuary and it is debatable whether or not it also applies to the east bank portions within the Urban Edge. The Quenera Local Spatial Development Framework Plan was prepared during 1997 and subsequently approved by Council in 1998. It was incorporated into the Buffalo City Municipal Integrated Development Plan in 2000 and into the Buffalo City Municipal Spatial Development Framework in 2003. During 2004, Buffalo City

Municipality became aware of growing demands from the property development sector to change land use and develop a range of commercial, residential and industrial premises in the area between the Quenera and the Gonubie Estuaries – the area is bounded to the west by the Quenera River, to the north along Old Transkei Road, to the east by the Urban Edge near the Gonubie Estuary and to the south by the coastal belt along the high water mark. It came up with the Land Use Management Guidelines for the Quenera area that was adopted by the Buffalo City Municipal Council as a spatial development policy document.

Gqunube Green is situated in what constitutes the secondary planning area that will take account of the trends, needs and characteristics of the transition zone between the urban area and the rural area. This secondary planning area generally lies outside the Urban Edge and considers those properties adjacent to the primary planning area. This consideration includes limiting the subdivision of prime and unique agricultural land into uneconomical units and the Buffalo City Municipality has to take decisions about this land in conjunction with the Department of Agriculture. It also means protecting the riparian environment along the Gonubie Estuary, as identified in the Subtropical Thicket Ecosystem Planning Project and the Spatial Development Framework. The main strategy to protect the riparian environment is to restrict holiday housing and resorts along the Gonubie Estuary and encourage environmentally sustainable and compatible developments. The Gqunube Green Ecovillage therefore accords with the guidelines of the Quenera Local Spatial Development Framework Plan and the Subtropical Thicket Ecosystem Planning Project.

The Subtropical Thicket Ecosystem Planning Project

The Subtropical Thicket Ecosystem Planning Project identified most of the Gonubie Valley and the area between the Gonubie Estuary and the Kwelera River as a Mega-conservancy Network. The Subtropical Thicket Ecosystem Planning

Project aims to ensure the persistence of biodiversity. Subtropical Thicket Ecosystem Planning Project is a regional biodiversity conservation planning initiative. The Mega-conservancy Networks comprise corridors of land along major river valleys and the coast that were identified as needing special safeguarding to ensure the sustainability of socio-economic systems and biodiversity. To achieve this, a co-operative strategy for conserving these corridors or pathways and enhancing livelihoods has been developed and published in the Subtropical Thicket Ecosystem Plan Project Handbook. All development within the Mega-conservancy Network must contribute towards the upgrading of the thicket, so that there is a net gain for the environment once the development is done. Gqunube Green is situated within the Gqunube Valley and is therefore subject to the Subtropical Thicket Ecosystem Planning Project rules. However, since the Subtropical Thicket Ecosystem Planning Project allows for development that promotes the long-term survival of the thicket, and since the Gqunube Green Land Management Circle provides rules for the preservation of the subtropical thicket, development along the lines proposed at Gqunube Green is entirely feasible. The Gonubie Valley area is recognized as being environmentally sensitive and the Precautionary Principle, as required by the National Environmental Management Act, must be applied.

The Subtropical Thicket Ecosystem Planning Project, probably has the support of the Buffalo City Municipality because of a new approach to physical planning that is found internationally, concerned with creating vibrant, compact spaces for community life (Harrison 2002, p.4). It is called 'New Urbanism' and it supports the creation and restoration of diverse, walkable, compact, mixed use communities composed of the same components as conventional development, but assembled in a more integrated way. This might explain why a development such as Gqunube Green would be acceptable to the Buffalo City Municipality. "New Urbanism is strongly linked to the environmental movement as it promotes a spatial form that is believed to protect scarce environmental resources, support

a more efficient use of infrastructure and reduce harmful emissions” (Harrison 2002, p.4). Key elements include networks of corridors and nodes, such as Subtropical Thicket Ecosystem Planning Project, integrated open space systems such the Metropolitan Open Space System, demarcated urban edges such as the Gonubie Estuary, densification such as the Gonubie Estuary Management Forum proposes on the east bank, mixed-use development such as Gqunube Green and inner city regeneration. It can therefore be argued that the ongoing efforts by the Gonubie Estuary Management Forum to redefine the Buffalo City’s Urban Edge and to redirect development to the West Bank of the Gqunube Estuary are patterns of New Urbanism and that Gqunube Green is itself an example of New Urbanism – a new way of urbanizing.

Arguably, the fact that parts of Gqunube Green and the neighbouring developments are subject to so many conservation rules makes it extremely difficult to justify any form of development. Section 2(4)(a)(vii) of the National Environmental Management Act stipulates that a sustainable development requires that a risk-averse approach must be applied that takes into account the limits of current knowledge about the consequences of decisions and actions. “Conservation groups generally promote the risk-averse principle, but if it were to be applied strictly then no new development would be possible since there is logically always a limit to the current knowledge about the consequences of decisions” (Claassen 2002, p.10). Furthermore, “post-apartheid municipalities have transformed their environmental management strategy from being reactive to being proactive. Being proactive means that management systems lead and guide development and conservation and a reactive system is a system that is basically dormant and kicks into action only when a development is proposed” (Claassen 2002, p.10). The Subtropical Thicket Ecosystem Planning Project guidelines are an example of a proactive management system because they make provision for the demarcation of conservation areas, as opposed to sections 21 and 26 regulations under the Environmental Management Act that

are wholly reactive, serving only to check proposed developments without giving and indication of what is desirable. The transformation of municipal environmental management strategies clearly favours a development such as Gqunube Green.

Development, in terms of the Quenera Local Spatial Development Framework for example, has to be limited to densities of approximately 10% of normal urban densities, or a density of two dwelling unit per hectare with the proviso that this will be the maximum density permitted and exclude hotels. The specific exclusion of hotels is significant in the light of the proposed hotel with seventy-five rooms that is planned on the Gonubie Valley Eco Golfing Resort on the eastern boundary of Gqunube Green. It is further proposed that development should be clustered in such a way as to promote the movement of species in the Subtropical Thicket Ecosystem Planning Project corridor and the large part of the development has to remain a No Development Zone. No Development Zones consists of nature reserves, coastal forest areas, estuaries and land below the 1 in 100 year flood line. They also include land needed for the reclamation or rehabilitation of indigenous vegetation, riverbanks and slopes of 1 in 5 or steeper. This zone is essentially a no physical development area and Gqunube Green complies with this requirement in all respects. The No Development Zone is in place to protect the biophysical environment, as well as to preserve areas of outstanding natural beauty.

Strictly speaking, no development is allowed in a No Development Area, except for soft ecotourism and adventure activities. However, the implications for development within the Subtropical Thicket Ecosystem Planning Project Network Area is that it should be limited to the existing disturbed areas, it must demonstrate net gains for the environment and disturbed areas not earmarked for development should be restored to a natural state. All such development should be eco-friendly, ensuring that structures should be of an eco-friendly

unobtrusive design, preferably using natural materials such as thatch and wood. One of the major environmental problem areas in the Scoping Report for Gqunube Valley Eco Golf Resort is that the development apparently cuts right across a Subtropical Thicket Ecosystem Planning Project Network Area. Thicket vegetation is a unique type of vegetation (biome) found mainly in the South Eastern Cape and has a high diversity of plants that grow nowhere else. The thicket biome is under pressure from overgrazing, bush clearing, agriculture, residential development and alien vegetation. The developers of the Gqunube Eco Golfing Estate undertook to preserve sensitive vegetation types but, according to the Subtropical Thicket Ecosystem Planning Project, the scoping report falsely indicated that the size of the No Development areas alone would ensure that more than the minimum required area of each thicket ecosystem would be retained. The scoping report, for example, indicates that in the case of Berlin Savanna Thicket, although the size of the No Development area is below the area required for that ecosystem type, the area outside the actual proposed development footprint for the site is well in excess of that requirement.

According to the Gonubie Estuary Management Forum, there are some serious flaws in this reasoning because all intact habitats in the entire Gqunube-Amatole Subtropical Thicket Ecosystem Planning Project Network is required to achieve the Subtropical Thicket Ecosystem Planning Project conservation goals. Minimal habitat loss can be tolerated but only if such an impact should lead to net conservation gains and the Gonubie Estuary Management Forum is adamant that the Gqunube Valley Eco Golfing Estate will lead to a net conservation loss for the thicket biome. According to the Gonubie Estuary Management Forum, a golf course and associated housing development, whether branded as 'eco' or not, are not consistent with the Subtropical Thicket Ecosystem Planning Project guidelines in any way whatsoever and the area should be used only for soft eco-tourism activities. The bottom lines are that the categorisation of land identified as part of a Subtropical Thicket Ecosystem Planning Project network overrides its

categorisation as an individual vegetation type and any land within the network of corridors is virtually sacrosanct. The Gonubie Estuary Management Forum therefore argues that the developer's attempts to create the impression that the actual proposed development footprint for the site exceeds the requirement is simply smoke and mirrors to hide the fact that the development cannot lead to the net conservation gains required by the Subtropical Thicket Ecosystem Planning Project guidelines.

The Land Use Management Guidelines

The Rural Zone, where the Gqunube Green Ecovillage is situated, is outside the Urban Edge. The Rural Zone comprises larger agricultural properties, rural and semi – urban settlements, coastal tourism resorts and rural service nodes. The Rural Zone is under pressure for development involving land use change and subdivision and the Land Use Management Guidelines set out the details concerning desired development in the Rural Zone. The Land Use Management Guidelines were guided by the Guidelines for Human Settlement Planning and Design and the rules set out by the Council for Scientific and Industrial Research in the Red Book and must be adopted and used by the Physical Planning Directorate in the scrutiny of relevant land developments. All land developments should be undertaken in accordance with an approved Layout Plan and/or Site Development Plan and after approval, only minor deviations from the applicable plan will be permitted. However, according to the Integrated Development Plan, the Buffalo City Municipality does not appear convinced that maximum development capacity in the Rural Zone will be reached in the short to medium term, if at all. The Buffalo City Municipality is in effect indicating that the Rural Zone on the east bank of the Gonubie Estuary has the potential for future development for many years to come. Development would be influenced by the investor confidence, the availability of privately owned property and crime and

stability, the availability of bulk infrastructure and the demand for accommodation.

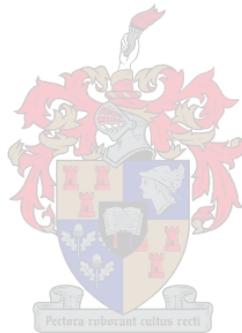
The main proposed land use in the Rural Zone is agricultural and conservation, both uses coinciding with two of the main areas of attention for the Gqunube Green Ecovillage. In terms of the Buffalo City Municipality Spatial Development Framework, small clusters of resort and accommodation type developments would be ideal in the remote rural zone where services and infrastructure are difficult to access. The Land Use Management Guidelines recommend that certain important pockets of land situated close to the Gonubie Estuary should remain for agriculture, where it can be established that deep alluvial soils with high potential for agricultural production exist. Applications for other land uses allowed in this zone on these high potential agricultural soils would be subject to the availability of infrastructure to support the change in land use, the Subtropical Thicket Ecosystem Planning Project guidelines, the Coastal Zone Management Plan, environmental assessment findings and approval from the Department of Agriculture. It can therefore be argued that the development of Gqunube Green as an ecovillage is in accordance with the Buffalo City Land Use Management Guidelines.



Conclusion

It can be concluded that, in terms of the plethora of local government policy guidelines affecting Gqunube Green, there is every indication that the establishment of an ecovillage on the east banks of the Gqunube River is entirely appropriate and in line with policy. It can also be concluded that public awareness of issues relating to the Urban Edge boundaries, conservation corridors, the rezoning of agricultural land and the development of the east bank of the Gonubie Estuary for mixed use purposes has been raised by groups such as the Gonubie Estuary Management Forum and that public debate about the sustainability and appropriateness of development on and around Gqunube

Green will continue and is likely to increase. It is also evident that the Buffalo City Municipality has taken a major step in approving an ecovillage development and embraced 'Creative Experimentalism' (Harrison 2002, p.5). "We can avoid our planning ideas and practices becoming dogma by adopting an attitude that demonstrates a willingness to be experimental and to be open to new or altered ideas and practices" (Harrison 2002, p.5). It can therefore be argued that Gqunube Green is the manifestation by the Buffalo City Municipality of just such willingness.



CHAPTER 5

SETBACKS AND SUCCESSES AT GQUNUBE GREEN

Introduction

Applications for rezoning the farms that constitute Gqunube Green were submitted during a period of transition from East London Municipality to Buffalo City in 2000. Since then, progress at Gqunube Green has been much slower than its architects would have liked and the ecovillage has probably not taken shape in the way that it ideally could have. However, it might also be argued that much has taken place in the way of experimentation and debate. This chapter will examine the setbacks and successes of the Gqunube Green Ecovillage project and will venture opinion on whether or not the architects of the project could, if they had used other strategies, achieved their aims sooner.

Delayed development

In its first e-Update in 2002, the Christian Ecovillage Trust proclaimed that the Gqunube Green Ecovillage intends *doing* sustainable development. It invited aspirant homeowners to build on the Triple Es of Sustainability – Economy, Equality and Equity (or economic, ecological and social capital). It explained that sustainable development only happens if all three are simultaneously growing. It was intended that potential subscribers to the Gqunube Green Ecovillage would be referred by word of mouth and by December 2002 eight plots had been reserved. The mood in 2002 was one of enthusiasm and the sense that the project was about to swing into gear. In reality, permission to build houses on Gqunube Green was granted only in November 2005, a full three years after the pioneer settlers had anticipated this would happen and it was this delay that persuaded several of them to give up their plots and build their homes

elsewhere. Two such settlers are Ms Mary and Mr George Kockott (George Kockott: Interviewed 2005, March 22).

'Proceduralism' is one of the dogmas associated with post-apartheid planning and the question is whether it can be attributed some of the blame for the delays in development at Gqunube Green? "The proceduralist approach is focused primarily on planning right, underpinned by a belief that good process leads to good outcomes. In the South African context, strongly participatory and communicative forms of proceduralism have replaced the former rationalist and instrumentalist proceduralism" (Harrison 2002, p.5). The implication is that the statutory requirements for rezoning and environmental conservation, such as the environmental impact assessment procedures are evidence of this proceduralism. "Zoning schemes tend to inhibit new development because of the high cost and the time delays inherent in the rezoning process" (Claassen 2002, p.9). "One of the profound changes in environmental management systems over the past thirty years has been the transformation from the idea of 'one profession – one department' systems, to integrated systems" (Claassen 2002, p.9). For example, although local municipalities have authority over municipal planning, sections 21 and 26 of the regulations in terms of the Environmental Conservation Act gave control over land-use management to the Department of Environmental Affairs and Tourism. The complexity of the environment, the needs and aspirations of humans and the limitations of the natural environment, have all combined to enforce an integrated approach. This is manifest in the Integrated Development Planning process. The problem is that integration of systems for environmental management has led to a duplication of functions.

Chicken Farming

Although development had clearly been slower than anticipated by almost everyone associated with the Gqunube Green Ecovillage project, farming activities on the land continued. Experimentation took place, with a permaculture garden for example. One of the first experiments was in December 2002 when Boschveld Chickens were introduced to Gqunube Green. A cross between three different types of indigenous chicken, the Boschveld chickens were introduced to Gqunube Green from the Matetsi Ranch north of Pretoria where they survive in the open from six weeks of age until twenty weeks when they are ready to lay eggs. Housed in portable chicken cages, the chickens follow cattle as they move from camp to camp. The chickens eat even the deeply lodged bont ticks off cattle. Experimentation with the Boschveld chicken was part of a strategy to reduce the need to spray cattle for ticks.

The intention had been to release the flocks into the veld with a herd of Nguni cattle at six weeks old and use a modified trailer as a movable chicken cage and once released, most chicks quickly learned to return to the trailer each evening upon hearing the rattling of a can half filled with mielies. However, after twenty weeks forty-six percent of the chicks had died, most having succumbed to an unknown illness. It was eventually decided that Boschveld chickens would not be used for eradicating ticks until there were sufficient numbers and that they should be moved into coops to start producing offspring instead. The hens proved to be very productive but susceptible to birds of prey, leguaans, wild cats and thieves, if left in the open. The Boschveld chicken project was eventually a failure for three reasons. Firstly, the chickens could not be directed or herded and therefore did not serve their purpose. Secondly, they damaged the embryonic permaculture garden at Gqunube Green and thirdly, they could not be protected in the open from birds of prey.

The Nguni Herd

A herd of nineteen Nguni cattle was purchased in May 2000. They consisted of one bull and eighteen heifers. Recognizing that grasslands are one of South Africa's most valuable resources, the cattle were used as a tool to move the Gqunube Green property toward the goal of holistic land management by developing and maintaining its grassland at a high successional level with a good mix of annuals and perennials, good nutrient and water cycles, and a superior energy flow. Portable electric fencing was used to ensure a steadily improving pasture. The Nguni cattle soon made an impression as a land management tool by trampling an excessive amount of moribund grass on Gqunube Green, thus reducing the fire hazard and encouraging new growth. Reverend Hudson noticed that the steady manuring of the veld led to a significant increase in dung beetles, which in turn contributed to the improvement of the nutrient and water cycles (Dr Brian Wilkinson: Interviewed 2006, June 28). The Nguni herd also played a role in preventing bush encroachment and in alien vegetation control as they browse the prolific Port Jackson. By December 2002, the original herd had doubled in size and the leadership of the Christian Ecovillage Trust made a decision to tithe ten percent of all calves to the poor.

The further motivation behind building an Nguni herd is that grass-fed beef, as opposed to the grain-finished beef that comes from feedlots, is a source of essential omega-3 fatty acids. It is claimed that a lack of essential omega-3 fatty acids is a cause of heart disease, diabetes and cancer. Since the human body is unable to convert other forms of fats into omega-3 fatty acids, eating foods rich in omega-3 is particularly important. It is believed that grass-fed beef reportedly contains two to six times more omega-3 fatty acids than grain-fed beef. The reason for this is that grass contains approximately 60 percent more omega-3 fatty acids and, when cattle graze, the omega-3 is absorbed. Since it was the intention to produce organic beef, Reverend Hudson significantly reduced the

use of poisons to control ectoparasites such as ticks at Gqunube Green. Plunge dipping was discontinued in favour of hand spraying heavily infested parts on cattle. It was discovered that the onset of summer brought a high tick burden, compelling Reverend Hudson to resorting once again to regular spraying of the Nguni herd.

The Settlement Project

By December 2002, almost half the sites had been surveyed and the authors of the Gqunube Green Ecovillage e-Update asked the first settlers to spread the word about what was being described as “a unique opportunity to purchase title to a third of an acre plot and to have shared title of a beautiful seventy-nine hectare property with stunning scenery and recreational opportunities”. It was acknowledged that “word of mouth is our best form of advertising and by July 2003, thirteen people had put down their deposits on plots, five more than had been the case six months earlier. A number of the future settlers gathered at Gqunube Green on Sunday, 9 February 2003 to meet one another, socialise and begin the formal process of decision-making on matters pertaining to the ecovillage. For the first time that day, those in attendance were able as a group of prospective settlers to gather to discuss their future and therein they experienced what ecovillage life was going to be like.

Reverend Hudson left South Africa in June 2003 to live in the United States of America but remained a director of the Christian Ecovillage Trust and planned to return annually to South Africa to visit. By December 2003, the aspirant settlers of Gqunube Green were clearly under the impression that the last hurdle was about to be crossed and therefore that permission from Buffalo City Municipality was imminent. However, a dilemma confronted the Christian Ecovillage Trust as the developer because it was the responsibility of the Christian Ecovillage Trust to provide funding for the application to meet municipal requirements for roads, water and electricity points for each site. The Christian Ecovillage Trust did not

have enough money at that stage for this purpose, so it was decided that the initial group of settlers should put up the cost of plots early to pay for the services. There was some resistance to this idea and some settlers refused to make the requested sacrifice, but it was resolved that a special trust account would be set up through a firm of attorneys and that a deposit paid into the account would secure a plot for the depositor. However, several settlers paid directly to the Christian Ecovillage Trust to assist it in setting up the process to get local authority permission to issue title deeds. The willingness of most of the settlers to place a deposit in advance is an indication of their commitment to the Gqunube Green Ecovillage and evidence of the fact that many believed that development was imminent.

The Christian Ecovillage Trust undertook to provide the following:

Zonings	Private sites are zoned as Residential 3 with Councils consent to limit development to one dwelling per site. The co-housing sites are zoned as Residential 3 with no restrictions. The farmhouse area is zoned Institutional. The Commercial Centre is zoned Business Zone 2 and the farmlands remains zoned as Agricultural.
Roads	Five metre wide gravel roads with side drains and stone faced culverts.
Security	Perimeter fencing.
Water	Metered water to the site boundary.
Sewage	It is mandatory for each homeowner to install a Biolytic Filter to treat their sewage. The approval has been granted based upon this system that is supplied by Biolytix, South Africa. Effluent from the filter may be used for own agricultural purposes. Unwanted effluent must be piped to the site boundary and discharged into sewage reticulation provided by

	Christian Ecovillage Trust.
Electricity	Power will be provided to each site boundary and all reticulation will be installed below ground.
Area Lighting	Low-level bollard lighting will be provided along the main access road only.
Telephone	Connection to each site boundary and all reticulation will be installed below ground.
Waste	A central waste collection and recyclable sorting area will be provided.
Fire	The water supply has been designed for fire fighting requirements.
Emergency Access	Access is possible to all site boundaries for emergency vehicles.

However, one of the most impeding issues that the project was forced to deal with was the delay in the process of rezoning and subdivision. Dr Brian Wilkinson replaced Reverend Roger Hudson at Gqunube Green as the new Chief Executive Officer with every intention of building a house at Gqunube Green. In May 2004, application was made to the Buffalo City Municipality to draw water off the municipal pipeline crossing Gqunube Green. When that application was granted, it was envisaged in July 2004 that it would take approximately three weeks to build the first phase roads and the consulting engineers were employed to provide the local authority with preliminary reports and these should have been submitted by November 2003. However, it had by this time become increasingly clear that progress towards achieving the development goals of Gqunube Green would not be dictated by predetermined timeframes.

It was envisaged that that roads would be built storm water guided by February 2004. The problem, however, was that the Buffalo Municipality Planning

Department could not be held to deadlines and apparently did not share the Christian Ecovillage Trust's sense of urgency to approve the subdivision. "A developer must first submit an application and wait for a 'yes' or 'no' decision, without much indication before hand what the decision will be" (Claassen 2002, p.10). Zoning scheme regulations are therefore seen by many as inhibiting development (thus reactive in nature), but also have proactive elements as they indicate to the developer what is acceptable. A concern about the environmental impact of using Biolytic filter sewage systems was one of the delaying factors because of concern from the municipality with health for the broader community and the health of the Gonubie Estuary. The Christian Ecovillage Trust had to accede to the municipality's request that the biolytic filter system be installed in every home, or in clusters of homes, the numbers of which were still to be determined.

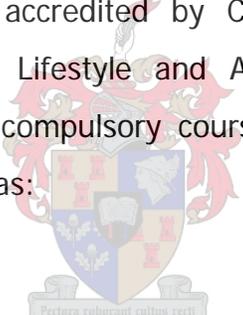
The Selection Process



The Christian Ecovillage Trust was clear in its commitment to set up a genuine ecological village and is therefore not anxious to sell plots to everyone who is in the market for a plot. The plots were offered for sale at very reasonable prices because it was the intention that people genuinely committed to the objectives of Gqunube Green should not be exploited but, instead be given an affordable opportunity to demonstrate their commitment. The relatively low pricing was a conscious attempt on the part of the Christian Ecovillage Trust to break with current exploitative property market trends. In order to test the commitment of prospective buyers, a strategy was developed to dissuade speculators. On 26 August 2005, the Board of the Christian Ecovillage Trust started the process for inviting prospective settlers to make formal commitment to the Gqunube Green Ecovillage. This was done by written communication and prospective settlers were expected to indicate whether or not they were prepared to comply with a list of criteria. The Christian Ecovillage Trust had collected the names of those

who showed an interest in living at Gqunube Green and the list was compiled in the order in which individuals have contacted Christian Ecovillage Trust and it came to be known as the Expression of Interest List. Those invited were permitted to make a site selection based upon the order in which they were listed on the Expression of Interest List, subject to a time limit. All individuals listed on the Expression of Interest List were sent an Expression of Interest Document in order to assist the Christian Ecovillage Trust in ascertaining whether to make a provisional invitation to them to purchase a site in Gqunube Green. Those who withdrew or who were not invited were paid back all monies placed with Christian Ecovillage Trust or with their own attorneys.

Those provisionally invited were expected to attend a minimum of three one-day training courses arranged or accredited by Christian Ecovillage Trust. An Introduction to a Sustainable Lifestyle and An Introduction to Sustainable Construction Techniques were compulsory courses and there was a choice of other courses on subjects such as:

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- An Introduction to a Sustainable Lifestyle at Gqunube Green
 - An Introduction to Sustainable Construction Techniques
 - The Christian response to Creation Care
 - Introduction to Permaculture
 - Making use of Solar Energy
 - Ways of reducing ones Ecological Footprint
 - Ecovillage Economy

Where couples intended moving to Gqunube Green, it was mandatory for both parties to attend. The courses were aimed at educating and equipping prospective buyers to understand the objectives of Christian Ecovillage Trust in developing Gqunube Green and to enable them to better grasp the role and

contribution they could make to achieve the objectives of Christian Ecovillage Trust at Gqunube Green. The intention was for these courses to be a balance between academic understanding and practical implementation and no prior knowledge was required. However, a passion to live a sustainable lifestyle was regarded as being an essential prerequisite. After attending a minimum of three courses, prospective residents were invited in writing to purchase a site at Gqunube Green.

The Christian Ecovillage Trust needed to raise funds for the construction of infrastructure and proposed doing this by requesting all purchasers to enter into a loan agreement with the Christian Ecovillage Trust. The loan agreement was linked to the Deed of Sale and, in turn, linked to a package of documents consisting of the Statement of Mission and Goals, Constitution and Bylaws, Building Regulations, site survey diagram and Environmental Management Plan. Together, this package of documents constituted the basis of a contract between the purchaser and the Christian Ecovillage Trust. Since costs for infrastructure had increased from inception of the project, the Christian Ecovillage Trust increased the price of plots to compensate for this increase. It was hoped that the installation of infrastructure would commence early in 2006 and that training would be held regularly each month. The proposal by the Christian Ecovillage Trust to enter into loan agreements with settlers was subsequently shelved in favour of a development loan from a banking institution and no timetable was provided by the Christian Ecovillage Trust to indicate to settlers when they could expect formalities to commence.

Conclusion

The most significant achievement of the Christian Ecovillage Trust to date has been the fulfilment of its first objective, to bring into being the Gqunube Green

Ecovillage. However, progress towards achieving the other objectives has been slow, mainly because of the time and cost involved in following the systems provided for in the zoning scheme in what has been described as 'proceduralism'. Another significant failing is that the aspirant settler community does not appear to have been carried along by the Christian Ecovillage Trust as the project developed, signifying a poor communication strategy that may have robbed the ecovillage of a few of its most enthusiastic adherents. Dr Wilkinson's departure meant that most of the daily administrative tasks at Gqunube Green were left to Alice Ford. However, considering that most of the aspirant settlers have completed the necessary short courses that Alice arranged, and that she has allocated most of the plots at Gqunube Green against the names of the aspirant settlers, one must acknowledge that her role in the establishment of the ecovillage has been significant. This is all the more so when one considers that Alice and Simanga pursued farming experiments with chickens, cattle and rudimentary permaculture gardening in addition to the multiplicity of other roles each of them played.



CHAPTER 6

THE FUTURE OF GQUNUBE GREEN

Introduction

Having established that the obstacles to the development of an ecovillage project on the scale of Gqunube Green are significant, the question begs whether or not Gqunube Green is likely to encounter further difficulties and, if so, what are those difficulties and are they surmountable? One of the main difficulties that a project of this nature sometimes has to confront is opposition from local government, from the public and, for those who settle in ecovillages, from friends, colleagues and family. This chapter will examine official and public prejudice against ecovillages in South Africa and argue that disagreement comes down to a conflict in values that can be addressed through closer dialogue, interaction and integration between functionaries and environmental interest groups. It will also argue that thinking and values are changing rapidly, assisted by developmental local government and the supportive legislative and policy environment that bodes well for the future the Gqunube Green Ecovillage and other similar such enterprises in South Africa.

Different Perspectives

Many aspirant Gqunube Green settlers, living in middle class suburbia, encountered¹ disparagement from certain friends, colleagues and family members when they revealed their intention to settle at Gqunube Green. It would appear that a certain paradigm shift signified to friends, colleagues and family members that the aspirant settler had somehow 'crossed over' to a 'green

¹ Interviews with various aspirant settlers

way of thinking' that was not entirely comprehensible to them and which they instinctively criticised. According to (Capra 1996, pg.5), this is indeed the result of a paradigm shift from anthropocentric, or human-centredness, to a deep ecological perspective. The conventional view, according to Capra, is to view humans as above or outside of nature, as the source of all value, and ascribe only instrumental, or use value to nature. Deep ecology does not separate humans, or anything else, from nature. The new paradigm may also be called an ecological view, if the term 'ecological' is used in a much broader and deeper sense than usual. Deep ecological awareness recognizes the fundamental interdependence of all phenomena and the fact that, as individuals and societies, we are all imbedded in (and ultimately dependent on) the cyclical processes of nature.

It is quite apparent that not all the prospective settlers at Gqunube Green are deep ecologists and there may be a potential source of conflict in future between those who are and those who are not. According to Dr Wilkinson², although his enthusiasm about the future of Gqunube Green is abundant, he is also evidently disappointed that his tenure as manager ended and he attributes that to a difference of opinion with several of the Christian Ecovillage Board members over the choice of strategy for the development of the ecovillage. Brian's enthusiasm is particularly strong in favour of holistic farming methods and it was his enthusiasm that resulted on one occasion in a difference of opinion between Brian and Jeff Anderson, another aspirant settler and builder of the tri-circle church, over what to do with the carcass of a cow that had died in clear view of anyone entering the ecovillage. In accordance with the precepts of holistic farming, Brian insisted that the carcass should remain exactly where it was and that nature should be allowed to take its course. Brian explained that the carcass would gradually decompose and that removing the carcass would result

² Interview with Dr Wilkinson at Kenton-on-Sea on 27 July 2006

in a break in the natural cycle that would violate the prescripts of holistic land management. In Brian's view, the carcass would eventually enrich the soil where it lay and provide compost.

It should be borne in mind that Reverend Hudson had previously professed his adherence to holistic land use management and Brian had consequently attended three courses in Vryburg on holistic land management techniques. He currently resides in Kenton-on-Sea where he is a Minister in the Methodist Church. Although Brian has not attended any of the courses at Gqunube Green to enable him to qualify for ownership of a plot, his heart is still at Gqunube Green and he would like nothing more than to return and play an active role at the ecovillage. However, various obstacles stand between Brian and his returning to Gqunube Green, not least of them being that he and his wife Wendy have recently moved into a new home in Kenton-on-Sea. Wendy apparently does not share Brian's passion for a truly sustainable lifestyle at Gqunube Green, instead preferring a more conventional lifestyle close to comforts and amenities. Brian is also committed to the upliftment of his congregants in Kenton-on-Sea and in the surrounding residential areas where the majority live in poverty, some in shacks and others in Reconstruction and Development Program houses. The intention behind Gqunube Green was clearly to attract families who share the ideals of an ecovillage and there is an obvious tension between Brian's commitment to that lifestyle and Wendy's indifference. However, Brian and Wendy's situation, where one spouse or partner is more committed than the other, is not unique amongst couples planning to settle at Gqunube Green.

According to Brian, his insistence on exact adherence to the principles he had learnt about at Vryburg exasperated Jeff Anderson, whose priority was to leave prospective visitors to Gqunube Green with the best possible impression of the ecovillage. In Jeff's view, the carcass should have been removed from where it lay in full view of the public. The carcass was a potential source of food for

Simanga and his family and he would just as soon have butchered it for meat instead of leaving it to rot in the sun. According to Brian, the episode with the cow carcass was an example of the kind of vacillation that was typical from many associated with Gqunube Green, between what had been professed to be the textbook approach to sustainable development on the one hand and what was practically manifest in the behaviour of the proponents of sustainable development on the other. Brian's insistence on a textbook approach appeared to have caused divisions between his supporters and his critics but the underlying problem, according to Brian, is that the members of the Board of the Christian Ecovillage Trust would not express themselves openly on their commitment to holistic management.

Reverend Hudson had always driven the Gqunube green ecovillage project, according to Brian, and the Board had been set up to assist him to fulfil the objectives of the Christian Ecovillage Trust, but Reverend Hudson controlled the project from the United States and was usually not accessible to deal with disputes. Members of the Board would consequently prefer not to express themselves for fear that Reverend Hudson might construe their comments as a challenge to his views. Brian accordingly surmised that the Board of the Christian Ecovillage Trust had great difficulty carrying out its tasks without Reverend Hudson being hands-on.

Public Prejudice

One source of opposition to the ecovillage concept appears to be based on the assertion that developers should not be allowed to profit at the expense of the broader community. Whether or not this is true in respect of the developers of the Gqunube Green Ecovillage will be examined further. The assumption is that it will be the lower income earners and unemployed who will suffer the most when Buffalo City Municipality's funds run out. The reasoning is that the

privileged gated community will be sitting comfortably behind high security fences while their servants squat in shacks in the surrounding bush. The bottom line is that developers have to demonstrate a commitment to the community through socially responsible planning and the Gqunube Green Ecovillage's scorecard in this regard will be examined. According to the Christian Ecovillage Trust, Gqunube Green is not a gated community and it has undertaken to provide fencing around the ecovillage but walls are inappropriate.

The Buffalo City Municipality's Spatial Development Plan's restriction on coastal development echoed earlier moves by the Western Cape Provincial Department of Environmental Affairs that called for a moratorium on high cost, themed residential estates that had led to what had come to be described as the 'estatification' of the Western Cape coast. This had been especially prevalent on the Garden Route where an escalation of golfing estates and housing developments had threatened to destroy the rural character of the coastal enclaves in that part of the Western Cape. Similarly, in KwaZulu-Natal, calls had been made to the provincial government to limit the escalating number of high-income residential estate developments in that province. An excellent example of such a project was the Balgowan Country Equestrian Estate, a 233-hectare property near Balgowan in the KwaZulu-Natal Midlands, situated in the Dargle Conservancy. Its proposed development involved the rezoning and subdivision of 139 residential plots of one acre each, three medium density clusters of forty-five residential plots, a boutique hotel and a ten-hectare equestrian centre incorporating stables, pub, arenas and a Midlands Meander node on the N3 exit.

The comparison between the Balgowan Country and Equestrian Estate and the Gqunube Green Ecovillage development is made because both proposed developments required the rezoning of agricultural land and therefore involved an application for consent in terms of section 4 of the Subdivision of Agricultural Land Act. The inference in the Balgowan example is that the subdivision would

be lamentable and that it should be seen in the context of areas such as Dullstroom in Mpumalanga Province where unrestrained rezoning of agricultural land, mainly to create themed estates, placed so much stress on the natural and social environment that the intrinsic pastoral and scenic character of the area had been irreversibly compromised. Prospective investors in that area were therefore discouraged, but had turned to the KwaZulu-Natal Midlands as an alternative. The patent question is whether the Eastern Cape Coast is the next to be carved into themed estates? The argument by those opposed to themed estates in the Midlands was that, if unrestrained subdivision of agricultural land was allowed to take place in pastoral KwaZulu-Natal as had been permitted in Mpumalanga Province, it would result in a land rush that would negatively impact the area and bring few material benefits. The implication is the land rush could continue in the Eastern Cape and the fact that the Billion Group and others have claimed nearly all the available farmland on the east bank of the Gonubie Estuary since 2000 appears to confirm those fears.

It is arguably quite likely in the current development climate that, unless ecovillages are able to reinvent themselves in such a way that they are clearly distinguishable from the themed estates that are rolling out across South Africa, they might be tarred with the same brush by public opinion. One suggestion is a separate zoning scheme to provide for the distinctive concept of an ecological village or an ecological habitat. This would require a significant intervention but, according "is unlikely because the key concept of sustainable development has informed environment and development discussion since 1987 but has never quite caught on to become a mainstream, unifying, rallying cry among the general public or even among environmental and development groups. This is attributable to several factors, including the apparent fact that governments seem to shy away from sustainable development because it does not fall into any single ministry or department" (Holliday, Schmidheiny and Watts 2002, p.13-14).. Although a stream of South African legislation refers to the 'sustainable

development, it probably requires levels of integrated thinking and acting that the South African government has thus far failed to achieve. The general public also has trouble with the concept because the main message is that in thinking about environment and development issues, as in thinking about one's own life, one must figure how to live off interest and not capital.

Conflicting Value Systems

Several reasons exist for growing opposition to the alienation of agricultural land for residential and resort development purposes. One such reason is that residential development in rural settings may undermine the basis of the economies that such areas currently sustain, namely the sense of place and landscape that attracts urban dwellers to commute on weekends and holidays to such areas. Itinerant visitors sustain local economies and such places exist as a kind of shared destination and common resource to be shared and enjoyed by everyone. The concern, primarily from environmentalists who may or may not be familiar with the concept of an ecovillage, is that the target market for residential developments in rural settings are the affluent in the urban areas and from overseas who are intent upon acquiring a second, or holiday home. It is feared that property speculation, rather than a serious commitment to integrate into and build local economies, is the motive of the well-heeled who is looking for a rural retreat and who has spare cash to invest. The logic is that those who purchase such property as a second or holiday home will not reside in those communities for the substantial part of the year and are accordingly not there in order to contribute significantly to the local economy. This represents a conflict between affluent urbanites and environmentalists and comes down to a conflict between differing value systems.

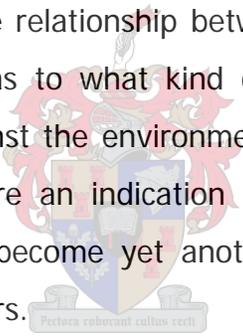
A further concern, again primarily of environmentalists, is that the Integrated Development Plans and Spatial Development Frameworks that form the basis of

Municipal Council decisions whether or not to permit development, are nothing but 'window-dressing' and may slow down rather than prevent inappropriate development. This contention is especially realistic in light of the potential increase in revenue that a municipality is likely to receive in return for approving such developments. Most municipalities are cash-strapped as a consequence of their commitment, usually set out in their Integrated Development Plans, to alleviate poverty, generate employment, provide housing and ensure that residents have access to basic services. The reality is that municipalities would be doing themselves a disservice if they did not do everything within their powers to attract wealthy residents who would form a reliable rates subscriber base and who could maintain their lifestyles without being a burden on the local authority. Agricultural land is not currently rateable and for municipalities the conversion of agricultural land to residential land is an extremely cheap way to generate revenue and provide employment. This represents a conflict between environmentalists and local government officials and yet another example of conflicting value systems.



Developers, including ecovillage designers, invariably disagree with the environmentalist's contention that people seeking alternative lifestyles are ironically attracted to scenic rural settings and then proceed to destroy that setting by developing it. Developers, including ecovillage developers, would argue that development can and should take place in such a way that it blends in with its surroundings, that architectural design can be adapted to and enhanced by the scenic surroundings. However, whereas ecovillage designers have a very specific set of criteria for development based on the internationally recognized ecovillage model, developers in South Africa, especially those who are intent upon creating themed estates in rural settings, are endearing themselves with the public and with municipalities alike by using ecological design terminology in their discourse. The Gonubie Valley Eco Golf Resort is but one such example and this represents a conflict of values between developers and environmentalists.

The Gonubie Estuary Management Forum indicated that the professionals tasked with conducting the Environmental Impact Assessments on behalf of the Billion Group had misinterpreted the Buffalo City Municipality Spatial Development Framework, the Western Cape Guidelines for Golf Courses and the Coastal Management Bill. According to the Gonubie Estuary Management Forum, a representative of the surveying company charged with processing the application for change of land use had attempted to mislead the public at a public meeting with regard to the legislation and an unethically close relationship existed between the developers of the golfing estate and the municipal decision-makers. The Gonubie Estuary Management Forum viewed this relationship as an unfair practice and illegal in terms of the Subdivision of Agricultural Land Act. The Environmental Impact Assessment regulations are an example of legislative measures taken to regulate the relationship between developers and the public and to provide an indication as to what kind of developments are desirable. However, the accusations against the environmental consultant by the Gonubie Estuary Management Forum are an indication that the Environmental Impact Assessment Regulations have become yet another arena for conflict between environmentalists and developers.



A further line of attack by critics of the golfing estate, and indeed any development within the coastal zone, is that the Coastal Zone Bill requires the developer to prove that the development has a dependence on its coastal location. For example, if the developer of the Gqunube Valley Eco Golf Resort is unable to demonstrate to the municipal planning authorities that the development depended on being located in the coastal zone, the golf course would have to be located elsewhere. In the view of the Gonubie Estuary Management Forum, the golfing element of the proposed development has no dependence at all on a coastal location and the developers should have been encouraged to look at alternative sites to the west of the Gonubie Estuary and within the Urban Edge where a golf estate development would be considered

desirable. The Gonubie Estuary Management Forum has pointed out that, where the proposed golfing estate is currently sited, hotel and lodge guests would be unable to gain reasonable and safe access to the beach or to the Gonubie Estuary. From the golfing resort, the Gonubie Beach is accessible down a precipitous slope of critically endangered coastal thicket and across the open river mouth, thus making it an inappropriate location for a coastal tourist destination. Gqunube Green is situated outside the coastal zone and the Gonubie Estuary Management Forum's criticisms and the provisions of the Coastal Zone Bill are therefore irrelevant.

Living with the Gqunube Valley Eco Golfing Resort

A potential source of conflict exists between the Gqunube Green settlers and the Gqunube Valley Eco Golfing Resort over a number of issues. One view is that the development requirements for the golfing estate would have a significant impact on the already stretched service capacity of Buffalo City Municipality, compounded by the fact that residents of the development would not be required to pay rates as the property would remain private and fall outside the Urban Edge. However, a significant group of settlers at Gqunube Green regard the proposed Gqunube Valley Eco Golf Resort in a different light and have considered the possible advantages of having an upmarket golfing resort as a neighbour. One of the advantages is a possible increase in the market value of property at Gqunube Green. In addition to the challenge of possibly sharing a road with the Gqunube Valley Eco Golf Resort, there are other contentious issues such as sewage processing and disposal, potable water supply, golf course irrigation water supply, staff housing, hotel and lodge location and height, the upgrading of the power supply spanning the Gonubie Estuary and refuse removal.

These are issues that impact directly on the feasibility of the proposed development and they are all issues that the Gonubie Estuary Management Forum has questioned. However, the possibility exists in the minds of some of the settlers that Gqunube Green Ecovillage can benefit if it were successful in negotiating to process sewerage from the Gqunube Valley Eco Golf Resort to be converted into useable fertilizer and perhaps even sold back to the golfing estate. Another advantage of having the golfing estate next door might be the opportunity to produce fruit, vegetables, meat and other consumables for the golfing estate. Many have taken the attitude that one should not 'look a gift horse in the mouth' and this is an example of possible future synergies between the residents of the Gqunube Green Ecovillage and the Gqunube Eco Golfing Resort.

A Comparison with the Fish Eagle Estate

An example of rapprochement between the local authority and a developer is the Fish Eagle Estate, Gqunube Green's immediate neighbour to the northwest where it was proposed portion 1 of farm 794 be rezoned. Buffalo City Municipality substantially amended the proposal following the adoption of the Quenera Spatial Development Framework Plan. The Directorate of Town Planning reviewed the layout plan in order to align the proposal with the guidelines provided in the Quenera Spatial Development Framework Plan. As proposed it included fifty-nine residential sites a number of chalets, conference facility and sports facilities. The issues that were raised by the Gonubie Estuary Management Forum were substantially the same as those for the Gqunube Valley Eco Golf Resort. The Fish Eagle Estate, like the Gqunube Valley Eco Golf Resort, is inside the Urban Edge. The developers of the Fish Eagle Estate actually adapted their proposals to be in line with environmental policy and planning for that area and reduced the number of proposed plots to forty to comply with the density requirements set out in the Quenera Spatial Development Framework.

However, in line with the Precautionary Principle, the Gonubie Estuary Management Forum insisted and the Directorate of Town Planning cooperated and decided to delay any decision on Fish Eagle Estate's development proposals pending the outcome of a review of the Quenera Spatial Development Framework Plan.

The Gonubie Estuary Management Forum raised a number of concerns about the appropriateness of the Fish Eagle Estate development in terms of the Buffalo City Municipality Spatial Development Framework Plan and relevant coastal and planning policy and guidelines. The developer subsequently withdrew the resort component of the development, further reducing the community benefits to be derived from the proposal and negating any coastal dependence that may have been claimed to exist in terms of the requirements of the Sustainable Coastal Development White Paper. The developers had initially intended to build a lodge on the Gqunube Estuary, but dropped this plan in favour of increasing the number of plots. Also, rezoning was amended to Resort Zone 2 rather than Residential Zone 2. One of the main differences between Fish Eagle Estate and Gqunube Green Ecovillage is the way they plan to deal with their sewerage. The Fish Eagle Estate will utilise conservancy tanks on each plot, serviced by a private contractor to transport it to the Gonubie Waste Water Treatment Works. It will be the homeowners association's responsibility for emptying of tanks. A contractor will collect domestic waste weekly outside each residence for transporting to a licensed disposal site.

"There are enough articulate and eloquent thinkers in the deep ecology movement who could convince our political and corporate leaders of the merits of the new thinking. The shift of paradigms requires an expansion not only of our perceptions and ways of thinking, but also of our values" (Capra 1996, p.9). Here it is interesting to note the striking comparisons in the changing tendencies between thinking and values. An insightful comparison of the movement of

changing thinking and the corresponding change in values makes it possible to overcome the barriers between those seeking to conserve the natural environment and those motivated for various reasons to make impacts on the natural environment. It would appear that the self-assertive environment that preceded the new democratic dispensation in South Africa has been moving gradually towards an integrative environment. The movement towards integrative thinking involves a change in values from a self-assertive value system to an integrative value system. We have started changing our value system because we have started realizing that all phenomena are fundamentally interdependent individuals and societies are all imbedded in nature.

Conclusion

The reasoning in this Chapter has been that rapprochement between the competing entities and personae involved in planning, development and conservation is possible, given that a paradigm shift favourable to rapprochement has accompanied the new political dispensation in South Africa. This shift is evident in a transition from self-assertive thinking to integrated thinking, accompanied by a concomitant shift in values from a self-assertive to integrated value system.

CONCLUSIONS

It can safely be concluded that, a quarter of a century ago ecovillages were a considered response to ever-increasing evidence of ecological degradation and deteriorating quality of life. A global movement grew in response to this realization and experiments in ecovillage design took root in South Africa at a time in its political history that permitted experimentation within an entirely new paradigm - a paradigm in which the values of conservation started to eclipse those of expansion, cooperation those of competition, quality those quantity and partnership as a value started to supersede domination. The setting for these value shifts is the South African Constitution and the legislation that it spawned. However, in spite of the tendencies towards a more integrative value system, self-assertive values prompted by land scarcity, business monopolies and political allegiances persist. The synopsis of Gqunube Green's future is that it was founded at exactly the right time in terms of the policy that the Buffalo City Municipal Council had decided to follow in respect of low density, mixed-use developments outside the Urban Edge. The Subtropical Thicket Ecosystem Planning Project was but one of a number of regulatory measures that facilitated Gqunube Green development. However, the most critical timing for Gqunube Green was before big and well-connected business interests, in the form of the Billion Group, was able to muscle in on the entire east bank of the Gonubie Estuary. In the final analysis, the development of an ecovillage appears in its daily practice to be the articulation of the intended values in everyday life and how this is made possible through dialogue and the working out of solutions that can never be prescribed in the best constitutions and regulations.

**STATEMENT OF MISSION AND GOALS, CONSTITUTION AND BYLAWS
OF THE QQUNUBE GREEN ECOVILLAGE HOMEOWNERS ASSOCIATION
FOR THE CONTROL AND MANAGEMENT of the DEVELOPMENT KNOWN
AS QQUNUBE GREEN ECOVILLAGE**

Draft 20

1 DEFINITIONS

In the interpretation of this Statement of Mission, Goals and Proposal, Constitution and By-laws, unless the context otherwise indicates: -

- a. 'Association' means the QQUNUBE GREEN ECOVILLAGE HOMEOWNERS ASSOCIATION, comprised of the owners of the private erven and CET;
- b. 'Chairperson' means the Chairperson of the various circles of QQUNUBE GREEN ECOVILLAGE HOMEOWNERS ASSOCIATION or the Chairperson of a general meeting of the said Association, depending upon the context in which the word is used;
- c. 'Local Authority' means the Local Authority having jurisdiction over the erven;
- d. 'Member' means a member of the QQUNUBE GREEN ECOVILLAGE HOMEOWNERS ASSOCIATION;
- e. 'Month' means a calendar month;
- f. 'Private Erven' means the residential erven owned by members of the QQUNUBE GREEN ECOVILLAGE HOMEOWNERS ASSOCIATION that are zoned as Residential Zone 3 with special consent for a single dwelling only;

- g. 'Co-Housing Unit' means the residential units owned by members of the GQUNUBE GREEN ECOVILLAGE HOMEOWNERS ASSOCIATION that are located on the erven zoned as Residential Zone 3;
- h. 'Roadways' means any roads within GQUNUBE GREEN ECOVILLAGE intended for vehicular traffic;
- i. Plurals Unless the context otherwise requires, any words importing the singular shall include the plural, and any words importing one gender shall include the other;
- j. 'Year' means a calendar year;
- k. 'Circle' is the equivalent of a committee;
- l. 'Covenants' refers to the Statement of Mission and Goals, Constitution and Bylaws of the Gqunube Green Homeowners Association;
- m. 'CET' the D.T. Hudson Christian Ecovillage Trust;
- n. 'GG' Gqunube Green Ecovillage;
- o. 'Resident' a proprietor or occupier of an erf or Co-Housing Unit;
- p. 'EMP' Environmental Management Plan.

2 STATEMENT OF MISSION AND GOALS AND PROPOSAL.

2.1 Statement of Mission:

Gqunube Green Ecovillage exists to promote a sustainability, which builds the Triple E's of Ecology, Equity, and Economy and integrates a Christian spirituality of love for God's creation.

Gqunube Green was established as an ecovillage by the CET to embody a way of life that is environmentally, socially, and financially sustainable and informed by the Christian calling to care for God's

creation, which is further embodied by the document - An Evangelical Declaration on the Care of Creation

2.2 Goals:

Gqunube Green will follow the principles of Holistic Management and its related disciplines of Land Planning and Grazing Planning. Gqunube Green will use the "Pattern Map of a Conservation Economy". Gqunube Green will use the sociocratic decision-making system.

2.3 Proposal Document:

The proposal document submitted to Amatola Regional Municipality will form part of the documents, which articulate the direction of GG.

2.4 Ownership of Farms 792 and 793:

Farm 792 will remain registered with the CET. Farm 792 will be used for sustainable agricultural purposes. Buildings and outbuildings related to sustainable agriculture will be limited to a maximum of 2.5% coverage of the size of farm 792. Other infrastructure related to sustainable agriculture such as shade cloth nurseries and/or aquaculture ponds and support structures will be limited to a maximum of 10% of the size of Farm 792. Such infrastructure must be environmentally designed, constructed and positioned as determined by the CET staff after consultation with the Land Management Circle of the GG Homeowners Association.

The Remainder of Farm 793 East London (being the land which is not land laid out as Private Erven or for Co-Housing Units) will remain registered in the name of the CET. It will be used for sustainable agricultural purposes except for those portions that are presently covered by indigenous forest, which shall be preserved as a nature conservation area. No buildings, bush clearing or development of any kind will be permitted in the said nature conservation area with the

only exception being that area on Farm 793 marked as "Church Retreat Site" on the map contained in the Buffalo City approved subdivisional plan dated 31 January 2003. This condition related to the use of the remainder of Farm 793 may not be amended except with the written consent of the CET and the unanimous written consent of the owners of all of the Private Erven in GG Ecovillage.

- 2.5 The Home Owners' Association will control the farming of the agricultural areas of Farm 793, excepting that of the Learning Centre, and will permit the CET and owners of Private Erven, to have access to the remainder of the property for agricultural purposes (subject to the conditions as these are established by the Home Owners' Association through the Land Management Circle). Further the Home Owners Association will permit the CET and owners of Private Erven, their family and guests access to the remainder of the property for recreational purposes (subject to the control of the Home Owners Association through the Land Management Circle).

The CET will retain control of the farming operations of Farm 792 and will allow owners of Private Erven on Farm 793, their families and guests access to the Gqunube River and to traverse the property on designated hiking trails and/or roads (subject to the control of the CET).

- 2.6 Ownership and restrictive conditions in Notarial Deed and Title Deeds of farms:

The conditions contained in paragraph 2.4 and 2.5 shall be incorporated into a Notarial Deed to be signed by the CET and the Home Owners' Association and shall be registered as conditions in the Title Deeds of Farm 792 and the Remainder of Farm 793.

3 CONSTITUTION

3.1 GG Homeowners Association

Gqunube Green Ecovillage Homeowners Association is structured according to a system of task and management based circles and uses a decision-making system called sociocracy to set policies and rules efficiently while respecting each other. Under this system there will be three levels of circles: Task Circles, a General Circle and a Top Circle. With sociocracy, the basis of decision-making is consent, which uses the principle of no objection.

3.2 Task Circles

Task Circles manage the various aspects of GG Ecovillage:

1. Architectural and Environmental Design Circle
2. Covenant Compliance
3. Economic Development
4. Facility Maintenance
5. Finance
6. Land Management
7. Social and Pastoral

Each Task Circle operates freely within given parameters in its own area of responsibility for the ecovillage. Each is responsible for educating its own members in its work and keeping its own records. All members of GG Ecovillage choose to participate in any of the Task Circles that have been legally constituted. Task Circle members elect a chair and a representative for membership of the General Circle by the 15 January each year.

3.2.1 Architectural and Environmental Design Circle

The object of this circle is to establish standards to protect and enhance the environmental quality, visual beauty, and property investment value of GG Ecovillage. It will be responsible for the ongoing development of the EMP. The Circle will promote maximum energy independence of GG. It will process requests for architectural and environmental design changes throughout the Property.

3.2.2 Covenant Compliance Circle

The object of the Covenant Compliance Circle is to ensure fair and timely enforcement of all the Covenants. These include the Statement of Mission, Goals and Proposal, Constitution and By-laws. This circle will ensure compliance to the EMP.

3.2.3 Economic Development Circle

The object of the Economic Development Circle is to initiate and promote economic activity for the financial and social benefit of the Association, the residents of GG and the greater community within the parameters of the Covenants.

3.2.4 Facility Maintenance Circle

The object of the Facility Maintenance Circle is to provide for inventory, preventive maintenance, repair, and security of buildings and equipment held in common; facilitate the homeowner waste pick-up and recycling programme, and promote well-maintained residential exteriors. This circle will ensure adherence and implementation to the EMP.

3.2.5 Finance Circle

The object of the Finance Circle is to ensure integrity of the fiscal and administrative systems and appropriate operation of financial transactions of the Association within the parameters of the Covenant. The Circle will meet generally accepted accounting standards. The circle will manage in all its transactions and records the Association's cash to the advantage of the organization and the circle will take appropriate measures to collect revenues due. The Circle will minimize expenses.

3.2.6 Land Management Circle

The object of the Land Management Circle is to ensure that land management activities are carried out so as to preserve and restore biodiversity, quality and abundance of natural resources and balance of natural systems in accordance with our Covenants and that outdoor amenities, such as roadways, pedestrian paths and trails are maintained to support community life, all in accordance with the EMP.

3.2.7 Pastoral and Social Circle

The object of the Social Circle is to foster a spirit of community, neighbourhood collaboration and residents' ongoing understanding and knowledge related to GG goals and objectives, and promote positive relations with the larger world.

3.3 General Circle

3.3.1 Duties and Composition

The General Circle (Management Committee) will manage the general operations of the whole ecovillage and is responsible for the development of the EMP for the ecovillage. Membership will

consist of the chairs of each of the Task Circles and representatives from the Task Circles. The first meeting of the year meets directly after the annual Task Circle elections. Chairpersons and Task Circle representatives elect the General Manager.

3.3.2 Election

Save for the provisions of Clauses 3.6.1 and 3.6.2 the General Circle membership shall be elected at the first annual meetings of the Task Circles and shall hold office until the next succeeding annual Task Circle elections, but shall be eligible for re-election save for the provisions of clauses 3.11.8 of the by-laws.

3.4 Top Circle

3.4.1 Composition

There will be a Top Circle composed of the General Manager, 2 representatives elected from the General Circle, the chairperson of the CET and Director of the GG Learning Centre (should these be different), and 2 CET representatives as chosen by the CET Trustees and other persons invited by the Top Circle because of their special expertise in areas vital to GG ecovillage.

3.4.2 First and Subsequent Chairpersons

The first Chairperson of the Top Circle shall be the chairperson of the CET or his nominee, who shall hold office as such until the first Top Circle election when he shall retire as Chairperson, unless re-elected, but continue as a Top Circle member.

3.4.3 Termination of Membership

A Top Circle member shall be deemed to have vacated his office upon his Estate being sequestrated or surrendered, or having

been convicted of a criminal offence involving dishonesty or becoming of unsound mind or upon his resignation.

3.4.4 Election

Save for the provisions of Clauses 3.6.1 and 3.6.2 the Top Circle membership shall be elected at the first meeting of the General Circle taking place after the elections held by the Task Circles and shall hold office until the next succeeding Task Circle elections, but shall be eligible for re-election save for the provisions of clause 3.11.8 of the by-laws.

3.4.5 Term of Office

Each Top Circle and General Circle member shall hold office from the date of his election until the next Top Circle and General Circle elections at which meeting he shall be deemed to have retired, but will be eligible for re-election to the Top or General Circle at such meeting. Upon any vacancy occurring in the Top Circle prior to the next round of annual elections at Task Circle level the vacancy shall be filled by a person nominated by the remaining members of the General Circle. Upon any vacancy occurring in the General Circle prior to the next round of annual elections at Task Circle level, the vacancy shall be filled by a person nominated by the Task Circle from which the General Circle member originated.

3.5 Membership

It is a condition of ownership of a Private Erf that the owners thereof shall be members of the Association and Deeds of Sale between the CET and Purchasers shall contain a condition to this effect. The CET shall refuse transfer until the Purchasers sign and bind themselves to membership.

It is a condition of ownership of a Co-Housing Unit that owners shall be members of the Association and any Deeds of Sale between the CET and Purchasers shall contain a condition to this effect. The CET shall refuse transfer until the Purchasers sign and bind themselves to membership

3.5.1 Membership

Membership of the Association shall be confined to the registered owners of the Private Erven, the registered owners of the Co-Housing Units and the CET

3.5.2 Joint Ownership of Erven or Co-Housing Units

Where any such owner of a Private erf or a Co-Housing Unit is more than one person, all registered owners of that erf or unit shall be deemed jointly and severally to be one member;

3.5.3 Cessation of Ownership of Erven or Co-Housing Units

When members cease to be registered owners of Private Erven or Co-Housing Units, they shall ipso facto cease to be a members of the Association;

3.5.4 Non Transfer of ownership

Members shall not transfer Private erven or Co-Housing Units unless it is a condition of transfer that Transferees bind themselves, as contracts for the benefit of the Association, to become members of the Association. The registration of that Private Erf or Residential Unit into the name of that transferee shall ipso facto constitute the Transferee a member of the Association;

3.5.5 Non Resignation

The registered owner of a Private Erf or Co-Housing Unit may not resign as a member of the Association;

3.5.6 Non Transference

The rights and obligations of a member shall not be transferable, except as provided for in clause 3.5.8, and every member shall: -

Further the objects and interests of the Association; and observe this Constitution, all by-laws, regulations and rules made by the Association or one its legally constituted Circles;

3.5.7 Outstanding Levies

Members may not transfer ownership of Private Erven or Co-Housing units, unless all levies due and owing by them to the Association, up to the date of such transfer, have been paid or secured to the satisfaction of the Finance Circle and they have obtained a Certificate signed by or on behalf of the Finance Circle to that effect.

3.5.8 Rented Accommodation.

A registered owner of a Private Erf or Co-Housing Unit, upon renting a home out, thereby permits the rental resident to fully participate in any of the Task Circles of the Homeowners Association subject to the condition that the rental resident shall further the objects and interests of the Association; and observe this Constitution, all by-laws, regulations and rules made by the Association. The only exception to the above is that non-owner residents will have no right to vote at an AGM.

3.6 Commencement

The Association shall come into being in terms of Section 2 of the Land Use and Planning Ordinance no 15 of 1985 (Cape) and

commence operation in terms of this Constitution and By-laws upon the transfer of the first Private Erf by the CET to a member, provided that –

3.6.1 Commencement after Registration of 17 Erven

All requirements in terms hereof as to Meetings and Circles and so forth shall not apply until **SEVENTEEN (17)** Private Erven have been transferred to Members;

3.6.2 Pre Commencement Status

Until such time as **SEVENTEEN (17)** Private Erven have been transferred, meetings of the CET, or existing members and the CET, shall be regarded as proper meetings, and such meetings shall carry out the work of the Task, General and Top Circles and other duties or obligations required of them and shall be fully bound in terms of the provisions of this Constitution and By-laws and no business transacted or resolutions passed shall subsequently be invalidated by reason of such meetings having constituted less than a quorum, or for any other reason.

3.7 General Meetings

3.7.1 Date of Meetings

The Association shall hold a general meeting before **15 April** as its Annual General Meeting. Notice of such Annual General Meeting shall be called by fourteen (14) days notice in writing to each member

3.7.2 Accidental Omission

Accidental omission to give notice in writing of a meeting (or any special resolution) shall not invalidate the proceedings (or any resolution passed,) at any meeting.

3.7.3 Matters Dealt With

The following matters shall be dealt with at every Annual General Meeting: -

- i. The receipt of the Chairman of the Top Circle's, who chairs the AGM, report
- ii. The consideration of any matters raised at the meeting. All such matters, excepting 3.7.3. iv. below, shall be referred by the AGM to the appropriate Circle(s) for action;
- iii. The receipt of the balance sheet of the Association;
- iv. Written notice of any resolution to amend this Constitution shall be given by the proposer thereof to all members at least 14 days before the date of the meeting at which such resolution shall be proposed. No amendments to this constitution will be valid unless passed by a 2/3 majority of the members present and voting at the meeting at which such resolution is proposed.

3.7.4 Voting

Voting shall be as follows: -

- Every member present in person or by proxy shall have one vote for each Private Erf or Co-Housing Unit registered in his name, provided that if an Erf or Co-Housing Unit is registered in more than one person's name, then they shall jointly have one vote;
- The CET as the owner of the Learning Centre and the remainder of Farm 793 shall have votes equivalent to 1/3 of the sum of the number of Private Erven and Co-Housing

Units, plus one. This shall be cast by the Chairperson of the CET after consultation with the CET Board;

- Voting shall be in writing by way of a secret poll unless the Chairperson otherwise directs. The election of a Chairperson (if necessary) shall be decided by a show of hands by a majority of members present in person or by proxy;
- Every resolution shall be seconded and if not seconded shall be deemed not to have been proposed;

3.7.5 Quorum

No business shall be transacted at any general meeting unless a quorum is present when the meeting proceeds to business, such quorum being such of the members entitled to vote as together represent one half of the total votes of all the members of the Association entitled to vote. If a quorum is not present the meeting shall stand adjourned to the same day in the following week at the same place and time, and if at such adjourned meeting a quorum is not present, those members present shall constitute a quorum.

3.8 Functions of the Task, General and Top Circles

3.8.1 Constitutional Obligations

The Circles, acting as set out by this Constitution, shall manage and control the business and affairs of the Association, with full powers of management, and exercise all powers of the Association and do all such acts on behalf of the Association as may be exercised by the Association in general meeting;

3.8.2 Make regulations

The General Circle may make regulations, by-laws and rules not inconsistent with this Constitution and By-laws, in furtherance and promotion of the objects of this Association and for the better management of the affairs of this Association, for the advancement of the interests of its members and to assist it in administering and governing its activities generally. .

3.8.3 Frequency of Meetings

Meetings of the different Circles shall be held at least once every quarter, unless all members unanimously waive the holding of such meetings.

3.8.4 Quorum at Meetings

A meeting of a Circle shall be legally constituted if two members are present.

3.8.5 Chairperson

The Chairperson shall preside at all such meetings, whom failing the Vice Chairperson, whom failing a person appointed by those Circle members present;

3.8.6 Minutes

Every Circle shall cause minutes to be taken of every Circle meeting, which shall be reduced to writing and certified as correct by the Chairperson.

3.8.7 No Remuneration

The Circle members shall not be entitled to remuneration for their services other than bona fide out of pocket expenses incurred and vouched for, and then only about the business of the Association.

3.8.8 Decide Levies

The levy payable by each owner of a Private Erf shall be an equal share of the amount which the General Circle considers it will require to enable the various Circles to carry out their functions, such equal share to be calculated as a fraction of the number of Private Erven sold to date.

The levy payable by each owner of a Co-Housing Unit shall be determined at the appropriate time by the Land Management Circle in consultation with the General and Top Circles of the Association and the CET.

3.8.9 Legal proceedings

The Association shall have the power to institute legal proceedings against any member who does not pay his or her levies on due date.

3.9 Levy

3.9.1 Recommendation of Levies by Finance Circle

The Finance Circle shall from time to time recommend levies be made upon the members for the purpose of meeting all the expenses which the Association has incurred, or to which the Finance Circle reasonably anticipates the Association will be put by way of maintenance, repair, improvement, and for payment of services rendered, salaries/wages of the employees of the Association and generally for the payment of all expenses reasonably incurred in the management of the Association. Such recommendations shall be passed by the General Circle. The levy will be calculated in accordance with the compliance audit of each individual house as carried out by the architectural circle. Compliance audit will take place annually. The star rating for

compliance will be set out by the Architectural and Environmental circle.

3.9.2 Running Expenses calculated by Finance Circle

The Finance Circle shall estimate the amount which shall be required by the Association to meet expenses during each year, and shall impose a levy upon members equal as nearly as possible to such estimated amount. The Finance Circle may include in such levy/levies an amount to be held in reserve to meet anticipated future expenditure not of an annual nature. Every such levy shall be made by equal monthly installments due on the first day of each succeeding month and year.

3.9.3 Special Levies

The Finance Circle may recommend from time to time, special levies be made upon the members in respect of all such expenses referred to in 3.11.1 hereof. Such recommendations will be acted upon by the General Circle.

3.9.4 Interest on Overdue Amounts Determined by Finance Circle

Any amount due by a member by way of a levy shall be a debt due by him to the Association and overdue levies shall bear interest at a rate to be determined by the Finance Circle. The Finance Circle may choose to follow an alternative remedial action that is mutually agreeable to both parties. The obligation of a member to pay a levy shall cease upon his ceasing to be a member. No levies or interest paid by a member shall be repayable upon ceasing to be a member.

3.9.5 Full amount of Levy Due on Transfer

The full amount of the levy and any arrears is payable by the old owner of an erf on transfer of title from the CET to the new owner.

3.10 Contracts and Regulations – General Circle

The General Circle may from time to time authorise and promulgate regulations recommended by the various Task Circles governing inter alia: -

3.10.1 Regulations re External Appearance

The external appearance of and maintenance of the Private Erven and Co-Housing Units and the improvements erected thereon;

3.10.2 Comply and be Bound by Regulations

Members of the Association undertake that they shall comply with and be fully bound by such regulations;

3.10.3 Specialist Consultants

The General Circle shall have the right to engage, or authorize the engagement by any Circle, on behalf of the Association the services of Accountants (or suitably qualified Bookkeepers) Attorneys, Architects, engineers or any other professional person or firm for any reason thought necessary by the General Circle and on such terms as the General Circle shall decide;

3.10.4 Review Financial Reporting

Once a year the Finance Circle shall lay before the General and Top Circles and AGM an income and expenditure account for the preceding financial year of the Association or in the case of the first account, for the period since the commencement of the Association, together with an audited balance sheet made up as at

the last financial year of the Association and a report of the finances of the Association during the year under review.

3.11 Objects and Powers

The objects and powers of the Association shall, through the various Circles established by Clause 3.2 of the Constitution be: -

3.11.1 Maintenance and Promotion of Common Interest

To control, maintain, repair and keep in good order all areas, roadways, and all services, common to, and or which serve and relate to the aforesaid erven following upon the aforesaid subdivision and development of the erven and to promote the common interest (according to the Covenants) of the members as registered owners of the aforementioned immovable property;

3.11.2 Compliance with legal requirements

To do all things necessary relative to the reasonable and lawful requirements of the Local Authority or its successor,

3.11.3 Enforcement

To enforce the observance of the by laws of the Association and the provisions of the Constitution and to deal with any infringement thereof;

3.11.4 Operate Bank Account

To open and operate a banking account;

3.11.5 Invest Moneys

To invest any moneys of the Association not immediately required for any of these objects or purposes in such manner as may from time to time be determined;

3.11.6 Manage and Maintain Open Spaces

To manage and maintain the open space;

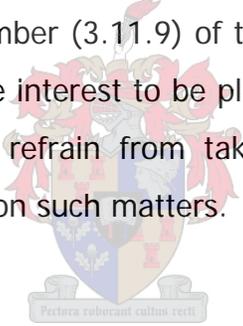
3.11.7 To do all such other lawful things as are incidental or conducive to the attainment and performance of the objects of the Association;

3.11.8 Circle members may, within any 10 year period, hold any position on the various Circles for a period of 5 years, be it for a period of consecutive or separate years only.

3.11.9 In the event that any members of any Circles (in any matter discussed or proposed by a Circle) have specific or declared interest, that interest must be revealed prior to further discussion or decisions of the appropriate Circle being made on that matter.

3.11.10 Such a member (3.11.9) of the Circle shall cause a notice of declaration of the interest to be placed in some public place. Such a member shall refrain from taking part in the discussions or decision making on such matters.

3.12 Building Time Limit



A building plan is required to be submitted to the municipality within two years of the date of transfer from the CET to the first or subsequent purchasers thereof. The Architectural and Design Review Circle must first approve these plans before submission to the municipality. Construction of the building is to start within one year of approval of the plans by the Municipality. If such dwelling has not been completed to the satisfaction of the Architectural and Design Review Circle within four years from the date of approval by the municipality, then the owner of such erf shall be liable to pay the Association a monthly penalty levy which is four times the amount of the ordinary levy, in addition to such ordinary levy, until the date of

completion of the said dwelling. Any infraction has to be rectified immediately by the owner of the dwelling.

Should an erf owner not have started construction of their dwelling within the three year time period described above (two year pre submission and one year post submission), that owner will be required to sell their erf back to CET at the original price escalated by the CPI rate.

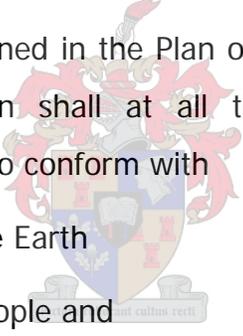
4 BY – LAWS

4.1 By-law 1: Principles of Use

4.1.1 In terms of our Statement of Mission to live a sustainable life:

Principles of Use – General Description

The erven contained in the Plan of GG and the common property contained therein shall at all times be used, managed and controlled so as to conform with

- Care for the Earth
- Care for People and 
- Sharing of Surplus (knowledge, stock, goods and services etc)

No use or activity upon any erf or upon the common property shall be performed or conducted contrary to such principles:

4.1.1.1 Enjoyment of Flora and Fauna

The flora and fauna will be respected at all times and utilized in such manner as will preserve the environment with full recognition of the environmental sensitivity of the area and the feeding of wildlife is forbidden.

4.1.1.2 Co-operation of Residents

A resident shall co-operate with the overall property policy and design in relation to general landscape, re-forestation, forestry, agriculture and aquaculture.

4.1.1.3 Permission for Certain Activities

A resident shall obtain the permission of the Land Management Circle and/or obtain appropriate permits and/or licences for the use of non-lethal traps or to hunt or fish. These animal management activities are to be in accordance with all current laws, regulations, guidelines and by-laws of government, appropriate non-government bodies and the GG Homeowners Association.

4.1.1.4 Access to Common Property and Fires

Residents shall not do or permit to be done or omitted, any act which might obstruct or tend to disrupt access to the common property or the surrounding area by any persons. Further, residents of an erf must obtain permission of the Land Management Circle for the lighting of fires, other than those lit in a dedicated braai area or safe braaing device, on their erven or the common property.

4.1.1.5 Permission for Removal of Trees

Residents shall obtain permission of the Land Management Circle for the removal of a living or dead non-alien vegetation or trees on their erven or the common property.

4.1.1.6 Permission to Use Undesirable Chemicals

Residents shall obtain permission of the Land Management Circle for the use of undesirable chemicals as provided in the list of such chemicals provided by the Land Management Circle from time to time.

4.1.1.7 Best Endeavors to Preserve Principles of Use

Residents shall use their best endeavours to preserve now and at all times in the future the principles stated above for use or activity over an erf or common property.

4.1.2 Act of Omission Constitutes a Breach of By-laws

Any act or omission done or omitted to be done in contravention of the principles expressed in this by-law shall constitute a breach of these by-laws.

4.2 By-law 2: Breach of Laws

4.2.1 Respect for Determination by Covenant Compliance Circle

The reasonable determination of the Covenant Compliance Circle as to whether or not there has been a breach of the provisions of any by-laws, shall be respected by the residents of all erven. Any dispute as to whether or not the decision of the Covenant Compliance Circle is correct shall be referred to the Top Circle, or those delegated by the Top Circle, whose decisions shall be binding on the residents of all erven.

4.3 By-law 3: Building Application Approval

4.3.1 Preliminary Discussion with Architectural & Environmental Design Circle

Residents, before engaging an architect, shall have preliminary discussions with the Architectural and

Environmental Design Circle about their proposed houses. Residents shall submit for approval to the Architectural and Environmental Design Circle or to such persons who shall from time to time be appointed as agents of the Architectural and Environmental Design Circle, site and layout plans for all constructions and/or alterations to the subject land prior to submission for approval by the relevant local authority.

4.3.2 Use of Inappropriate Chemicals

In recognition of the above principles, and in particular by-law 1 (4.1.1.6), no building approval will be given to any plan for/or construction and/or alterations specifically requiring the application of those chemicals referred to in by-law 1 (4.1.1.6). Where there has been a deemed contravention of by-law 1 (4.1.1.6), the Architectural and Environmental Design Circle at the defaulting resident's cost, is to conduct the appropriate testing of the site to assess the damage caused and recommend the appropriate action to be taken by the resident at fault with respect to same.

4.3.3 Non-negotiable Environmental Requirements

Each resident shall ensure that the design of their dwelling complies will non-negotiable environmentally friendly requirements as outlined out in the current EMP or any amendment thereof.

4.4 By-law 4: Building Restrictions

4.4.1 Building Lines

The following building lines would apply to all erven zoned as private erven:

Front boundary 5 metre except for car ports which can be built on boundary

Rear boundary 1 metre

Side boundaries 2 metre, minimum of 1,5 metre with an aggregate of 4 metres

Notwithstanding these building lines, fire safety distance lines, or any other criteria contained in the National Building Regulations, are applicable.

4.4.2 Coverage

A maximum of 25% of the total site area may be built upon. Cantilever walls would be included in building area, but roof overhangs would be excluded.

4.4.3 Height restriction

A structure may consist of a maximum of two storeys, inclusive of a basement and no part of the structure may extend above a horizontal plane located seven meters above the highest point on the site.

4.4.4 Ground Stability

No excavations within a site boundary may destabilize or undermine any adjacent property or common land. The angle of repose for soils is taken as 30°. Any slope steeper

than this must be retained by a retaining structure designed and certified by a registered engineer.

4.5 By-law 5: Business Application Approval

4.5.1 Submission of Business Applications to Economic Development Circle

Residents shall submit for approval to the Economic Development Circle or to such persons who shall from time to time be appointed as agent on behalf of the General and Top Circles, detailed proposals for the conduct of any business from any erf within or on the common property of the GG Ecovillage.

4.6 By-law 6: Noise and Behaviour

4.6.1 Restriction of Noise

A resident shall not upon the erven or the common property create any noise and/or behaviour likely to interfere with the peaceful enjoyment of the resident of another erf or any person lawfully using common property.

4.7 By-law 7: Vehicles

4.7.1 Driving Restrictions

A resident shall endeavour to avoid parking or standing any motor vehicle or other vehicle upon common property except with the consent in writing of the Land Management Circle. Nor shall any person drive or cause to be driven a motor vehicle within or upon common property at a speed in excess of 40 kilometers per hour. Nor shall any person drive or cause to be driven a motor vehicle on service

roads, grasslands or in forests without permission of the Land Management Circle.

4.7.2 Compliance with Municipal, Provincial & National Regulations

Any motor or other vehicle driven upon an erf or common area shall comply with municipal, Provincial and National traffic regulations in that it must be in a roadworthy condition, the driver to be duly licensed and the vehicle duly registered.

4.8 By-law 8: Eradication of Weeds and Fire risk

4.8.1 Abide by policy

Residents shall abide by the EMP regarding the eradication of alien vegetation and minimization of fire risks. (The Land Management Circle shall supervise this responsibility).

4.9 By-law 9: Behaviour of Invitees

4.9.1 Resident Responsible

Residents shall take all reasonable steps to ensure that their invitees behave in a manner not likely to interfere with the peaceful enjoyment of the resident of another erf or of any person lawfully using common property, not to cause or contribute to any breach of these by-laws.

4.10 By-law 10: Behaviour of Children

4.10.1 Resident Responsible

Residents shall take all reasonable steps to ensure that their children or children of an invitee behave in a manner not likely to interfere with the peaceful enjoyment of the resident of another erf or any

person lawfully using common property, nor to cause or contribute to any breach of these by-laws.

4.11 By-law 11: Depositing of Rubbish on Common Property (see by-law 1 - 4.1)

4.11.1 General Prohibition

No resident shall deposit or throw upon the common property any rubbish, dirt, or other material likely to interfere with the peaceful enjoyment of the resident of another erf or of any person lawfully using common property.

4.12 By-law 12: Storage of flammable Liquids

4.12.1 Consent Required

Residents shall obtain the consent in writing of the Land Management Circle to use or store upon any erf or upon the common property any flammable chemical, liquid or gas or other flammable material, other than chemicals, liquids, gases or other material used or intended to be used for domestic purposes.

4.13 By-law 13: Refuse Disposal (see by-law 1 - 4.1)

4.13.1 Compliance with Recycling Programme

Residents shall, in accordance with a recycling programme as provided by the EMP, maintain receptacles on the erf for recycling refuse.

4.14 By-law 14: Keeping of Animals

4.14.1 Consent of General Circle

In accordance with the principles of use, residents may, with the consent of the General Circle only, keep certain domestic animals or fowl on an erf or the common property but this shall be subject to the provisions of any local authority regulations and the Land Management Circle.

4.14.2 Prohibition of Dogs and Cats

The keeping of dogs and cats is prohibited, save that subject to a written motivation being submitted to the Land Management Circle, permission may be granted by this Circle to those moving onto plots with existing full grown dogs to retain them.

4.15 By-law 15: Illegal Use of Erf Prohibited

4.15.1 Illegal use Prohibited

Residents shall not use any erf for any purpose which may be illegal or injurious to the reputation of the ecovillage.

4.16 By-law 16: Receipt of official Notices

4.17.1 Distributed to members within 2 days

A notification of receipt of any official notices served on the Homeowners Association by either any government departments, CET or their agents, relating to planning issues that may have some impact on residents, shall be

distributed to all members within two working days of receipt, and copies of the official notices shall be promptly made available at cost and on the request of members, and the General Circle be responsible to clear the Homeowners Association mail box a minimum of three times per week.

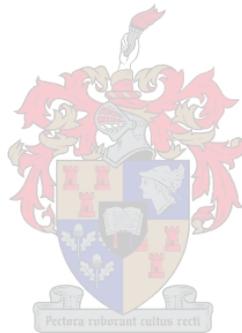
4.18 By-law 17:

4.18.1 CET offered right of First Refusal

CET will be offered the right of first refusal by any owners deciding to sell their erven and may purchase the property or nominate some other person to do so. If it wishes to exercise this right it shall notify the seller in writing within 10 days of the property being formally offered to it in writing. Should the seller lower the price after CET has declined to exercise this right in writing, the seller must offer CET first refusal in writing at this new price.

Should the CET decide to sell Farm 792 or remainder of Farm 793, it shall first extend the offer to the Homeowners Association who shall have 10 days to reply in writing. Should the Farms not be sold to the Homeowners Association, any purchasers of said

farms shall be bound by the existing rights of the residents.



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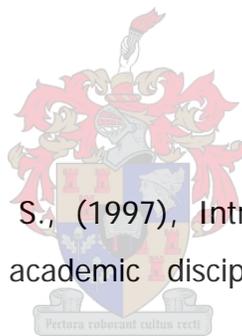
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Kockott, George: Interview on 22 March 2005

Puchert, Derek: Various interviews.

Wilkinson, Brian: Various interviews.