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**AN EVALUATION OF COMMUNITY-BASED
ENVIRONMENTAL INITIATIVES AT BETTY'S BAY,
WESTERN CAPE, SOUTH AFRICA**

A thesis submitted to the
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KEVIN JOHN WINTER

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Department of Environmental & Geographical Science
University of Cape Town

Abstract

Since the United Nations Conference on Environment and Development in 1992 there has been a considerable increase in research activity centred on public participation in the local environment. The results of this research have provided a mixed account of successes and limitations of public participation. Some researchers have noted that public participation remains a top-down, expert led activity that fails to engage the public, while others suggest that public participation is a prerequisite for sustainable development, peace and social justice. These diverse accounts offered in the academic literature prompt the key research question in this study, *why involve the public in environmental initiatives?*

In answering this question, four theoretical perspectives are explored in order to explain why groups of citizens carry out actions or involve themselves in activities that contribute to the common good. These perspectives are incorporated into an analysis of public involvement in environmental initiatives. The four perspectives which are examined are whether or not:

- (a) individuals act on the basis of self-interest;
- (b) individuals can be expected to co-operate and act collegially;
- (c) collective actions are informed by socially acquired and constructed knowledge;
- (d) collectives reach agreements by accepting and adhering to prevailing norms and values.

The study evaluates three environmental initiatives at Betty's Bay in the Western Cape, South Africa. It compares and contrasts the successes and limitations of these projects in contributing to environmental husbandry and to sustainability in a local setting. The empirical research is informed predominantly by primary

sources including written reports, minutes of meetings, correspondence and interviews with role players. A controlled research design ensures that comparisons between the initiatives are kept stable. The findings are used to construct an empirical framework to explain the potential of community-based interest groups to contribute to sustainability.

The results of the study demonstrate that interest groups are capable of contributing to slow, but incremental improvements in the biophysical environment. These 'outcomes' are the result of public involvement characterised by the willingness of volunteers to take responsibility for addressing various environmental issues. Despite improvements to the local environment, the study concludes that interest groups are limited in contributing to sustainability. However, the greatest potential to contribute to sustainability occurs in situations where initiatives involve the public acting together with the Local Authority and a research institution.

The study concludes that committed community-based interest groups are capable of contributing toward the common good of the public and the environment. Secondly, interest groups are able to build social capital in which there is greater access to knowledge, skills and expertise that is unavailable to individuals or institutions acting alone. Thirdly, the identification and membership of an organised structure offers opportunities for groups to access a range of social and material possibilities, including financial support. Fourthly, interest groups are capable of taking collective responsibility to address their interests and aspirations. Finally, interest groups are capable of establishing modest and incrementally valuable results over time that translate to tangible practical contributions to sustainability.

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Chapter 1

Introduction

The formal recognition of the importance of community participation and empowerment, in creating and implementing the changes that are required in a sustainable world, allows us to build on a movement supporting community-driven environmental action that has gained strength and knowledge slowly over the past 20 years.

Warburton, 1998, p.2

Community¹ involvement² in sustainable development³ has caused both excitement and confusion particularly since the United Nations Conference on Environment and Development (UNCED) in 1992. In response to UNCED, many local governments worldwide have attempted to include the public⁴ in governance in order to demonstrate their commitment to the ideals of sustainability (Warburton, 1998; ICLEI,⁵ 2004). Worldwide there has been

¹ There is little consensus about the term 'community'. In this study, reference to community is based on Warburton's concept of community, that of a group or groups of people who relate to each other usually through organisations or institutions, whose sphere of influence is a bounded or recognisable locality, and who engage most frequently in voluntary actions. Community in this sense is '...a dynamic process in which a shared commitment creates and recreates community through action by people who are aware and committed to the principle of working together' (Warburton, 1998, p.18). This form of a community is a relational one because its members identify with and feel an attachment to a social organisation (Stukas & Dunlap, 2002).

² Involvement refers to a form of participation in which there is opportunity for meaningful decision-making and problem solving (Beierle & Cayford, 2002) rather than tokenism in issues confronting public interest and aspirations (Chess, 2000).

³ The most widely accepted definition is '...development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development, 1987, p.43). The South African National Environmental Management Act 107 of 1998 defines sustainable development as '...the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations' (s.1(1) xxix).

⁴ While 'public' is used throughout this study in the singular, it is recognised that there is no single public nor are citizens considered a homogeneous public or group of people (Roberts, 1995).

⁵ In 2001, ICLEI (International Council for Local Environmental Initiatives) conducted a global survey of Local Agenda 21 processes. This survey documents the extent to which local authorities have implemented Agenda 21. A total of 633 municipalities responded to the survey with representation from every continent (ICLEI, 2004).

increasing activity and interest in public participation over the last decade. One result of this growing interest is the proliferation of research on public participation in sustainable development projects, programmes and initiatives (Morrissey, 2000; Colvin, 2002; Agyeman & Angus, 2003, among others). These works have concentrated largely on how public participation contributes to sustainable development (Warburton, 1998); why people get involved; how to keep the public involved for longer; and how to make their involvement more meaningful (Stukas & Dunlap, 2002). Such research has often emphasised 'how' public participation contributes to sustainable development, but the question, 'why' involve the public, has largely been ignored. This study contributes to theory and research on public participation by examining public involvement in environmental initiatives⁶. The distinction between public participation and public involvement is discussed later in this Chapter.

1.1 The Problem

The virtues of public participation in the environment are touted as good practice (Marinetto, 2003). There are numerous claims in the literature to suggest that public participation ensures greater efficiency in solving problems because the public are in the best position to understand local conditions, and are more likely to provide solutions appropriate to their circumstances (Carr & Halvorsen, 2001; Beierle & Cayford, 2002). Some researchers go so far as to claim that public participation is a prerequisite for sustainable development⁷, peace and social justice (Brown & Quiblier, 1994; Abbott, 1996; Allen, 2001). Seippel (2002) suggests that the only remedies and hope for addressing serious degradation of

⁶ Environmental initiatives refer to the sustained effort of institutions and organisations, including private individuals, to conserve, protect and/or improve the condition of the environment.

⁷ Development involves a process, usually a consciously goal-oriented action towards achieving a desired state. Sustainability is one such state. Sustainability refers to planned or managed actions to achieve specific goals to address the needs of present and future generations (Pearce, 1993).

the natural environment lies in voluntary social action⁸ and that public involvement in the environment is 'crucial'. These claims are supported by evidence collected over the past two decades from the United Kingdom and United States in which public participation is found in decision-making processes and in public actions affecting the local environment (Warburton, 1998; Stukas & Dunlap, 2002). Despite this, Batson *et al.*, (2002) claim that there is also evidence worldwide of a general failure of societies to act for the common good of the environment and on behalf of future generations. Selman (2001, p.14) suggests that an indifference to the environment and future generations is the result of a 'stressed, over-committed, atomised and morally privatised society'. Further insights suggest that environmental plans, projects and programmes tend to be top-down, expert led initiatives that fail to engage the public much beyond being mere receptors of persuasive information (Morrissey, 2000; Davos, *et. al.* 2002; Agyeman & Angus, 2003).

Some researchers are not as optimistic about the success of public participation in environmental issues and concerns. For example, Conley and Moote (2003), Stukas and Dunlap (2002), and Moffatt (1996), question the rationale for involving the public in efforts to achieve sustainability. Furthermore, O'Riordan (2000) is doubtful whether the public are really capable of contributing to sustainable development or of arresting the pace of environmental degradation. In addition, questions are being asked about the risk of involving the public in taking shared responsibility for the management of environmental resources (Hauck & Sowman, 2003), and whether participatory processes are adding value to environmental management (Selman, 2001).

The foregoing discussion has identified two key issues that will be addressed in this study: to explain why it is necessary to involve community-based interest

⁸ Social actions are processes and/or activities carried out by an organisation, group or individual (Gilbert, 1989).

groups in environmental issues; and how the involvement of such groups has the potential to contribute to sustainability. The concept of a community-based interest group is used throughout this study to refer to individuals who voluntarily join or align themselves to an organisation or a collective, and in so doing, identify with or share the same or similar interests, goals and aspirations. The concept of an interest group does not imply that the participants have ulterior motives, as used by some researchers in social psychology (Turner & Killian, 1987), but refers to a group of people whose interests, experience, social capital and willingness is congruent with the shared goals of a group. For the sake of brevity, the term 'interest group' will be used in this study. Voluntary interest groups, and the initiatives in which they were involved, form the units of analysis in this study.

1.2 The Study Question

The study seeks to explain why it is necessary to involve the public in local environmental issues and to understand the potential of the public to contribute to sustainable development at a local scale. The scale and context of the study area is described later in this chapter. The main research question is expressed simply as:

Why involve the public in environmental initiatives?

A secondary question seeks to understand the potential of human agency⁹ to contribute to sustainable development (Conley & Moote, 2003). The rationale for this emphasis is based on the premise that progress towards sustainable development lies in the potential of collectives or interest groups, as members of

⁹ Agency is defined as embodied intentional causality that issues in a state of affairs (Bhaskar cited in Harvey, 2002). Agency is the capacity of individuals to transform existing states of affairs, and by implication, agency's capacity to transform itself reflexively. Agents refer to persons who, either individually or collectively, intentionally engage in social processes in order to transform or modify an existing state of affairs.

the public, to formulate and achieve shared goals that are guided by principles and processes of sustainable development (Sztompka, 1991; Dobson, 2003).

At least four reasons are identified from the academic literature to suggest why the public should be involved in environmental issues and problems. Firstly, environmental management involves a complex set of interactions and interdependencies that exist between natural and socio-economic systems. This complexity requires a holistic and broad participatory approach to ensure that responsible decision-making is achieved (Hauck & Sowman, 2003). Secondly, long-term sustainable use of resources is dependent on managing human impacts that are acceptable to society. By implication, managing resources will need to involve the public. Thirdly, there is a widely held assumption that participation in environmental management both empowers¹⁰ and supports citizens to take responsible actions (Cuthill, 2002). Finally, Shaull (cited in Cuthill, 2002) suggests that 'a backlash against perceived economic, social and political domination' by central governments worldwide has encouraged 'citizens to re-assert their right to participate in, and make decisions on local development processes as part of a broader push towards a participatory democracy' (Cuthill, 2002, p.80).

1.3 Public Involvement as a form of Public Participation

To avoid confusion at the outset of this study, it is necessary to clarify the concepts of 'involvement' and 'participation' that are frequently used interchangeably in the academic literature. In this study, the concept of 'involvement' refers to individuals or groups who voluntarily participate in some form of social activity or action to achieve certain shared ends (Stukas & Dunlap, 2002). Public involvement typically occurs within an organisational setting, is planned, pro-social behaviour, and is usually characterised by longevity (Penner,

¹⁰ Empowerment enables citizens to mobilize, execute actions, and exert influence and control.

2002; Dobson, 2003). In addition, Stukas and Dunlap (2002) claim that community involvement usually has as its primary goal the 'betterment of community', and that this goal is achieved directly or indirectly by building social capital¹¹.

There is a wealth of academic literature on different forms of public participation which range from those that constitute minimal participation, to others in which people take the initiative and act in ways that demonstrate a degree of independence (Pretty, 2002). Arnstein (1969) was one of the earliest researchers to present a typology of public participation using the concept of a 'ladder of participation' to illustrate these different forms. The ladder shows several levels of interaction between the public and government ranging from the most manipulative form of participation at the bottom, to situations in which the public have the power to take control of decisions. Arnstein's contribution lies in understanding how citizens might increase their interaction and involvement with government from levels of minimal participation to positions of empowerment. However, Wild and Marshall (1999) suggest that Arnstein failed to describe the context in which the levels of participation might take place. They claim that this is an omission in her work because governments define the wider, structural framework through policy, legislation and administrative arrangements that affects every aspect of people's lives, including whether they are able to participate or not (Wild & Marshall, 1999).

It is conceded that the distinction between 'involvement' and 'participation' is often self-defining and depends on particular situations, circumstances and contexts. In this study, the key distinction is that involvement refers to a long-

¹¹ Social capital is defined as the product of social interactions (Stukas & Dunlap, 2002) with the potential to contribute to the social, economic or civic well being of a community (Selman, 2001). Social capital is recognised by attributes that include connectedness, norms, values, rules, reciprocity and trust (Putnam, 2000). See Chapter 2 for further discussion on social capital.

term¹², voluntary contribution of individuals and/or members of interest groups who engage in social processes with the intention of achieving certain shared ends. This form of participation is characterised by 'bottom-up' initiatives that often starts without the consent or acknowledgement of a local authority or other formal government agency.

Roberts (1995) considered the potential of the public to participate in Environmental Impact Assessments (EIAs). He gives a number of reasons to explain this potential: first, the public are able to present knowledge and information, and devise creative solutions often not considered by an implementing agency; second, social problems and conflicts are avoided or minimised when the public is consulted; third, consultation increases the commitment of the public to projects, plans or programmes; and finally, public involvement leads to better decisions than might otherwise have been realised. However, Roberts refers exclusively to EIAs in projects that tend to be short-term, specific activities frequently characterised by forms of public participation that are limited to raising awareness about an EIA and informing the public about decisions that may have already been taken.

A typology of public participation in EIAs is outlined in Figure 1. It illustrates five different forms of participation ranging from persuasion to empowerment. It also identifies the tools and techniques that are used to achieve these different forms and shows the extent to which public participation increases from left to right. The involvement of community-based interest groups in environmental matters is not represented adequately by any of the forms of participation presented in Figure 1. Interest groups can be autonomous and not accountable to any authority or partnerships other than to its members. However, as will be shown in this study, interest groups participate in committee meetings, deliberate over

¹² By convention, short term refers to less than 5 years; medium term between 5 and 15 years; and long-term between 15 and 30 years or more.

information and make decisions that closely resemble aspects of an empowered public as shown in the right hand column of Figure 1.

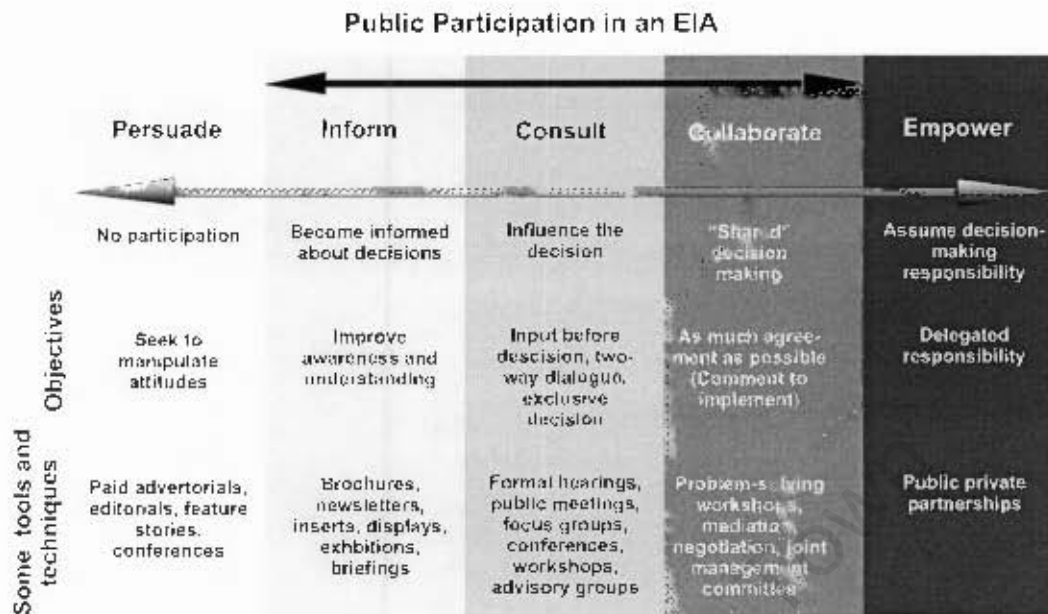


Figure 1: Forms of public participation in an EIA (Source: SAIEA, 2005)

1.4 Study Aims and Objectives

This study aims to contribute to theory and research in public participation in environmental management at a local scale by focusing on the potential of voluntary interest-based groups. It analyses the successes and limitations of three environmental initiatives and identifies what community-based interest groups are capable of achieving.

Three environmental initiatives are evaluated. These initiatives have received general support of interest groups and the Local Authority at Betty's Bay¹³ over a reasonably long period of time. The earliest initiative, which began in 1962, involves the clearance of alien vegetation. The second initiative was started in

¹³ The location and geography of Betty's Bay in the Western Cape, South Africa, is described in Section 1.6.

1972 and was initially established as the Wild Flower Society, and later known as the Botanical Society. In 2000, the third initiative was established in order to solve the problem of water pollution in one of the coastal lakes at Betty's Bay. The rationale for selecting these initiatives is discussed in Chapter 3.

The aims of this study are addressed by the following objectives:

1. To review and analyse literature on social theory and sustainable development in order to establish a working conceptual framework for the purpose of analysing the initiatives;
2. To describe the changing context and circumstances in which these initiatives operated;
3. To analyse the characteristic features of each initiative;
4. To identify and explain the factors associated with the successes and limitations of each initiative;
5. To evaluate empirical evidence against a theoretical framework; and
6. To evaluate whether the selected environmental initiatives contributed to sustainability.

1.5 Epistemological Context: Sustainable Development

One of the most salient features of modern society, as suggested by authors such as Hannigan (1995), Dunlap *et al.*, (2002) and Dobson (2003), is a widespread lack of concern for future generations. Dobson (2003) warns of dire consequences for future generations because the current generation is unable or unwilling to recognise that current resource usage is generally unsustainable.

Sustainable development is one of the most important paradigms and discourses of the 21st Century because of its focus on present and future generations' needs (Redclift, 1992). Eco-development, the forerunner to the concept of sustainable

development, was first used at the United Nations Conference on the Human Environment in Stockholm in 1972. At this gathering some delegates, especially those from underdeveloped countries, expressed dissatisfaction with the dominant Western-held understanding of the environment-development nexus, and expressed concern about the rapid environmental degradation in Western countries (Achterberg, 1996). The Stockholm conference raised public awareness of the fragility of the environment and succeeded in placing environmental concerns on the international political agenda (Allen, 2001). At the conclusion of the conference, tensions between the environment¹⁴ and development were found in debates that deepened the philosophical and political divisions between 'North' and 'South'. Wynberg (1993) argues that these tensions were heightened in the years that followed largely because too little attention was given to the integration of economic policy and decision-making in addressing environment and development issues.

Since the publication of the World Conservation Strategy, sustainable development has dominated the environment-development discourse. The strategy of sustainable development recognises, *inter alia*, that 'conservation of nature would be impossible unless it was pursued within a process of development that catered for human needs' (Holdgate, 1997, p.45). The concept was refined further by the Brundtland Commission (1987) that recognised environmental protection and long-term economic development as complementary (Baker, *et al.*, 1997; Allen, 2001).

Researchers such as Clark (2003), and O'Riordan and Stoll-Kleemann (2002), see sustainable development as a dynamic social concept. Clark (2003) points out that sustainable development is a 'common journey of humankind consisting

¹⁴ The term 'environment' is used without a qualifying adjective. It refers to the totality of objects and surrounds that interact with all living systems including human beings (Fuggle & Rabie, 1992). This is a holistic understanding of the term that includes biophysical, social and economic components, as well as the connections with and between these components (DEAT, 2002).

of one tentative step after the other' requiring continuous feedback about whether society is 'going roughly in the right direction or not' (Clark, 2003, p.xviii). Similarly, O'Riordan and Stoll-Kleemann (2002, p.116) suggest that progress towards sustainable development involves a 'constant process of transformation of society and an economy' in which present generations act as 'trustees for future generations to maintain and nurture life and habitability'. O'Riordan (2000) proposes that it is through the integration of social processes, economic decisions and environmental outcomes that societies or groups of people are likely to move towards a 'transition to sustainability'¹⁵. O'Riordan and Stoll-Kleemann (2002) claim that this transition is achieved partly through a participatory democracy in which global issues are understood at a local scale, and local actions are linked to the global. This interplay between these two scales reflects the growing realisation that globalisation is a process that impacts on places, resources and livelihoods worldwide (O'Riordan, 2000). A recurring message of Agenda 21, the key document that emerged from the United Nations' Conference on Environment and Development (UNCED) (also referred to as the Rio Summit) in 1992, is that sustainable development initiatives are likely to be most effective at a local scale involving ordinary people in an environment of open communication and interaction. The signatory nations to Agenda 21 recognised these ideas as key principles and committed themselves to finding opportunities for the public to engage in inter-governmental communications and to recognise the need for increased participation and communication between governments and non-government organisations (NGOs) (Wynberg, 1993; Joas, 2001).

During the decade that followed UNCED, the concept of public participation was expanded to include many different forms of participation such as co-operative

¹⁵ O'Riordan refers to a shift towards sustainability as a 'transition'. This occurs when there is recognition of '...caring and sharing so that enterprising livelihoods are enabled to flourish in millions of cultures and spaces' (O'Riordan, 2000, p.52).

governance¹⁶, collaborative participation¹⁷, partnerships¹⁸ and co-management¹⁹, among others. According to Colvin (2002), O’Riordan and Stoll-Kleemann (2002), and Hauck and Sowman (2003), these forms of participation are holistic and offer a people-centred approach to environmental and resource management. These forms of participation lie in sharp contrast to authoritarian approaches used in the past (Beierle & Cayford, 2002).

The concept of sustainable development provides an epistemological context for identifying, interpreting and analysing how community-based interest groups could contribute towards economic, environmental, institutional and social processes in a local setting. Valentin and Spangenberg (2000) represent these processes in a three-dimensional prism (Figure 2). These processes are addressed by, *inter alia*, ensuring fair access to resources; enabling democratic procedures and processes; demonstrating a willingness to share the burdens of others; exercising social justice; caring for others as well as the environment; and using eco-efficient means to mitigate impacts on the environment and the natural resource base. The authors imply that the imperatives of sustainability represent an ideal condition that might be met when attention is given to processes and actions that are directed towards each imperative.

Researchers such as Pretty and Ward (2001), Stukas and Dunlap (2002), and Agyeman and Angus (2003), recognise that sustainable development is best achieved in circumstances where there is deliberative, inclusive participation, and

¹⁶ Co-operative governance includes a wide range of governance mechanisms such as associations and partnerships (DEAT, 2003). It is characterised by the devolution of governance in environmental policy involving discussions, agreements and a blend of formal and informal regulation between industry, citizen groups, and frequently includes local authorities (Forsyth, 2000).

¹⁷ Collaborative participation enables mutual understanding, consensus, democratic decision-making and common action among stakeholders, institutions and organisations (Allen, 2001).

¹⁸ Partnerships are concerned with the development of relationships and agreements between relevant environmental conservation authorities, local resource users and other stakeholders (Hauck & Sowman, 2003).

where dialogue, communication and interaction is present. However, at the scale at which interest groups are likely to operate, it is not expected that they will be capable of or sufficiently motivated to take responsibility for all the processes and actions identified in the prism of sustainability. Nevertheless, the prism has at least three implications for this study: first, the framework identifies the integration of four imperatives of sustainability which are salient goals; second, it identifies processes and actions that are deemed necessary or important to address these imperatives; and third, it identifies a fourth dimension that is frequently omitted in the sustainable development discourse, that of the institutional role. In this study, institutions include government agencies, research institutions and local organisations.

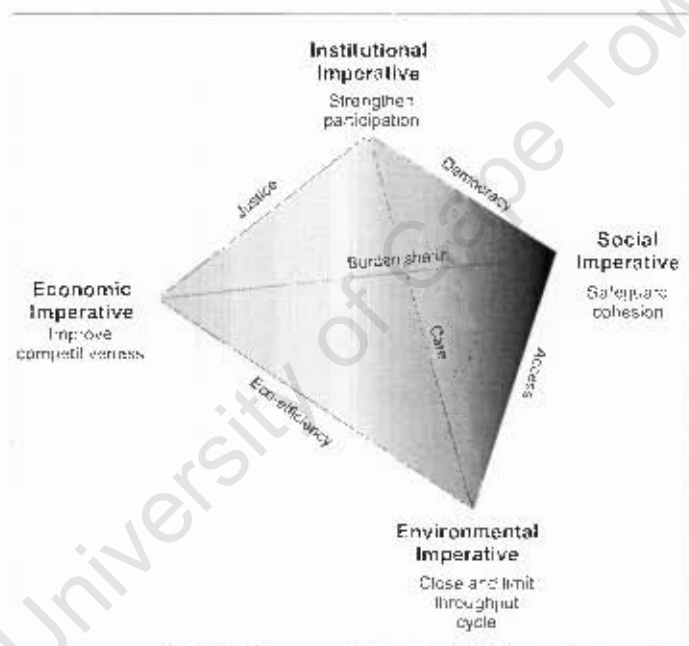


FIGURE 2: Prism of sustainability (Adapted from Valentin & Spangenberg, 2000).

The concepts 'sustainability' and 'sustainable development' are often used interchangeably in the academic literature. The former is frequently used to

¹⁹ Co-management is '... a type of collaborative institutional and organisational arrangement between government, user groups and stakeholders for effective management of a defined resource' (Hauck & Sowman, 2003, p.19).

indicate whether a particular condition or state is sustainable or not, while the latter refers to processes, strategies and actions that inform various considerations such as the use of the Earth's resources, the degradation of the environment and the needs of present and future generations. Some authors use sustainability to refer to the management of social capital in order 'to maintain the capability of satisfying the needs and aspirations of both present and future generations' (Stauth & Baskind, 1992, p.31). In this instance, sustainability appears to encompass strategies and negotiated goals that regulate the interactions between society and the environment (Becker & Jahn, 1999).

In this study, sustainability is used to refer to a sustainable *condition* or *state*, while sustainable development refers to *processes* and *actions* that contribute to the social, economic, environmental and institutional requirements or options for achieving a condition or state of sustainability.

1.6 Geographic Context of Betty's Bay

This section provides a detailed description of the study site, the scale of the site, its location in the Western Cape, and the processes responsible for the formation of the physical landscape and biological diversity of Betty's Bay and Kogelberg Biosphere Reserve (KBR). An examination of the geographical context also explains the reasons why people have found Betty's Bay an attractive locality to build holiday homes and as a choice for a retirement destination.

Betty's Bay is a small coastal township that forms a ribbon development (centre: 34°21'10"S 18°55'05"E) stretching eleven kilometres along the southern Cape coast of South Africa (Figure 3). The centre of the township lies 45 kilometres south-east of Cape Town and is accessible via a coastal road, approximately 100 kilometres from the Central Business District of Cape Town.

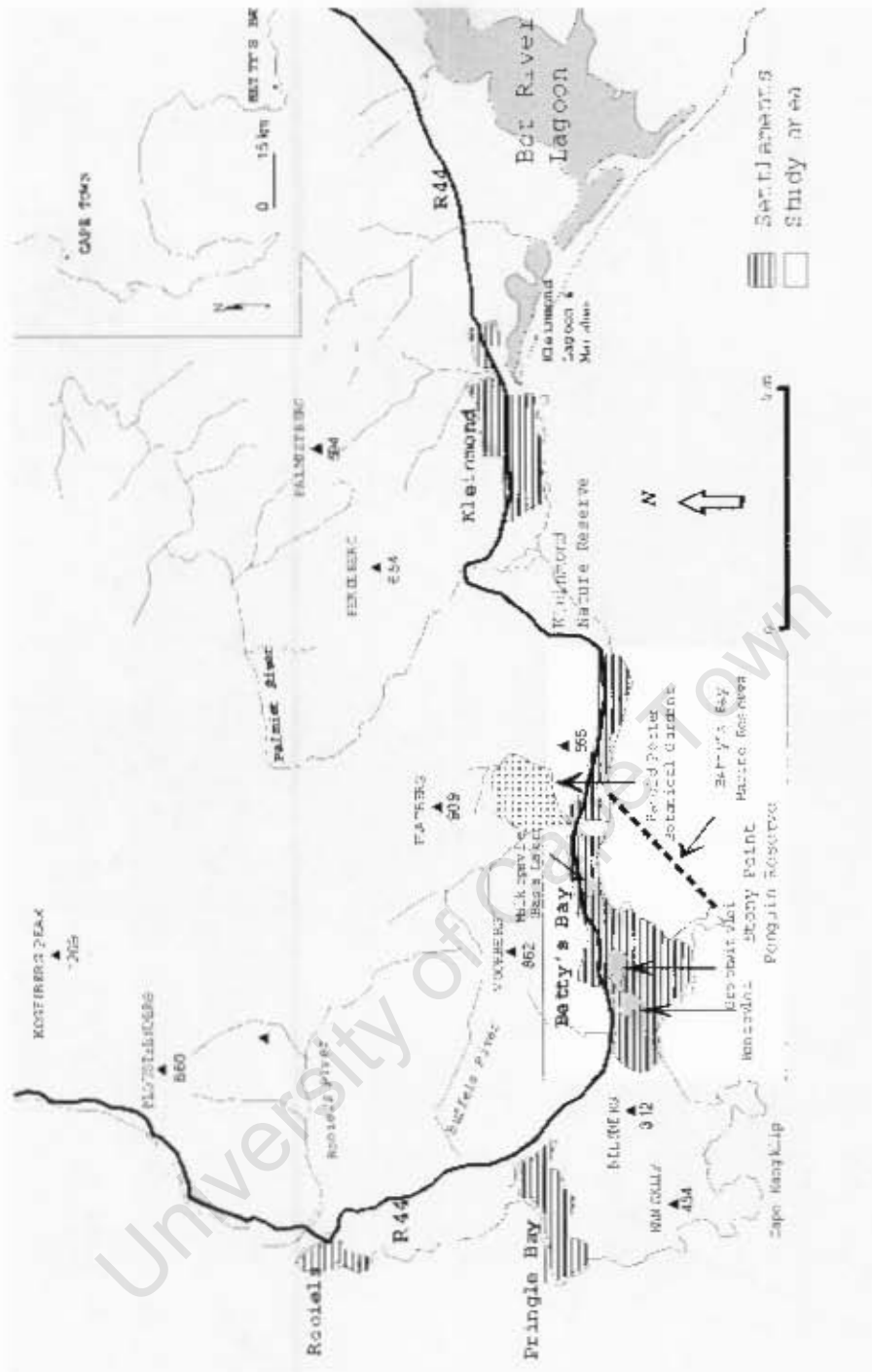


Figure 3: The Study Area

Betty's Bay is one of four urban settlements lying within the Kogelberg Biosphere Reserve (See Figure 4). The KBR was registered as a biosphere reserve under the United Nations Educational, Scientific and Cultural Organisation (UNESCO)

in 1998. The reserve is bounded to the west and south by a rugged coastline of Table Mountain Sandstone and interspersed occasionally by sandy bays and beaches. The peak of the Voorberg Mountain (816m), the highest point overlooking Betty's Bay, is situated less than 2 kilometres from the southern shoreline (1:50 000 SA Government Topographic Survey Sheet, 3418BD Hangklip). Only a narrow coastal plain remains along the foothills as a remnant of an old peneplain that dips seaward at an angle of 1° (Boucher, 1978). Steep 1:3 gradients are found typically between the coastal plain and vertical cliffs stretching to the crest of the Voorberg and adjacent mountain peaks of the Kogelberg range. The base of these south-facing talus slopes consists of sandy, acidic soils with low nutrient value, typical of the *fynbos*²⁰ ecological region (Cowling & Richardson, 1995). The Hottentots Holland and Groenlandberg mountains delineate the northern boundary, while the Bot River forms the eastern boundary of the KBR (See Figure 3). The entire reserve is dominated by steep mountain slopes consisting of hard Peninsula, Goudini and Skurweberg sandstones interspersed with layers of shale from the Cederberg formation. These sandstones were deposited during the Ordovician period (about 420 million years ago), and then uplifted approximately 300 million years ago to form the Cape Fold Mountain System (South African Committee for Stratigraphy, 1980; SA Geological Series, 1990 Map 3318). Steep slopes and rugged landscapes have made this area relatively inaccessible and inhospitable for human habitation.

The KBR reserve has some of the most significant remnants of the Cape Floral Kingdom, one of six floral kingdoms of the world. Indigenous plants cover an area of less than 90 000 km² in this kingdom (0.04 percent of the Earth's surface) (Cowling & Richardson, 1995). Cowling and Richardson describe the 'fynbos' biome of the Western Cape as the 'global epicentre of biodiversity'. The plant

²⁰ Fynbos is a term given to a 'collection of plants that is dominated by shrubs and comprises species peculiar to South Africa's south-western and southern Cape' (Cowling & Richardson, 1995, p.21).

diversity is attributed to the high variability of the terrain (Johns & Johns, 2001). The biodiversity of the KBR represents at least 70 percent of all plant species endemic to this region (Younge, 2002).

Despite the relative inaccessibility of the KBR, there has been a loss of habitat due to an increase in 'agriculture, rapid and insensitive development, overexploitation of marine resources and wild flowers, and the spread of alien species' (Younge, 2002, p.171). Important habitats have been reduced in size by over 90 per cent. Less than five percent of the land in the lowlands of the KBR is protected by legislation (Younge, 2002).

The United Nations Biosphere Programme was established in an effort to reconcile the conservation of biodiversity with land usage. Typically a biosphere reserve is divided into three zones consisting of a core, a buffer and a transition offering different measures of protection. However, only the core is required to have formal legal protection under UNESCO agreements. The UNESCO Biosphere Reserve guidelines state that there should be a measure of co-operation between stakeholders in the transition zone to manage and develop the area's resources to the benefit of people living in the zone (www.unesco.org/mab). In the case of the KBR, most of Betty's Bay lies in a transition zone. No designated buffer zone exists between the township of Betty's Bay and the core (See Figure 4).

The narrow, low lying coastal plain of Betty's Bay is dominated by vegetated sand dunes less than 10 metres above mean sea level. These dune systems were formed by marine deposition and an accumulation of *Aeolian* deposits (Gardiner, 1988). Streams flowing from the adjacent mountain slopes have been impounded by these sand dunes resulting in the formation of three black-water acid lakes (Boucher, 1978). These lakes lie on shallow tertiary-quaternary, podzolic sandy soils. They receive surface inflows from a number of small feeder

streams and a constant flow of shallow groundwater from adjacent mountain slopes (Taylor, van Rensburg & van der Spuy, 1998). The lakes represent some of the best examples of rare, black-water acidic habitats in South Africa (Johns & Johns, 2001).

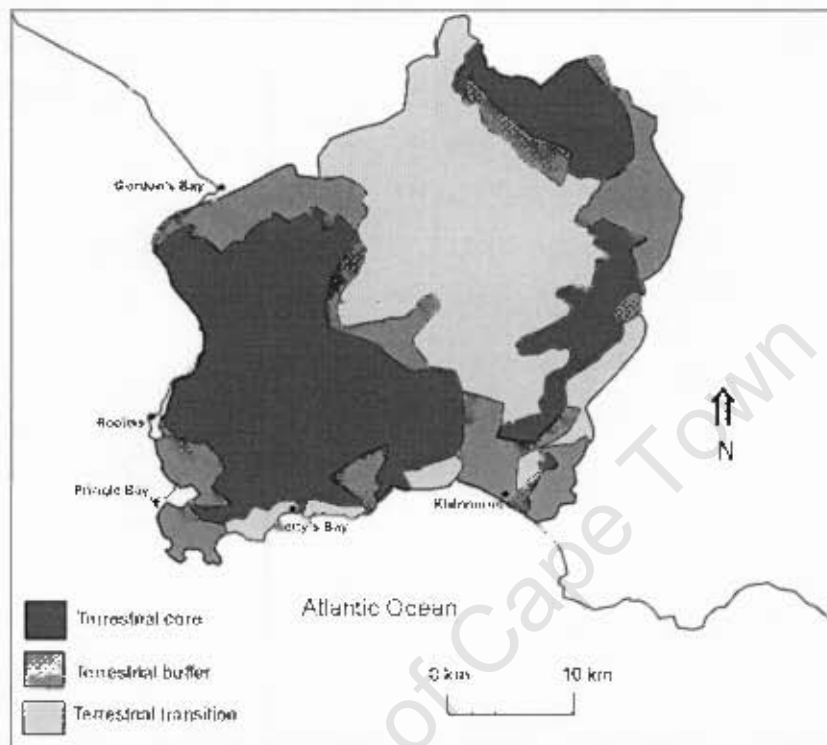


FIGURE 4: The Kogelberg Biosphere Reserve (Adapted from Johns & Johns, 2001).

1.7 Historical Context of Betty's Bay

Early Stone Age archaeological evidence of human habitation has been found on the Hangklip Peninsula (Mabbutt, 1954). In 1934, Malan, an archaeologist, found implements in a Palaeolithic site of black sandy peat between 1 and 1.2 metres thick lying in close proximity to present day Pringle Bay. These artefacts are evidence of the African *Chelles-Archeul* culture believed to have inhabited the area approximately 120 000 to 140 000 years ago (Mabbutt, 1954).

The next evidence of early occupation in this region is found in a series of shellfish middens at the base of Cape Hangklip mountain from a later Stone Age period, about 100 000 years ago. Some middens show evidence of fire used by the ancestors of the Khoi and San, often referred to as 'Strandlopers' (Boucher, 1978).

The first European to use land in the Greater Hangklip region was a Danish immigrant, Andries Grove, who was granted grazing rights in 1739 (Luckhoff, 1982). Other farmers are reported to have farmed for brief periods along the coastal plain east of the Kogelberg range. These farmers never stayed for long because the grazing was poor and the mountains were too rugged for cattle farming (Luckhoff, 1982).

In March 1899, brothers John and William Walsh bought four coastal farms, namely *Waaygat*, *Buffels Valley*, *Papenkuyls Fontein* and *Rooi Els Rivier*, all of which were eventually incorporated into the Hangklip Beach Estates²¹, and later formed the township of Betty's Bay. In the early 1900s these farms were used predominantly for grazing but the potential was limited (Luckhoff, 1982). In 1912, John Walsh leased land at Stony Point to the Southern Cross Whaling Company (Wesemann, 1991). A small harbour was established on the eastern shore of Stony Point and three buildings were erected to service the whaling operation. This venture was unsuccessful and by 1917 was forced into liquidation. Ten years later, Irvin and Johnson bought the company and put it back into operation, but the enterprise was again terminated in 1930 when the price of whale oil fell substantially on world markets (Krohn, 1970). From these accounts it appears that economic prospects for developing this coastal region were limited.

In 1935 the executor of the estate of the late Mr John Walsh sold all the farms owned by the Walsh family to a company known as the Hangklip Syndicate (Pty)

²¹ Deeds Office Cape Town, Title Deed Reference No. 2239, 30 March 1899.

Ltd. for approximately £20 000²². Two years later this company applied to the Administrator of the Cape of Good Hope to consolidate these coastal farms stretching from Rooi Els to the west, and the Palmiet River to the east, into a single farm to be called Hangklip. This land was consolidated with the intention of establishing a residential township. The application to consolidate the farms and to establish a residential township was confirmed in a letter written to the Directors of the Hangklip Beach Estate by the company's attorneys, Messrs. Moore & Son (17 April 1937). The first section of the farm, known later at Betty's Bay township, was sub-divided into 310 erven for single residential purposes, but included properties zoned for commercial activities and a school. The deed of sale and the reference map (Hangklip No. 1207/1937) outlines conditions of private ownership and also makes reference to the Cape of Good Hope Local Board Ordinance (No. 18 of 1934) which permitted the establishment of a township.

Hangklip Estate remained relatively unknown until a military road was built along the coast from Gordon's Bay to Kleinmond shortly after the outbreak of the Second World War (See Figure 3). Luckhoff (1982) states this road, 'heralded the beginning of a period of township development in this hitherto little spoilt and beautiful area' (Luckhoff, 1982, p.13).

By 1952 the company re-zoned two further portions of the Hangklip farm for residential development. This resulted in two new townships, namely Sunny Seas and Silversands (Figure 5). The company imposed a number of its own conditions on the sale and future ownership of property at Betty's Bay. Attached to the deed of sale was 'Appendix B' which stated the 'Conditions imposed by the Owner'. These conditions excluded 'race' groups other than 'White' from owning property at Betty's Bay (18 June 1942). Conditions contained in the title deeds were therefore imposed on all future property owners at Betty's Bay.

²² Deeds Office Cape Town, Title Deed Reference T9153, 25 October 1935.

An extract from the Conditions of Sale imposed on the future owners (Appendix B) states:

(a) that this erf or any portion thereof shall not be transferred, leased or in any other manner assigned or disposed of to any Asiatic, African Nature, Cape Malay or any person who is manifestly a 'coloured person', as also any partnership or company (whether incorporated or otherwise) in which the management or control is directly or indirectly held or vested in any such person. Nor may such person reside on this erf or in any other manner occupy the same other than the domestic servants of the registered owner or his tenant, or, in the case of business erven, the servants of the occupier who render their services on the erf.

All future development of the settlement was controlled by the conditions of this deed of sale. Rights to land and access to beaches and amenities were secured exclusively for 'Whites', being people of European descent. As a consequence, a relatively stratified group of property owners was established at Betty's Bay. Census data from 1960 to 2001 (Table 1) reveals that permanent residents of Betty's Bay were overwhelmingly White. Only a small minority of African and Coloured residents are recorded. The only Black residents in Betty's Bay were likely to have been employees of the Company and the municipality. Employees were housed in a small settlement called Mooiuitsig, an isolated housing development situated along the north-western periphery of Betty's Bay.

TABLE 1: Census records of permanent residents of Betty's Bay 1960–2001 (RSA Census)

Year	African	Coloured	White	Unspecified	Total
1960	9	6	19		34
1970	12	6	66		84
1980	4	72	77		153
1985	5	73	115		193
1991	0	46	125		171
1996	8	19	342	6	359
2001	3	27	332		362

In 1960 the Provincial Administration of the Cape of Good Hope approved further extensions to Betty's Bay (Extensions No. 2 to 6). These extensions consolidated the townships of Sunny Seas and Silversands into a single township (Figure 5). Table 2 shows the land use zones planned for each of these extensions as envisaged by the town planners in 1958. The urban infrastructure and proposed land use zones suggest that the developers intended Betty's Bay to become an urban area with a permanent population receiving a range of municipal services. A further extension of the township was approved in 1967 (Extension No. 7) adding 398 erven to Betty's Bay.

TABLE 2: Land use at Extensions No. 2 to 6

	Ext No.2	Ext No.3	Ext No.4	Ext No.5	Ext No.6
Single Residential	243	443	328	321	185
General Residential	5	22			
Hotel	1				
Shops	3				
Light Industrial	4				
Cinema	1				
Service Station	1				
Church	1				
Government purposes	1				
School sites	1	1		2	1
Public Place	10	11	10	14	8
Electricity Sub-stations	1	3	3	3	2
TOTAL ERVEN = 1629	272	480	341	340	196

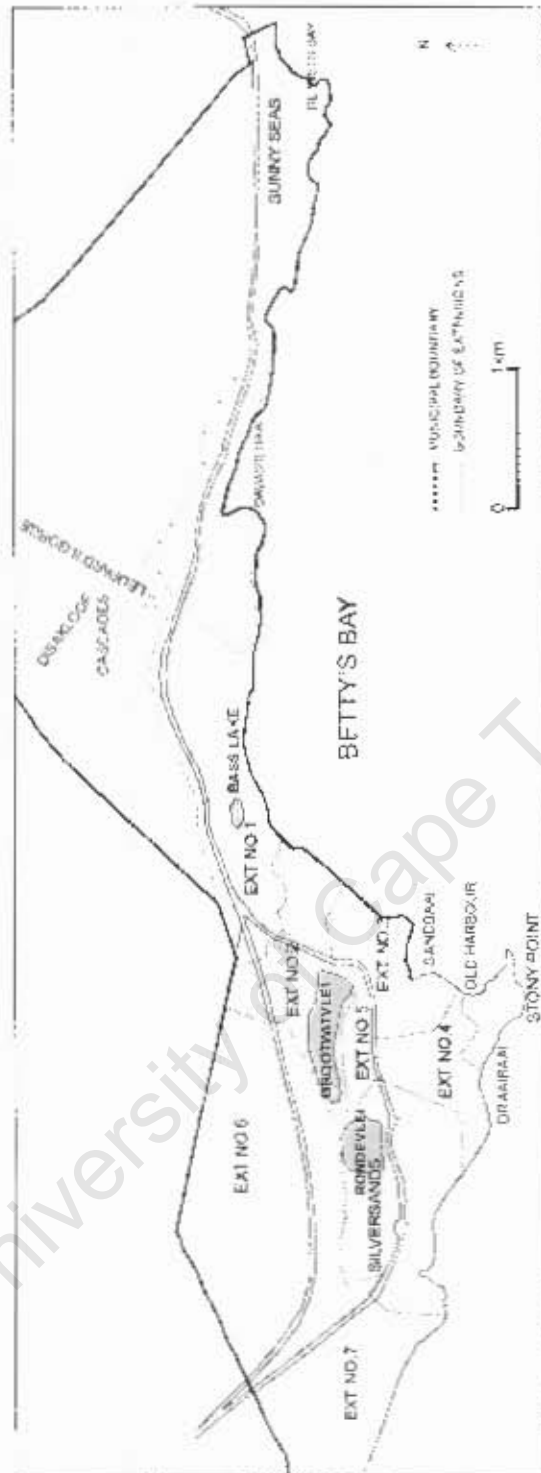


FIGURE 5: Town planning map of Betty's Bay and extensions (Adapted from: Betty's Bay Municipality Architects and Planners, Twentyman-Jones, Field & Munro, 1982).

By 1990, 2848 erven were demarcated, but only 469 had any physical structure on the site (Direktoraat: Beplanning Kaapse Provinsiale Administrasie, 1990). A report commissioned by the Planning Department of the Cape Province (1990) recommended that further expansion of Betty's Bay should not be approved. The report recognised the sensitivity of the biophysical environment and suggested that any further development in the vicinity of sandy beaches could not be justified. By 2001, approximately 1400 dwellings had been erected at Betty's Bay (Minutes of the Betty's Bay Ratepayers AGM, December 2001). In 2002 the development of properties on vacant erven in the Overstrand Municipality increased at an estimated average of eight percent per annum compared to a national average rate of between two and three percent (Mr W. Smuts, Mayor of Overstrand Municipality, pers. comm., 2001). Two principal reasons were given for a rapid increase in development at Betty's Bay. Firstly, in 1987 Betty's Bay township was connected to the national electricity grid thereby offering an attractive service to existing residents and potential buyers. Secondly, an upgrade of the R44 coastal road from Gordon's Bay to Kleinmond was completed in 1996. This improvement reduced the travel time from Cape Town to Betty's Bay, and made this coastal area more accessible to weekend holiday-makers from Cape Town.

1.8 Literature

An analysis of theory and research informing this study is based on a large body of local and international literature on themes of sustainable development, civil society, collective action and social capital (Chapter 2). The main body of theoretical work informing this thesis is drawn from social science literature. A review of the literature commences with a discussion on democracy and civil society in South Africa focusing on political developments during Apartheid and in the period following the first democratic elections in 1994. In this discussion, consideration is also given to the development of civil society in South Africa.

Two questions shape the discussion that are of relevance to the research question:

- Can interest groups be expected to contribute to the common good of others and the environment?
- Can interest groups contribute to sustainable development?

Chapter 2 discusses the work of classical social theorists Durkheim, Marx, Weber, Parsons and Giddens. This is followed by a discussion of the contemporary works of Habermas (1981), Putnam (2000), Pretty (2001) and Dunlap (2003). The theory emphasises the role and nature of collective actions and is based on the premise that sustainable solutions are unlikely to be achieved by individuals alone, but by groups of people who demonstrate a degree of trust, cohesion, connectedness and the ability to work with each other (Selman, 2001). The literature review provides a detailed discussion of the attributes of social capital and a synthesis of social systems theory in order to establish a working conceptual framework.

1.9 Research Design and Methodology

Three environmental initiatives were selected for this study. Two of these were selected because they have received community-based support for ten years or more. The third initiative is a more recent project that began in 2000 with the aim of solving the problem of water pollution in the lakes at Betty's Bay. The most recent initiative offers a number of insights that are different to the others. This initiative also takes place in a post-Apartheid period and yields new insights into the use of networks, connectedness, interaction and communication.

The empirical evidence informing this thesis is largely historical in nature and derived almost exclusively from the private papers of individuals involved in

various environmental initiatives at Betty's Bay and from written sources of evidence located at the local municipality and State Archives. Primary sources of evidence span a period from 1949 to 2005. The documentation includes minutes, agendas, correspondence, brochures, documents and reports generated by members of interest groups, individuals, researchers, municipal authority officials, councillors and government officials.

In addition, thirteen non-structured interviews were held with current and past role players involved in one or more initiatives, local authority officials and elected councillors. These interviews were used to clarify processes and outcomes of the selected environmental initiatives. The interviews were broadly conversational in nature and aimed at understanding how groups performed as a collective; how and where they obtained support; how communication and interaction was facilitated; and the achievements of each environmental initiative.

It is appropriate to use a case study approach in this study because each environmental initiative is unique and occurs in a defined geographical setting over a defined period of time. A large volume of historical evidence is available for this study and is evaluated in relation to social theory. The findings of each initiative are compared with each other in order to establish similarities and differences.

1.10 Limitations

Evidence from the earliest Betty's Bay initiatives is based largely on written sources either from the private collections of role players or found abandoned in a municipal storeroom. These documents were not archived in any way. There is little way of testing whether these primary sources represent each initiative adequately or if any strategically important or sensitive documents were

abandoned earlier. However, role players, past and present, were extremely co-operative and willing to lend their personal documents and papers.

A second limitation of this research is the absence of groups or organisations in South Africa involved in the environment that currently have a membership that is representative of the country's demography from which to compare empirical evidence collected in this study. While this is disappointing, there are nevertheless lessons to be learnt from the manner in which a racially stratified and relatively homogenous population group at Betty's Bay worked together to protect the natural resources in a local setting over a considerable period of time. The study therefore can claim to evaluate theories of collective action against empirical evidence, but cannot make generalisations applicable to the country as a whole.

1.11 Thesis Structure

Chapter 1: The introduction establishes the aims and objectives of the study. It provides the background to the research and describes the study question.

Chapter 2: A review of the literature discusses civil society in South Africa and the socio-political context. This is followed by discussion on themes of sustainable development, collective action and social capital so as to establish a substantial theoretical basis for this study. The Chapter concludes by constructed a working conceptual framework which incorporates social theory and the concept of sustainable development.

Chapter 3: The research methodology describes the research design, the rationale for choosing a case study approach and the research methods. It argues that multiple case studies present a valid means for analysing processes, events and circumstances.

Chapter 4: This chapter describes the changing socio-political and institutional changes at Betty's Bay from the 1960s to 2001.

Chapter 5: The earliest recorded efforts to remove alien vegetation at Betty's Bay began in 1963. This initiative describes how a privately arranged project attracted and sustained the voluntary services of residents and property owners in an effort to eradicate alien vegetation from Betty's Bay.

Chapter 6: The Wild Flower Society, formed in 1972, initially aimed to show case indigenous vegetation at Betty's Bay and to support the work of the Hack Group. The Society also lent support to a range of environmental initiatives at Betty's Bay including the conservation of a penguin colony and the establishment of the Kogelberg Biosphere Reserve.

Chapter 7: The Sewage and Water Initiative is a contemporary project characterised by a collaborative effort between researchers, local authority officials and members of the Ratepayers' Association. The committee was requested to address the deteriorating water quality in the coastal lakes and groundwater at Betty's Bay. This chapter describes a monitoring and evaluation programme in which the results were used to identify faulty domestic sewage systems and efforts to identify new and appropriate technologies to deal with sewerage.

Chapter 8: This chapter analyses the evidence by comparing the initiatives and seeks to establish matching patterns across the three case studies (initiatives) in order to synthesise and present a convergence of findings. These findings are analysed further to explain the potential of interest-based groups to contribute to sustainability within a critical realist paradigm that encapsulates the theoretical considerations of the study.

Chapter 9: This chapter discusses the conclusions and presents some recommendations for further research.

University of Cape Town

Chapter 2

Civil Society, Social Action and Sustainability

A world faced by fundamental ecological challenges can be reshaped by collective cognitive action – mutuality, trust and common actions reconnect the world again, all for collective and personal benefit.

Pretty, 2002, p.69

This chapter begins with an overview of the socio-political history of South Africa from 1948 to 1999 to provide a context from which to identify the structural forces and circumstances that characterised the Apartheid period and the transition period until the general elections held in 1999. The discussion also includes an examination of civil society movements during this critical period in South African history. A civil society movement, or absence thereof, provides an indication of the extent to which individuals, as social agents, are prepared to engage in advocacy and activities to maintain or modify structural influences, and may also give some indication of the preparedness of civil society to involve itself in an organised effort to contribute to the common good of society, including efforts to address environmental matters.

The discussion continues with a review of social systems theory in order to develop a theoretical and critical understanding of the potential and capability of human agency to change social structures. In this discussion, four theoretical perspectives are identified to explain why people involve themselves in collective action; why they can be expected to contribute to the common good; how collectives develop capabilities to engage in social actions; and how social agreements are formulated in order to support common, shared goals. Finally, the theory under discussion is synthesised and incorporated into a conceptual framework that seeks to explain how social actions could contribute towards sustainability.

2.1 South Africa: a Socio-political Overview from 1948 to 1999

In 1948, a 'White'²³ electorate voted a conservative, nationalist party into power in a general election that resulted in the institutionalisation of the Apartheid system. The newly elected Nationalist Party represented Afrikaner²⁴ domination and was characterised by 'White' supremacy (Worden, 1994). During the reign of the National government from 1948 to 1994, more than 300 laws were introduced to entrench the Apartheid system in virtually every sphere and sector of South African life (Woods, 2000). For example, the prohibition of Mixed Marriages Act (1949) and the Immorality Act (1950) banning marriages between Black and White citizens. These are just some of the legislative means that were promulgated to prevent sexual contact between Black and White people (Worden, 1994). In another example, the Group Areas Act of 1950 excluded Black South Africans from residing in residential areas declared as 'White settlements'²⁵. The Land Act of 1913 prohibited Blacks from purchasing land outside the Cape Province, but in 1936 this prohibition was extended to include the Cape Province (Schrire, 1978). The promulgation of these statutory Acts explains why a relatively homogenous, White population was able to acquire property and freehold rights at Betty's Bay. From the outset, the Nationalist Party was intent on preventing any development toward inter-racial integration (Davenport, 1977). Race became the most fundamental means of differentiating the populace into separate groups (Schrire, 1978).

²³ Apartheid classified people into racial groupings: Whites refers to people of European origin; Black people are African; Indian people are of Asian decent; and Coloureds are of mixed race resulting from the fusion of Whites, slaves, Hottentots and Bushman (Schrire, 1978). In this study, the researcher refers to these classifications as common nouns in the same way as they are currently used in South African Census records.

²⁴ Afrikaners were European settlers of Dutch origin whose language evolved from Dutch speakers and from other local dialects in southern Africa, most notably through slave owner and slave (Saunders, 1995).

²⁵ The Group Areas Act of 1950 restricted each 'race' group to its own residential and trading sections of settlements by controlling the purchase or occupation of lands or dwellings in specified areas (Saunders, 1995).

From 1910, when the Union of South Africa was formed, Whites controlled a unified government of South Africa. Briefly, the Union signified the creation of four provinces under one government. Previously the Cape and Natal colonies were under British rule; and the Orange Free State and Transvaal republics fell under Afrikaner rule. English-speaking Whites had a numerical minority and required significant Afrikaans language speakers' support to win power. In the 1948 'general' election, a display of largely Afrikaner unity ushered in a predominantly Afrikaans speaking National Party.

In 1948, and ever since 1910, the South African political system resembled the Westminster System with parliament being the supreme tier of the polity (Olivier & van Wyk, 1978). The political structures of the state were designed to ensure that power and control were firmly maintained by the state (Kuperus, 1999). The absolute sovereignty of parliament was reinforced when South Africa became a republic in 1961²⁶.

The central government defined the powers of the second and third tiers of government even though the administration of all three tiers was integrated to a considerable extent (Cloete, 1978). This integration of central, provincial and local authority government is illustrated in a schematic diagram showing the organisational structure that prevailed during Apartheid (Figure 6). The administration of seven self-governing Black Homelands (shown on the right hand side of Figure 6) necessitated seven separate bureaucracies, each falling under the legislative assembly of Parliament. After 1994, these racially-based administrations were discontinued.

Provincial councils formed the second tier of government responsible for passing ordinances to determine the scope of local government. They acted largely as

²⁶ The formation of South Africa as a Republic was recognised in the Republic of South Africa Constitution Act 32 of 1961. This Act made provision for the power of the Republic to be vested in the Parliament consisting of the State President, a Senate and a House of Assembly (Olivier & van Wyk, 1978).

intermediaries between the central state and local authorities. The Administrator of the province played a key role in exercising executive and legislative power while at the same time serving as the central government's representative and chief executive officer of the Provincial Council (Vosloo, *et.al.*, 1974). During the 1970s, however, the central state became increasingly involved in local issues that were previously managed by provincial and municipal authorities. Rees (1979) cites cases in which national Administrators exercised their authority over municipal decisions in matters, such as town planning schemes, to ensure that separate development legislation was strictly enforced.

The third tier of government of interest to this study consisted of numerous local authorities or municipal councils, each with its own executive powers (Schwella & Muller, 1992). In the 1970s, most local governments consisted of elected councillors who were responsible for supervising the activities of full-time salaried officials headed by a town clerk (Vosloo, *et.al.*, 1974). At this stage two broad forms of organisation were identifiable at local government level. Firstly, the council was divided into multiple committees, with each committee being responsible for certain line functions. Secondly, a management-committee system was created similar to the parliamentary cabinet in which power was vested in its executive members, elected councillors and town clerks (Vosloo, *et.al.*, 1974). Local government councils had the power to pass by-laws to regulate activities of individuals²⁷ (Rees, 1979) and levy taxes on properties (Vosloo, *et.al.*, 1974). The most important task of local government was to provide services directly to the public residing in a municipal district. From the mid-1970s, local authorities became little more than administrative bodies whose main purpose was to carry out 'national plans and to provide local services subject to central controls' (Kendall, 1991, p.29). Local authorities could only

²⁷ Each level of government could regulate matters only in accordance with the powers given to it by a higher authority. Apart from Parliament, the decisions of all other levels of government could be tested in the courts. All levels of government had to comply with legislation laid down by the Union of South Africa Act of 1910 (Rees, 1979).

promulgate laws if authorised to do so from a higher tier of government. As a result, Kendall (1991) contends that South Africa became one of the most highly centralised political systems in the world.

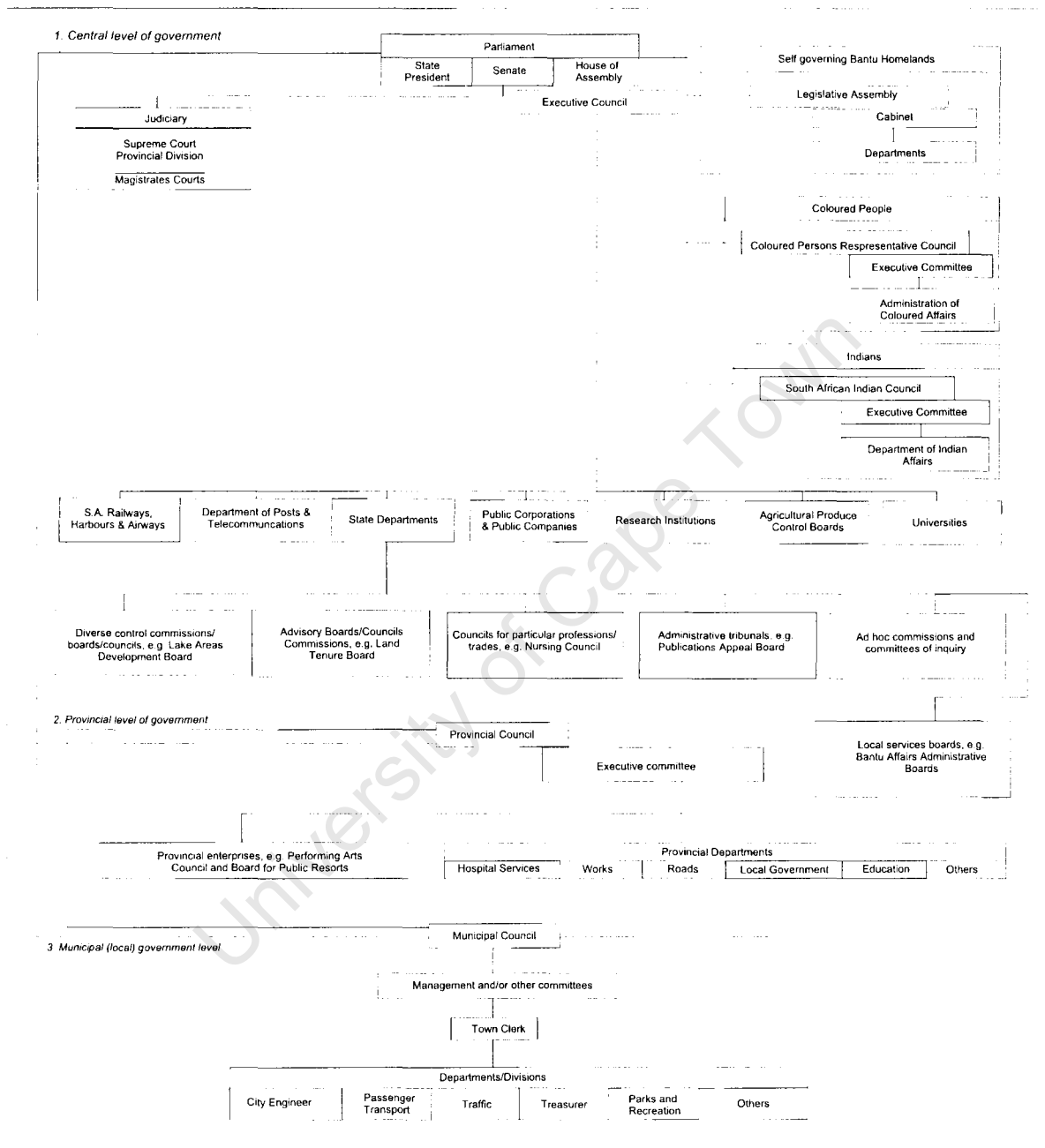


Figure 6: Institutions of state bureaucracy in South Africa during Apartheid (Source: Cloete, 1978).

From 1948 until the early 1990s, discrimination based on race and White control dominated all elements of government across the entire country. This was also true of the 'independent homelands'²⁸ referred to as self-governing Bantu homelands (Schrire, 1981). The establishment of 'Homelands' effectively stripped Black South Africans of their access to the White political system, and offered a poor substitute for political rights in the homeland reserves²⁹ (Saunders, 1995). In addition, Homeland policies caused large-scale social dislocation through the removals of people from areas designated as White settlements under the Group Areas Act 41 of 1950 (Wilson & Ramphela, 1989). Khan asserts that Homeland policies had far-reaching negative consequences for development in South Africa largely because Blacks were 'marginalised by a policy that perpetuated the spiritual and physical estrangement of Africans' causing them to become dislocated from their land and the environment (Khan, 2001). Black South Africans who attempted to engage in civil society were forced to operate in an offensive mode against the ruling government (Pillay, 1996). By contrast, the White minority enjoyed opportunities that largely furthered their interests and privileges (Khan, 2001).

It was only in 1994, a date that signals the beginning of the post-Apartheid period in South Africa³⁰, that policy and institutional arrangements were implemented to ensure opportunities for participation in matters such as environment management (a discussion on statutory acts requiring public participation is held later in this Chapter). Despite these changes which hold the potential for an open, transparent, deliberative and inclusive form of governance in a post-

²⁸ Bantustans became known as 'Homelands' after 1951. Homelands were established because the South African government believed that 'race' groups differed to such an extent in their culture and values that it was impossible 'to have conciliation within one common society' (Schrire, 1981, p.10). This was justified by the principle of 'separate but equal'.

²⁹ The Natives' Land Act of 1913 and Natives' Trust and Land Act of 1936 divided South Africa into White (including Indian and Coloured) and African areas. These Acts established the Reserves, later known as 'Homelands', and had at least one intention, that of creating independent nations for Xhosa, Venda, and Zulu speaking people (Saunders, 1995).

³⁰ The first democratic elections held in 1994 were seen as a milestone in the development of democracy in the country (Woods, 2001).

Apartheid period, recent evidence suggests that top-down approaches to governance remain (Lyons, Smuts & Stephens, 2001). These claims are supported by a number of research reports and findings (CASE & SANGOCO Report, 1998; Seekings, 2000; Urquhart & Atkinson, 2002).

A shift towards the normalisation of socio-political relations in South Africa began in the early 1990s and coincided with a 'global movement towards democratisation, [the] dismantling of authoritarian control' and a shift in 'relations between society, economy, nation-state and the international system' (CASE & SANGOCO Report, 1998, p.1). The first democratic general elections in South Africa resulted in the formation of a government of National Unity and a Constituent Assembly that operated as a transitional government until general elections in 1999. Atkinson (1996) claims that the 1994 general elections effectively changed the nature of civil society³¹ because it created the potential for all South Africans to participate in civil society for the first time. This 'turning point' started a process of social and political transformation through the discharge of legislation and policies designed to institute a democracy and to create opportunities for civil society to participate in the affairs of the country.

Atkinson (1996) describes civil society as a sphere of non-state and non-family social life that includes the economy as well as many other forms of organisations such as sports clubs, churches, non-government organizations, community-based organisations, and voluntary non-profit organisations. In South Africa the membership of civil society includes 'community-based organisations, trade unions, social movements, mass-based groups, and those non-profit organisations that supported oppositional efforts through funding, technical assistance, or advocacy research' (Bollens, 2000, p.168).

³¹ The process of drafting the Constitution involved the largest public participation programme ever carried out in South Africa. Consultations involved ordinary citizens, civil society and political parties represented in and outside of the Constitutional Assembly over a two-year period (www.polity.gov.za).

In 1996 the scope for civil society was given moral substance and an expression of the will of the people when the South African Constitution became a statutory law. The Constitution, underpinned by a Bill of Rights, enshrines the rights of all people '...and affirms the democratic values of human dignity, equality and freedom' (SA Constitution, 1996, s.7(1)). Of note, and with respect to the environmental focus of this study, is a clause in the Constitution that respects the right of citizens to a safe, clean and healthy environment³². In addition, the Bill of Rights supports an approach to development that is people-centred, environmentally sound and participatory in nature (du Plessis *et al.*, 2000). These statements of human rights are embedded in law and have become institutionalised in public life. For example, the Constitution mandates local authorities to:

(3) *...govern, on its own initiative, the local government affairs of its community, subject to national and provincial legislation, as provided for in the Constitution.*

(4) *[Govern in such a way that...] the national or a provincial government may not compromise or impede a municipality's ability or right to exercise its powers or perform its functions.*

South African Constitution, 1996, s.151

At the same time, municipalities are required to:

- a. *provide democratic and accountable government for local communities;*
- b. *ensure the provision of services to communities in a sustainable manner;*
- c. *promote social and economic development;*
- d. *promote a safe and healthy environment; and*
- e. *encourage the involvement of communities and community organizations in the matters of local government.*

South African Constitution 1996 s.152

³² Everyone has the right

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that :
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
 - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development (SA Constitution, 1996, s.24).

The Constitution gives autonomy to local authorities to govern people in their respective municipal districts provided matters are conducted within the ambit of national and provincial legislature (Glazewski, 2000). In accordance with the Constitution, local authorities are required to: provide democratic structures; be accountable to local communities; and encourage public participation in matters of local government (South African Constitution, 1996, s.152).

The National Environmental Management Act 107 of 1998 (NEMA) deals explicitly with public participation in environmental management. Section 35 of NEMA, for example, makes it possible for communities or persons to enter into co-operative agreements³³ with government. The Act highlights the right to and opportunities for public participation:

- *The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured (s.4(f)).*
- *Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge (s.2.4(g)).*
- *The Minister and every MEC and municipality, may enter into environmental management co-operation agreements with any person or community for the purpose of promoting compliance with the principles laid down in this Act (s.35(1)).*

National Environmental Management Act 107 of 1998

³³ Environmental management co-operation agreements may contain:

- (a) an undertaking by the person or community concerned to improve on the standards laid down by law for the protection of the environment which are applicable to the subject matter of the agreement;
- (b) a set of measurable targets for fulfilling the undertaking in (a), including dates for the achievement of such targets; and
- (c) provision for— (i) periodic monitoring and reporting of performance against targets; (ii) independent verification of reports; (iii) regular independent monitoring and inspections; (iv) verifiable indicators of compliance with any targets, norms and standards laid down in the agreement as well as any obligations laid down by law; (d) the measures to be taken in the event of non-compliance with commitments in the agreement, including where appropriate penalties for non-compliance and the provision of incentives to the person or community (NEMA s.35(3)(a-d)).

The incorporation of public participation into NEMA is not unique to South Africa. Amendments to the United States National Environmental Policy Act of 1969 (NEPA), for example, are similar to NEMA. However, Poisner (1996) is critical of the progress to involve public in decision-making in the United States. He suggests that NEPA fails to encourage a deliberative democracy³⁴ and that the current status of NEPA leaves citizens and agencies frustrated by the limitations of decision-making. He contends that public participation is perceived merely as a requirement for influencing political decision-making because it is used simply to legitimise participatory processes. He suggests that new decision-making structures are required to encourage deliberation and to re-invigorate civil society's participation in public decision-making rather than simply meet bureaucratic requirements (Poisner, 1996).

2.2 Civil Society in South Africa

A comprehensive study of civil society³⁵ in South Africa is beyond the scope of this study, but a brief overview and discussion serves as a point of departure from which to explain particular features and circumstances of the environmental initiatives examined in this study.

Scholars claim that a strong civil society strengthens existing democracies. For instance, civil society can make demands that can force authoritarian governments to change but can also play a role in building strong, accountable societies (Kuperus, 1999; Edwards, 2001; Gerwel, 2001). Thus, civil society is seen as an association that either resists an authoritarian regime or helps to strengthen and consolidate political systems. Fatton's (1995, p.67) understanding

³⁴ Deliberative democracy is best described as 'a mode of discussion in which participants engage in reasoned discourse about what actions serves the common good of the community involved' (Poisner, 1996, p.54).

³⁵ A broad definition of civil society is that 'realm of organised social life that is voluntary, self-generating, (largely) self-supporting, autonomous from the state, and bound by a legal order or set of shared rules' (Diamond cited in Kuperus, 1999, p.8).

of civil society is that of a 'private sphere of material, cultural and political activities resisting the incursions of the state'. This notion of civil society is similar to early European societies that detached themselves from state or church, or both, during the period between 1500 and 1800 (Atkinson, 1996). European societies became increasingly powerful during this period because citizens demanded 'social autonomy and personal liberty' (Atkinson, 1996, p.288).

By 1989 in South Africa, there was a noticeable transition in socio-political circumstances as shown by a shift from authoritarian rule to a liberal democracy³⁶ (Kuperus, 1999). This shift towards freedom and democracy was partly the result of a social movement known as 'civics' that originated in the Black townships of South Africa in the 1960s. Civics began as a protest movement in which organisations and associations vented their frustration at being excluded by the White government (Seekings, 2000). These civic groups became the target of oppression by the South African government. From the 1960s most Black South African social movements were severely repressed (Pillay, 1996). Many civic leaders were forced into exile. Atkinson (1996) suggests that the only resemblance of a civil society movement in South Africa from the 1960s until the 1990s, was found in a small, but assertive group of Afrikaans speaking Whites who were closely connected to the government. Typically these groups were found in churches, businesses, and in agricultural and cultural associations. The Apartheid government expressed little interest in encouraging non-profit organisations that fell outside of its own support base, other than to pass certain regulations, such as the Companies Act of 1973 and the Co-operatives Act of 1981, in order to define different types of organisations for taxation purposes (Atkinson, 1996). This attitude toward civil society reasserts an earlier claim of a highly centralised autocratic system of government in which rules and regulations were defined by the authorities without regard to civil

³⁶ Kuperus (1999) defines democracy as 'a system of institutionalized competition for power' in which there is scope for participation, and in which there is respect for civil and political rights.

society. Dewar (1999) states that the public were only required to react to policy decisions and were seldom involved in consultation or participation. White South Africans had the right to vote and the nominal means to become involved in directing their socio-economic circumstances, but they were largely apathetic and uninformed. As a consequence, decisions were left to elected officials and bureaucrats (Dewar, 1999). By contrast Black, Coloured and Indian populations became highly politicised through the movement of civics, but were denied access to formal decision-making bodies (Pillay, 1996).

After 1994 the official policy framework of the Government of National Unity was embodied in the Reconstruction and Development Programme (RDP)³⁷ which served as a vision and guide for the ruling party (Pillay, 1996). The baseline document of the RDP expresses a vision for developing a democracy through 'representative, participatory and direct democracy' (ANC, 1994, p.120). In this new era of reform the post-Apartheid administration was faced with two important imperatives: to meet the developmental needs of the country; and to establish a democracy (Bollens, 2000). The challenge of meeting these objectives remains. Recent research has reported on a general decline in relations between political movements and civil society in the period from 1994 to 1999. The CASE and SANGOCO Report (1998) identifies the problem as a lack of political will to strengthen civil society in a post-Apartheid South Africa (CASE & SANGOCO Report, 1998). Seekings (2000) noted a general decline in the influence and prominence of civics after 1993 partly because the *raison d'être* had disappeared. Civic organisations also experienced a leadership crisis as many civic leaders opted to stand as councillors in local elections in 1995 resulting in resignations from local civic organisations. In addition, foreign donor funding became increasingly channelled through the government's RDP programme forcing many non-profit organizations to close (Seekings, 2000). The CASE and

³⁷ The RDP became official government policy after the 1994 elections. It is a programme focusing on socio-economic upliftment (Saunders, 1995).

SANGOCO Report (1998) suggests that NGOs and CBOs were left with insufficient resources to mount campaigns in support of their work among the poor. Other researchers have observed an increase in the bureaucratisation of development undertaken by NGOs and CBOs. They suggest that this led to a fundamental change in the interest and will of civil society to participate (Lyons, Smuts & Stephens, 2001). Furthermore, these researchers claim that a bureaucratic approach to development has profoundly affected 'the nature of participation, and its potential impacts, including the relationship between participation, sustainability and empowerment' (Lyons, Smuts & Stephens, 2001, p.274). They concluded that there was a growing trend toward a standardised approach to participation and a bureaucratised model in the management of public processes in South Africa.

The CASE and SANGOCO Report (1998) identifies further problems facing civil society in South Africa. The report suggests that consensual decision-making, once a feature of the transitional period from 1994 to 1996, had given way to a 'normal' mode of politics characterised by competition between interest groups who sought power and access to resources. The report claims that while organised business and labour have had some measure of success in getting the attention of government, it has been at the expense of the poor and marginalised sectors of society.

In all, the CASE and SANGOCO Report (1998), Seekings (2000), Lyons, Smuts and Stephens (2001), raise serious concerns about the nature of participation, public involvement and the uncertain role of civil society in its contribution towards a mature democracy in South Africa. Pillay (1996) suggests that a key indicator of a mature democracy in South Africa will be the extent to which civil society contributes to the development of a post-Apartheid social order.

By contrast, Reid and Taylor (2003) report on the growing interest in civic environmentalism in the United States. Shutkin (cited in Reid and Taylor, 2003) identifies a growing realisation in the United States of a civil society movement which is attempting to grasp a 'holistic approach to environmental problems' and to recognise, that '...problems and solutions are inextricably linked to social, political and economic issues' (Taylor & Reid, 2003, p.77). Seligman (1992) suggests that there is a shift in mainstream environmentalism from a historically *élitist* movement to a democratic movement in which the concept of a sustainable community is being pursued with renewed vigour. Civic environmentalism³⁸ described as a 'place-based' rallying point for renewed interest in community participation is becoming increasingly familiar in public participation discourse particularly with an environmental orientation (Agyeman & Angus, 2003). However, not all researchers share this same enthusiasm. Etzioni (1996) and Putnam (2000) raise serious concerns about the ongoing decline of community involvement and the role of civil society in the United States.

Returning to the South Africa context, broad-based involvement of the masses in the environment, and in the conservation and management of resources in particular, remains a serious challenge. The socio-political history of South Africa has frustrated the emergence of a strong civil society movement particularly with respect to conservation (Khan, 2001). The majority of Black South Africans continue to perceive conservation to be 'strongly associated with *élitism*, an acceptance of the political *status quo*, and an indifference to the lot of the poor' (Khan, 2001, p.211). Even after the 1960s, despite a growing interest in conservation in Western countries, the appeal and recruitment of members to conservation organisations in South Africa was confined largely to an affluent, educated, and White population. Khan (2001) was only able to identify four small, local Black organisations whose energies were being directed toward the

³⁸ Layzer (2003) defines civic environmentalism as 'using local, collaborative decision making processes to generate innovative, non-regulatory solutions to a host of environmental problems' (cited in Agyeman & Angus, 2003, p.346).

conservation of land and whose members were drawn from a Black middle class society. She concludes that conservation 'enjoyed a low priority among the Black middle class, and very few conservation organisations were established' (Khan, 2001, p.213). She suggests that obstacles to the development of a broad-based environmental movement and general lack of interest in the environment in South Africa can only be explained by the repressive political climate that dominated the country until 1994. Khan's research identifies important obstacles preventing the vast majority of South Africans from becoming involved in a broad-based environmental movement.

2.2.1 Public Involvement in Environmental Movements: some International Perspectives

Over the past 20 years governments worldwide have been prompted by various global gatherings such as UNCED³⁹ to shift from centralized, top-down directives to holistic, people-centred approaches to governance (Morrissey, 2000; Cuthill, 2002; Conley & Moote, 2003; Hauck & Sowman, 2003). Stukas and Dunlap (2002) suggest that there has been a concerted effort to increase public participation in governance in the United States boosted largely by domestic policies that encourage community service initiatives. However, as discussed earlier, Poisner (1996) contends that public involvement in social processes in the United States is a grand experiment in democracy in which administrative agencies of the federal government open their decision-making processes to public input and scrutiny, but do not seriously engage with the public. He recommends that the challenge of involving the public in government, and from the perspective of this study, requires new, creative, innovative tools and techniques if a 'transition to sustainability' is to be realised.

³⁹ 179 heads of state were signatories to Agenda 21 at UNCED in 1992 (Dodds, 2002).

Arguably, *Agenda 21*⁴⁰ is the most significant document to have contributed to new thinking on environment and development. *Agenda 21* has raised the profile and debate about public involvement in environmental matters (Mason, 1999). It provides guidelines for the establishment of global partnerships and advocates public participation and the active involvement of NGOs and CBOs. In addition, it makes reference to the involvement of individuals or groups of people in decision-making, including NGOs, CBOs, scientific communities, women, youth and indigenous people. Of note, and of interest to this study, is Chapter 28 of *Agenda 21* which states that 'environmental problems and solutions are identified as having their roots in local activities, and that participation and co-operation of local authorities will be a determining factor in dealing with these problems' (*Agenda 21*, s.28(1)). The document recognises that local authorities represent the 'level of governance closest to the people', and are, therefore, in the best position to encourage the development and maintenance of economic, social and environmental infrastructure; to oversee planning processes; to establish local environmental policies and regulations; and to assist in implementing national and sub-national environmental policies to promote sustainable development (UNCED: *Agenda 21*, 1992).

Worldwide the success of *Local Agenda 21*⁴¹ (LA21) programmes is largely encouraging. In 2001 the International Council for Local Environment (ICLEI) undertook a global survey to study the implementation of *Local Agenda 21*. The study was commissioned by United Nations Secretariat of the World Summit on Sustainable Development in collaboration with the United Nations Development Programme Capacity 21 Initiative (www.iclei.org). The purpose of the survey was to evaluate the progress of LA21 programmes, to explore the constraints facing

⁴⁰ Documents that emerged from United Nations Conference on Environment and Development (UNCED) (1992) that received official agreements:

(a) The Rio Declaration on Environment and Development; (b) *Agenda 21*; (c) A Declaration of Principles on Forests; (d) The Framework Convention on Climate Change; (e) The Convention on Biological Diversity.

⁴¹ LA21 is a framework for implementing *Agenda 21* at a local scale.

local authorities, and to identify the kinds of support necessary to extend LA21 initiatives to all parts of the world. Over 600 local governments and 146 associations representing 113 countries responded to the survey. The findings illustrate the scope and support of LA21 programmes in some countries, but they also highlight common difficulties and identify the limitations of LA21 programmes operating in Africa:

- *6416 local authorities in 113 countries have either made a formal commitment to Local Agenda 21 or are actively undertaking the process*
- *National campaigns are underway in 18 countries accounting for 2640 processes*
- *Formal stakeholder groups exist in 73% of municipalities with Local Agenda 21 processes*
- *In 59% of responding municipalities, Local Agenda 21 had been integrated into the municipal system*
- *Water resource management is a common priority and issue for municipalities in all world regions regardless of economic situation*
- *Local authorities in all regions and regardless of economic situation, list the lack of both financial support and national government political commitment as key obstacles to greater success*
- *Of 151 municipalities in 27 African countries that were surveyed, only 20, all of which were located in South Africa, had embarked on LA21 projects.*

www.iclei.org, 2002

All municipalities that participated in the survey indicated that insufficient finance was the largest obstacle to successfully implement LA21 programmes regardless of a country's GNP or even the presence of a national campaign to support such programmes. In developing countries additional obstacles were identified which included insufficient expertise and capacity to implement LA21. The survey also highlights progress in South Africa and noted that LA21 initiatives were confined to programmes concerned with policy development or small-scale projects that aim to create jobs and alleviate poverty. Environmental sustainability was largely neglected in these projects (Urquhart & Atkinson, 2002).

Some researchers have concluded that the success of LA21 is only likely to be achieved when governments are transformed from centralised, top-down,

technical service providers to those that build capacity, support learning, and enable communities to articulate their needs through democratic processes (O'Riordan, 2000; Urquhart & Atkinson, 2002).

2.3 Public Involvement in Contemporary South Africa

The Constitution of South Africa Act 108 of 1996 and the Local Government Municipal Structures Act 117 of 1998, establish a framework for democratic and development-orientated local government. Both Acts represent a discernable shift from the bureaucratic decision-making processes of previous governments under Apartheid. Statutory Acts, such as NEMA and the Water Act 36 of 1996, require local government to work with citizens and groups to find sustainable ways to meet social, economic and material needs of the people, and to improve the quality of the lives of its citizens (Mazaza, 2000). Local authorities are also mandated by central government to address the needs of the majority of citizens whose rights and opportunities to improve their material needs and quality of life were denied in the past.

Bollens (2000) suggests that a transformation of civil society will only be achieved when there is co-operation and a constructive involvement of civil society in activities that address poverty alleviation, job creation and delivery of health care. He suggests that a more realistic and important priority for most post-Apartheid civic organisations is that its members should become advocates and articulators of community needs and aspirations so as to contribute to democracy and respond to the mandates of communities. Mazaza (2000) recognises that communities will need to participate in a structured and organised manner if civic organisations are expected to respond effectively. It is noted that public participation in South Africa still occurs in a disjointed manner especially at a local level (Mazaza, 2000). This contention is identified in a study on 'Models of Participatory Development in South Africa' (Lyons, Smuts &

Stephens, 2001). These researchers identified two contemporary attributes of local authority behaviour that serve as a deterrent to higher forms or levels of public participation and hinder the development of local initiatives. Firstly, they concluded that community participation is nothing more than the co-option of people into projects characterised by top-down decision-making processes. Secondly, while acknowledging the role of the state in transforming society, these researchers raise concern that institutions of state continue to be perceived as central to the instigation and maintenance of development. They found that the role of the state had increased, while the role of the private and semi-private sectors had declined. These findings are supported by the CASE and SANGOCO Report (1998) discussed earlier. Their conclusions also concur with Plummer (2000) who states that a continued top-down approach of governments undermines the potential for public participation.

The foregoing discussion on the socio-political history of South Africa, with its emphasis on the Apartheid period and the nature of civil society during this same period, has sought to outline and identify social structures and structural influences that led to a fragmented, racially divided South African society. These circumstances have had a direct influence on a civil society movement. For example, a non-racial, broad-based environmental movement has not emerged after more than 10 years of democracy despite significant changes in policy and legislation to ensure public participation, social equity and a normalisation of social relations.

Given the South African context, the rationale for posing the study question should become increasingly clear. The context outlined in the foregoing identifies some of the major challenges determining progress towards a sustainable future. In this study the potential to involve the public in contributing towards this progress is considered initially in relation to social systems theory. The empirical findings and analysis to support or refute this theory is analysed and discussed in

Chapter 7. The substantive theory underpinning this study focuses attention on understanding the interplay of agency and structure to explain why interest groups operating at Betty's Bay were relatively successful in their efforts to conserve and enhance the biophysical environment.

2.4 Social Systems Theory

Social systems theory is examined in an attempt to show the capacity of human agency to contribute to sustainability. The discussion that follows begins with a theoretical treatise of the nature of collectives. It also substantiates a claim, made earlier in Chapter 1, that a transition to sustainability is unlikely to be achieved by individuals acting independently of each other. Collective actions involve a number of people carrying out the same or similar actions at the same time in which there is some form of dependency among the actors as opposed to individuals acting independently or alone (Coleman, 1984). In the discussion that follows, four theoretical perspectives are explored to suggest why collectives are expected to carry out actions or activities that broadly conform to some common goals or shared ends. The four perspectives are:

- (a) individuals do not necessarily act on the basis of self-interest;
- (b) individuals can be expected to co-operate and act collegially;
- (c) collective actions are informed by socially acquired and constructed knowledge;
- (d) collectives reach agreements by accepting and adhering to prevailing norms and values.

These perspectives are developed further in a theoretical discussion on structure and agency, and in an examination of a dualistic, synthetic approach to understanding the interplay of structure and agency in a modern and post-modern period. The discussion that follows seeks to synthesise a vast body of

theory so as to construct a theoretical framework and a critical understanding of the nature of public involvement as a form of participation.

2.4.1 Social Structure and Collective Action

In the late 1800s, Durkheim's published work on social determinism took the view that social structures⁴² influence individual actors and their actions (Graaff, 2002). Durkheim claimed that society functioned as a system because individual members of that society behaved in ways that lent support to that system (Sztompka, 1991). In essence, his theory of functionalism explained social order in society. A functionalist viewpoint requires an examination of forms and functions of social systems to understand how collective actions and social interactions maintain the continuity of systems. Parsons (1937) extended Durkheim's functionalist theory by showing that individual acts were interlinked with other individual acts resulting in a complex web of social interaction which he called an 'action system'. Parsons used an action system to explain how individual acts were responsible for establishing social divisions which is a feature of complex social systems. He argued that individuals, as members of one or more social divisions (such as gender, class, race, ethnicity or age groups), could be expected to achieve certain shared ends through interaction and mutual agreement. Parsons claimed that it is only through meaningful social interactions that agreements are likely to be reached (Seippel, 2002). Such agreements are underpinned by an acceptance and adherence to norms and values that are accepted and adhered to in a stable and orderly society (Parsons, 1937). A failure to adhere to norms and values leads to disruption, anarchy, chaos and 'anomie'⁴³. If an individual's actions were informed only by rational

⁴² A social structure is defined as regular pattern of behaviour (Graaff, 2001). Examples include family structures, power structures, class structures and authority structures. Giddens (1989, p.19) describes social structures as the 'underlying regularities or patterns in how people behave and in the regularities in which they stand with one another'.

⁴³ Anomie is a sense of aimlessness or purposelessness that is induced by certain social conditions (Giddens, 1989).

self-interest, the result would be instability and chaos in society. In reality, however, society tends to move towards equilibrium rather than chaos. Parsons contends that orderly, stable and functional societies exist in reality simply because of the agreement(s) reached among its members.

In essence, Parsons' (1937) 'action system' seeks to explain why societies tend toward a state of equilibrium as opposed to chaos. He claims that this tendency is initiated and maintained through a process of socialisation⁴⁴ in which individuals and groups accept prevailing or perceived roles and norms. In the absence of socialisation, the potential to achieve shared ends is limited because conflict and a lack of co-operation will prevent any agreement from being reached. Parsons developed a schema, known as 'AGIL', to explain how societies survive over time (Graaff, 2001). He claims, firstly, that society adapts to change in order to ensure social stability and order (Adapt); secondly, societies pursue and achieve desirable goals (Goals); thirdly, all elements of a social system need to be integrated (Integrated); and finally, cultural patterns of society, including conflict, must be managed and maintained (Latency) (Mullard & Spicker, 1998). In Parsons' schema, collectives are expected to reach agreements, establish shared ends, and act rationally in pursuit of the agreements. These expectations are typical of the behaviour of willing volunteers who wish to contribute towards jointly agreed, meaningful goals. The assumption is that social wholes, that is the sum of social fractions or social divisions, exist in reality and are unique; that they possess a unity and operate as a unit; that the social whole has autonomy to control its parts and properties; that social wholes possess continuity and identity; and finally, that social wholes influence other social wholes as well as individual members (Sztompka, 1991).

It is, however, overly simplistic to believe that individuals are completely compliant beings who willingly accept the norms and values of social structures,

⁴⁴ A process in which humans become part of society (Parsons, 1937).

and who are likely to display a natural tendency to co-operate as *sui generis*, a social whole (Sztompka, 1991). Parsons is criticised for being too simplistic in his explanation of behaviour modification and control whilst neglecting social conflict as a valid attribute of social reality. Parsons claimed, for instance, that conflict leads to a breakdown of society, but he ignored the possibility that conflict could strengthen the resolve and direction of societies (Mullard & Spicker, 1998). In addition, Papadakis (2002) criticises Parsons further by suggesting that his work lacks the necessary empirical evidence and that he gives undue attention to the power of social institutions while underestimating the individual's role in actively shaping social institutions and social structures (Papadakis, 2002). Both Durkheim and Parsons are accused of postulating theories that constrain individual actors to behave in accordance with the norms and values of institutions, organisations and associations of society. In the final analysis, Catton (2002) questions whether the work of theorists such as Parsons and others within the functionalist tradition still applies in a modern, high energy, industrialised and pluralistic society. Nevertheless, Durkheim and Parsons contribute to understanding the interplay between individuals and society, namely in identifying the influence of socialisation on the human agent. In this study, a functionalist approach is considered in the analysis of empirical data to suggest how norms and values find implicit expression through social interaction within the Betty's Bay Ratepayers' Association that, in turn, influence processes within the selected environmental initiatives.

2.4.2 Agency and Collective Action

A second theoretical perspective lies in a brief examination of the works of Karl Marx and Max Weber. They introduced structuralism to understand the relationship between society and agency, the antithesis of functionalism. Marx recognised that human actors and their actions do not exist in a vacuum, but occur within a context of social wholes. Central to Marxist ontology is an

understanding of the relational substance between individuals and structures. Marx argued that it is the relational substance that causes actors to act. The point of departure for Marxism is an understanding of the human agent, their actions and the material conditions in which they live. He was careful to emphasise that the essence of humanity is not derived from an abstraction inherent in each single individual, but lies in the 'ensemble of the social relations' (Marx & Engels, 1968, p.29). Furthermore, social structures represent a multitude of social relationships between people. This relational approach suggests that individual action is not necessary one in which a free agent acts at will. Any individual acting without reference to others is unlikely to agree on common or shared goals of others. Of interest to this study is that Marx recognised that the potential of the human agent(s) to reproduce and/or transform society lies in the nature of social interaction and relationships. The relational substance of Marxist theory suggests that collectives engage in social actions because social interaction and relationships enable or facilitate the formulation of generally cohesive social actions that are directed in the pursuit of common goals or shared ends.

Weber adds a further consideration of the potential of human agency to transform society. He defines social action as the subjective meaning attached to social actions by the human actor. Weber is suggesting that the behaviour of others influences individual actions along a particular course (Gilbert, 1989). Action is therefore 'social' insofar as its subjective meaning takes the behaviour of others into account. Social action can, therefore, be accounted for by the past, present or expected behaviour of others. Thus, social action goes beyond face-to-face interaction with individuals and could conceivably include taking the behaviour and needs of future generations into account. The crux of understanding the nature of social action is therefore dependent on the subjective meaning which motivates an actor's initial intentions to act. Weber does not necessarily imply that an actor is required to be a member of a social

group although it might be difficult for an actor to sustain his/her efforts without being in some form of a relationship.

Two ideas emerge from a brief examination of structuralism of relevance to the research question. Firstly, social action depends on social interaction and relational substance, and secondly, the subjective meaning that individuals attach to the behaviour of others influences social actions.

2.4.3 The Integration of Agency and Structure

The foregoing discussion has outlined a theoretical dualism in sociology that has caused contemporary social scientists to turn their attention to develop a synthetic or dialectic approach to social theory rather than to debate the polemics of structure and agency. Giddens (1977) is foremost in developing structuration theory which attempts to understand the intersection between knowledgeable and capable human agents, and social structures. He seeks to replace the conventional dualism of agency and structure with a duality. In this duality, he acknowledges that social systems involve recurrent practices and activities of human subjects, but also recognises that social systems have structures in which the human subjects are absent (Johnston, *et.al.*, 1995). According to Giddens (1977), factors that bind social systems and human subjects to structures are rules, sanctions, norms and values formed from social interaction. All systems of social interaction involve communication, power and sanction (Giddens, 1977). The interplay between the production of social practices and the reproduction of social structures ensures that everyday life encounters are bound to the development of social institutions (Johnston, *et.al.*, 1995). This means, firstly, that every social actor is knowledgeable and skilled about the conditions of reproduction of society of which he or she is a member. Secondly, structures are not barriers to social action, but are essential to the production of social practices.

Sztompka (1991) offers a slightly different paradigm to Giddens' structuration theory, but his work also demonstrates a shift from social totalities, systems *sui generis*, typical of 19th Century, to one that recognises individual acts and social actions as interdependent elements of society. He argues that social structures have lost their dominance and authority, and have shifted to a position in which they are viewed as products of the individual. This means that human agents actively shape their circumstances in order to create the conditions in which they live within structural constraints that to a greater or lesser extent affect individuals. Sztompka's (1991) theory of 'social becoming' attempts to bridge the divide between rigid determinism of collective actions and the unhindered, unfettered voluntarism of free individuals. As such, individuals can be expected to act co-operatively or collegially with each other because they want to achieve certain shared ends that are likely to have 'mutually beneficial outcomes' (Miller, 2001, p. 20). Collective volunteerism typically operates under these conditions although the behaviour of volunteers does not necessarily have to be structurally impelled, save that members of a particular group might not condone certain actions. Sztompka claims that transformation of social conventions, norms and/or institutions are unlikely to be achieved by a single agent acting alone, but by agents acting collectively.

The idea of an emancipated individual and the power of the collective to affect social transformation is central to Bhaskar's (1987) model of social transformation. He uses the idea of critical realism to connect two philosophies typically found in social science discourse, that of transcendental realism and critical naturalism. Both philosophies are complex and difficult to explain, but it is necessary to briefly introduce the essence and form of these 'realisms' in order to understand Bhaskar's 'Transformational Model of Social Activity' (TMSA). The TMSA is a significant contribution to this study since it forms part of the final analysis which addresses the study question.

Bhaskar (1987) draws on the philosophy of transcendental realism to inform his approach to scientific method. Transcendental realism refers to a realism that is metaphysical, that is, objects exist in reality not because these objects are empirically proven, but because they exist in reality. Empirical tests are therefore not always required to establish the existence of knowledge or truth of reality, but the existence of objects must conform to the rules of logic (Harvey, 2002). The relevance of this discussion for this study lies in an approach to understanding *social reality* which consists of a plurality of material elements and mechanisms that interact with everyday life experiences. These interactions are non-linear, constantly evolving and seldom display predicable patterns (Harvey, 2002). It is therefore unrealistic to apply a scientific approach to understanding social systems because such an approach results in the formulation of scientific laws that are narrow, 'normic statements' of truth (Harvey, 2002). Since scientific studies of the social world will have to contend with constantly evolving systems, the philosophical and scientific approach to social reality is one in which the findings conform to logic and are framed as probabilistic outcomes.

The second philosophical concept underpinning Bhaskar's transformation model of social activity (TMSA) is the use of critical naturalism. In keeping with a transcendental philosophy of science, as outlined above, he turns his attention to understanding how the laws of nature can be applied to the laws of society and human nature (Harvey, 2002). He seeks to establish the kinds of properties people and societies possess that make them possible objects of knowledge. In essence, he considers whether a scientific approach to explaining natural phenomena can also be applied to the study of social phenomena (Bhaskar, 1987). His contention is that it is possible to study the social world from a naturalist, scientific approach, provided this approach conforms to the ideas of logic. The possibility of explaining societies and human nature as objects of knowledge is achieved by using the TMSA model to illustrate Bhaskar's contribution to the dialectic of agency and society. Bhaskar combines the two

philosophies of transcendental realism and critical naturalism to develop his understanding of critical realism, a philosophical approach that seeks to understand the evolving nature of human agency and structure as legitimate objects of knowledge and understanding.

Bhaskar (1987) sees the human agent as a product of socialisation and social control, and is constantly contributing to the social reproduction and transformation of society. Society is both the condition and outcome of human agency, but at the same time human agency is the reproductive and transformative influence on society. These ideas are represented in a modified version of Bhaskar's TMSA model. Each element of this model is described with reference to this model (Figure 7). The triad on the left, with downward pointing arrows, encapsulates the approach of Durkheim and Parsons. This perspective emphasises the structural power and influence of society on the human agent which is influenced by socialisation and social control. The second triad on the right hand side reflects Weberian and Marxist philosophies. This triad is the reversal of first sequence. Agency is shown as 'routinely reproducing and, on occasion, transforming society' (Harvey, 2002, p.167). As a whole, the TMSA model asserts that the human agent possesses an implicit dualism, that is, the individual is a product of structural and social intercourse, but is also in a 'state of becoming' an autonomous agent whose history and biography has prepared the individual to 'engage in self-directed action or socially innovative collaboration with others' (Harvey, 2002, p.178). The history and biographical flows associated with the 'state of becoming' a human agent is a feature of both time and place. It reflects ways in which society organises itself both materially and culturally to reflect the ontological requirements of social life over time. The notation T1 and T2 indicates the irreversible evolution of society over time influenced by the historical flow of material processes and institutional changes.

Bhaskar's contribution to the seemingly intractable polemical debate in social science lies at the centre of the TMSA model. The existence of a real 'community' (depicted by the grey box in the centre of Figure 7) is the 'primary workshop' in which 'personal identities, social structures, reproductive mediations are materially and practically fabricated' (Harvey, 2002, p.183). It is here that biography and history are co-joined in a matrix of social relations. The 'community' is the material nexus through which people reproduce and transform society, and concomitantly, in which human agency is socialised to influence social reproduction as a result of human interaction. 'Community' refers to an actual group of people who are directly or indirectly interacting in territorial space and 'who are morally integrated by a set of relatively stable social institutions' (Harvey, 2002, p.183). Thus, a critical realist perspective seeks to understand how the human agent functions within a set of cultural traditions and within the material and ecological boundaries of real, existing communities (Harvey, 2002). The focus of the model lies in understanding the nature and implications of the material and social nexus that mediates the dialectic of structure and agency. One of the implications of the Bhaskar's model, for example, is that it is difficult for collectives to operate independently of institutions if they want to reproduce or transform their social and/or cultural circumstances.

The final element of the TMSA model focuses on the idea that the human agent is capable of creating cultural forms with the view to achieving certain goals. Here Bhaskar concurs with Sztompka (1991). An individual is in a constant 'state of becoming' through self-positing goals that are constantly evolving over time. However, goals are not only the product of individual aspirations. They are also formulated in relation to the material and social possibilities that are available to members of a real, concrete community. In other words, social interaction, afforded by membership of a group or community, mediates the determinate powers of society, that is, the process of unchecked socialisation, and at the same time constrains the rampant ability of human agency to reproduce and

transform social systems. Whilst the human agent might create new forms and ways to advance individual interests, over time these creations can also be destroyed, rejected or modified in conjunction with changing social institutions, structures and norms.

To summarise, this discussion has focused on the concepts and ideas depicted at the centre of the TMSA model, and has briefly explored how Bhaskar has applied a critical realist approach to explain how cultures can be constructed, destroyed and re-construct over time. The model contributes to the theoretical discussion of this study in a number of ways. Firstly, it demonstrates the possibility of integrating human agency and society by considering the material and social nexus in a local setting. Secondly, the model provides a framework from which to evaluate social actions over time. Finally, the model offers a theoretical perspective from which to consider how agency could influence institutions and organisations to formulate goals that might embrace the principles of sustainable development.

Further discussion on the implications of the TMSA model is presented in the analysis in Chapter 8.

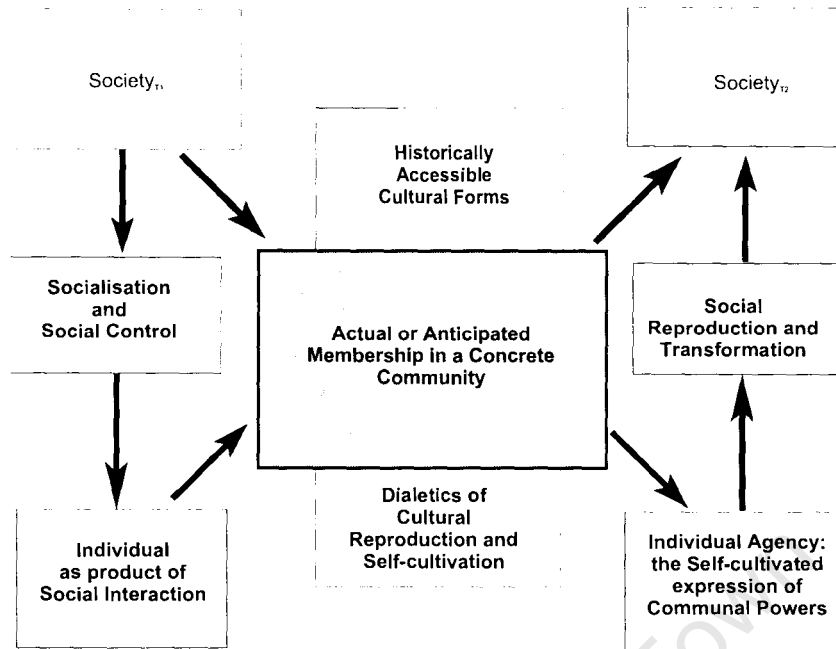


Figure 7: Transformation model (Source: Harvey, 2002, p.184)

2.5 Social Capital and Collective Action

The ascendancy of individualism in a modern and post-modernist age led Coleman (1984) to suggest that individuals act more independently than they did in the past, that goals are arrived at more independently, and that individual interests are more self-directed than they were in the past. Coleman's observations, set in the context of Western societies, raises doubt about whether individuals can be expected to act outside of their own self-interests. This expression of doubt runs counter to Bashker's model of transformation in which he suggests that individuals realise their aspirations through membership of a group or 'community' by accessing the social and material possibilities. Coleman's concerns are troublesome with respect to achieving sustainability. Not only is he suggesting that free agents are more concerned about self-directed self-sufficiency, but agents increasingly operate independently of social

organisations and institutions. This observation introduces a final body of theory to this study which seeks to understand how human agents use social capital to achieve individually conceived and shared goals in a modern and post-modern era.

The idea of social capital first appeared in the literature when Alexis De Tocqueville made a number of observations in the 1830s about the emerging character of society in the United States. He noted the 'propensity for individuals to join together to address mutual needs and to pursue common interests' (Wilson, 1997, p. 746). However, it is during the last decade that the concept of social capital has risen to prominence and brought renewed interest in the study of civil society and social action (Wilson, 1997). Given the rise in interest in the concept, Portes warns that social capital has evolved into a 'cure-all for the maladies affecting society' and suggests that 'excessive extensions of the concept may jeopardise its heuristic value' (Portes, 1998, p.1). He claims that there is nothing new about the idea of drawing 'capital' from others.

For Coleman (1984), the novelty of the concept lies in understanding how social relations and social networks encourage productive activities (Coleman, 1984). Social capital is the product of social interactions which can contribute to the formulation of common or shared purposes. These social interactions can also lead to the acquisition of knowledge, understanding and skills, and the identification of resources which could be used to build or store social capital (Selman, 2001). Individuals, therefore, might want to join a group in order to realise and benefit from a resource that is based on sociability. Thus, a network (a lattice of connecting relationships) provides a means to recruit others, to perform good deeds, and to foster norms of reciprocity that may encourage individuals to attend to the welfare of others (Portes, 1998).

The contemporary use of social capital implies some form of social action which is precariously influenced by attributes of social capital, namely, social interaction and communication, networks, relations of trust, knowledge, norms and values (Coleman, 1994; Etzioni, 1996; Myszal, 1996). Coleman (1994) suggests that the development of social capital depends on the stability of social structures. Any disruption of social organisations or social relations can be highly destructive to social capital. Parsons explained the necessity for stable, orderly social systems. However, the stability of social structures does not necessarily depend on individuals, but on the positions that social organisations hold in relation to their history and culture (Coleman, 1994). In other words, individuals occupy positions within a social organisation, but as they enter or leave, the organisation is not necessarily disturbed. Therefore the development and maturity of social capital lies with the social organisation and not with individual members. Social organisations provide a mechanism for achieving shared ends even though individuals might change their views, move their membership or shift their involvement to other activities within the organisation. Pretty (2002) suggests that co-operative relations are established by some form of social arrangements, such as an organisation, that allows people to become increasingly confident in the capacity of a collective to address their interests and encourages them not to engage in private actions that are harmful to society or the environment (Pretty, 2002). Wilson (1997) concurs with Pretty by suggesting that social capital is essential to maintain and enhance the value of public goods⁴⁵. She suggests that social capital not only creates the goodwill to resolve issues such as those highlighted in the well known '*The Tragedy of the Commons*' essay (Hardin, 1968), but also allows for creative solutions.

⁴⁵ 'Public goods' refers to those public assets that can only be maintained through co-operation and trust, and whose value is lost through the pursuit of individual self-interest (Wilson, 1997).

2.5.1 Attributes of Social Capital

Pretty and Ward (2001) identify four attributes of social capital which are widely cited in the literature (Coleman, 1994; Etzioni, 1996; Misztal, 1996). These attributes are: (a) the establishment of trust; (b) reciprocity; (c) common rules, norms and sanctions; and (d) networks and groups that demonstrate connectedness. Each of these is discussed in the following sub-sections.

2.5.1.1 Trust

Trust is no longer perceived as a regulatory mechanism, but as a public good in modern society (Misztal, 1996). Pretty (2002) identifies two kinds of trust. Trust in individuals who are known, and trust in a known social group or organisation. This study stresses the role of trust in social organisations and associations. In reality, however, the distinction between these two forms of trust is difficult to distinguish since individuals are also members of organisations that have formal, non-formal or informal structures. What is important is that trust lubricates co-operation (Pretty, 2002) and stabilises interaction through the establishment of unwritten social contracts. Furthermore, trust binds a collective and encourages groups to reach agreements towards shared ends. The assumption, therefore, is that trust builds co-operation, entrenches and extends the social capital of collectives. Furthermore, trust is built on social interaction that is best achieved through dialogue and the development of relationships (Agyeman & Angus, 2003). Pretty (2002) concurs by suggesting that trust is underpinned by dialogue, goodwill, willingness to listen and the use of discretion. If people are going to co-operate effectively as a collective, then trust is essential to social interaction and communication.

2.5.1.2 Reciprocity

Reciprocity explains why people want to contribute to the good of others or to the benefit of the environment. For example, people who volunteer to protect and enhance the environment may do so because they expect that the quality of the environment and its resources will ultimately benefit their immediate welfare, investments or enjoyment of that environment. Etzioni (1996) refers to reciprocity as 'the touchstone of social capital'. He states that the principle of generalised reciprocity is so 'fundamental to civilised life that all prominent moral codes contain some equivalent' (Etzioni, 1996, p.135). Reciprocity is evoked either consciously or unconsciously when an individual's intention to act is predicated on an expectation that there will be some form of return.

Two forms of reciprocity are identified in the literature. 'Specific' reciprocity refers to simultaneous exchanges of items roughly of equal value. Alternatively, 'diffuse reciprocity refers to a continuing relationship of exchange that at any given moment may not be met, but eventually is repaid and balanced' (Pretty & Ward, 2001, p. 211). These authors conclude that diffuse reciprocity is most likely to contribute to long-term obligations between people. To-date there is no research to determine whether this also applies to achieving desirable environmental outcomes through which people feel obligated to improve the environment. However, Pretty and Ward (2001) suggest that reciprocity has the potential to achieve positive environmental outcomes because it involves long-term obligations between people. Reciprocity also presents a strong argument against the idea that individuals act purely out of self-interest since reciprocity is characterised by a sense of belonging to a social circle (Wilson, 1997). While this conclusion might be exaggerated, Coleman (1994) questions why a rational person would want to create such obligations since the moment when he or she is called upon to return the 'debt', the timing might be inconvenient or the extent of the obligation may 'cost' more than the original deed. It remains uncertain how

the idea of reciprocity applies to people acting in a voluntary capacity for the environment other than to assume that individuals respond to learned moral, ethical beliefs and behaviour that informs their actions for the common good.

2.5.1.3 Common Rules, Norms and Sanctions

Well-developed social capital is linked to a strong internal morality in which individuals balance individual rights with collective responsibility (Etzioni, 1996). This is an impelling reason which could explain why it is necessary to involve collectives in environmental issues since collective responsibility is closely bound to an acceptance of norms and values. Parsons argued that an acceptance of norms not only reflects the moral maturity of society, but that values underpin shared norms which in turn influence social actions (Parsons, 1937). He also stated that society is a moral entity characterised by common values and beliefs. Moral order therefore rests on a core of values that are largely shared by society and are embedded in social structures (Etzioni, 1996). Shared values are considered to be those values to which citizens are committed to upholding. A general acceptance that normative rules influence social behaviour may explain why collectives undertake certain actions. In other words, the behavioural explanation of human subjects lies in understanding the nature of norms that are being followed. For example, a prescriptive norm, as an obligation to engage in taking collective responsibility, enables individuals to forgo their self-interests and to act in the interests of the collective (Coleman, 1994).

Societies often have strong moral voices that help to maintain social order in which values are accepted voluntarily rather than being forced to do so (Etzioni, 1996). He suggests that a 'moral voice' encourages individuals and groups to reflect shared values and to avoid behaviour that leads to unproductive conflict. However, as has been reiterated several times in the discussion thus far, communication and interaction are necessary to facilitate a shared understanding

of the prevailing norms and values. Agyeman and Angus (2003) also suggest that the propensity for social action is based less on knowledge and understanding of issues, but rather on the strength of general concern and a sense of morals.

2.5.1.4 Connectedness, Networks and Groups

Well-developed social capital is characterised by multiple memberships of organisations and multiple links between different groups. In other words, connections between and within a group are just as important as the connections between the group and other organisations and/or institutions. These different connections or linkages enable different kinds of actors to be brought together as social capital (Rydin & Holman, 2004, p.122). According to Pretty (2002, p.71) connectedness can be recognised in the following ways:

- (a) local connections – strong connections between individuals and within local groups and communities;
- (b) local-local connections – horizontal connections between groups within communities or between communities;
- (c) local-external connections – connections between local groups and external agencies, organisations and institutions, being one one-way (usually top down) or two-way;
- (d) external-external connections – connections between external agencies, that might lead to integrated approaches and collaborative partnerships;
- (e) external connections – strong connections between individuals who are connected to external agencies.

The concept of connectedness provides further insights to suggest why it is necessary to involve community in environmental issues and concerns. Connections and networks in collectives are likely to be substantially greater than those available to individuals acting alone. This results in increased opportunities

to improve understanding and management of complex issues and problems. However, it should also be noted that 'cosy', in-house relationships can create exclusion, discrimination, exploitation and competition among individuals or groups.

2.5.1.5 A Critical Perspective of Social Capital

Recent studies have identified at least three negative consequences of social capital. Firstly, strong social bonds within a group can exclude others from accessing a social network or group. Secondly, excessive constraints can be placed on group members who might be required to conform to the demands of the group leading to a diminution of moral obligation. Thirdly, Portes (1998) identifies the 'downward levelling' of norms which occurs in cases where there is strong group solidarity, for example, as a result of adversity and opposition to mainstream society. A repressive ideology could be imposed on individuals and make demands that he/she act in the interests of something or someone other than themselves. By the same token, individual or even collective self-sufficiency can destroy social capital (Coleman, 1994).

Social capital, like any other form of capital, depreciates over time if it is not renewed. Social relationships die out if they are not maintained. In addition, expectations and obligations whither over time (Coleman, 1994). A lack of civic commitment, of shared memories or future hopes, and the rise of individualism, power and money are all elements that could lead to a decline of social capital (Selman, 2001).

2.6 Conceptual Framework: a Synthesis of Theory

The literature review has identified and discussed a large body of theory with many varied and discursive themes relevant to the study question. What follows

is a synthesis of theory through the construction of a working, conceptual framework to provide a perspective from which to develop an empirical framework later in this study.

The construction of the framework begins with a consideration of the socio-political context shown by the outer boundary of the diagram (Figure 8). The bounded area reflects a history of socio-political processes over time and in a specific geographic space. Time is present in all processes. Lloyd (1998, cited in Sztompka, 1991, p.106) claims that 'human agency and social change relate dialectically to social structure over time'. As such, events at a certain time have potential to shape agency at a later time. Any existing state of society or community is only a phase in a historical sequence that is a product of past events and a precondition for future events (Sztompka, 1991). While it has not been possible in this study to identify a coherent sequence of events that cause a collective to function in a particular way, it is recognised that collective social actions result from an accumulation and evolution of events and history, and that both history and events prompt new social learning.

The social milieu that characterises the settlement at Betty's Bay allowed a relatively small group of Whites to benefit from the opportunity of acquiring property along the southern Cape coastline. Any definitive explanation of the social context at Betty's Bay is problematic largely because this context operates as a dynamic system that can never be perceived as a whole, but rather as a multitude of systems operating within a geographic space in which there is constant change induced by internal and external agencies and structures. In this study, the interplay of a dynamic socio-political context juxtaposed with theory of how and why collective actions contribute to the environment, presents a constant tension and critical challenge in the analysis of the empirical evidence. Although these perspectives are presented at the beginning of the framework to

explain why interest groups contribute to sustainability, in reality the process of achieving sustainability is unlikely to be linear or conclusive.

The first element of theoretical framework representing a substantial portion of the theory that informs this study is the use of theory to explain why individuals are expected to operate as a collective. Four theoretical perspectives, identified earlier in this chapter, explain why collectives might desire to achieve certain shared ends. To reiterate, these perspectives:

- (a) individuals can be expected to contribute to some common good rather than to act purely out of self-interest;
- (b) individuals can co-operate to perform social actions if the activity is meaningful or significant;
- (c) social actions can be informed by socially constructed knowledge; and
- (d) there is a tendency for collective action to reflect the norms and values of society.

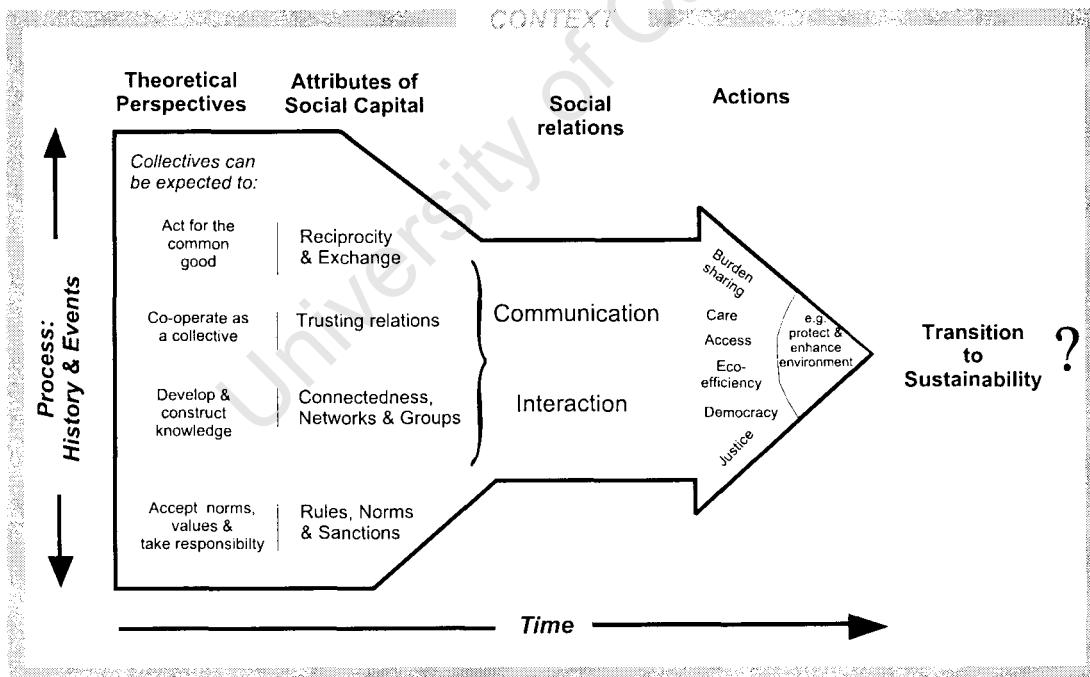


FIGURE 8: A conceptual framework.

The next element of the framework identifies the attributes of social capital. These attributes are closely linked to the fore-mentioned theoretical perspectives:

- (a) individuals are willing to work as a collective because they trust each other;
- (b) shared goals and a desire to contribute to the common good can be influenced by appeals to reciprocity;
- (c) knowledge is socially constructed through connections and networks which are available as internal and external associations;
- (d) norms, values and the desire to take responsibility rests on a core set of values that are embedded in historical social processes and are shared by members of a group, organisation or society (Etzioni, 1996).

The next category of elements identifies the mechanism underpinning the development and/or the deterioration of social relations. In this study, social organisations are identified as those units of association in which human relations are facilitated by social processes that are both internal and external to organisations. Successful human interaction results in co-operative relations which, in turn, are reliant on dialogue, mutual respect and collaboration (Wilson, 1997).

The fourth category in the framework identifies a series of processes and activities that are deemed necessary to contribute to a transition to sustainability.

There is no way of knowing when or if a society will reach sustainability or what the society will look like when it has achieved such a state, but to reiterate, sustainability is a 'constant process of transformation of society and an economy' in which present generations act as 'trustees for future generations to maintain and nurture life and habitability' (O'Riordan & Stoll-Kleemann, 2002, p.116). The challenge in this study therefore, is not only to identify characteristics and

attributes of social processes that support the development of collective action and to compare with theory, but to critically evaluate the kind of contributions that selected interest groups make towards sustainable development over a reasonably long period of time.

2.7 Conclusion

The conceptual framework represents the integration of a large body of social theory that has been selected and discussed in this Chapter. It attempts to provide a coherent, but tentative schematic of linkages between social theory and sustainable development discourse. At this stage, no attempt has been made to justify or compare this conceptual framework with the transformation model. This process will only be addressed when the empirical data are used as evidence to critique and develop Bhaskar's transformation model in the final analysis (Chapter 8).

This Chapter has contributed to a theoretical understanding of the research question by identifying what can be expected of collectives when they involve themselves in real issues at a local scale; how they acquire the means to deal with matters of common interest and concern by drawing on social capital; and the importance of social interaction and communication to formulate rules, sanctions, norms and values in order to reach shared agreements. Finally, Bhaskar's TMSA model suggests that the society-agency dialectic is achieved when social and material possibilities are accessed through the membership of a real community in which the self-actualisation of individuals and the cultural identity of collectives are products of the mediations of socialisation, and of social reproduction and transformation.

The purpose of the foregoing analysis of social theory has sought to identify the fundamental attributes and nature of collective involvement, and to position

collective involvement in the interplay of agency and structure within the discourse of sustainable development.

University of Cape Town

Chapter 3

Research Design and Method

The ultimate aim of social scientists is the establishment of general laws covering empirical events...the demand for objectivity...is a fundamental norm in the scientific community.

Nachmias and Nachmias, 1976, p.13

Evaluation studies tend to focus most often on establishing how policies or programmes perform against yardsticks or criteria. Such studies are usually undertaken to improve programmes or policies through a systematic assessment of processes and outcomes (Patton, 1986; Weiss, 1998). Evaluations of public participation typically use criteria or indicators to establish the quality of performance and to compare outcomes. Such studies have achieved mixed results either because the evaluation is limited to the use of one or two criteria, or the studies are overly ambitious in the use of multiple criteria. Conley and Mooté (2003) do not advocate the use of criteria as a checklist for evaluating public processes, but stress the importance of clarifying methods appropriate to the projects, programmes or decision-making processes. The problem that confronts researchers in evaluation studies is that there are no agreed goals from which to measure public involvement. Conley and Mooté (2003) suggest that the ultimate measure of success of public involvement in the environment is to assess whether the environmental conditions have improved or not. However, these authors acknowledge that very few studies have been able to achieve convincing results based on environmental outcomes alone largely because data informing such outcomes usually spans only a short period of time.

This short discussion highlights the difficulties confronting the study design. It is clear that the use of indicators and criteria are unlikely to yield adequate answers to address the study question. It is for this reason that the study design has

focused attention on evaluating empirical data against a body of theory. In addition, each initiative is examined and presented as a case study so as to refine the collection, analysis and interpretation of the evidence.

3.1 Case Studies

Yin (1984) defines case study research as an empirical inquiry aimed at investigating contemporary phenomena. This approach is typically used when the boundaries between a phenomenon and the context are not clearly evident, but multiple sources of evidence are available. To be effective, case study research requires a diversity of evidence, a clearly conceived research question or questions, and a robust research design (Yin, 1984). Case studies typically draw on a wide range of multi-faceted data sources to explore phenomena in sufficient depth in a specific context (Punch, 1998). Frequently, case studies involve the use of different data sources which are matched to other phenomena in order to improve the potential for verification and reliability (Yin, 1984). Sources of evidence that inform case studies include primary and secondary documentation, archival records, interviews, direct observations, participant observation and physical artefacts (Yin, 1984). Sources such as these are used to identify central facts and issues in an effort to corroborate findings through a convergence of evidence capable of strengthening the results and conclusions. In general, the use of case studies in social science research seeks to provide an in-depth, holistic description and explanation of social phenomena using qualitative data (Yin, 1984; Stake, 1995; Punch, 1998).

Case study research is not without its criticism. Soy (1996) claims that case studies have a limited basis for making scientific generalisations because researchers tend to use small sample populations. Researchers tend to oversimplify or exaggerate a situation leading to distortion or erroneous conclusions (Stake, 1995). Yin (1984) counters these suggestions by stating that

generalisations are a legitimate outcome of case study research provided there is sufficient understanding of how single or multiple cases are used to generalise about a theory or theories.

Despite these criticisms, a case study approach in social science research can be justified when a number of conditions are met. Firstly, the empirical evidence must be discrete, qualitative and reasonably extensive. In addition, research must occur in a geographically bounded area in which the socio-economic characteristics of participants are known over a reasonable period of time (Punch, 1998). Secondly, the research question should have a solid theoretical basis so that information from cases can be correctly identified and extracted (Yin, 1984). Thirdly, multiple sources of data are used in an effort to establish and confirm evidence from a range of sources (Yin, 1984). Finally, validity and reliability is established by posing a common set of theoretical propositions against each case study and weighed against these propositions (Stake, 1995).

3.2 Research Design

The research design is described as a logical sequence of activities that connects empirical data to the research question for the purpose of guiding the process of collecting, analysing and interpreting information (Nachmias & Nachmias, 1976). In this study the design is guided by five considerations:

- (a) the study question;
- (b) theoretical perspectives;
- (c) the unit of analysis;
- (d) the connections between evidence and theory; and
- (e) interpretation and analysis.

Each of these considerations is discussed in the sub-sections that follow, but it is first necessary to clarify the contextual realities that inform the research strategy

used in this study. The study has no control over the behaviour either of individuals or groups involved in the selected environmental initiatives. It is therefore impossible to implement a research strategy that uses an experimental research design. Events and the behaviour of individuals and groups involved in the initiatives have all been extracted from documentary sources. The evidence has been gathered from records of meetings, decisions, events and general correspondence. This study is a 'historical case study' which seeks to reveal social phenomena over time, rather than through contemporary, short-term revelations gathered from behavioural observations (Yin, 1984). The case studies are also explanatory since empirical data are used to explain how interest groups have contributed to the environment and to sustainability.

3.2.1 The Study Question

The study question seeks to explain why it is necessary to involve interest groups in the environment and how such groups could contribute to sustainable development, and equally why they may not have contributed. The research question requires an analysis of social phenomena and processes associated with each environmental initiative and between each initiative. The study then evaluates the findings against theory. The empirical analysis addresses four primary objectives. These are:

- (a) to analyse the structural features and characteristics of each initiative by examining why and how individuals operated as a collective; how social capital supports various actions; and how the selected environmental initiatives were sustained over time;
- (b) to compare the evidence of each case study across multiple cases using constant criteria to ensure a systematic analysis;
- (c) to identify and explain factors associated with the successes and limitations of each initiative;

- (d) to interpret how or if the environmental initiatives contributed to sustainable development.

3.2.2 Unit of Analysis

The primary unit of analysis are the community-based interest groups operating at Betty's Bay. The study seeks to evaluate how initiatives have contributed to the environment and to sustainability as a result of the collective involvement of interest groups. The primary evidence reveals the kinds of activities in which interest groups were involved, but does not attempt to gather information from individuals or groups who were not involved in the initiatives.

The initial selection of the three environmental initiatives was based on knowledge that each of the projects received sustained support for a reasonably long period of time. The following account describes the temporal aspects of each initiative:

- (a) The Control of Alien Vegetation initiative began formally with the first volunteers meeting in February 1963. Thereafter, volunteers met on the first Sunday of every month;
- (b) The Wild Flower Society organised its first flower show in 1973 and presented these shows biennially until 1983. In 1984 the Society was affiliated to the National Botanic Society and changed its name to the Betty's Bay Botanical Society, and to the Kogelberg Botanical Society in 1992; and
- (c) The Sewage and Water Initiative held its first meeting in March 2000. The committee subsequently met approximately four times each year and continue to monitor water quality each year over a six week period when the resident population is at a peak.

As mentioned in Chapter 1, the first two initiatives were established during the Apartheid period in South Africa, while the third initiative was established in a post-Apartheid period.

3.2.3 Evidence and Theory

The evidence of community involvement in each of the environmental initiatives is organised according to theoretical perspectives and concepts discussed earlier in Chapter 2 and synthesised in a conceptual framework (See Figure 8). A robust structure was applied to the primary sources of information so as to improve the extraction of information and to facilitate comparisons across each of the case study. Table 3 summarises each theoretical perspective in the form of questions and sub-questions so as to refine the extraction of information and improve the linkages between social theory and empirical evidence.

TABLE 3: Theoretical structure guiding information extraction

Primary questions relevant to theory	Sub-questions to refine the extraction of information
What can collectives achieve?	Does the initiative indicate collective action is directed towards the common good?
	Is there evidence of group co-operation?
	Is knowledge gathered and constructed to inform the initiative?
	Is there evidence of an expression of values and norms, and of taking responsibility?
Is there evidence of social capital?	Is there evidence of reciprocity?
	Is there evidence of trust?
	Is there evidence of different levels of connectedness and networks among volunteers?
	Is there evidence of norms, rules and sanctions among volunteers?
What role do social organisations play in facilitating and supporting initiatives?	Is there evidence of communication and interaction?
Is there evidence that social action contributes to sustainability?	What kinds of social action definably contribute to sustainability?
What evidence indicates the potential of the initiative to contribute to sustainability?	What kinds of environmental outcomes are evident?

3.2.4 Interpretation and Analysis

Each environmental initiative is presented as a separate case study. The presentation of each 'case' conforms to five broad categories reflected in Table 3, namely:

- (a) collective behaviour;
- (b) social capital;
- (c) institutional structures and organisations;
- (d) social actions; and
- (e) outcomes.

These categories provide a structure and a set of guiding questions for analysing individual cases and to use as a tool to establish matching patterns between cases. The categories presented by the framework are delineated according to theory as opposed to explicit criteria or standards typically used in project specific evaluation studies. In this study, the method of evaluation is achieved by comparative analysis across cases and aims to confirm, refute or modify theory. A structured analysis is used in an attempt to support logical interpretation, description and argument.

3.3 Research Method

3.3.1 Primary Sources of Information

Historical documents form the primary evidence of this study. A variety of documents were located at a number of sites in and around Betty's Bay. Written documents form the bulk of the evidence used in this study. The most extensive source of primary evidence, covering the period from the late 1950s to 2001, was found abandoned in a municipal storeroom at Kleinmond. This evidence included letters of correspondence between municipal officials and residents, minutes of

municipal and community-based interest groups meetings, and memoranda written by municipal officials. The extent of the material yielded approximately 45 files each containing between 60 to 200 documents relevant to one or more of the selected environmental initiatives. It excludes information on the Water and Sewage Initiative since this initiative was only established in 2000. In this initiative information was obtained from members serving on the committee and from the Ratepayers' Association.

Documents were also gathered from the private collections of individuals who were either current or past serving members of one or more of the selected initiatives. These documents included correspondence between serving members, between members and local authority officials, councillors or institutions, minutes of meetings, and general reports. A third source of evidence was found in the state archives at Cape Town which yielded information on the earliest years in the development of Betty's Bay as a township.

Apart from evidence available in state archives, none of the documents mentioned in the foregoing are catalogued or housed in a location suitable for future reference. This situation presents a potential challenge to establishing reliability and validity. To address the problem, all sources that were not located in an archive have been electronically scanned from the originals and appear as appendices on a compact disc attached to the cover of this thesis. The contents page on the disc provides 'hot links' to corresponding appendices.

3.3.2 Interviews

Non-structured interviews were held with current and past role players involved in the selected initiatives, as well as with current councillors and municipal officials. These interviews aimed to establish the extent of co-operation and communication between local organisations, and between the Local Authority

and local organisations. Role players were also asked to describe how the initiatives were established, the perceived successes, and the support they felt was forthcoming to sustain the initiative. Interviewees were identified either because their names were encountered repeatedly in the written primary sources or were recommended to the researcher by other role players. The researcher contacted interviewees to seek permission for an interview and, once agreement was established, an interview was held. The interviews took place between December 2000 and February 2001. A total of thirteen interviews were conducted each lasted between 15 and 45 minutes duration. Most interviews were recorded on cassette tape by agreement with the interviewee. Recorded interviews were transcribed verbatim, while notes were taken at four of the interviews. The transcripts are presented in Appendix ????. In general, these interviews provide only limited evidence and do not form a substantial portion of the total evidence gathered in this study.

3.3.3 Analysis

A comparative analysis aims to identify similarities and differences within cases and across cases. The comparative analysis is achieved by identifying matching patterns in which several pieces of information from the same case are linked to the conceptual framework. Successive cases replicate the procedure by either confirming or refuting the conceptual framework. A firm position is reached either by confirming or refuting the evidence when all three case studies confirm the same logical deductions. The logic of pattern matching lies in the comparison of an empirically based pattern in relation to a predicted one. If the patterns coincide, the results strengthen internal validity (Yin, 1984).

3.4 Limitations

A number of constraints are recognised in undertaking this study. Firstly, the conceptual framework provides a structure to delimit data extraction and analysis. The framework synthesises a large body of social theory selected by the researcher. It cannot represent all the theoretical arguments. Although every effort has been made to consult a wide range of literature, the theoretical account is limited while the selection of theory could raise a potential bias in seeking to answer the study question.

Extensive efforts were made to gather historical evidence of each initiative, but it was impossible to ensure that all relevant documentation was collected. Given the lack of curatorship of primary sources, it is possible that some documents may have been lost or removed because of their sensitive or confidential nature. There is no way of counteracting this problem.

Chapter 4

Social and Institutional Context

...environmental problems and solutions are identified as having their roots in local activities, and that participation and co-operation of local authorities will be a determining factor in dealing with these problems'

Agenda 21, 1992, s.28(1)

A discussion of the social and institutional context provides a detailed understanding of the social interaction and structural influences that impinge on the capacity of interest groups to operate at Betty's Bay. Attention is focused on the quality and nature of the relationships between the Local Authority and the capabilities of interest groups, including the Ratepayers' Association, to establish mutually agreeable goals over time.

4.1 Introduction

On 14 May 1955, Betty's Bay was proclaimed a 'Local Area'⁴⁶ by the Administrator of the Province of the Cape of Good Hope. A local board was given the responsibility of ensuring basic services in accordance with the Divisional Council Ordinance No. 11 of 1921. The jurisdiction of the Local Board covered the entire Hangklip Estate (as outlined earlier in Figure 5). The establishment of the Board meant that Hangklip Beach Estates were no longer obliged to provide services to the township which now became the responsibility of the Local Board of the Divisional Council of Caledon. One of the initial tasks of the Local Board was to establish a water reticulation system in agreement with the Caledon

⁴⁶ 'Local Areas', as defined in the Cape Divisional Ordinance (Section 289 of 1921), were administered by a committee of the Divisional Council. The Committee had powers to deal with street and storm water drains, maintenance, rubbish removals, lighting and other matters affecting ratepayers in the area.

Divisional Council. This agreement included arrangements for the supply of domestic pipelines, sewage disposal and fire hydrants.

In 1962 the status of the Local Board changed to a Village Management Board (VMB), but had the same administrative powers as the previous Board (Divisional Council Ordinance No. 10 of 1921). The administrative boundaries remained the same. In 1962 the VMB consisted of three officials who formed the Secretariat. In addition, a representative from the Betty's Bay Ratepayers' Association was elected to serve on the Board for a period of one year. The Ratepayers' Association was active in the affairs and management of Betty's Bay for the duration of the VMB. A substantial volume of primary sources of evidence informing this study was generated during this period of administration. Written documents dealt with matters such as the collection of seaweed from the beaches, fire-fighting equipment, alien vegetation, camping arrangements, roads, rubbish collection and control of development. The Ratepayers' Association established a working arrangement with the Secretariat of the Local Authority. This will become evident later in this Chapter.

On 1 January 1975, the VMB became the Municipality of Betty's Bay following the promulgation of Municipal Ordinance No. 20 of 1974 (27 November 1974). The Ordinance made provision within the structure of the municipality (s.5(2)) to include the election of two members of the public to act as Councillors in the interests of ratepayers:

The members of the every council or board of a prior authority and the mayor and deputy mayor or chairman and deputy chairman thereof, as the case may be, shall, subject to the provisions of this ordinance, continue in office and, in the case of a prior authority which was a village management board or a local board, the members, chairman, deputy chairman and secretary thereof shall be deemed to be the councillors, mayor, deputy mayor and town clerk respectively of the municipality deemed to have been established under the provisions of subsection (1)(a) in the place of such prior authority.

Cape of Good Hope, No. 414/1974, s.2

The Administrator of the Province of the Cape of Good Hope was given wide ranging powers to determine the municipal boundaries, to name municipal areas and to abolish the municipal structure for whatever reason (Cape of Good Hope Ordinance, No 414/1974, No. 414 Ch. II). The Ordinance specifies the powers and duties of a municipality including the provision of sewerage, drainage, water, gas and electricity (Chapter XI). Resource management and conservation were not included in the requirements of the Ordinance.

In 1995 the Betty's Bay Municipality was incorporated into the greater Hangklip-Kleinmond Municipality. An enlarged administrative area meant that the Betty's Bay Ratepayers' Association no longer had the undivided attention of municipal officials and its councillors as was often the case in the past especially under the VMB (Berrisford, 2001, pers. comm.). In 2001 the administrative boundaries were enlarged. The Overstrand Municipality was formed with its administrative centre at Hermanus (situated approximately 40 kilometres east of Betty's Bay). Betty's Bay was now one of the smallest settlements under the jurisdiction of the newly formed municipality. Figure 6 shows the changing administrative boundaries between 1955 and 2001. A summary of these developments is presented in Table 4. The enlarged municipal area together with a shift in political power and priorities after 1994 meant that the Betty's Bay Ratepayers' Association lost further access to executive members of the Local Authority. While a satellite municipal office was retained at Kleinmond, the seat of local government and power had moved to Hermanus (Nunn, 2001, pers. comm.).

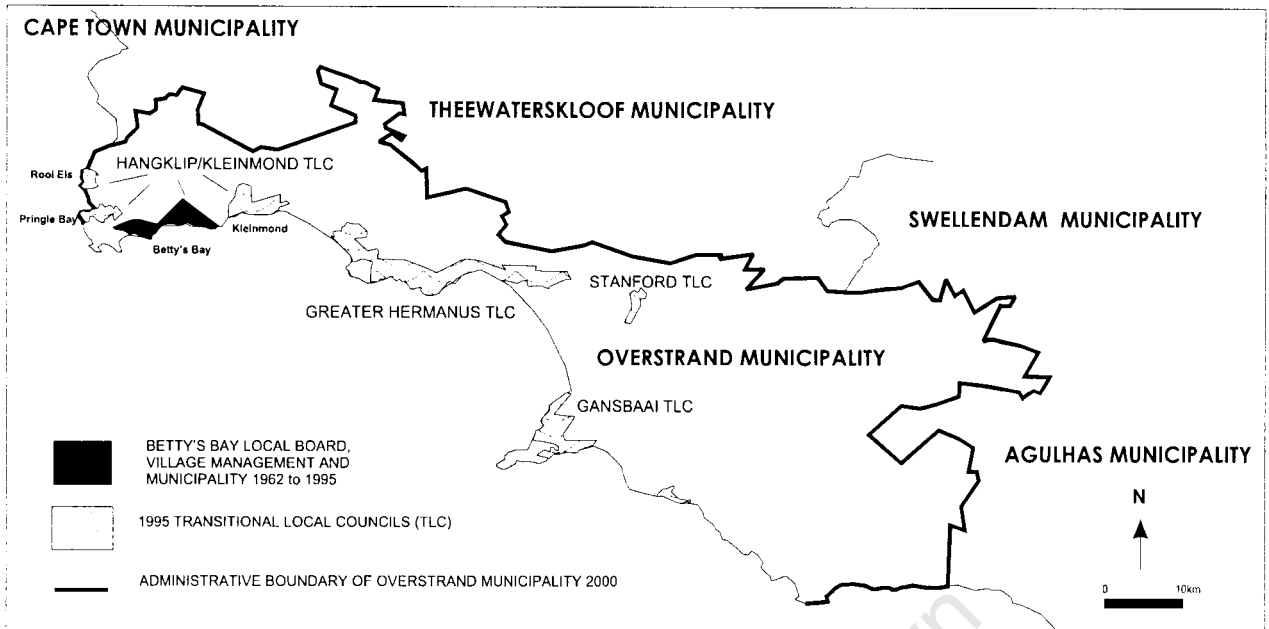


FIGURE 9: Changing administrative boundaries: 1955 - 2001 (Adapted from Municipal Demarcation Board, 2001).

Table 4: Changes in the Local Authority and administrative area

Period	Local Authority	Municipal boundary
1955 – 1962	Local Board	Betty's Bay
1962 - 1975	Village Management Board	Betty's Bay
1975 - 1995	Betty's Bay Municipality	Betty's Bay
1995 - 2000	Hangklip-Kleinmond Municipality	Coastal area from Rooi Els to Kleinmond (4 townships)
2000 to present	Overstrand Municipality	Enlarged coastal and immediate hinterland area from Rooi Els to 25 km east of Gansbaai

4.2 Organisations and Institutional Authorities

The Ratepayers' Association and the Local Authority played a key role in facilitating communication, interaction and relationships between members of interest groups, municipal officials and elected councillors. This section briefly

discusses the relationships between organisations and institutional structures between 1960 and 2001.

4.2.1 The Ratepayers' Association

The Ratepayers' Association provided an important organisation for establishing and facilitating interaction and communication between ratepayers. It became a forum for expression in matters relating to the environment and social development at Betty's Bay.

The first record of the Betty's Bay and Districts Ratepayers' Association (BBDRA), as it was then known, is found in the minutes of the executive committee (2 April 1960)⁴⁷. Early correspondence between the BBDRA and the VMB suggests that an amicable relationship existed between the Local Authority and Ratepayers. However, the BBDRA was forthright in making its 'voice' heard. For example, the Chairperson of BBDRA, Heesom, outlined the intentions and role of the BBDRA in a letter addressed to the VMB (17 March 1964)⁴⁸:

It is the Committee's intended wish that it may serve the community by drawing the Board's attention from time to time to matters which may have been overlooked, affecting safety, health or threat to the amenities⁴⁹ of the district.

The BBDRA queried the Board's management of certain issues at various times. For example, after a meeting of the Executive Committee of the Ratepayers'

⁴⁷ Appendix 1: The meeting discussed nine issues: closure of the post office; opposition to tarring roads at Betty's Bay; concern about costs of incorporating Pringle Bay into Betty's Bay; request for a handman to look after the properties of the Board; objections to septic tank lavatories built at David's Kraal; desire to have electrical connections established at Betty's Bay; formulating an application for foreshore rights; hacking parties to remove alien vegetation from golf course; rubbish removal to Kleinmond; and discussion on increased rates imposed by Caledon Division Council (2 April 1960).

⁴⁸ Appendix 2: Letter written by the Chairperson, Heesom, to the VMB (17 March 1964).

⁴⁹ In the minutes of the BBDRA Executive Committee, the 'environment' is discussed under the category of 'Amenities'.

Association, a letter was sent to the VMB with the following requests (17 March 1962)⁵⁰:

Minutes of the VMB were read... Arising therefrom it was decided to request the Board for further information on the following items:

- (a) *Fire Fighting equipment: What arrangements are being made in the event of fire – how the hoses will be transported; will any alarm be given and what will be the position if Mr West is away from Betty's Bay, i.e. who will have access to the fire fighting equipment?*
- (b) *Traffic signs: Has the Board pursued this matter with Province and what reaction have they had?*
- (e) *Dawid's Kraal: Numerous complaints have been received about the disgusting and unsanitary state in which Dawid's Kraal is left by the campers. Under whose control does Dawid's Kraal fall; who is responsible for cleaning up and stopping people from camping, chopping up the tables and benches and sawing down the trees; does the Health Inspector inspect this area when he visits Betty's Bay?*

In the 1960s, the Chairpersons of the BBDRA, namely Mr Bevan, who held office from 1960 to 1963, and Mr Heesom, from 1963 to 1968, were personally responsible for writing a substantial volume of documents that reflect the interests and concerns of the Ratepayers at the time. One of the first recorded letters written by Heesom, on behalf of the Association, raised the issue of Perlemoen (*Haliotis midae*) extraction from the nearshore at Betty's Bay. The letter requested the Secretaries of the VMB to provide advice on Perlemoen fishing regulations and to inquire how the Board proposed to enforce these regulations. The letter claimed that Perlemoen fishing boats were 'invading' Betty's Bay (10 March 1965)⁵¹. On another occasion, the Chairperson of the BBDRA, Heesom, wrote to the VMB requesting them to purchase a machine for cutting alien vegetation. The Board responded with a terse reply to the Chairperson of the BBDRA (17 June 1965)⁵²:

⁵⁰ Appendix 3: Minutes of the Executive Committee meeting of the BBDRA (17 March 1962).

⁵¹ Appendix 4: Letter written by the Chairperson, BBDRA, Heesom to the Secretaries of VMB (10 March 1965).

⁵² Appendix 5: Letter written by the Secretaries of VMB to the Chairperson of BBDRA (17 June 1965).

The Board does not feel justified in purchasing this machine for the limited application it would have for the Board's work.

The BBDRA did not agree with this decision and pursued the matter further. Dr J. Rourke, a renowned botanist, wrote to the VMB requesting them to support the Betty's Bay Hack initiative and to consider giving the group a grant to purchase a machine. He suggested that the removal of large stands of Rooikrans (*Acacia Cyclops*) would reduce the risk of a fire hazard and help the Board meet its own objectives (1 July 1965)⁵³. Soon thereafter the VMB agreed to purchase a Stihl power saw (9 August 1965).

While support from the Local Authority was not always forthcoming or immediate during the 1960s, the spirit of volunteerism, persistence and resilience of members of the Ratepayers' Association is demonstrated in numerous accounts presented in this study. For example, the Chairperson of the BBDRA, Heesom, wrote to the VMB Secretaries (25 January 1966)⁵⁴ outlining a plan to plant indigenous shrubs in selected open spaces at Betty's Bay. The letter informs the VMB that the Ratepayers had formed an *ad hoc* committee of volunteers who wanted to plant indigenous vegetation on vacant, public areas under the jurisdiction of the VMB. Volunteers were prepared to contribute their personal finances to the project. The letter appealed to the VMB for assistance. The letter also makes reference to the connection between the BBDRA and the National Botanic Society thereby indicating that the proposed activity would be a joint undertaking between these two bodies. The letter, entitled the 'Beautification of Betty's Bay', identifies a co-operative relationship between residents and the National Botanic Society:

You will no doubt be aware of the generous offer of the Authorities at Kirstenbosch to provide plants and seedlings to enhance still further the beauty

⁵³ Appendix 6: Letter written by Dr J. Rourke addressed to the VMB (1 July 1965).

⁵⁴ Appendix 7: Letter written by the Chairperson of BBDRA, Heesom, addressed to the VMB (25 January 1966).

of Betty's Bay, as a mark of favour for the efforts which have been made to rid the district of alien vegetation. Certain local residents have also kindly offered to make available some rare and distinctive species.

The Association now seeks the Board's wholehearted approval and support of this very laudable project in the following ways –

- 1. Permission to plant various indigenous trees and shrubs on the sites referred to.*
- 2. Assistance (when required) from the Board's labour in clearing certain sites of undesirable vegetation. It would appear that few such sites are likely to be involved.*
- 3. The occasional use of the Board's transport to move compost or manure and other materials during the planting-out process.*
- 4. The provision, later, of a limited number of stopcocks – 10 to 12 – off the main water supply for the watering of the sites when the planting has been done.*

In reply, the Secretaries of the Board endorsed the project fully (28 January 1966)⁵⁵:

We have been asked by the Board to congratulate the authors of the project to not only arrange the growth of flowers and shrubs but also to beautify certain otherwise rather unsightly open spaces”.

The Board fully approves in principle and will be delighted to co-operate as requested.

Further evidence of co-operation between the Association and the VMB is demonstrated in a letter written by the Chairperson of BBDRA, Heesom, to the Secretaries of the VMB to inform them that picnickers were damaging a stand of Melkhout trees (*Sideroxylon inerme*), a protected species, growing at Dawid's Kraal. It was suggested that the Board should patrol the area over weekends and take the initiative to provide cut firewood either for free or at a nominal price (21 March 1966)⁵⁶:

⁵⁵ Appendix 8: Letter written by the Secretaries of the VMB addressed to Heesom, Chairperson of BBDRA (28 January 1966).

⁵⁶ Appendix 9: Letter written by the Chairperson of BBDRA, Heesom, addressed to the VMB (21 March 1966).

The Executive Committee of this Association is seriously concerned at the deterioration of the position at the picnic site at Dawid's Kraal. The Melkhout there has taken a great many years to grow to its present grandeur, but at the present rate of despoliation it may well all be gone in 5/10 years..."

The Board responded to the Association (24 March 1966) and agreed to stock the area with ample firewood so that picnickers would be less inclined to use the trees as firewood.

In the early 1960s, a number of projects undertaken by the Ratepayers demonstrated a close co-operation with the VMB. For example, a planting ceremony, mentioned earlier in correspondence dealing with the 'Beautification of Betty's Bay' (Appendix 7), provides evidence of a high level of organisation, leadership and connections with other institutions, including the VMB (24 May 1966)⁵⁷. This observation is endorsed in another example in a tree-planting project intended to celebrate Arbour Day at Betty's Bay. The BBDR invited the Prime Minister of South Africa, Dr H B Verwoerd, who was also a property owner at Betty's Bay, to officiate at the planting ceremony. The Chairperson of BBDR, Heesom, informed the wife of the Prime Minister, Mrs Verwoerd, of the tree planting ceremony and outlined the project. Other organisations involved in the exercise were also mentioned (1 July 1966)⁵⁸:

I cannot tell you how much your kind letter of June 6th was appreciated in Betty's Bay, and with what satisfaction it has been learned that your husband, Dr Verwoerd, has agreed to take the central part in the tree-planting ceremony on Saturday, September 24th, at 3pm. Full arrangements for this are, therefore, now going forward and details will be sent through in good time."

May I add that the planting out programme is a truly community effort involving the Village Management Board, the Ratepayers' Association, the National Botanic Gardens of South Africa and many private residents of Betty's Bay. The efforts of these bodies and private individuals have been co-ordinated through the Ratepayers' Association.

⁵⁷ Appendix 10: Letter written by Heesom to members of BBDR entitled 'Beautification of Betty's Bay' (24 May 1966).

⁵⁸ A copy of the document cannot be copied to an Appendix because of the poor quality of the original.

The planting ceremony had to be cancelled because the Prime Minister was assassinated on 6 September 1966⁵⁹ three days before the event. The BBDRA erected a plaque at the site where Dr Verwoerd would have planted a tree (9 September 1966)⁶⁰. The Ratepayers bore the cost of organising the event although this was later refunded by the VMB.

In the late 1960s, the BBDRA became increasingly concerned about the type of housing structures being erected at Betty's Bay. Timber frame houses were a particular source of concern. The issue of housing structures dominated the Ratepayers' Association agenda in subsequent years. In a strongly worded letter, the Chairperson, Heesom, wrote to the VMB proposing a process in which formal objections to proposed houses should be vetted by the VMB as well as the Association. It was also proposed that when disputes arose, the Administrator of the Cape should be called upon to mediate the conflict (17th September 1968)⁶¹:

The views of the Association have been made to the Board on a number of occasions and have not altered. We accept the fact that the Board has the interests of the District just as much at heart as has this Association, but we differ how these are best preserved. We do not doubt that certain types of industrialised houses can look attractive and we are not in a position to argue on the structural merits or demerits of the house it is proposed to build on Lot 216.

Nevertheless, we regard the whole principle as so important that we consider it essential that the Administrator should be asked to give a final ruling based on the submissions to the Board and the counter-submissions of this Association. In other words, this should be regarded as a 'test case'. Formal notice calling for objections would also have value in allowing those owners whose plots are adjacent to Lot 216 to put forward their own objections if they wished to do so. As things are, they are likely to be in ignorance of the position.

The BBDRA took up the matter of timber framed houses with the Administrator of the Cape of Good Hope, who in reply, stated that the issue should be settled

⁵⁹ During the political career of Dr Verwoerd, as Prime Minister, he committed the government to policies to ensure the separation of Blacks and Whites (Davenport, 1977).

⁶⁰ Appendix 11: Letter written by the Chairperson of BBDRA, Heesom, addressed to the VMB (9 September 1966).

⁶¹ Appendix 12: Letter written by the Chairperson of BBDRA, Heesom, to the VMB (17 September 1968).

between the property owners and the Village Management Board. The Administrator outlined the fact that power had been delegated to the Local Board to 'decide whether it will allow the erection in its area of timber buildings which comply with the standards prescribed by the Bureau of Standards in regard to materials and methods of construction' (19 November 1968)⁶².

Ratepayers' meetings afforded members an opportunity to raise concerns and aspirations. With respect to the environmental emphasis of this study, and by way of illustration, a ratepayer, Mr van t'Hoogerhuys, reported on the development of Betty's Bay and highlighted the need to address conservation issues. The report, presented verbally at a Ratepayers AGM, outlines a vision for a regional nature reserve and raises concerns about the sustainable utilisation of resources (22 December 1984)⁶³. Most of the report has been quoted verbatim below since it emphasises the values of a serving committee member and representative of the Ratepayers' Association at the time. Expressions of values and norms are rarely found in the primary evidence informing this study. In acknowledging the unique vegetation and beauty of Betty's Bay, the aim of van t'Hoogerhuys' report is to motivate for an environmental management committee to plan for the sustainable use of resources at Betty's Bay. The report also identifies a number of attributes that underpin the values of ratepayers as a collective: the love of Betty's Bay for its sheer beauty; a recognition of heritage; and a strong desire to conserve its resources:

We, the ratepayers of Betty's Bay come here for different reasons. It may be the mountains, the sea, the fynbos, the flowers, the birds or the animals, or a combination of these things. We all have something in common – we love Betty's Bay. As our Chairman of the Wild Flower Society in her Annual Report has so aptly quoted from Rudyard Kipling:

God gave all men all earth to love

⁶²Appendix 13: Letter written by Director of Local Government of the Cape of Good Hope to the Chairperson of the BBDRA (19 November 1968).

⁶³ Appendix 14: An address presented by van t'Hoogerhuys to the BBRA AGM (22 December 1984).

*But, since our hearts are small,
Ordained for each, one spot should prove
Beloved over all.*

I want to address a simple question. What will become of this spot in the future? First, a look at the past. In 1968 Betty's Bay had 2985 erven and 290 houses. Today, there are probably between 500 and 600 houses. This means that when fully developed, there will be at least 5 times as many houses in Betty's Bay as there are today.

The reason why I have put this proposal in this way follows an educational experience I have been privileged to enjoy over the past five years through the conservation motivation for the coastline between Rooi Els and the Bot River lagoon. As you know, this conservation motivation started in 1979 after the last major Betty's Bay Flower Show. The motivation has now reached an advanced stage. The Rooi Els / Kleinmond Advisory Committee established by the Minister for Constitutional Development and Planning has now reached consensus that there should be a conservation motivation for this whole ecological unit. This Rooi Els / Kleinmond Advisory Committee includes representatives of the State, through the Department of Environmental Affairs, and Constitutional Development and Planning, the Cape Provincial Council, Caledon Divisional Council, the Municipalities of Betty's Bay and Kleinmond, the two townships of Rooi Els and Pringle Bay, and most importantly of all, the private owners of the smallholdings outside the townships. The Committee also includes representatives from the Kleinmond Wild Flower Society and of course the Betty's Bay Wild Flower Society – and many of you will know that it was the Betty's Bay Wild Flower Society that initiated this conservation motivation at the end of 1979.

What has been accepted by this Committee is that there will be a total conservation concept from the Kogelberg Mountains in the north to the sea in the south, and from Rooi Els in the north west to the Bot River Lagoon in the east. The object of this conservation concept is to attempt to maintain a level of use of the resources of this area at a sustainable level. It is expected that this objective will be carried out by way of a national management committee. You may well ask, what are these resources? The answer is simply – we have here in this beautiful spot a fragile and unique vegetation – a national heritage unique not only to the Cape but to the world. We are privileged to be the custodians of this heritage.

Relations between the Association and the Local Authority were not always cordial, particularly during the late 1980s and 90s with respect to a variety of environmental concerns. In a report, presented at the Ratepayers' Association AGM in 1989, the role of the Association appears to have shifted to that of a 'watchdog' serving the Ratepayers' interests. The Chairperson's report at the

Annual General Meeting suggests that conflict had arisen between the Betty's Bay Council and members of the Association (30 December 1989)⁶⁴:

As far as relations between the Association and the Council during the year under review are concerned, we must report that this has been a year of some controversy. Controversial matters that have arisen during the year being the question of the removal of gravel from the lakes during the past summer and the question of leasing certain environmentally sensitive municipal land for industrial purposes. These matters have been dealt with in some detail in previous newsletters and we do not propose to rehash them, suffice it to say that your Committee is conscious of the fact that the function of the Ratepayers Association is to act as a watchdog on all matters that affect ratepayers and this must of necessity refer particularly to the local Council. Wherever possible the Ratepayers Association will give its support to the Council on any particular issue, but where we feel that the interests of Betty's Bay are being adversely affected by any proposed action, then the Committee will not shirk in opposing such actions in a constructive way. It should be borne in mind that it is not our function to be a slavish rubberstamp organisation. Despite the controversial issues referred to above, relations with Council have improved and a worthwhile social evening between Councillors and Members was held...

Relations between the Association and Municipal Council again deteriorated in 2000. There were accusations and counter-accusations between the Association and the Hangklip-Kleinmond Municipal Council, particularly in the period prior to local elections held in 2001. One of the key issues expressed by members of the Ratepayers' Association was that the Municipality was carrying out decisions which did not comply fully with the Betty's Bay Structure Plan guidelines⁶⁵. For example, the quality of building structures and the growing acceptance of vibracrete walls (manufactured pre-cast walls) were perceived to be deleterious to the environment and contrary to the sentiment and principles expressed in the Betty's Bay Structure Plan.

In summary, the Ratepayers' Association provided a forum for expression and a structure from which to direct matters of concerns. Relations between the

⁶⁴ Appendix 15: A report presented by the Chairperson of the Executive Committee of the BBRA, Mr J. M^cNaught-Davis, to the BBRA AGM (30 December 1989).

⁶⁵ Taylor, van Rensburg and van der Spuy (1998) Betty's Bay Local Structure Plan, Consultants' Report.

Ratepayers and the Local Authority were generally amicable particularly during the 1960s and 70s. During this period, the Ratepayers Association provided a support structure from which various environmental initiatives could be launched, such as the 'Beautification of Betty's Bay' and 'Tree Planting' projects. Evidence also identified the inter-connectedness of the Ratepayers' Association with external institutions such as the National Botanic Society. Relations between the Ratepayers and the Local Authority appear to have deteriorated at various times from the late 1980s. Despite these tensions, the environmental initiatives continued to receive voluntary support from the Ratepayers Association and members of the interest groups.

4.2.2 Local Authority

The evidence collected and presented in this section focuses on the changing structure of the Local Authority and on the interaction between the Local Authority and Ratepayers. The account is presented in chronological order to demonstrate changing perspectives over time.

4.2.2.1 The Village Management Board

One of the earliest documents drafted by the Village Management Board and published in Government Gazette No. 523 (14 June 1963), dealt with the regulation of activities under the Board's control. The principal aim was to control the launching of boats and driving of motor vehicles on beaches and sand dunes at Betty's Bay. These regulations also included the control of open fires; restrictions on camping in undesignated areas; and the control of wildlife and the picking of wild flowers. Of interest to this study are two regulations dealing with the reservation of Betty's Bay beaches for Whites and measures to control the

extraction of marine resources from the H. F. Verwoerd Coastal Reserve⁶⁶. Both regulations restrict general public access to these resources. The first was intended to preserve the interests of the White group by granting them exclusive access to the beaches. The second restricts access to marine resources. Only members of the White group were allowed to fish from the Betty's Bay beaches because access to the beaches were prohibited for Blacks:

Area reserved for presence of the White Group – Only persons of the White Group are allowed to enter or remain in the seashore areas, but there are certain exceptions to this – (a) nursemaids or other servants in charge of the children who are lawfully in the area; (b) Medical practitioners, nurses or other persons rendering first aid; (c) any person engaged in saving any other person from drowning; (d) the Board's employees in the discharge of their duties.

The H. F. Verwoerd Coastal Reserve – This reserve includes the area in a straight line between the concrete beacon B1 at Stony Point and B2 at Jock's Bay, and then all along the high water mark between these two beacons. Within this reserve fishing is permitted, but the removal of perlemoen, alikreukel, rock lobster, mussel, red bait and other marine organisms is prohibited. It should be noted that the removal of perlemoen is prohibited for a distance of 200 yards seaward from the high water mark from Cape Point to Cape Agulhas.

Government Gazette No. 532 14 June 1963, p.18⁶⁷

The issue of 'race' and the regulation of 'non-Whites' in the municipality received considerable attention during the administration of the Village Management Board from 1962 and successive councils. In a letter to the Provincial Secretary (2 February 1962)⁶⁸, the Secretaries of the Village Management Board indicated the Board's desire to preserve access rights of 'Whites' to the beaches at Betty's Bay. The Provincial Secretary wished to know how local authorities were controlling the beaches under their jurisdiction with respect to the Separate Amenities Act 49 of 1953:

⁶⁶ The H.F. Verwoerd Marine Reserve was the first reserve of its kind established in South Africa (See Figure 3). It was renamed the Betty's Bay Marine Reserve in 1996.

⁶⁷ Betty's Bay Village Management Board, Sea Shore Regulations, Government Gazette No. 532 (14 June 1963, p.18).

We refer to your letter of the 23rd ultimo and have to inform you that after due consideration the Board wishes to comment as follows:

*Steenbrasriviermond – Whites - agreed
Koeelbaai – Coloureds - agreed
Rooi Els – Whites – agreed
Pringle Bay – Whites – agreed
Betty's Bay – Whites –agreed*

However the Board is desirous of strongly recommending the following:

- 1. Pringle Bay to the Hangklip Lighthouse to be reserved for Coloureds*
- 2. Hangklip Lighthouse to De Wets Bay to be reserved for Whites*

It is further urged that the area from Betty's Bay to the Palmiet River mouth be reserved for Whites in view of the fact that there is considerable development by the Whites in this area and also in view of the fact that provision has been made for the Coloureds in the Pringle Bay area. It should also be borne in mind that the Betty's Bay area is completely White.

The preservation of Betty's Bay as a White area under the Group Areas Act shaped the demography of the township as indicated earlier by census data (See Table 1). The Hangklip Beach Estate Company had secured conditions to the title deeds to ensure that Betty's Bay remained exclusively for 'Whites' well before the Apartheid government promulgated the Group Areas Act of 1950. It was convenient, however, to ensure that some Black labour remained available to the VMB. For example, labour was required for the collection of seaweed on the beaches by contractors. The Department of Lands was responsible for issuing permits to seaweed collectors and gave instructions to the Secretaries of the Village Management Board (29 June 1960)⁶⁹ to control 'non-European' labourers on the beaches:

With reference to the abovementioned subject I wish to inform you that the Department contemplates issuing to the undermentioned persons with permits

⁶⁸ Appendix 16: Letter written by the Secretaries of the VMB to the Provincial Secretary, Administration of the Cape of Good Hope (2 February 1962).

⁶⁹ Appendix 17: Letter written by the Regional Representative, Department of Lands, to the Secretaries of the VMB (29 June 1960).

for the collection of seaweed from the seashore adjoining the area of jurisdiction of, inter alia, Betty's Bay Local Board.

*The permits will be made subject inter alia to conditions which will stipulate that:-
(a) All non-European employees of the permit holders shall be under the direct control of Europeans at all times and they shall wear armbands denoting that they are collectors.*

In the 1970s the Secretaries of the VMB queried the control of non-Europeans at Betty's Bay and wrote to the Director of Local Government accordingly (19 November 1971). The VMB wanted to confirm the exact location of a section of the beach that had been set aside for *bona fida* domestic servants of White residents. In reply, the Director of Provincial Administration of Cape of Good Hope (30 November 1971)⁷⁰ confirmed the location and indicated that a tidal pool should be provided. The pool was never built.

According to my records it was a recommendation of the Minister of Planning during October, 1966, that the whole of the coastal area falling within the jurisdiction of your Board with the exception of a stretch of the coast 50 yards long to the immediate west of "Walvisbeenkop" which shall be reserved for bona fida local Coloured servants and that a tidal swim pool be provided thereat.

During the administration of the VMB considerable attention was given to implementing the Sea Shore Regulations. Most attention was given to the harvesting of Kelp (*Ecklonia maxima*) and Perlemoen. The Secretaries of the VMB outlined their concerns about the removal of Perlemoen in a letter to Director of Sea Fisheries (19 April 1962)⁷¹:

We respectfully submit that considerable restrictions should be placed upon the amount of Perlemoen which may be collected and the frequency with which they may be gathered. We suggest that the present unlimited collection is a menace to the preservation of Perlemoen and it is recognised that persons now prevented from catching Rock-lobster will turn to Perlemoen diving.

⁷⁰ Appendix 18: Letter written by the Director of Provincial Administration of Cape of Good Hope, to the Secretaries of the VMB (30 November 1971).

⁷¹ Appendix 19: Letter written by the Secretaries of the VMB addressed to the Director of Sea Fisheries (19 April 1962).

The Director of Sea Fisheries (30 April 1962) suggested that the VMB should consider establishing a sanctuary or reserve where no Perlemoen could be extracted at any time. The Secretaries of the VMB requested the Department of Sea Fisheries to investigate an area to be proclaimed a reserve somewhere between Cape Hangklip and Sandown Bay (24 May 1962)⁷²:

We would, therefore, respectfully submit for your consideration that the area between Cape Hangklip and Sandown Bay be made a reserve and the only exception permitted should be in favour of local residents, who may be allowed to take a specified limited number of perlemoen fro their personal requirements.

4.2.2.2 Betty's Bay Municipality

The issue of race and control of 'other' race groups dominated the administration. Other issues including water supply, building structures and signage. This section describes some issues pertinent to understanding the socio-political context of Betty's Bay during Apartheid from the mid-1970s to early 1990s. It illustrates the structural barriers that excluded other groups, other than Whites, from participating in the environmental initiatives informing this study.

The full extent of Apartheid legislation, the Group Areas Act in particular, created difficulties and confusion in the administration of Betty's Bay. Queries were frequently raised with provincial government and with the attorneys of the Municipality. For example, Mr H. Edwards, a Councillor and Acting Mayor, appealed to the Attorneys Syfret Godlonton-Fuller for advice (11 May 1983)⁷³:

My Council has asked me to acknowledge receipt of your letter of 21st April and to indicate that whilst the reason for the generality of the terms thereof is

⁷² Appendix 20: Letter written by the Secretaries of the VMB addressed to the Director of Sea Fisheries (24 May 1962).

⁷³ Appendix 21: Letter written by Mr H. Edwards to Messrs. Syfret Godlonton-Fuller (11 May 1983).

understood, nevertheless they have difficulty in applying these principles to the particular situations obtaining.

In the circumstances I am requested to pose the following specific situations for favour of your advice in regard thereto:

- 1. Is the Betty's Bay Municipal Area in a Group Area, a Controlled Area or a Specified Area. If so, which?*
- 2. May a member of the Coloured Group reside (other than a servant, employee or scholar) in a house situated in Betty's Bay and owned by a member of the White Group who is a private individual as opposed to a limited liability company. Please deal with this query separately according to whether:*
 - (a) the owner is also in residence, or*
 - (b) If only a member of the owner's family is in residence, or*
 - (c) If no member of the family of the owner is in residence.*
- 3. Can the Council exercise control over its coastal area between low water mark and high water mark by way of refusing, or consenting to, use thereof by picnickers, rock fishermen or campers belonging to any Group other than the White Group. If so, to what extent and upon what conditions?*

The reply from the attorneys confirmed that Betty's Bay was proclaimed a 'White' Group Area for occupation and ownership. They also suggested that the Municipality could exercise its rights to control the sea-shore by excluding other race or class groups under the Separate Amenities Act (18 May 1983)⁷⁴:

Control over coastal area: This aspect and the Municipality's powers pertaining in hereto are governed by the Sea Shore Act (Act 21 of 1955), the Reservation of Separate Amenities Act (Act 49 of 1953) and the Reservation of Separate Amenities by Local Authorities Ordinance (Ordinance No 20 of 1955).

The sea and area between the low-water mark and the high water mark ("sea-shore") belongs to the State President, but the Minister of Agriculture may let this area for general public use. This power, may, by proclamation in the Gazette, be delegated to the local authority. In point, we have not been instructed as to whether the Municipality is vested with such authority or not.

In the event of the Municipality having control over the "sea-shore" as aforesaid, the reservation of Separate Amenities Act provides in Section 2 that the controller may whenever he deems expedient and in such manner or by such

⁷⁴ Appendix 22: Letter written by the Attorneys, Syfret Godlonton-Fuller Moore Inc. to the Town Clerk, Betty's Bay (18 May 1983).

means as he may consider most convenient, set apart portion of the "sea-shore" for the exclusive use of persons belonging to a particular race or class.

The Town Clerk of the Betty's Bay Municipality wrote to the Director of Local Government appealing for assistance to deal with increasing numbers of 'other races' visiting the area during holiday seasons (26 January 1984)⁷⁵:

Betty's Bay is a "White" area. During the holiday season we have had many complaints from ratepayers that large numbers of Non-Whites came to the beaches, and also to the picnic areas.

My Council would like to have a clear answer as to what should be done to prevent that this repeats itself in future.

It was found that the number of Coloureds who came to the Betty's Bay beaches has increased considerably in comparison to the figure as could be recalled from previous years. I may mention that no actual figures are available, but anyone living in Betty's Bay could easily notice the vast difference.

One problem that arises from this matter is the total lack of facilities for Coloureds with the result that the vacant plots and the fynbos are used by these people.

A further difficulty arose in the administration of 'race' laws in Betty's Bay following the complaint of one or more residents to the Town Clerk. The complainant had observed that a neighbour had entered into a 'mixed' marriage and the couple were now living in a 'White' area. The attorneys advising the municipality suggested that, in accordance with the law, the couple should be asked to leave the area at the expense of the State (16 March 1984)⁷⁶:

In terms of Section 1(2) of the Prohibition of Mixed Marriages Act, Act 55 of 1949, the marriage in question is void and has therefore has no effect in the Republic of South Africa. The lady in question, is therefore not entitled to reside with her husband by virtue of marriage, as the Municipal area of Betty's Bay is designated as a White Area.

⁷⁵ Appendix 23: Letter written by the Town Clerk to the Director of Local Government (26 January 1984).

⁷⁶ Appendix 24: Letter written by the Attorneys Syfret Godlonton-Fuller Moore Inc to the Town Clerk, Mr Stassen (16 March 1984).

The Urban Areas Act, Act 36 of 1966, provides in terms of Section 2 (1) that a White male who is married to or who co-habitates with a coloured female, is considered to be a coloured person. On this ground, Mr X is not entitled to reside in the area, as he is deemed to be Coloured and is therefore living illegally in a Whites Only Area.

Environmental issues appeared regularly on the Council agenda. For the sake of brevity, Appendix 25 summarises the decisions that led to specific actions being taken by the Council during the period from September 1977 to September 1981, and from January to July of 1984. The information has been extracted from the minutes of the Council's monthly meetings⁷⁷. Only items where a decision was taken dealing with environmental and conservation management, or where the Council had shown some resolve to support or obtain support from people involved in environmental initiatives, are included. For example, efforts by the Council to secure land for conservation and recreation purposes through a Notaries Deed of Servitude over an area zoned as public open space received considerable attention from 1977 to 1981.

Of interest is a reference to an item on the agenda entitled as 'Environmental Management and Nature Conservation' which was introduced (20 March 1980) at the suggestion of a newly elected councillor, Mr R. Attwell. Previously environmental matters had been tabled at meetings under 'Amenities'. On balance, however, the records of Council meetings reveal a full agenda in which public administration issues dominated the proceedings, while environmental and conservation management played only a small part. Nevertheless the records suggest that during this period, the elected councillors took their responsibilities seriously, were disciplined in debating issues, were diligent in carrying out tasks and addressed a range of environmental issues.

⁷⁷ Appendix 25: A summary of the decisions and actions taken by the Council with respect to environmental management and biodiversity conservation between September 1977 and July 1984.

4.2.2.3 Hangklip-Kleinmond Municipality

After local elections in 1995, the townships of Betty's Bay, Rooi Els, Pringle Bay and Kleinmond were incorporated into the Hangklip-Kleinmond Municipality. The municipal offices were located at Kleinmond, approximately eight kilometres from the eastern boundary of Betty's Bay. During this period of administration, the Municipality established an Environmental Advisory Board. The Board was constituted under the provisions of Clause 4(1) of the by-law relating to the Advisory Board for nature reserves in the Hangklip-Kleinmond Municipal area⁷⁸. Interested environmentalists and conservationists were elected to the first Board⁷⁹. The Advisory Board meetings were not open to the press or public⁸⁰.

The powers of the Advisory Board were limited to providing advice⁸¹. There was no obligation by the Council to implement any of the recommendations of the Board. This situation proved a source of frustration to the voluntary members of the Advisory Board who decried their lack of decision-making authority and were frustrated by the lack of action (P. Joubert, 2001, pers.comm.). Soon after the establishment of the Advisory Board, the name of the Board was changed to the 'Environment Conservation Advisory Board' (14 May 1996) to include a wider range of environmental issues rather than confining attention to nature conservation issues⁸². A further name change to that of 'Environment Advisory Board' was accepted on 11 February 1997.

⁷⁸ Provision for the establishment of an advisory body was legislated by the South African Conservation Act 73 of 1989.

⁷⁹ Clause 4 (1) of the by-law for nature reserves states that: 'The Board shall elect a Chairman and a vice-Chairman for the term of office of the members of the Board at the first meeting of the Board after being duly constituted...' (Hangklip-Kleinmond Municipality founding meeting of the Nature Conservation Advisory Board, 18 March 1996).

⁸⁰ Minutes of the Hangklip-Kleinmond Nature Conservation Advisory Board, 24 April 1996, Item 5.5.

⁸¹ The Chairperson brought to the attention of the Advisory Board that only advice could be given and warned members not become involved with concerns of other organizations (Minutes of the Hangklip-Kleinmond Nature Conservation Advisory Board, 14 May 1996, Item 4).

⁸² Appendix 26: Policy of the Hangklip-Kleinmond Nature Conservation Advisory Board: A Discussion Document, 14 May 1996 Item 6.4.

The Advisory Board gave advice on a wide range of environmental issues which included items on the control of alien vegetation on private property, applications for sub-division of properties, poaching of marine resources, the design of management plans for the coastal and mountain reserves, and also considered potential sites for regional waste disposal. An audit of the Board's activities, from June 1996 until February 1997, revealed that:

- (a) 139 items were discussed;
- (b) 53 of the total number of items discussed were finalised by the Board;
- (c) 26 items could not be finalised by the Board because the Council had not discussed these items; and
- (d) 13 items were not accepted by the Council and were categorised as a disagreement⁸³.

In Item 6.4 (14 May 1996), the Chairperson of the Board concluded that communication between the Board and the Council, and between the Board and the Municipal staff was poor and 'must be improved as a matter of urgency'. An ongoing frustration was the delay in the Council's response to the Board's recommendations^{84,85}. The Board claimed that in the period from 21 July 1997 to 8 December 1997, ten items required resolution, but only 1 item was finalised⁸⁶. By February 2000, the Chair and vice-Chair resigned from the Advisory Board citing the fact that the work expected of Board members had become too onerous (Environmental Advisory Board Minutes, 21 February 2000). Dr A. Heydorn identified additional problems such as the difficulty of attending monthly meetings; delays in waiting for Council decisions; and the lack of streamlining of

⁸³ Hangklip-Kleinmond Environment Conservation Advisory Board, Chairperson's Report, 1996 Proceedings (4 February 1997).

⁸⁴ Hangklip-Kleinmond Environment Conservation Advisory Board, Item 8.3 (24 November 1997).

⁸⁵ Appendix 27: Memorandum written by Mr R. Attwell, a member of the Advisory Board, expressing concern over delays in decision making and inaction of Council (June 1998).

⁸⁶ Hangklip-Kleinmond Environment Conservation Advisory Board Minutes, (Annexure K - no date, but assumed to be February 1998).

activities of the Board (Environmental Advisory Board Minutes, 21 February 2000).

4.3 Conclusion

The Hangklip-Kleinmond Municipality is credited with the implementation of a mechanism to review environmental issues and to seek the advice of interested members of the public, but the evidence suggests that actions and the matter of resolving decisions was limited and often became a source of frustration. No senior members of the Municipality's management attended the Advisory Board meeting, decisions were delayed and the lack of action served to exacerbate the situation further. By contrast, the Council structure and *modus operandi* during the period under the Betty's Bay Municipality and Village Management Board proved far more effective with respect to communication between members of the Council and with members of community-based organisations including the Ratepayers' Association. However, the geographic scale and extent of environmental issues increased considerably during the period of the Kleinmond-Hangklip Municipality making it difficult and unrealistic to compare with an earlier period when Betty's Bay was administered by the VMB.

Chapter 5

Control of Alien Vegetation

Working together is easier in a community blessed with a substantial stock of social capital

Putnam, 1993, p.35

5.1 Introduction

In the 19th century there was a marked upsurge in the growing of exotic plants during a period when botanical societies flourished in the British colonies. Thousands of exotic plant species were transferred from one colony to another. In the late 1940s in Cape Town, exotic and indigenous trees and shrubs were planted to prevent driftsand from obstructing roads. Shaughnessy (1980) claims that most exotic plants were obtained from the Cape Town Botanical Gardens. The most successful alien species were Port Jackson (*Acacia saligna*), Rooikrans (*Acacia cyclops*), long-leaved Wattle (*Acacia longifolia*), Blackwood (*Acacia Melanoxylon*), Australian Myrtle (*Leptospermum laevigatum*), Sweet Hakae (*Hakae suaveolens*), and stone and cluster pine (Shaughnessy, 1980). These species thrive in warm, dry conditions and in sandy soils, and produce large amounts of seeds that are available for planting elsewhere. Timber plantations were also planted extensively in the Western Cape where exotic species were used either as windbreaks for young pine plantations, as firebreaks or as a source of bark for tanneries (Shaughnessy, 1980). Shaughnessy showed that from as early as 1847, 'pest plants' were planted deliberately on the Cape Flats, a flat sandy area stretching east of Cape Town to False Bay to the south. She argued that while the natural spread of alien vegetation could not be ignored, '...exotic plants were distributed far and wide by the Botanic Gardens, the Colonial Botanist and the Forestry Department.

Since 1908 various South African conservation scientists, such as Marloth (1908), Phillips (1938), Wicht (1945), Hall and Boucher (1977), Hall (1978) and Macdonald (1984) (cited in Macdonald, Jarman & Beeston, 1985) raised concern about the invasion of alien plants in the Cape Floral Kingdom. It was only in the 1970s that the problem of alien vegetation became increasingly apparent to conservation authorities (Ferrar, cited in Macdonald, Jarman and Beeston, 1985). The Conservation of Agricultural Resources Act 43 of 1983 was eventually promulgated in order to control alien plants. The Act gave the Minister of Agriculture the power to declare the propagation and harbouring of invader plants an illegal activity (Glazewski, 2000). Over two hundred alien species were listed in the Act. In the schedules, for example, *Acacia Cyclops*, a dominant invasive species found at Betty's Bay, is listed as a Category 3 plant⁸⁷.

The long delay before passing the Act meant that there was *ad hoc* and uncoordinated control of alien vegetation left largely to official land management agencies, such as provincial and national departments of Environment, Agriculture and Water Affairs; official bodies in small nature reserves; managers of private nature reserves; and by volunteer groups (Macdonald, Jarman & Beeston, 1985). This chapter focuses on the initiatives of volunteers at Betty's Bay who systematically removed alien vegetation from public land at Betty's Bay from 1963.

In the early 1950s, the Hangklip Beach Estates Company introduced *Acacia Cyclops* into Betty's Bay with the aim of stabilising the coastal dune system (Macdonald, Jarman & Beeston, 1985). The Managing Director of Hangklip

⁸⁷ The Conservation of Agricultural Resources Act 43 of 1983 Section 15C states:

- (1) Category 3 plants shall not occur on any land or inland water surface other than in a biological control reserve;
- (4) No person shall, except in or for purposes of a biological control reserve –
 - (a) plant, establish, maintain, multiply or propagate category 3 plants;
 - (b) import or sell propagating material of category 3 plants or any category 3 plants;
 - (c) acquire propagating material of category 3 plants or any category 3 plants.

Beach Estates, Mr Roy Makepeace, claimed that the company was advised by the Government Forestry Department to introduce certain types of alien vegetation to provide the most suitable windbreaks (25 January 1956)⁸⁸:

The planting of Rooikrantz (Acacia Cyclops) round certain borders of the golf course by the Company was carried out entirely on the recommendation of the Government Forestry Department, who in fact, supplied the seed and raised the seedlings, after unsuccessful attempts had been made by the writer to raise other types of hedge at Betty's Bay over three seasons. In seeking advice on what to plant, I think it was reasonable for me to have approached the responsible Government Technical Department, whose opinions on these matters should be as authoritative as those of amateur Botanists, more specially as vast stretches of their land have a common boundary with ours and a great portion of that land has been declared a "General Nature Reserve" in perpetuity by the Government.

In the late 1950s, *Acacia Cyclops* and *Acacia Saligna* seeds were also introduced into Betty's Bay during the construction of gravel roads in the township. *Pinus Pinaster*, *Eucalyptus Lehmannii*, *Albizia Lophantha* and *Sesbania Punicea* species were also spread by private landowners who planted these species as hedgerows, windbreaks and shade trees (Macdonald, Jarman & Beeston, 1985).

The first indication of public awareness of the threat of alien vegetation appeared in an article published in the Betty's Bay Ratepayers' and District Association (BBRDA) newsletter (September 1962)⁸⁹. The author, Bevan, refers to the spread of alien vegetation as a 'Green Cancer'⁹⁰ and claimed that it was killing the natural vegetation of Betty's Bay. He exhorted residents to do something about the situation in order to pass on 'an unspoilt heritage to our children'. This is one of only two references made concerning a 'future generation' although the

⁸⁸ Appendix 28: Letter written by Makepeace, Managing Director of Hangklip Beach Estates addressed to D'Ewes, Editor of the Cape Times and property owner at Betty's Bay (25 January 1956).

⁸⁹ Appendix 29: Article written for the BBDRDA Newsletter written by Bevan (September 1962).

⁹⁰ Reference to 'Green Cancers' was probably taken from an earlier publication of the Control of Alien Vegetation Committee, Kirstenbosch (1959) entitled: 'The Green Cancers in South Africa: the threat of alien vegetation to our own South African veld and forest', Citadel Press.

concept of an unspoilt heritage is referred to on several occasions in the primary sources informing this study. Bevan, who was chairperson of the BBDRA at the time, had had his attention drawn to the threat of alien vegetation by Mr Tijmens, the curator of the Harold Porter Nature Reserve at Betty's Bay (Attwell, 1985). Bevan's article not only describes the spread of alien vegetation, but the need to take responsibility for eradicating the threat:

Despite rigid protection and our attempts to prevent veld fires, a very real enemy threatens the indigenous growth of Betty's Bay, so that it is up to each one of us, individually and collectively, to do our bit in fighting this alien 'Green Cancer' which is threatening the whole Hangklip area. Now it is the considered opinion of such experts as Dr Rycroft that, in the not too distant future, Betty's Bay veld⁹¹ will consist of Rooi Kranz, Cluster pine and Port Jackson willow...

On its own, our indigenous veld is fighting a losing battle.

Two years ago, thanks to a large party of hackers organised by the Control of Alien Vegetation Committee, Kirstenbosch, and the efforts of local residents, the Golf Course was cleared (in one day) of an infestation of Rooi Kranz. That committee is very concerned to see the spread of Cluster Pine, and has organised two Hacks in an effort to draw attention to the menace. Very few ratepayers turned out, and it is high time that we, the custodians of Betty's flora, did something ourselves, and did it NOW.

In 1962, at the BBDRA Annual General Meeting, Heesom, a Cape Town journalist and property owner at Betty's Bay, proposed that volunteers should take responsibility to control the spread of invasive plants at Betty's Bay. He recommended that these plants be eradicated systematically and that the task required a concerted and committed effort. He invited volunteer 'hackers'⁹² to meet on the first Sunday of each month at a pre-determined site to commence the battle to eradicate alien vegetation from Betty's Bay. Heesom championed this initiative for over 16 years until his death in 1979. Subsequently the leadership of the Hack was passed onto members of the Betty's Bay Wild Flower Society. During the period from 1962 to 1974, the Hack was largely a privately

⁹¹ 'Veld' is an Afrikaans word referring to a field or land in general.

⁹² 'Hackers' refers to volunteers who participate in a campaign or initiative to eradicate alien vegetation.

organised and funded affair and remains one of the best examples of sustained collective involvement at Betty's Bay (Attwell, 1994). The discussion that follows presents an account of the initiative and includes the period in which the Hack was privately organised as well as the period when the organisation fell under the auspices of the Wild Flower Show Society and the Botanical Society.

The evidence presented in the following sections conforms to the categories outlined earlier in the conceptual framework.

5.2 Attributes of Collective Involvement

5.2.1 Working for the Common Good

There is no explicit account in the primary sources of evidence suggesting that members of the Betty's Bay Hack Group were motivated to take action because of their goodwill to the environment. The underlying reasons for collective action can only be inferred. However, there is substantial evidence to indicate a long-term commitment and resolve on the part of volunteers to address the invasion of alien vegetation and its impacts floral diversity and beauty of Betty's Bay.

In the campaign against alien vegetation a number of goals were pursued that were not limited to the eradication of alien vegetation only. Over time, the Hack Group developed a number of sub-goals which include: informing and educating the public and new property owners of the threat of alien vegetation; lending support to the management of the Harold Porter gardens; communicating with volunteers; and sharing expertise and experiences with hack groups in other parts of the country. These goals were publicly stated at the time when the organisation of the Hack was managed by the Wild Flower Society in 1974. By 1985, the aims of the Betty's Bay Hack Group, apart from the main aim of removing alien vegetation and planting indigenous species, involved the distribution of information about alien vegetation; educating property owners; and

giving support to the management of the Harold Porter Gardens. Arguably, these aims are expressions of goodwill that were intended to be of benefit to the environment, and to property owners and visitors to Betty's Bay in general⁹³:

1. *To clear public areas in Betty's Bay of alien invasive species such as: rooikrantz, black wattle, albitzia, Port Jackson, myrtle, pine, etc.*
2. *To keep informed of present and projected infestation by means of amateur and professional observation and surveys.*
3. *To raise awareness about alien species and to educate Hack volunteers on how to identify and correctly remove aliens.*
4. *To maintain previously cleared land by subsequent return visits to pull up seedlings.*
5. *To attend to new areas systematically, where possible.*
6. *To co-operate with the Betty's Bay Branch of the Botanical Society in educating the general public and local property owners to plant indigenous flora and trees in preference to exotics by means of educational shows, lectures, conducted walks, etc.*
7. *To reintroduce indigenous flora, e.g. to areas such as the popular mountainside path known as Rods Trail in Betty's Bay where large numbers of protea sepciosa have been successfully planted by members of the Hack Group.*
8. *To stimulate interest in the indigenous flora and the activities of the Hack group by means of a monthly newsletter which goes out to +/- 200 people each month. The newsletter is addressed to full or affiliate members of the Botanical Society and contains a report on the latest "Battle of Betty's Bay", as well as current nature notes of interest and educational value.*
9. *To encourage other committees elsewhere, by means of the newsletter and the success of this endeavour, to engage in similar projects to protect their environment.*
10. *To provide information to other possible new Hack groups on how to motivate the public to participate, and how to run successful groups.*

The proliferation of alien vegetation remained a constant source of frustration to the Betty's Bay Hack Group. The group felt that until legislation was promulgated and enforced, the growth of alien vegetation on public land could not be prevented because the seed was distributed from private to public land. In the absence of stringent legislation, the Hack Group offered to remove alien vegetation from privately owned land. This is a further act of goodwill:

⁹³ Appendix 30: History, Activities, Aims and Achievements of the Betty's Bay Hack Group (n.d. estimated 1986).

By 1975 the Hack, now into its thirteenth year, had virtually cleared the rooikrans from the mountain side of Porter Drive. The following year the Society approached a number of individuals who were harbouring invasive alien vegetation on their properties, and offered to help clear their plots and even provide 'approved' replacement trees (Attwell, 1994).

Twenty years later, this same offer continued to be made. Members of the Botanical Society offered to monitor and remove alien vegetation from private land. The Hack Group sent a letter to all private property owners living in those areas worst affected by alien vegetation offering their services (24 July 1992)⁹⁴:

Should you like to know more about the plants that grow on these dunes there are several of our members who would be glad to give you a list of the plants and their functions, as well as a list of the animals which live there.

The Betty's Bay Hack Group have, over the years, kept this area free of alien vegetation, and will continue to do so. However, there are certain properties on which aliens, especially Rooikrans, have begun to invade the natural vegetation. If you would like the Hack Group to remove these aliens and to monitor your property to ensure they do not recur, please contact us at the above Box number.

5.2.2 Working as a Collective

In 1985 the convenor of the Hack Group commended 'hackers' on their determination and resolve to maintain control over areas where they had worked previously. The report not only suggests the Hack Group were serious about taking responsibility for eradicating alien vegetation, but were careful to ensure that progress was systematically monitored and assessed (Annual Report, 1985)⁹⁵:

In a year what have we achieved? Nothing or something? In terms of sheer effort – much – in terms of halting the green invader – nothing. Nothing that is that a year's unchecked growth won't reclaim.

⁹⁴ Appendix 31: Letter written by the Betty's Bay Branch of the Botanical Society to property owners located near the dune thicket system at Betty's Bay (24 July 1992).

⁹⁵ Appendix 32: Annual Report on the Hack Group activities written by Silberbauer (December 1985).

But I'll tell you what we have achieved. A single-minded resolve to keep and retain control of all those areas that we have tackled. To do this requires not only our regular attention but an examination of our efforts over the last decade. It is no earthly use overdoing one area and overlooking another; all areas require attention and we must allocate our time accordingly.

The organisers of the Hack Group used a number of strategies to sustain the interest and involvement of volunteers. Attwell (no date, estimated 1985) identified three key factors that sustained the Hack Group over the years these being continuity, communication and commissariat. The activity of the Hack created an opportunity for social interaction and ensured ongoing interest and co-operation⁹⁶:

Continuity – The Battle of Betty's Bay has taken place on a regular, organized basis, on the first Sunday morning of every month.

Communication – An essential part of the Betty's Bay Hack operation is the production of a monthly newsletter. This is financed by the Betty's Bay Wild Flower Society and it is sent to all members of the Society whether they are Hackers or not.

Commissariat – The mid-morning tea break and the aftermath are important. In the very early months of the Hack each brought their own tea flask. One month, a tin of tomato sandwiches was produced, and that really started something! Since then, tomato sandwiches have become an essential part of the tea scene... The aftermath consists of Beer and Ginger beer, bought with donations from the hackers. An occasional Bring-and-Braai is held, thus ensuring that hacking is not all hard work!

Regular communication with the volunteers appears to be a key factor supporting the success of the Hack Group. The 'Battle of Betty's Bay' newsletter (Round 201, September 1979) provides a typical example of how the Hack Group leader, Heesom⁹⁷, encouraged co-operation and support through written communication. Round 201 includes a report on the previous outing; some social news captured over drinks and eats at the Heesom's home during the 'Aftermath'; a report on

⁹⁶ Appendix 33: Note written by J Attwell (c.1985)

⁹⁷ Appendix 34: Battle of Betty's Bay newsletter No. 201 written by Heesom (26 September 1979).

the rainfall during the past month; some interesting snippets of information; a description of the venue for the next Hack; and finally, a light-hearted comment or joke. In Round 201 there is also a description of the 200th Hack celebrations and the presentation of a trophy to Heesom. The newsletter also mentions that 20 members of the Mountain Club of South Africa assisted with the Hack. In addition, the newsletter reports on the progress of the Municipality to have ten noxious weeds, all found at Betty's Bay, added to the schedule of an amendment to the Weed Act of 1937. The newsletter suggests that 'if the application receives official support it could be the beginning of a revolution in the official attitude to alien vegetation in the Western Cape' (The Battle of Betty's Bay: Round 201, 1979, p.3).

Heesom was acknowledged on several occasions as the champion and leader of the Hack Group during the first ten-year period in which it was privately organised. Dr Vogts, an accomplished botanist and researcher of Cape flora, wrote a letter of appreciation to Heesom (March 1963)⁹⁸:

The unofficial organisation of ours is getting results because of the enthusiasm, suggestions and criticisms of those who are involved in it. The time you give, the thought and planning you devote to the cause of keeping the alien vegetation from destroying our unique flora are an inspiration to us who are lovers of nature and more closely lovers of Betty's Bay.

In December 1972, Heesom received the Cape Tercentenary Foundation Award for his contribution to the preservation of Cape flora. Heesom (1973) emphasised the need to communicate with the 'troops'; to hold regular activities; to offer rewards or incentives; and to acknowledge progress:

It is now ten years ago that the residents and weekenders⁹⁹ of Betty's Bay decided that they would try to do something for themselves and, in a rush of

⁹⁸ Appendix 35: Letter written by Dr Vogts to Heesom (March 1963).

⁹⁹ 'Weekenders' refer to those property owners who do not reside permanently at Betty's Bay.

enthusiasm, I offered to organise this, the bait being that after a morning's toil they would come to my house and replace the liquid lost with something more potable. So the 'Battle of Betty's Bay' came into being and, on the first Sunday morning of each month, has been going on ever since.

It did not take me long to realise certain facts of life. The first was that the battle was never likely to end. The second was that hacking does not greatly appeal to many people. Forty-three people turned out to our first hack but the numbers rapidly dwindled until a hard core of really dedicated people was left. ...Thirdly it is essential to keep the thing going every month. It is only too easy to find excuses to cancel an outing.

One more thing I found out early is that to keep a body of people together cannot be done by word of mouth, so an essential part of the operation has been the production each month of a newsletter to tell the 'troops' where to meet, something about what happened the previous month, for those who were not there and all sorts of tit bits of information about local rainfall, what is in flower at Betty's Bay, what birds have been seen on the vleis and so on, even some would be light relief.

Although an individual initiated and organised the Betty's Bay Hack Group, the collective involvement of volunteers in the project was paramount. The goal of regularly removing alien vegetation could never be achieved without co-operation and effort of volunteers. After Heesom's passing in 1979, the Hack Group continued to operate under the auspices of the Wild Flower Society. The organisation of the Hack had reached sufficient maturity for volunteers to continue working together without the leadership and charisma of its founder. This is evident in the statement made by a convener of the Hack in 1985 in which he acknowledges the support and collective efforts of the participants (Annual Report, 1985)¹⁰⁰:

Attendance has been heartening over the year. There was only one mutiny when the team refused to down tools in the morning in the pouring rain. On another occasion some of our members got lost. Otherwise the tea and the beer have always been rendered punctually, not to mention punctiliously.

There is overwhelming evidence to suggest that a small group of volunteers contributed to the conservation of the environment because of their collective

¹⁰⁰ Appendix 36: Annual Report on the Hack Group written by Silberbauer (1985).

actions. Attwell (1994, p.10) claims that the 'dedication and efficiency of Hack Convenors together with the loyalty and hard work of the 'troops' established a camaraderie unequalled in any other sphere of Betty's Bay life'.

5.2.3 Acquiring Knowledge

By mid-1980, the Hack Group had gained knowledge and experience in managing the removal of alien vegetation at Betty's Bay. In 1984 the Wild Flower Society was invited to send representatives to the Fynbos Biome workshop, a project administered by the CSIR¹⁰¹. At the workshop members of the Betty's Bay Hack Group were given an opportunity to present the work of the Hack and to outline the operation of the organisation. The group was complimented for its consistency of effort, its record keeping and the results that had been achieved (Attwell, 1994).

Knowledge about the control and management of alien vegetation was acquired partly as a result of a close relationship with the Botanical Society of South Africa based at the Kirstenbosch Botanical Gardens, Cape Town. Heesom's own interest in the Botanical Society led him to become chairperson of the Botanical Society of South Africa in 1965. His close association with the Society gave him immediate contact with staff at the Kirstenbosch Gardens, and the director, Professor Rycroft, in particular. This contact with professional staff kept him informed about developments in the field of alien plant management. For example, he was able to write to the Secretaries of the Village Management Board to inform them that the Wild Flower Protection Section of the Botanical Society of South Africa was in the process of re-drafting a booklet entitled 'Green

¹⁰¹ CSIR - Council for Scientific and Industrial Research.

Cancers'¹⁰². In the letter he claimed that this booklet would eventually provide a comprehensive list of alien vegetation plants:

I understand that the Board has it in mind to draw up Regulations to prohibit the planting of these aliens and, if this is so, this step will have the fullest support of this Association. I am enclosing a list of those species which are known to be highly undesirable. This list is almost certainly not complete. The Wild Flower Protection Section of the Botanical Society of South Africa is at present engaged on the re-issue of their booklet 'Green Cancers' which deals with this subject, and I understand that the final list is likely to be somewhat longer. As soon as the list is complete, I should be glad to send you a copy.

A close association between the Botanical Society of South Africa and Heesom is also evident in one of the earliest 'Battle of Betty's Bay' newsletters (Round No. 4, 25 April 1963). The report includes a map of a cleared area and shows the proposed site for the forthcoming hack. Maps were used to give directions for forthcoming hacks, but were also used to indicate progress in areas that had been hacked and to show those areas that had been inspected for signs of re-growth. This newsletter also included advice from Professor Rycroft who recommended certain types of indigenous plants appropriate for the conditions at Betty's Bay. In a further example of growing expertise and knowledge, found in of the Battle of Betty's Bay newsletter, Round No. 29 (26 May 1965), the Chairperson explains how and why certain sites were selected for the Hack. In preparation for the Hack, organisers investigated areas and planned ahead for each monthly event:

Quietly and with very little advertisement this work still goes on. Some months ago I mentioned 4 spots where future work was needed. One of these has now been systematically tackled by private enterprise, the area to the seaward side of the road leading to the Centre Shop. More strength to more elbows for such noble efforts.

The Battle of Betty's Bay newsletter provided an important source of information for the volunteers. On occasions it carried extracts from published articles. For

¹⁰² Appendix 37: Letter written by Heesom, Chairperson of the BBDRA, to the Secretaries of the Betty's Bay Village Management Board (13 December 1965).

example, Round No. 202 (October 1979) contains an extract from an article published in the *Veld and Flora* magazine. The extract outlines the history of Australian Myrtle at Kleinmond (situated 8 kilometres east of Betty's Bay), an account of how the pest plant had spread, and the difficulty of eradicating the species.

When the Wild Flower Society took over the co-ordination of the Hack in 1974, the committee organised three or four evening meetings annually to which specialist guest speakers were invited to address members of the Society. These experts shared their knowledge and interest with attendees. In the early 1980s, for example, Dr Anthony Hall, a botanist from the University of Cape Town, presented a talk (6 September 1981)¹⁰³; and Mr Peter Steyn, a 'well known ornithologist and photographer' gave a talk on Gough Island (3 July 1982)¹⁰⁴. The practice of holding evening meetings continued until 1986 after which the Society felt that interest in guest presentations had dwindled.

5.2.4 Taking Responsibility

The success of the Hack Group is attributed to the commitment of volunteers and organisers for taking responsibility to eradicate alien vegetation. From as early as 1963 the Hack Group made an effort to inform and involve all new and existing property owners in the campaign. In the 'Battle of Betty's Bay (Round No. 5, 16 May 1963) the work of the Hack Group was introduced to newcomers who joined the Hack for the first time. The extract that follows illustrates the responsibility that was taken to inform new recruits about the work of the Hack and to encourage property owners to become involved:

¹⁰³ Appendix 38: Minutes of the Wild Flower Committee Meeting held 15 May 1982.

¹⁰⁴ Appendix 39: Battle of Betty's Bay newsletter, Round No. 5 (16 May 1963).

For the benefit of newcomers, the organisation running these monthly hacks is entirely unofficial. It has no constitution, no officers, no annual general meeting – and no subscription. It exists because of the goodwill of a large number of people who are determined to eradicate the alien vegetation from the Betty's Bay area. It receives plenty of encouragement from the two officially constituted local bodies, the Betty's Bay Village Management Board and the Ratepayers' Association.

Taking responsibility also involved communicating and lobbying the Local Authority to adopt policies to control the spread of alien vegetation at Betty's Bay. For example, in a letter addressed to the National Director of the Division of Soil Protection, Heesom explained the influence of the Hack Group at Betty's Bay and proposed that the township should implement a similar by-law to that of Kleinmond (24 August 1979)¹⁰⁵:

*Apart from the practical value of these regular hacks at Betty's Bay they have proved an encouragement to others with the result that other regular hacks have been organised at Pringle Bay, Kleinmond (though the situation has now changed there) several in the Table Mountain area while one new one at Somerset West is proposed. At Kleinmond, the previously privately organized hack has now been taken over by the Municipality of Kleinmond and, for your interest, I enclose a copy of the by-law. You will see that it is aimed at doing exactly the same sort of work as is contemplated in the Weeds Act, that is the elimination of the alien vegetation in the area and particularly *Leptospermum lavigatum* (Australian Myrtle) with which the area is rotten, and the Municipal campaign is being most energetically pursued.*

The foregoing account provides evidence of the extent to which the Hack Group took responsibility for clearing public and even privately owned land. These accounts suggest that volunteers systematically and regularly undertook the task of removing alien vegetation; that they shared their knowledge and experience with others; and that they established plans and the means to sustain the Hack.

¹⁰⁵ Appendix 40: Letter written by Heesom to the Director, Division of Soil Protection, Dept of Agriculture, Pretoria, Mr R. L. Beukes (24 August 1979).

5.3 Attributes of Social Capital

There is no clear evidence to suggest that volunteers were seeking some form of reciprocity or exchange for their efforts other than an obvious enjoyment of a sense of 'camaraderie', meaningful social interaction and a sense of accomplishment (Attwell, 1985). Equally there are no explicit expressions of trust between members of the group or between the organisation and external organisations or institutions. However, it is recognised that the volunteers participated month after month while expecting others to be there and also to do their part. The only attribute of social capital that can be identified explicitly is taken from those accounts that demonstrate a 'connectedness' amongst the group and individual members.

The proposal to establish a hacking group was prompted initially by the connection of individuals to the Control of Alien Vegetation Committee (CAV) under the auspices of the Botanical Society of South Africa. The CAV informed the Executive Committee of the Ratepayers Association of a proposed 'hack' to take place at Betty's Bay on 17 September 1961 (BBDRA Committee Meeting Minutes, 2 September 1961)¹⁰⁶. This association between the CAV and the BBDRA continued after this event. In the minutes of BBDRA Executive Committee meeting (21 July 1962)¹⁰⁷, Silberbauer, a member of BBDRA committee, indicated that he was in contact with the CAV and had discussed the possibility of calling on the group to assist the Ratepayers' Association:

Mr Silberbauer drew the attention of the Committee to the Australian Wattle which is growing in profusion in the pine plantation. Decided to ask the Board if it would be possible for them to hire boys¹⁰⁸ to hack out this Wattle before it spreads – the Control of Alien Vegetation Committee would be glad to come down and assist.

¹⁰⁶ Appendix 41: Record of the planned CAV event noted in the Minutes of the BBDRA (2 September 1961).

¹⁰⁷ Appendix 42: Item 4 of the BBDRA Executive committee minutes noting an intention to request the Local Board to supply labour to remove Australian Wattle (21 July 1962).

¹⁰⁸ 'Boys' is a derogatory term used to refer to unskilled Black labourers.

The first organised public hack at Betty's Bay was held on 3 February 1963. A report in the Minutes of BBDRA suggests that the event was a success. The Ratepayers decided that a letter of appreciation should be sent to Heesom thanking him for the work he was doing in organising the 'Hacks'¹⁰⁹.

In the ten years that followed, the internal and external connectedness of the Hack Group grew considerably. By 1965, for example, Heesom had consolidated his own position at Betty's Bay by becoming the Chairperson of the BBDRA. This new role gave him an opportunity to launch other initiatives aimed at conserving the environment at Betty's Bay. It also placed him and the BBDRA in a stronger position to request support from the Village Management Board. The 'Beautification of Betty's Bay' initiative, mentioned earlier in Chapter 4, was launched as a volunteer-based project to plant indigenous trees and shrubs on the corner of roads leading off the main road (Clarence Drive). In a letter to the Secretaries of the Village Management Board, Heesom outlined the project and requested permission and the support of the VMB (25 January 1966)¹¹⁰:

I may add that the ad hoc committee regards this project as a co-operative effort. I have already referred to the offer of species from the Kirstenbosch Authorities and from various private individuals. This Association is likely to give financial help for the provision of compost and protective materials, such as wire guards. It is believed that certain Betty's Bay residents will be prepared to 'adopt' and care for the sites in the vicinity of their houses. Finally, Mrs M. M. Vogts has kindly agreed to act as 'technical' supervisor.

It is suggested, therefore, that it would be fitting if the VMB were to give this project its blessing and to support it in the practical way set out above.

Heesom was in constant contact with the Botanical Society of South Africa and the Director of the Botanical Institute. He became personally informed through this network and, in turn, was able to inform others. In a letter to the Secretaries

¹⁰⁹ Item 8 of the Minutes of the Executive Committee of the BBDRA (23 February 1963).

¹¹⁰ Appendix 43: Letter sent to the Secretaries of the VMB outlining the project (25 January 1966).

of the VMB he wrote about plans regarding the control of alien vegetation on Table Mountain and identified the possible implications for Betty's Bay (26 June 1967):

*As you know the position of scheduled weeds on one's property is not in itself an offence under the Act. It is only an offence if an order is served on the owner, who fails to comply with it. Thus, for Table Mountain there is no intention of serving orders wholesale, but of working with, not against, the bodies involved. Thus, the Cape Town Municipality has, for instance, agreed that when its growth of cluster pine (*Pinus pinaster*) has grown to maturity, it will be removed and not re-planted.*

As I am in constant contact with Professor Rycroft (director of National Botanic Gardens) I expect to learn the outcome of this move shortly after it has been implemented, after which it will be worth making a further move on the Betty's Bay problem.

There is no evidence to suggest that the actions of the Hack Group were underpinned by a system of values or an acknowledgement of prevailing norms of behaviour. However, records infer the existence of an awareness and sensitivity that people felt towards an environment threatened by alien vegetation. For example, the Chairperson of the VMB alludes to a 'community consciousness' of the environment (23 June 1971)¹¹¹:

I know of no community in the Western Cape which is more conscious of the need for conserving the natural benefits which have been bestowed on the area than the community of Betty's Bay and the members of its Board.

In another report written by a convenor of the Hack Group, the rich biodiversity of Betty's Bay is recognised together with a claim that efforts to protect the environment are worthwhile (30 December 1990)¹¹². The report also recognises that people are not easily attracted to the task of removing alien vegetation

¹¹¹ Appendix 44: Chairperson of the VMB, Heesom, alludes to a community consciousness of the environment (23 June 1971).

¹¹² Appendix 45: Report by the co-ordinator of the hack group, Silberbauer (30 December 1990).

especially in comparison to more glamorous concerns such as when a hippo or dolphin dies in captivity:

Is any of this worthwhile?....No one can seriously consider allowing a multitude of rare, beautiful, fascinating, endemic and endangered botanical treasures to be taken over by a uniform dull, uninteresting and useless horde of pine, acacia, gum and myrtle.

It has been suggested that we are fighting a losing battle. This is nonsense. Those of us with long memories can recall the dense clusters of rooikrans around the lakes. These have been eliminated and kept back. There are certainly less aliens in this area than there used to be.

A fynbos which is being throttled does not stir up the emotion caused by a throttled Hippo or Dolphin. The fynbos is not being gill-netted or shot or poached for its aphrodisiac properties. The fynbos is simply disappearing unnoticed by the uncaring majority.

Attributes of social capital are difficult to discern from the primary sources. Motives to explain why people became involved in hacking alien vegetation are also unclear. However, sensitivity to the environment and a concern about the threat of alien vegetation is repeated throughout the records and appears to have motivated many ratepayers to become involved. This sentiment incorporates intrinsic values, personal aesthetic values, and moral commitment to the environment and fellow residents. The beauty of the environment and love of Betty's Bay influenced many to take care and responsibility for its well being. This is confirmed by remarks made in an interview with Attwell¹¹³ and in a report discussed earlier in the previous Chapter, by van 'tHoogerhuys¹¹⁴:

I believe that the mere presence of the core fynbos biome has indirectly affected a lot of people. Certainly in our own case, we came here because of the fynbos country and certainly others have come here for the same reason (Mr R. Attwell, pers.comm.).

We, the ratepayers of Betty's Bay come here for different reasons. It may be the mountains, the sea, the fynbos, the flowers, the birds or the animals, or a

¹¹³ Appendix 138: Transcript of interviews.

¹¹⁴ Appendix 14: An address presented by van 'tHoogerhuys to BBRA AGM (22 December 1984).

combination of these things. We all have something in common – we love Betty's Bay. As our Chairman of the Wild Flower Society in her Annual Report has so aptly quoted from Rudyard Kipling:

*God gave all men all earth to love
But, since our hearts are small,
Ordained for each, one spot should prove
Beloved over all.*

The object of this conservation concept is to attempt to maintain a level of use of the resources of this area at a sustainable level. It is expected that this objective will be carried out by way of a national management committee. You may well ask, what are these resources? The answer is simply – we have here in this beautiful spot a fragile and unique vegetation – a national heritage unique not only to the Cape but to the world. We are privileged to be the custodians of this heritage.

A functional social organisation and activities of the Hack encouraged individuals to volunteer and participate in events as confirmed in an interview with Mrs A Nunn¹¹⁵:

When I came here obviously you can't help coming here and not being interested in all the things going on around you and the things that are going on. When I was a member of the Botsoc committee, it was Wild Flower Society in those days, when something came up we were the only environmental body in the area. When something came up, well we took it on and we started with the Penguin thing and we went from there. I suppose my interest is just that when something seems to be wrong, something needs to be done about it and nobody else seemed to be doing anything, so there was obviously a need for my hands.

An acknowledgment of a moral or ethical reason to explain why people became involved in the eradication of alien vegetation is largely absent from written sources informing this study. Volunteers and convenors seldom express concern for heritage, future generations or a sense of caring for creation. Occasionally leaders explicitly express moral and ethical motives which are implicitly endorsed by membership.

¹¹⁵ Appendix 138: Transcript of interviews.

5.4 Relations with Institutions

In 1959 the Hangklip Beach Estates Local Board acknowledged the problem of alien vegetation in the area under its jurisdiction. The Board was urged to take control of the spread of alien vegetation by two organisations based in Cape Town, namely, the Control of Alien Vegetation (CAV) (a sub-committee of the Mountain Club of South Africa)¹¹⁶ and the Western Province Branch of the Wild Life Protection Society of South Africa¹¹⁷. Both organisations sent letters imploring the Local Management Board to remove alien vegetation from a golf course adjacent to Bass Lake. An extract from the letter written by Mr Willis expresses the Wild Life Protection Society's concerns:

Our attention has been drawn by some of our members to the rapid encroachment of rooikrantz in the Betty's Bay area, and especially on the Golf Course.

We are writing to appeal to you to take all steps in your power to eradicate this evil wherever and whenever possible. Your area is generally recognised as being one of the richest floral areas in the whole coast belt, and it is one of the aims of this Society to protect the flora as well as the fauna, both of which are interdependent to a great extent and are part of our national heritage.

In response to these letters, the Board requested Mr J. A. van Niekerk, a local resident, to recruit local labour to remove the *Rooikrantz*¹¹⁸. This act of organising and paying workers to remove alien vegetation is the earliest record of local authority involvement in the eradication of alien vegetation at Betty's Bay. Later, in 1965, the Board began a protracted inquiry dealing with legislative

¹¹⁶ Appendix 46: Letter written by Mr J. F. Blacquiere, Convenor of the Alien Vegetation Control, addressed to the Secretary, Hangklip Estates Local Board (17 February 1959).

¹¹⁷ Appendix 47: Letter written by Willis, Chairman of the Wild Life Protection Society of SA, addressed to the Secretary of the VMB (3 March 1960).

¹¹⁸ Appendix 48: Letter written by the Secretaries of the Betty's Bay Local Board to addressed to J. A. van Niekerk of Betty's Bay (17 March 1960).

controls to prohibit the planting or harbouring of alien species on private property at Betty's Bay:¹¹⁹

The Board wishes to know whether it can by legislation prevent the planting and growing of alien vegetation.

Should this be possible the Board would like you to take steps to have this promulgated and will supply you with a list of aliens in due course.

In 1965, Heesom, who was then Chairperson of the BBDRA, wrote to the Secretaries of VMB calling on the Board to draft regulations that would prohibit property owners from planting alien species (13 December 1965)¹²⁰. The VMB responded positively to this suggestion and agreed to use a list of alien species, supplied by the CAV, as a checklist of plants that could apply to Betty's Bay:

As you know the local residents and weekenders have been progressively clearing the alien vegetation of Betty's Bay over the last three years, and this work is continuing on a monthly basis. Large areas of the district are now completely free, though much remains to be done still particularly in the area towards 'The Four Seasons' and the Point.

Much of this work has been done on private ground. It would be a thousand pities if this work was to be undone by the planting of these same unwelcome species by newcomers to Betty's Bay. This is only too likely to happen because these aliens are, in general, the fastest growing species and, to those ignorant of the true position, would be attractive as providing shelter and windbreaks as quickly as possible.

I understand that the Board has it in mind to draw up Regulations to prohibit the planting of these aliens and, if this is so, this step will have the fullest support of this Association. I am enclosing a list of those species which are known to be highly undesirable. This list is almost certainly not complete. The Wild Flower Protection Section of the Botanical Society of South Africa is at present engaged on the re-issue of their booklet "Green Cancers" which deals with this subject, and I understand that the final list is likely to be somewhat longer.

¹¹⁹ Appendix 49: Letter written by the Secretaries of the Village Management Board to the Messrs Moore & Son, the Board's attorneys.

¹²⁰ Appendix 50: Letter written by Heesom, Chairperson of the BBDRA to the Secretaries of the VMB (13 December 1965).

Heesom was obviously pleased with the response of the VMB and wrote another letter on the subject. He informed the Board that he had consulted Professor Rycroft, Director of the National Botanic Gardens, and also complimented the Board on its proposed actions (27 May 1966)¹²¹:

I have now been in touch with Prof H. B. Rycroft, Director of the National Botanic Gardens, over the species for which application should be made, and I attach the list. Prof Rycroft has asked me to emphasise two points which I would expect are fully appreciated by the Board already –

1. *The Application for scheduling of these aliens must clearly apply to the Board's area only and not be of wider application.*
2. *In terms of the Noxious Weeds Act it is not necessarily an offence to have any of the proclaimed weeds growing on one's property. It only becomes an offence if these weeds are not removed after Notice has been served on the owner to remove such weeds.*

May I congratulate the Board on its courage in attempting to do something which, to the best of my knowledge, has never been attempted in South Africa before, and wish it all success in the Application which in due course it will be making...

However, despite this positive response, very little progress was made in implementing by-laws to control invasive plants at Betty's Bay. The issue remained a source of frustration to the Hack Group in the decades that followed. By 1993 the Betty's Bay Botanical Society sought legal advice concerning the failure of the Local Authority to control alien vegetation adequately.

Nevertheless, the Betty's Bay VMB was acknowledged for its efforts to manage alien vegetation and to support the Hack Group. In the late 1960s, this local authority attempted to establish regulations to prevent owners from planting alien vegetation and to require property owners to remove alien plants from their property. Its efforts to formulate by-laws were thwarted by the Department of Agricultural Technical Services (17 February 1967)¹²² that suggested it was

¹²¹ Appendix 51: Letter written by Heesom, Chairperson of the BBDR to the Secretaries of the VMB (27 May 1966).

¹²² Appendix 52: Letter written to the local authority by the Department of Agricultural Technical Services (17 February 1967).

impossible to establish an exception to the Weed Act of 1937 solely for Betty's Bay:

I hereby regret to inform you that the Alien species recommended for scheduling under the weeds Act in the Betty's Bay area cannot be approved for the following reasons:

- i) The recommended species are regarded as useful plants in the Western Cape for shelter and windbreaks.*
- ii) It is impossible to make an exception for Betty's Bay only, because property owners of Betty's Bay and elsewhere will regard this approach as unfair and unjustified. The intention of the weeds Act is surely not to make exceptions for certain areas. On the contrary any plant proclaimed under the weeds Act as a noxious weed, must be eradicated and this means on a national basis.*

In later years, the Betty's Bay Municipality sent information circulars to all private property owners informing them of the dangers of alien vegetation. The letter highlighted a section in the Agricultural Resources Act 43 of 1983 dealing with noxious weeds and was signed by the Town Clerk, Mr D. Stassen (March 1985)¹²³. The advice outlines the concerns of the Local Authority with regard to alien vegetation at Betty's Bay. In the final paragraph, the Wild Flower Society and the Ratepayers' Association are acknowledged for their conservation efforts:

As part of its policy to protect our flora and natural environment resources, the Municipality of Betty's Bay wishes to bring to the attention of all Ratepayers the terms of the new legislation in regard to noxious weeds and alien plants.

- 1. Declared weeds...species that must not be introduced in the Betty's Bay area.*
- 2. Declared Invader plants....seven species have to be controlled effectively.*
- 3. In Betty's Bay there are presently THREE additional species which are a threat as alien invasives of our fynbos...*
- 4. In developing your plot, it is in your own interest to clear the minimum amount of natural vegetation. The large scale clearing or grading of a site by owners has often proved disastrous and caused the unnecessary destruction of valuable plant communities and rich fynbos worthy of careful preservation.*

¹²³ Appendix 53: A circular, signed by the Town Clerk, Stassen, was sent to the ratepayers (March 1985).

5. The Cape fynbos is part of our national heritage. It is a world-famous flora, threatened by development and the spread of alien vegetation. It is well preserved within the Municipality of Betty's Bay and its conservation is one of our main aims.

6. By joining the Wild Flower Society and the Ratepayers' Association, you will assist us in furthering the cause of conservation in our area. Please help us to develop at Betty's Bay a township in harmony with the environment.

By the 1990s, as mentioned earlier, the Botanical Society grew impatient with the Local Authority's inability to schedule local by-laws to prevent the 'harbouring' of alien vegetation on private property. Miss P Palmer, Chairperson of the Betty's Bay Botanical Society, implored the Local Authority to take decisive action to control the spread of alien vegetation (6 May 1995)¹²⁴:

This Committee is concerned about the infestation of private properties, mainly in the Betty's Bay area, with Australian Acacia (Rooikrans). Not only is this a threat to the unique Fynbos of the area, it is a considerable fire hazard.

We request that the existing Municipal regulations regarding the control of vegetation be applied, and that owners of the affected even be requested to clear their plots within a certain time and should they fail to do so, the plot be cleared by a contractor to their account.

In reply, Mr M. Bartman, Head of Engineering Department at the Hangklip-Kleinmond Municipality, responded to the Society (1 June 1995)¹²⁵ by stating that the by-laws dealing with alien vegetation control applied only to Kleinmond where alien vegetation posed a fire risk:

The existing by-law relating to the growth of grass and vegetation on premises applicable in Kleinmond, does at the moment not apply to Betty's Bay. It will have to be promulgated for Betty's Bay.

We do however, foresee some difficulties in as far as the bylaw doesn't distinguish between indigenous and alien vegetation. This by-law relates to

¹²⁴ Appendix 54: Letter written by Palmer, Chairperson of the Botanical Society, to the Chief Executive Officer Kleinmond/Hangklip Municipality (6 May 1995).

¹²⁵ Appendix 55: Letter from Head of Engineering Department at the Hangklip-Kleinmond Municipality addressed to Palmer (1 June 1995).

properties which poses a fire or health hazard, whereas your concern is primarily focused on the threat alien vegetation poses to the fynbos.

The lack of action evoked a measure of frustration from at least one member of the Botanical Society. Silberbauer, a previous convenor of the Hack Group, expressed concern about the poor response from the Local Authority (8 July 1995)¹²⁶:

Regards the agenda; I don't know how you would agenda this but my old and longstanding concern is the old and irritating non action of the Council to implement the eradication of aliens on private property. The Hack Groups efforts over the past 30 odd years has been near miraculous but this will come to naught in a very short space of time, given the alarming number of houses being built by the alien loving population. The last few hacks in the Great Lakes area illustrates the problem quite forcibly, if such illustration were indeed necessary.

Tough and uncompromising action is required from Council. With a potential World Heritage Site on our doorstep how on earth can Betty's Bay permit a total shambles on its very boundary?

The Botanical Society sought other means of addressing the lack of action on the part of the Local Authority. Palmer wrote to Mr J McNaught-Davis, a lawyer, inquiring about appropriate legal procedures to prosecute the Municipality for failing to control alien vegetation on private property (26 July 1995)¹²⁷:

We wish to know if we have legal recourse to prosecute the Municipality for failing to control alien vegetation.

As you know, the Hack has been doing, what is really the Municipalities work, in controlling alien vegetation on public open space and other non-private ground. This task is made all the more difficult with re-seeding from private properties and the fact that despite numerous requests, the felled trees are not removed by the Municipality, which is their job.

In general, the earliest accounts of the Hack Group suggest that there was an amicable and co-operative relationship between the organisation and the Local

¹²⁶ Appendix 56: Letter written by Silberbauer to Palmer (8 July 1995).

¹²⁷ Appendix 57: Letter written by Palmer to McNaught-Davis (26 July 1995).

Authority. This was noticeable in the 1960s and 70s when the Village Management Board was in office. It also coincided with periods in which Heesom served as Chairpersons of the BBDRA, the VMB and the Wild Flower Society. Good co-operation and regular communication was evident during these periods which is partly due to the scale of the administration at the time. In later years, evidence suggests that Botanical Society became increasingly frustrated by the inaction of the Local Authority to deal with alien vegetation.

5.5 Addressing Imperatives

The available evidence can only identify a sense of 'caring' for the environment which is closely linked to 'taking responsibility'. 'Caring' is highlighted in a presentation to the Betty's Bay Branch of the Botanical Society AGM (December 1990)¹²⁸:

The achievement of the caring minority in the form of one morning's work once a month is nothing short of miraculous. The unsung heroes of Betty's Bay are the mid-week irregulars; permanent residents who, with eagle eye, eliminate outriders along the length and breadth of our territory. This work goes unnoticed because it is unspectacular. The results, to the more observant, I can assure you are spectacular.

It is unfair to judge the actions of the Hack Group entirely in relation to the prism of sustainability (Valentin & Spangenberg, 2000). The prism is an interpretation of how societies can move towards sustainability. It would be unrealistic to expect the Betty's Bay Hack Group to address every dimension of the prism in order to demonstrate their contribution to sustainability. The prism indicates that the environmental imperative incorporates an institutional means to 'care' by exercising control, applying management procedures, passing appropriate legislation and taking responsibility for the environment. In the first 20 years of the Hack Group, the Local Authority supported the Hack campaign. Examples

¹²⁸ Appendix 58: Report written by Silberbauer for the Betty's Bay Botanical Society AGM, December 1990.

cited in this chapter and in Chapter 4, indicate a willingness to fund some of the requests made by the Hack Group, and to remove cut trees and branches after a hacking event. In these examples, 'taking care' is carried out by both the organization of the Hack Group and by the Local Authority.

5.6 Outcomes

The Hack Group made a considerable contribution to eradicating alien vegetation at Betty's Bay. Members of the Hack Group wrote various reports claiming some measure of success ascribed to the Hack Group. There is no scientific analysis of the removal of alien vegetation over time to substantiate the claims of the Hack Group, but Attwell (1994) feels that had aliens not been removed the situation at Betty's Bay could have been devastating.

One of the earliest accounts of the achievements of the Hack Group is described in a letter addressed to Professor J. H. Gilomee, the Secretary of the Society for the Protection of the Environment (23 June 1971)¹²⁹. This letter not only claims that Betty's Bay is reasonably clear of pest plants, but indicates how the cleared alien vegetation is being made available for use by picnickers as fire wood thus avoiding the indiscriminate removal of wood from Melkhout trees at Dawid's Kraal (an indigenous protected species):

In my personal capacity I have been organising a 'Hack' of pest plants in Betty's Bay on a monthly basis now for over eight years – the 100th Hack was held at the beginning of May. The result is that Betty's Bay is so far freer of Acacias, Albizia, Spider Gum and other pest plants than other areas in the Western Cape. A corollary to this is that arrangements were made with the Board several years ago for the cut Rooikrantz to be dumped at the Dawid's Kraal picnic spot to be used for firewood. Previously picnickers had been wont to cut the fine stand of Melkhout which exists there for that purpose. They now take the easier way out and the Melkhout is no longer under threat.

¹²⁹ Appendix 44: Letter written by Heesom addressed to Professor J. H. Gilomee, Secretary of the Society for the Protection of the Environment (23 June 1971).

Convenors of the Hack Group often published progress reports in the Battle of Betty's Bay newsletter. Detailed accounts of the achievements of the Hack Group were also found in correspondence and in reports presented at the Ratepayers Association AGM. In a letter written by Silberbauer, a hack convenor, addressed to Dr G. Brits of Houteq, Pty Ltd, specific achievements of the Hack Group were identified (22 October 1991)¹³⁰:

Aliens in the Betty's Bay context can be defined as any plant which is heavily invasive and would, if left to its own devices, take over the entire area destroying most, if not all, the fynbos. One has only to look at the area from Mooihavens to the "Old Main Road" to see the destructive influence rooikrans has.

I know that were it not for the Hack the whole of Betty's Bay – all 200 hectare of it – would by now have been in a similar state. The hack group have kept about 89% of Betty's Bay relatively free of aliens. This happy state of affairs would be possible to maintain but for one dreadful factor – the cultivation of aliens on private property.

A rough count taken over 100 built-on properties surveyed from the Centre shop through to Sunny Seas showed that 50% of these properties were infested with chronically invasive aliens. These properties represent about 25 hectare which is only 1,2% of the total area. However this 1,2% would take the present Hack group about 2 years to clear due to the size of trees and the difficulty of clearing the fell.

The Chairperson of the Botanical Society, McNaught-Davis provided further confirmation of success (December 1990)¹³¹:

This Hack Group has been operating for 25 years. What have they been doing? Is it worthwhile?

Are we fighting a losing battle?

Those of us with long memories can recall the dense clusters of rooikrans around the lakes. These have been eliminated and kept back. The outriders of the pine forest have been kept under control. We have only to look at the pines in the area between the rubbish dump and Buffelsriver, and the myrtle forests in Kleinmond and Hermanus to realize what would happen if we stopped trying. At

¹³⁰ Appendix 59: Letter written by Silberbauer (Hack Convenor) to Dr George Brits of Houteq, Pty Ltd (22 October 1991).

¹³¹ Appendix 60: Chairman of the Botanical Society, McNaught-Davis (December 1990).

least our areas which have been relatively clear of aliens are being kept clear, but this is an ongoing task. What has been achieved by our small band in one morning's work once a month is nothing short of miraculous. But the unsung heroes of Betty's Bay are the mid-week irregulars, permanent residents who keep an eagle eye on aliens whenever they go for walks and DO SOMETHING ABOUT THEM. If only more people would do this.

Another account of the outcomes of the Hack is found in a report presented at the AGM of the Betty's Bay Branch of the Botanical Society (December 1990). The report outlines the activities of the Hack Group since 1963 and reflects some of its achievements in twenty-five years of hacking. The account also registers some disappointment in those disinterested property owners who continue to harbour alien vegetation, and of the general lack of support from the Local Authority¹³²:

...Areas which have been relatively clear of aliens are being kept clear. This is an ongoing task, worthwhile task and a winning task. Good exercise too.

...A disappointing and more saddening aspect of the local scene however is the proliferation of aliens planted by disinterested plot owners, many of whom are unaware of what they are doing or are possibly misinformed. A determined, sensitive, active and caring Council would do a lot towards rectifying this tragic state of affairs.

There are claims that the eradication of alien vegetation from public land at Betty's Bay was due largely to the work of the Hack Group. Attwell (1985, p64) claims that 'all invader species on municipal land were being successfully controlled' through the work of the Hack. In another account, published in the 'Battle of Betty's Bay' newsletter (Round Number 463, July 2001), it is claimed that the Hack Group had ensured no further encroachment of alien vegetation¹³³:

Ed, our hack Convenor, told the group that in 1980 a survey of rooikrans infestation was done by Peter Slingsby. Reference to his maps indicates that no

¹³² Appendix 61: Report written by Silberbauer for the Betty's Bay Botanical Society AGM (December 1990).

¹³³ Appendix 62: 'Battle of Betty's Bay' newsletter, Round Number 463, from the reports on the achievements and events of the hack during the month of June 2001.

further deterioration has taken place in this area in the past 21 years, thanks to the work of the hackers.

5.7 Conclusion

A large body of evidence shows that the Hack Group took responsibility for the removal, control and management of alien vegetation. This work was done with some measure of the support from the Local Authority, especially during the first thirty years of the Hack. The associations, networks and connectedness of individual members of the Hack Group contributed to the acquisition of knowledge and experience in eradicating alien vegetation. There is also evidence to suggest the volunteers acted out of goodwill to avoid the spread of alien vegetation on public and private land. In undertaking the task, members of the group established a sense of camaraderie as they engaged in a meaningful social activity. The dominant pattern of behaviour to explain why people became involved in the Hack appears to be one of taking responsibility for the potential threat caused by invasive alien vegetation, the conservation of the environment and a keen sense of working together on a significant project.

Chapter 6

Wild Flower and Botanical Societies

...it is not enough to extol the virtues of democratic participation in general – people want to participate in something tangible, in improving their lives and having the satisfaction of self-development, and the confidence it engenders.

Carley, 2001, p.4

6.1 Introduction

A proliferation of wild flowers in the Spring of 1972, following a devastating fire in February 1970, created circumstances that were largely responsible for the formation of the Wild Flower Society (Attwell, 1994). In November 1972 a small group of permanent residents and 'weekenders' held an informal meeting to discuss the possibility of showcasing the wild flowers found at Betty's Bay. At this meeting it was decided that, in order to hold a flower show to which the public would be invited, it would be necessary to form an organisation. This led to the establishment of the Wild Flower Society which became the Betty's Bay Botanical Society in 1986, and then the Kogelberg Botanical Society in 1992.

Apart from arranging five flower shows, the Wild Flower Society was actively involved in a range of environmental initiatives including efforts to conserve African penguins that arrived unexpectedly on the mainland at Betty's Bay; the co-ordination of the Betty's Bay Hack Group; and support for to establish the Kogelberg Biosphere Reserve.

The proposal to establish the Wild Flower Society was initiated by Heesom (Attwell, 1994). He proposed that the Society should have wider objectives than merely that of an annual flower show (10 November 1972)¹³⁴:

My recommendation is to go for our own society and one with wider objects than merely the running of the Wild Flower Show. I believe that there are several specific projects which might be undertaken –

1. *the planting out of the road reserves with indigenous flora (note: this used to be done successfully but the road reserve areas were wiped out in the 1970 fire).*
2. *Tree planting at strategic spots, e.g. Bass Lake*
3. *Co-operation and assistance (including possibly financial assistance) to the Harold Porter Botanic Reserve.*
4. *Advice to all Ratepayers (not merely members of the Association) as to what to plant as windbreaks and what not to plant.*
5. *Responsibility for “The Battle of Betty’s Bay” - the pest plants clearance campaign to ensure continuity of this in the future.*

If the new Society does not do these things all of which seem to be desirable, they are not likely to get done.

Items 3, 4 and 5 above, propose that the Society should support the work of the Hack Group and the Harold Porter Reserve¹³⁵. Furthermore, Heesom proposed that the Society should find ways to educate all property owners about indigenous plants and alien vegetation, and not only members of the Ratepayers Association. The proposal was formally presented to the Betty’s Bay Ratepayers Association (6 January 1973) and duly accepted by its members (Attwell, 1994).

The objectives of the first Flower Show, held in 1973, were fourfold¹³⁶:

¹³⁴ Appendix 63: Memorandum proposing the establishment of the Wild Flower Show Society written by Heesom (10 November 1972).

¹³⁵ In 1949, Mr Harold Porter, a member of Hangklip Beach Estates, and later the Chairman of the Board from 1950, informed the Directors that he wished to establish a wild flower reserve at Hangklip. He proposed forming a non-profit company for this purpose and offered to endow it with an income of £1,000 per annum for its upkeep. The Board agreed to an area of land of approximately 200 morgan on the mountainside of Betty’s Bay. A non-profit company, known as “The Shangri-La Nature Reserve”, was proposed for the purpose of taking transfer of this land. The management of the reserve was passed to the National Botanic Gardens in 1960.

¹³⁶ Appendix 64: Stated objectives of the first Flower Show in 1973.

- *That it should be a pleasure to look at – this, of course, applies to All Wild Flower Shows*
- *That the exhibits should be drawn from the Betty's Bay area only, that is the area between the Steenbras and Palmiet Rivers and the mountain area behind. All the flowers shown are, therefore, indigenous to the area*
- *To avoid "mining" the veld by taking excessive quantities of any one species*
- *That there should be an educational value both for the amateur and the professional.*

All of the Flower Shows arranged by the Society emphasised the conservation of indigenous vegetation and education of property owners. Members of the Society felt that flower shows drew attention to the floral diversity at Betty's Bay, raised awareness of biodiversity conservation and encouraged property owners to develop their properties in such a way as to minimise the impact on indigenous vegetation (Attwell, 1994). These objectives are reiterated in a report on the Flower Show held in 1975 (November 1975)¹³⁷:

There seems to be three main reasons... [for holding flower shows] –

1. *To present a representative cross-section of the beauty available in the veld at this time of year, with a strong accent on the educational side of this.*
2. *To give pleasure to others, and to have fun for oneself. This was amply achieved for there was a wonderfully good spirit among those who helped. Those who shouldered the main responsibility for the 1973 Show were willing to do so again this year, and were assisted by very much the same people again. With that past experience to draw on, things could be expected to go smoothly, and in fact they did.*
3. *To cover expenses, with something to spare.*

The format of the 1973 Flower Show was followed by all subsequent shows held biennially until 1983. Briefly this involved identifying and selecting specimen plants; labelling specimens which was done by professional botanists; and arranging individual bowls rather than a mass display. Visitors to the show were

¹³⁷ Appendix 65: Report on the 1975 Wild Flower Show written by the Chairperson, Heesom (November 1975).

handed a pamphlet explaining the aims of the Show and those of the Society (Attwell, 1994). Approximately 1500 visitors attended the first show in 1973.

As mentioned earlier, the scope of the Society's activities went far beyond the organisation of flower shows. In the first place, it provided the organisational structure and leadership for the Hack Group which shifted from a privately organised activity to the organisational structure of the Society. The formation of an organised group provided an opportunity to enlist members and to establish an organising committee.

The Society became closely associated with initial efforts to protect the first pair of African penguins to establish a nesting area on the mainland of South Africa. In 1982, two penguins arrived at Stony Point, the southernmost peninsula at Betty's Bay (Cooper, 1986) (Figure 10). Scientists at the Avian Demography Unit at University of Cape Town suggested that these penguins had arrived from Dyer Island, 60 km north east of Betty's Bay as a result of the declining food sources on the island and surrounding the island (Avian Demography Unit, <http://web.uct.ac.za/depts/stats/adu/stonypt.htm>). The first nesting sites were among the rocks at the tip of the Stony Point peninsula. As the colony increased in size, the birds started to nest under thick vegetation on an adjacent sandy area. The area occupied by the colony began to expand because more birds were being recruited. With increasing population, penguin guano slowly killed the bushes which were being used as nesting sites thus forcing the birds to choose sites farther from the sea (Cooper, 1986).

By January 1986, scientists from the Fitzpatrick Institute at the University of Cape Town had made 26 surveys of the colony and found eleven nests, all containing eggs (Cooper, 1986). Later that year, a leopard attacked the colony, killing 50 penguins on the first night and 15 on the next (Cooper, 1986). This incident prompted the Wild Flower Society and the Marine Development Branch of the

Department of Environmental Affairs to urge the Local Authority to take the responsibility for protecting the colony¹³⁸. The Wild Flower Society proposed that a fence should be erected along the landward perimeter to keep people and predators out of the colony. This proposal subsequently involved the Society in a protracted effort to raise funds for the purchase and erection of a fence. The involvement of the Society in the penguin colony is discussed in more detail in this Chapter.

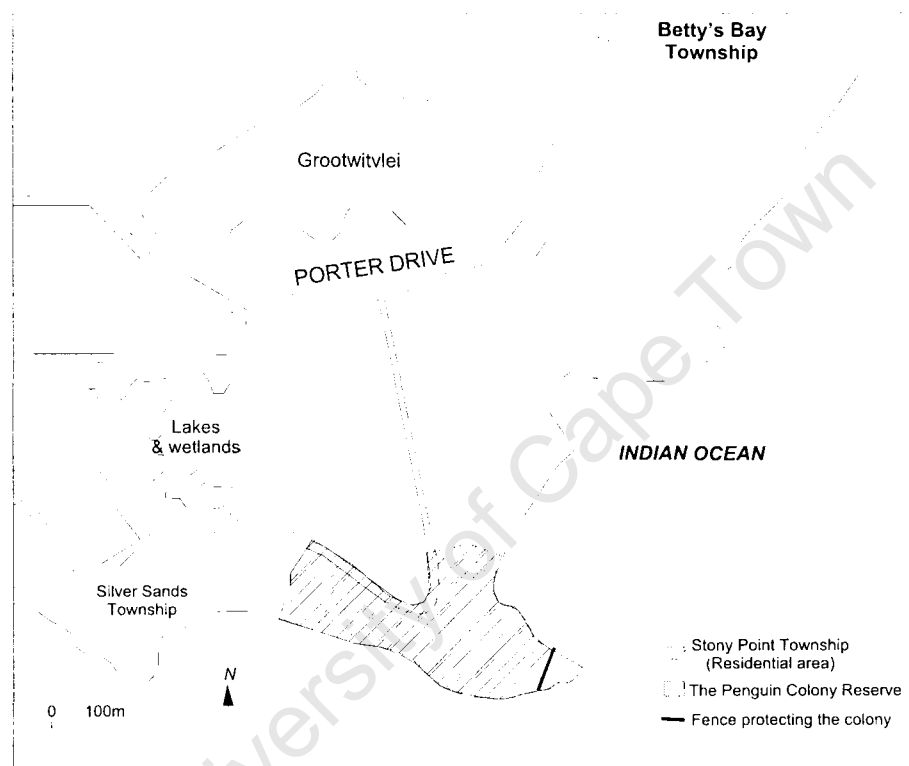


Figure 10: Site of the Penguin colony, Stony Point

¹³⁸ Appendix 66: Correspondence written by the Director, Mr J van Wyk, Department of Nature and Environmental Conservation to the Town Clerk, Betty's Bay Municipality (25 February 1985).

6.2 Attributes of Collective Involvement

6.2.1 Working for the Common Good

The constitution of the Society¹³⁹ outlines the intentions and goals of its members to contribute to the good of the public and the environment. This is evident in two main objectives: to conserve indigenous flora; and to educate the public and local property owners to minimise their impact on indigenous flora. Section 2 of the Wild Flower Society Constitution states that:

2. *The objects of the Society shall be –*
- 1) *To promote the beautification of Betty's Bay by the preservation of the indigenous flora*
 - 2) *To promote interest in the Harold Porter Botanic Garden*
 - 3) *To assist in the removal of alien vegetation in the area controlled by the Betty's Bay Village Management Board*
 - 4) *To stimulate interest among members and non-members of this society to the attainment of objects (1), (2) and (3).*
 - 5) *To co-operate with other societies or bodies which are interested in the preservation of the indigenous flora*
 - 6) *To raise and administer funds for the abovementioned objects.*

Further objectives of the Society aimed to involve people in the organisation; to network with other groups interested in the preservation of indigenous vegetation; to support the work of the Harold Porter Reserve; and to raise funds to maintain the operations of the Society.

An extract from the 5th Annual Report of the Committee (31 October 1977)¹⁴⁰ provides further evidence of the Society's involvement in various environmental interests and concerns at Betty's Bay. The close relationship between the Society and the Village Management Board is also apparent from this extract.

¹³⁹ Appendix 67: The Constitution of the Wild Flower Show Society, 1973.

¹⁴⁰ Appendix 68: 5th Annual Report of the Committee (31 October 1977).

The report expresses the Society's interest in preserving the ecology at Betty's Bay:

Although the Society was primarily formed to organise and run the biennial Wild Flower Shows it has a continuing interest in the preservation of the ecology of Betty's Bay. In this the Committee works closely with the Village Council and also the Committee of Rate Payers Association which is made easier as a number of individuals serve in more than one capacity.

The proposed donation of 3 erven of land by the Municipality as an extension to the Harold Porter Botanic Garden continues to hang fire, as it has done now for several years. The reason is that the future of the Garden itself is not certain. Two of the erven are already proclaimed Public Places and are therefore safe for all time from development. The third which is the area which made up the Golf Course, was scheduled for future sub-division for building purposes. Province has accepted that, with so much undeveloped land in Betty's Bay already there is no need for it to be reserved for future development. If therefore the donation to the Gardens should finally fall through it is the intention of the Village Council that this area, also, should be declared a Public Place. It is a splendid floral area.

As described earlier, the Wild Flower Society took an early interest in the conservation of the African penguins that arrived at Stony Point. In 1984 the Society contacted the Percy Fitzpatrick Institute at the University of Cape Town seeking advice on how best to manage the growing colony. Researchers from the Institute were already involved in monitoring the population of birds at Stony Point. They advised that the colony was likely to grow further and that the site could become one of national importance. The researchers recommended that a barrier should be built to protect the colony from predators and human interference (11 Feb 1985)¹⁴¹:

Fencing the colony is essential to its future. During our visits we have found extensive evidence of human visitors. Eventually one of these visits will be by vandals, with unfortunate results. Dogs will also be a problem...

Finally, the colony is likely to prove of national importance as a monitoring site for the Benguela Ecology Programme. If the colony grows large enough, we hope to

¹⁴¹ Appendix 69: Letter written by Dr D. Duffy, Percy Fitzpatrick Institute, University of Cape, to the Wild Flower Society (11 February 1985).

sample penguin diets using a safe stomach pump. Such samples will provide important data on the biology of the anchovy.

On the advice of the Percy Fitzpatrick Institute and the Department of Nature and Environmental Conservation, the Society became convinced of the necessity to enclose the penguin colony, but funds were not forthcoming (Minutes of the Wild Flower Society, 2 February 1985)¹⁴². In November 1986 the Society approached Dr Douglas Hey, a respected conservationist and former director of Nature and Environmental Conservation of the Cape Province, requesting him to convene a fund-raising committee in order to finance the erection of a fence and viewing platform at Stony Point (Minutes of the Wild Flower Society, 15 November 1986). Dr Hey agreed to this and seven months later it was reported that funds were received from the South African Nature Foundation. A sub-committee of the Wild Flower Society was formed to plan the erection of a barrier resulting in the enclosure of the colony (Minutes of the Wild Flower Society, 30 May 1987)¹⁴³:

The Chairman reported on two meetings of the sub-committee on site. A green plastic mesh fence with 400 mm deterrent would be erected and the Nature Foundation would fund the cost of R5,500, initially. They would later launch an appeal for the money. Mrs Smitheman had agreed to design a viewing platform. There would be one entrance in the fence for authorised people to view the penguins, of which there were about 15 at the present time.

The foregoing discussion and evidence gives some examples of the Wild Flower Society's efforts to contribute directly to conservation. The Society contributed indirectly to conservation efforts by emphasising the educational aspects of flower shows, creating a public interest in biodiversity and by providing information on the floral diversity at Betty's Bay. These flower shows were also managed in such a way as to provide an exemplar to similar organisations involved in presenting flower shows elsewhere.

¹⁴² Appendix 70: Minutes of the Wild Flower Society Committee Meeting (2 February 1985).

¹⁴³ Appendix 71: Minutes of the Wild Flower Society Committee Meeting (30 May 1987).

The organisation and support of the Hack, discussed earlier in Chapter 4, is further evidence of the goodwill of the Society and its members to eradicate Betty's Bay of alien vegetation. The Society provided a structure, a leadership and financial support to sustain the activities of the hack.

Finally, the Society lobbied local and provincial authorities to take responsibility for the conservation and management of the penguin colony. In addition, they sought advice from research scientists on ways to protect the colony and took responsibility for raising funds to enclose the colony and erect a viewing site for the public.

6.2.2 Working as a Collective

The organisation of the Flower Shows became a rallying point for members. These events required considerable co-operation and general support. In a report following the 1973 Flower Show, Heesom stated that '...all in all, Betty's Bay was brought together in a common cause in a way which perhaps has never happened before' (Attwell, 1994, p.5). Collective involvement in the preparation and organisation of the 1979 Flower Show is illustrated in a Society newsletter which describes the roles of various sub-committees with specific responsibilities for the Show that included picking, receiving, sorting and arranging flowers, managing the layout in the display hall, providing refreshments, and organising signboards to direct visitors to the venue. In the Society newsletter, the Chairperson of the Society, Mr L. Harker, described the tasks of each sub-committee and requested assistance from Society members to support the organisation of the Show¹⁴⁴:

To achieve the standard to which all of us are looking for, the convenors of the respective Sub-committees will need all the help that they can obtain. This Newsletter, therefore, has as its essential object an invitation to assist the Show

¹⁴⁴ Appendix 72: The Wild Flower Show newsletter (March 1979).

in the direction you prefer and/or in which way you feel you can make the best contribution.

The co-ordination of the Hack remained one of the most important on-going activities of the Society and one that best demonstrates the commitment of volunteers to the task. At the Society's AGM (December 1991)¹⁴⁵, the Chairperson reported on the involvement of members at the monthly hack:

Our main activity has continued to be the monthly Hack, held on the first Sunday of each month at 9.00 o'clock. The average monthly attendance was 21 people, with a high of 44 people (in January when our upcountry members are down on holiday) and a low of 8 (in August when it is cold and wet). We have hacked from the eastern edge of Betty's Bay right over to the western edge at the Blesberg and at various points in between. Our main objectives have been the Pohutukawa (New Zealand Christmas Tree) and the Acacia Cyclops (Rooikrans). Tools have been maintained by Mr Lewis Silberbauer and Mr Ron Cock and some new tools were acquired as well with a kind donation of R4800,00.

In 1992 the local botanical branch at Betty's Bay, now known as the Kogelberg Botanical Society, was asked to arrange a display at the Flora '93 Flower Show to be held in Cape Town. The Society agreed to the task and, in so doing, was able to draw on the assistance and co-operation of other interest groups and members living in Kleinmond and Hermanus. The Chairperson reported on these matters at the Branch AGM and described how the co-operation with like-minded societies was used to good effect (28 December 1993)¹⁴⁶:

...the highlight of this year has been our participation in Flora '93. Once again we were invited to put on a display of Restios...Because of the rough nature of Restios, we were able to pick the bulk of our material well in advance of the show, thanks to much local help and our Kleinmond and Hermanus colleagues. It was a good example of one whole community working together, and I think, really enjoying it.

The Wild Flower Shows and the monthly hacks required the co-operation of willing volunteers. The Battle of Betty's Bay newsletter, Round Number 464 (July

¹⁴⁵ Appendix 73: Chairperson's report to Branch AGM (December 1991).

¹⁴⁶ Appendix 74: Chairperson's report to Branch AGM (28 December 1993).

2001)¹⁴⁷ and 465 (August 2001)¹⁴⁸ lists the names of those who participated in these two events and gives some indication of support. Hacks during the winter season were not generally well supported, but the organisers reported that they were pleased that 19 people attended the July Hack, while 28 people attended the August Hack of 2001.

6.2.3 Acquiring Knowledge

Committee members of the Wild Flower and Botanical Societies were well informed about plant species found at Betty's Bay. This is demonstrated, for example, when the municipal Council sought the advice of the Society on different kinds of alien species growing at Betty's Bay to be included in an amendment to the Weed Act of 1937. The Society committee identified twelve species that were not listed in the Act at the time. The botanic and common names of these twelve species were listed in the minutes of the Society (6 November 1982).

In summing up the achievements of the Flower Shows, the Chairperson of the Wild Flower Society, Heesom, suggested that members had learnt a great deal about how to present Shows that incorporated conservation principles (5 May 1975)¹⁴⁹:

There were no mass displays of flowers which involves 'mining' the veld, and, for the same reason, we have decided to run the Show only every two years. The Show had a strong educational bias for every one of the specimens was fully named by a Professional Botanist and Betty's Bay is reputed to have more varieties of wild flower for its size than anywhere else in the world. All in all, the Show created a very favourable impression and was regarded by many good judges as a model as to how such a Show ought to be run. It was extremely well

¹⁴⁷ Appendix 75: Battle of Betty's Bay newsletter Round 464 (July 2001).

¹⁴⁸ Appendix 76: Battle of Betty's Bay newsletter Round 464 (July 2001).

¹⁴⁹ Appendix 77: Letter from Chairman of the Wild Flower Society, Heesom, to the South African Railways Travel Bureau (5 May 1975).

supported by the public (despite initial lack of publicity) and some 1500 people came over the two days.

The scale of the Flower Shows required specialist expertise that lay outside the experience and expertise of local Society members. Access to expertise and knowledge of specialists appeared readily available. In a comprehensive report on the 1975 Wild Flower Show, Heesom describes the extent of support he obtained from professional botanists (November 1975)¹⁵⁰:

No Wild Flower Show can hope to be a success without the support of the experts, though strangely some Shows do try to go it alone. We could not have been better served. The National Botanic Gardens of South Africa gave massive support through the Harold Porter Botanic Garden and staff. John Rourke came out to the pickers' meeting and pinpointed where one species after another was likely to be found. Elsie Esterhuizen from the Bolus Herbarium, with Ez Powrie, dealt with the Restionaceae section in a way which compelled the admiration even of her fellow professionals. Charlie Boucher and Mary Thompson from the Botanical Research Unit, Stellenbosch [University], were responsible for naming the specimens and did an extremely meticulous job. In the professional class of course also is Dr Marie Vogts with her expert knowledge of Proteaceae. Last, but by no means least, John Rourke offered to build up for us a 'Herbarium Parvum' of all the species on show so that for future Shows the long job of exact identification will be made considerably easier.

The membership was also exposed to the knowledge and experience of guest speakers. The organising committee of the Society invited guest speakers to present talks to the membership on three or four occasions each year. At the Betty's Bay Botanical Society AGM, the Chairperson reported on the themes and topics that were presented by invited guest speakers (28 December 1993)¹⁵¹:

We have hosted several talks. The first was by Dr Ian McDonald of the S.A. Nature Foundation, who spoke, most appropriately on the control of invasive alien vegetation world-wide, which had been the subject of his doctorate. It helps to know that others too share our problems. Hilary Mauve gave us an enchanted evening gardening with butterflies; ones attitude to caterpillars will never be the

¹⁵⁰ Appendix 78: Report on the 1975 Wild Flower Show written by the Chairperson, Heesom (November 1975).

¹⁵¹ Appendix 79: Chairperson's report at the Branch AGM (28 December 1993).

same again. Then in December, Peter Steyn, the renowned bird photographer, enthralled us with his slides and experiences in this field.

The construction of knowledge implies that individuals or a group develop an understanding that is informed by values, perceptions, experience, and uses language to express and refine an evolving understanding of concepts. In this study, there are no explicit references in the primary sources to indicate any forms of socially constructed knowledge with respect to concepts such as conservation or ecology. Indirectly, however, examples abound. For instance, at the Society's AGM in 1993, the Chairperson expressed her thoughts on the unique biological diversity at Betty's Bay and acknowledged that the environment had a right to be conserved and protected. Since the inception of the Society, the membership felt that the long term conservation and protection of biodiversity at Betty's Bay could only be achieved by educating property owners, by continuing to remove alien vegetation, and by informing the public of the fragility of the *fynbos* biome. These perceptions and ideas were expressed at a Society committee meeting in a proposal to establish a special Projects and Education Sub-committee to address a number of concerns (20 July 1985)¹⁵²:

- (a) Offer assistance to the Curator of the Gardens to expand the existing ongoing floral presentation and to develop something unique to Betty's Bay and create a greater awareness of the whole diversity of the Kogelberg Area fynbos.*
- (b) Provide a fynbos service to advise new and existing owners on plants to use on their plots in Betty's Bay, when they want this service.*
- (c) These objectives would be developed in terms of three important aims (i) To conserve the fynbos; (ii) To avoid and remove the aliens (iii) Create a greater public awareness of the unique and fragile nature of the fynbos.*

6.2.4 Taking Responsibility

The Society took responsibility for the Betty's Bay environment in several ways. The earliest records indicate that the Society concentrated on informing all

¹⁵² Appendix 80: Minutes of Betty's Bay Wild Flower Society committee (20 July 1985).

ratepayers about alien vegetation and recommended selected indigenous plants that were likely to grow well in the conditions at Betty's Bay. The Chairperson of the Wild Flower Society outlined the Society's intentions to inform all ratepayers about plants and planting in Betty's Bay through printed circulars to be sent to all ratepayers¹⁵³:

In due course I hope to send out a circular to every ratepayer in Betty's Bay (about 1000 of them) on the whole subject of alien vegetation – what not to have on one's property and what to plant instead – accompanied by a full colour circular being produced by the Department of Nature Conservation, which will cost a bit, though if it is included [in] the Rates notices early next year, which is the next opportunity for blanketing all the ratepayers, we ought to get a free ride.

In 1993 the Society became involved in protracted efforts to have private land incorporated into the Harold Porter Gardens. The objective was to extend the Harold Porter Gardens along the Disa River all the way to the sea (Figure 11).

¹⁵³ Appendix 81: Letter written by Heesom to the Chairperson of the Wild Flower Show (11 April 1979).

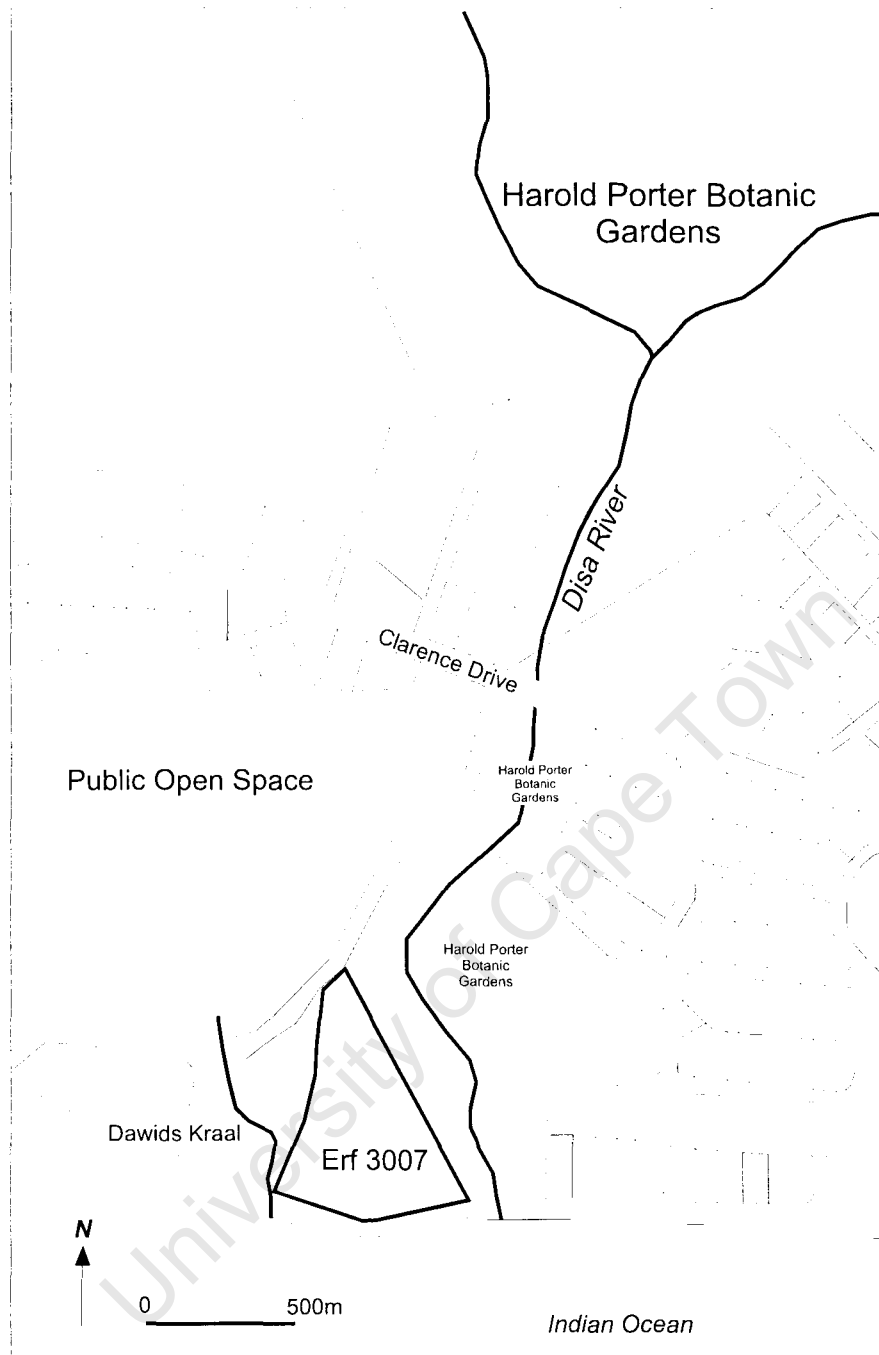


Figure 11: Erf 3007 and its proximity to the Botanic Gardens

The history of the local Botanical Branch's efforts to acquire land (Erf 3007) is described in a letter written by the Chairperson of the Betty's Bay Botanical

Society and addressed to the National Botanical Society (4 July 1995)¹⁵⁴. In brief, the Society attempted to raise capital to purchase the site (Erf 3007), but was unable to meet the seller's demand. The Society had hoped that the land could be secured for conservation purposes under the management of the National Botanic Institute since the land would form an adjunct to land already under the management of the Harold Porter Gardens. Since the Society was unable to raise the necessary funds, the land in question was subsequently sub-divided and acquired for private development:

As you know, the history of trying to acquire this Erf to add to Harold Porter Gardens is a long and complicated one, there has also been a considerable amount of interference by private people in the matter, despite the fact that the Botanical Society was working on it....

All this is academic now. What still troubles most of us is that development on this erf has been allowed to proceed despite the fact that none of the conditions laid down by the Municipality have been adhered to.

The Society also took responsibility to ensure that their views were represented on various issues at Betty's Bay. Conservation concerns were the dominant motivating factor for the Society's involvement in environmental issues. For example, the Society commented on the Betty's Bay Structure Plan commissioned by the Betty's Bay Municipality in 1991. In preparation for the Structure Plan, the Society submitted a report to the Municipal Council of Betty's Bay, outlined a variety of environmental problems at Betty's Bay, and offered practical solutions. At the conclusion, the Society requested the Municipal Council of Betty's Bay to 'formulate and actively promote a policy for conserving the environment of the Township, and to this end, the Branch offered assistance to the Council in drawing such a policy'¹⁵⁵. In a submission to the Town Planners, tasked with the design of a Structure Plan for Betty's Bay, the Society stressed the importance of environmental conservation and the need to define the concept

¹⁵⁴ Appendix 82: Letter written by Palmer, the Chairperson of the Betty's Bay Botanical Society to Advocate A. Meiring, the Chairperson of the Botanical Society of South Africa (6 May 1995).

¹⁵⁵ Appendix 83: Submission to the Municipal Council of the Betty's Bay regarding the environment (1993).

broadly to include both human and biophysical dimensions (March 1994)¹⁵⁶. In the extract, the human dimension of the environment is confined to concerns about infrastructure, waste and pollution.

The Society would like to see the whole area as unspoilt as possible, for the maximum enjoyment, both recreational and educational, of all people who cherish their world.

Previous planning took place before ecological factors were fully understood. A concerted effort should, therefore, be made at some form of general restitution, to restore valuable ecological sites.

Planning must be for the greater region and must go hand-in-hand with conservation. Environmental conservation is a broad concept: it includes all features, natural and man-made, people, rubbish, noise, unsightly structures and development, roads, quarries, unacceptable industries, sewage and all forms of pollution must be eliminated.

The Society also became involved in 'search and rescue' mission to identify and extract indigenous plants that lay in the path of engineering works that were necessary to install an underground electrical reticulation system at Betty's Bay. The Chairperson of the Society, Smitheman, reported on this 'mission' at the Branch AGM (28 December 1993)¹⁵⁷:

*As the electrification of Betty's Bay has progressed, since February, our local members have mounted a search and rescue operation, preceding the bush clearers and trench diggers laying the underground cables. Many plants have been saved, taken to the Harold Porter Gardens for potting out. Today, for example, you can see a patch of *Satyrium halackii*, tall spikes of pink serrated flowers growing sturdily at the foot of the sand dune feature in the Gardens.*

Finally, the Society took responsibility to ensure that arrangements to protect the growing population of African penguins were adequate. As already mentioned, Mr R. Attwell, a committee member of the Wild Flower Society and an elected Councillor to the Betty's Bay Municipality, consulted the Percy Fitzpatrick Institute

¹⁵⁶ Appendix 84: Submission by the Society to the Town Planners, Betty's Bay Municipality (1994).

¹⁵⁷ Appendix 85: Chairman's Report at the AGM (28 December 1993).

at the University of Cape Town to seek advice on how best to protect the colony. As a result of advice received from the Institute, Attwell wrote to the Acting Mayor of Betty's Bay, Mr H. Edwards, suggesting that the Council's approach of allowing members of the public to enter the bird colony enclosure was incorrect (5 October 1988)¹⁵⁸:

The data contained in the accompanying letter from the FitzPatrick Institute clearly indicates that Council has adopted poor management in respect of the penguin situation. The opening of the area to the public has not achieved what was hoped for – indeed the continuation of this plan can lead only to harmful effects on the penguin population. Further, the decision does not bring credit on a Municipality which, until now, has enjoyed a reputation for an understanding of, and support for, conservation principles.

I submit that Council should rescind its former decision to allow the public to enter the fenced area, and that the gate be locked forthwith; immediate action is important in view of the data contained in the letter, particularly that relating to moulting and disturbance at this time – leading to potentially major effects on the population.

By the same token, the Local Authority also sought the assistance and advice of officials and scientists from provincial government departments and research institutions. For example, in response to a query from an Honorary Nature Conservation Officer at Betty's Bay (Mr van der Zeyde), the Town Clerk explained why the gate to the enclosure of the penguin colony was being left open (21 October 1988)¹⁵⁹:

After the fence was erected and the gate locked, the number of cormorants that nested at Stony Point increased considerably, but the disturbing factor was that the number of penguins reduced to the lowest count that has ever been recorded.

Further, I wish to inform you that Mr. Heijl and Dr. Berutti, from the Department of Sea Fisheries and Nature Conservation respectively, visited Betty's Bay on our request to investigate the problem and advise us on alternatives if our measures

¹⁵⁸ Appendix 86: Letter written by Attwell to the Acting Mayor of Betty's Bay (5 October 1988).

¹⁵⁹ Appendix 87: Letter written by the Betty's Bay Town Clerk, Jonkheid, to Honorary Nature Conservation Officer, van der Zelde (12 October 1988).

were not acceptable to them. At that point in time the number of cormorants already showed signs of a reasonable reduction and the number of penguins had again increased from approximately 20 to 37. It was agreed that the gate would be kept locked during the penguin breeding season during April and May.

6.3 Attributes of Social Capital

It has already been mentioned that the Flower Shows required considerable expertise from specialists who were required to identify and label plant species. At the first show in 1973, 285 species were collected from the Hangklip region extending from the west of the Palmiet River to Cape Hangklip (Attwell, 1994). In 1977, 350 species were collected and identified (Attwell, 1994). The Society invited professional botanists to undertake the task of collecting, identifying and labelling the plants. In all these efforts, the Director of the Kirstenbosch Botanic Gardens gave assurance of support in the Society's endeavours to mount these flower shows. These examples illustrate the external connections and networks which the Wild Flower Society established and used at various times. In addition, the Society invited influential guests to attend the Flower Shows as a further means of extending their networks. At the 1977 Flower Show, Dr Douglas Hey, Director of Nature and Environmental Conservation was invited, along with other specialist botanists, to view the Flower Show. Others invited included botanists renowned for their expertise: Mrs Mary Maytham Kidd, author of the Cape Peninsula Wild Flower Guide; Professor Christo Pienaar, Botany Department, University of Western Cape; and Professor Jan van der Walt, Botany Department, University of Stellenbosch (Attwell, 1994).

In the early 1980s, the Society became involved in efforts to establish the Hangklip Nature Reserve. The National Department of Water Affairs, Forestry and Environmental Conservation initiated this project. The Society gave enthusiastic support to this project because the proposed reserve included the township of Betty's Bay as well as the adjacent mountain slopes. In August 1980, committee members of the Society started attending meetings along with

government officials to discuss the establishment of the nature reserve. The optimism and enthusiasm of the Society, led the Chairperson, Harker, to suggest that the 'proposed reserve was the Society's greatest defence against spoiling the peace and tranquillity of Betty's Bay' (Minutes of Committee Meeting 5 December 1981)¹⁶⁰.

The discussion in this section illustrates some of the attributes of social capital. It has emphasised the importance of the 'connectedness' of members of the organising committee in that experts were invited to advise on various matters regarding the display of flower shows. It has also illustrated that the existence of an organised structure and a social network that had the potential to increase the opportunities of involving members in various activities in the conservation of flora at Betty's Bay.

6.4 Relations with Institutions

During the 1970s and 80s, communication and interaction between the Society and local authority was facilitated by the dual membership of people involved in both the Wild Flower Society, the Ratepayers and Municipal Councillors. An extract from the 5th Annual Report of the Committee of the Wild Flower Society suggests that a close co-operation existed between the Society and the VMB (November 1977)¹⁶¹:

Although the Society was primarily formed to organise and run the biennial Wild Flower Shows it has a continuing interest in the preservation of the ecology of Betty's Bay. In this the Committee works closely with the Village Council and also the Committee of Rate Payers Association which is made easier as a number of individuals serve in more than one capacity.

¹⁶⁰ Appendix 88: Minutes of Wild Flower Society Committee Meeting (5 December 1981).

¹⁶¹ Appendix 89: 5th Annual Report of the Committee of the Wild Flower Society (November 1977).

In the early 1980s, this close co-operation and interaction between representatives of the Local Authority council and the Society was also confirmed by the regular attendance of elected officials at the Society's committee meetings. This is demonstrated in the following example:

*Mr Harker (Chairperson of the Society) had expressed the municipality's desire to plant Melkhout (*sideroxylon inerma*) each side of Dawidskraal, paying for the cost of clearing, planting and protection. Mr Harker outlined the Municipality's proposed plan being to eventually have the main area protected and fenced and the smaller areas made available for picnic sites. ...Mr Harker explained that the Mayor was seeking the co-operation of the Society as a matter of principle at this stage. It was agreed that the Society's Hack members would undertake the clearing of aliens on these sites and give all possible assistance (6th November 1982).*

The Municipality were largely in accord with the Society's conservation values and were concerned to protect the natural heritage at Betty's Bay. In 1985, in a Municipal Circular to ratepayers, the Local Authority describes its policy of protecting the flora and natural resources in conjunction with the Conservation of Agricultural Resources Act 43 of 1983. The circular also identifies three species in addition to those listed in the Act that should be considered invasive (March, 1985)¹⁶². In the extract below, the Local Authority acknowledges the work and support of the Wild Flower and Ratepayers' Association:

The Cape fynbos is part of our national heritage. It is a world-famous flora, threatened by development and the spread of alien vegetation. It is well preserved within the Municipality of Betty's Bay, and its conservation is one of our main aims. Accordingly it is the Municipality's intention to embark firmly, but with patience and understanding, on a campaign to promote the gradual eradication from Betty's Bay even of all undesirable invasive plants.

By joining the Wild Flower Society and the Ratepayers' Association, you will assist us in furthering the cause of conservation in our area. Please help us to develop at Betty's Bay a township in harmony with the environment.

¹⁶² Appendix 90: Circular to sent to all ratepayers of the Betty's Bay Municipality (March 1985).

The Society also enjoyed a close relationship with the Ratepayers' Association. For instance, at the AGM of the Wild Flower Society (27 December 1980), it was suggested that the Ratepayers' Association and the Wild Flower Society should be integrated into a single body. This matter was discussed further at a Wild Flower Society committee meeting (28 February 1981). The discussion was prompted by the offer of an annual donation of R500 from the Ratepayers' Association to support the work of the Wild Flower Society. The Society was keen to accept this financial support, but felt that it was necessary to remain a separate entity so that the special interests of the Society could be addressed¹⁶³:

...It was felt that the Wild Flower Society has a special interest only in wild flowers and conservation in general while the Ratepayers' Association is more concerned with the "politics" of Betty's Bay. It was, therefore, decided to thank the Ratepayers' Association for the donation of R500 and to ask them to bear the cost of the hack from 1982. If they do not see their way clear to do so, the Wild Flower Society will continue to bear the costs so long as it is financially able to do so.

In the early 1990s, relations between the Society and the Local Authority showed signs of deterioration. No direct evidence was found to indicate why relations had deteriorated, but an area of contention that fuelled a growing frustration on the part of the Society was the perceived lack of action by the Local Authority to design an environmental management plan for Betty's Bay. The Society became actively involved in lobbying the Local Authority to implement such plans. In the minutes of the Betty's Bay Botanical Society (3 October 1992), the Town Clerk of Betty's Bay was requested to promote policies to conserve the environment. The Town Clerk responded positively to the request, but members of the Botanical Society felt that too little was being done to address urgent environmental matters especially because of the rapid expansion of the settlement and unchecked development. Some members of the Society were frustrated by the Local Authority's ineptitude to address conservation issues at Betty's Bay. In a

¹⁶³ Appendix 91: Wild Flower Society committee meeting minutes (28 February 1981).

letter to the Botanical Society, Mr G Cunningham and Mr R Attwell outlined the 'Future Environmental Conservation in Betty's Bay' (n.d. estimated at 1991 or 1992)¹⁶⁴. Extracts from the letter emphasise the responsibility which they expected the Local Authority to undertake:

1. *The concept of a Biosphere Reserve in the Hangklip / Kogelberg / Palmiet area is of international importance.*
2. *For this concept to become effective, it is essential that all the local authorities concerned make a co-operative effort to ensure its application.*
3. *The Betty's Bay environment is arguably the most important part of the area controlled by local authorities; accordingly the Betty's Bay Municipality should play a leading role in the discussions and application of the proposed biosphere reserve concept.*
4. *Unfortunately, it appears that the Municipality's role is negative (see Appendix A (1) (2) (3) – letters from and to G. B. Cunningham) in so far as environmental conservation in Betty's Bay is concerned.*
5. *In order to attempt to overcome the problem, we suggest that the Branch requests an early meeting with the Municipal Council to spell out the importance of the biosphere concept, and the need for immediate action in respect of conservation measures in our township.*

The Town Clerk responded to these suggestions by requesting that Attwell should draft a policy for the conservation of the Betty's Bay Environment (1993)¹⁶⁵. Attwell took up this challenge and began by outlining the efforts of the previous Council, and then offered plans for the immediate future and ongoing support of the Society. The sentiment of the letter emphasises the Society's conception of conservation and an expression of values in which nature had to be protected against future development:

The area is part of a proposed International Biosphere Reserve. This enhances its importance and necessitates better attitudes towards resources conservation. Local authorities usually lack the expertise, manpower and money to practice proper conservation, and they commit themselves to development at the expense of the environment. This brings them into conflict with local conservationists. This is unlikely to happen if development goes hand in hand

¹⁶⁴ Appendix 92: Letter written by Cunningham and Attwell to the Botanical Society, outlining the 'Future Environmental Conservation in Betty's Bay' (estimated date: 1991 or 1992).

¹⁶⁵ Appendix 93: The Town Clerk, Stassen, responding to a request to draft a policy for the conservation of the Betty's Bay Environment (1993).

with conservation. Yet, despite being arguably the most important of the local authority areas to be included in the Biosphere Reserve, Betty's Bay is still without a conservation officer.

The natural attributes of our area are under increasing threats, and not only from an affluent society placing recreational pressures on the resources. The establishment of a satisfactory programme, without ecological advice, is hardly possible. Unless we set high standards in conserving our fynbos, the insidious encroachment of development into areas which should be conserved will follow.

*Former development in the township has shown lack of planning and scant regard for environmental consequences: the siting of a firebreak through the middle of our main colony of the threatened *Mimetes hirtus*, the deviation of a stream, resulting in a donga formation, the second island in Grootwitvlei, are some examples. But for degradation due to a lack of policy, go to Kleinmond which offers the ultimate – deviation of a river, resulting in massive erosion and flooding, rock blasting in the nature reserve for attempted stabilization of the new course of the river, an eyesore of a waterworks in the nature reserve.*

Management plans must be formulated – essential to effect the policy. As requested, I have given you an outline, and here the Botanical Society Branch's offer to assist you would be useful.

Despite the efforts of the Society and individuals keen to promote environmental conservation, a level of frustration continued. At the Betty's Bay Botanical Society AGM (December 1993)¹⁶⁶, it was reported that the Council had not responded to the Society's requests and proposals. The extract below outlines the frustrations of the Society, but also their resolve to continue to pursue their goals:

4.2 There has been no reaction to the Branch's proposed policy for Environmental management. The Committee will once again approach the Council on this.

4.3 It was suggested that the Committee become proactive in this matter and made positive proposals to the Council.

4.5 It was suggested that the Committee approached the Town Planners direct and made suggestions about the Environmental Management, and ask to see the proposed plans.

¹⁶⁶ Appendix 94: AGM of Betty's Bay Botanical Society (December 1993).

Soon after the first penguins arrived at Stony Point, the Society wrote a letter to the Town Clerk of Betty's Bay (18 April 1985)¹⁶⁷ urging the Local Authority to take measures to protect these penguins since they are an endangered species. The Society felt that Council should take immediate responsibility for protecting the colony:

The Jackass Penguins have not bred on the mainland of southern Africa since a few years after van Riebeeek's landing in 1652. At first one pair and subsequently several more pairs of these now endangered birds selected nesting sites at Betty's Bay and this area may well prove important in re-establishing these penguins and finally removing them from the endangered list.

We should like to suggest to the Council that these birds be protected as soon as possible.

In reply, the Town Clerk gave his assurance that the Council was equally desirous to secure the protection of the penguin colony, but could not declare the area a nature reserve until this was approved by the Department of Nature and Environmental Conservation (6 May 1985)¹⁶⁸:

I can assure you that my Council is hundred percent in favour of the protection of the colony of penguins but the problem lies in the time it always takes to get the co-operation of a Government Department!

Earlier, the Director of the Department of Nature Conservation and Environmental Conservation, Dr van Wyk, had also intervened and had urged the Local Authority to re-zone the area occupied by the penguins to that of a local nature reserve (25 February 1985)¹⁶⁹:

The Jackass penguin is a species that is regarded as endangered. They breed mostly on islands, but disturbances on these islands and the ever present threat

¹⁶⁷ Appendix 95: Correspondence written by the Chairperson, Wild Flower Society (Mrs A Nunn) to the Town Clerk, Betty's Bay Municipality (11 April 1985).

¹⁶⁸ Appendix 96: Letter written by the Town Clerk of Betty's Bay to Department of Nature and Environmental Conservation (6 May 1985).

¹⁶⁹ Appendix 97: Letter written by the Director of the Department of Nature and Environmental Conservation, Mr J van Wyk, to the Town Clerk, Betty's Bay Municipality (25 February 1985).

of oil pollution has caused a considerable decline in their numbers. Although they bred on the mainland in the past, interference by man has prevented them from doing so for many years.

A successful breeding colony at Stony Point will make a considerable contribution to the conservation of the Jackass penguin. We consider it thus vitally important that adequate steps be taken to protect this colony. The main problem at present seems to be the presence of dogs that disturb the birds.

We understand that Stony Point is Municipal property. Would it be possible for your Council to consider having this area proclaimed as a local nature reserve? This Department could then assist with funds to provide an adequate fence as a first step to protect the colony.

Finally, with respect to establishing working relations between the Society and institutional authorities, the Society became a leading stakeholder in the preparation of an application to the United Nations Educational, Scientific and Cultural Organisations (UNESCO) to establish the Kogelberg Biosphere Reserve. The preparation was undertaken jointly with input from members of the Society, the Local Authority, the Kleinmond Nature Conservation Society and the Kogelberg Biosphere Committee (KOBIO). The eventual registration of the site as a Biosphere Reserve, established the Kogelberg as the first proclaimed site on the African Continent (1998). In the Chairperson's Report to the Betty's Bay Branch of the Botanical Society AGM, the efforts of the Society were recognised in their support and preparation of the application for the Biosphere Reserve (December 1993)¹⁷⁰:

The most far reaching combined effort is the possible declaration of the whole of the Kogelberg as an International Biosphere Reserve. Such a status gives international recognition to any area which is naturally unique, ecologically valuable and possibly threatened by unchecked development of various kinds. It would be registered by UNESCO and the core area, Kogelberg itself, would be a World Heritage Site. To date, no place in South Africa has been thus declared. It is great that the irreplaceable value of the fynbos here has been recognized and chosen to be the pioneer area in the whole country. The area would extend from Steenbras to Bot River and inland as far as the N2 running through Elgin. In the

¹⁷⁰ Appendix 74: Chairperson's Report at the AGM of the Betty's Bay Branch of the Botanical Society held (December 1993).

future, corridor zones can be created to link the Kogelberg with other valuable fynbos areas.

6.5 Addressing Imperatives

The Society became actively involved in promoting the idea of proclaiming the area from Cape Hangklip to the west of the Palmiet River as a nature reserve. These efforts were in-keeping with the Society's wishes to preserve and protect the biodiversity of the area. In 1980, discussions were held with the Department of Forestry with the view to establishing such a reserve. In the minutes of the Society committee meeting (28 February 1981), it is indicated that maps had been commissioned to display the attributes and features of the proposed area. There is also evidence of correspondence with the Department of Forestry on the matter of establishing the reserve¹⁷¹:

The chairman reported that he received a letter from Mr Fenn of the Dept of Forestry and advised the Committee as to what had been done. Mr Fenn had been provided with a cadastral map of the proposed nature area. His department will now take the matter further, do all the necessary preparation work and thereafter apply to the Prime Minister's Office to have the proposed area declared a nature area.

In a subsequent meeting, the proclamation of a nature reserve was discussed with the committee and the provincial Department of Water Affairs, Forestry and Environmental Conservation. It was recommended that the area zoned for residential purposes should be excluded from the nature area and that mountain areas were best protected if they were classified as 'catchment' areas. The Committee agreed with this approach, but felt the inclusion of Betty's Bay township could still be achieved at some later stage (6 June 1981)¹⁷². As mentioned earlier, the Wild Flower Society felt that the proposed reserve would be 'the Society's greatest defence against spoiling the peace and tranquillity of

¹⁷¹ Appendix 98: Minutes of the Wild Flower Society committee meeting (28 February 1981).

¹⁷² Appendix 99: Minutes of the Wild Flower Society committee meeting (6 June 1981).

Betty's Bay'¹⁷³. Unfortunately these efforts to establish a nature reserve did not materialise. Nevertheless, the idea of creating a reserve gained impetus and resulted in discussions to incorporate the Hangklip coastline and Kogelberg Mountains into the Kogelberg Biosphere Reserve officially being declared in 1998. This is a further example in which authorities and organisations took responsibility and 'care' by finding a mechanism to safeguard the biophysical environment.

A form of 'caring' is also recognised in efforts to establish joint projects with the Local Authority and other organisations. By 1981 the Wild Flower Society shifted its *raison d'être*. The feasibility of continuing to hold flower shows was in doubt. Apart from a limited capacity to organise further shows, there was general consensus that these shows were no longer worthwhile and that the 'event was not a viable proposition financially'¹⁷⁴. It was felt that the objectives of the show had been achieved and that more attention should be given to support the Harold Porter Botanic Gardens:

...Dr Vogts said she felt our objective in demonstrating to the public how a show ought to be run – with the emphasis being placed on education and conservation – had been achieved.

Mr Attwell expressed the view that the Hack Group achieved more than flower shows could ever hope to achieve.

It was unanimously agreed that the focal point of activities should be the Botanic Gardens. Furthermore, that the Committee should aim at popularising the Garden and making this the centre of activities arranged by the Society.

6.6 Outcomes

Outcomes represent tangible, practical achievements. The Flower Shows contributed to conservation partly in the manner in which the shows were

¹⁷³ Appendix 100: Minutes of the Wild Flower Society committee meeting (5 December 1981).

¹⁷⁴ Appendix 101: Minutes of the Wild Flower Society (5 December 1981).

conducted, and also in the contribution to educating the visiting public. In a report on the Wild Flower Show of 1977, Heesom claims that some success could be described in terms of the number of visitors to the show, but that the real success lay in the efforts to establish an exemplary flower show – a model for others to follow (November 1977)¹⁷⁵:

How is one to judge the success of the Show? If one takes as a criterion the number of people who were attracted to it, then this was easily the most successful of the three Shows which we have held...If you add in Society members who had free entry, a number of invited guests and masses of children who accompanied the adults there were certainly well over 3500 people in all. It was gratifying too to see that they included a number of Coloureds who were very welcome. It goes without saying that the Show was a financial success.

The other, and ultimately more important, criterion must be the reaction of the more discerning visitors. I can only say that the Betty's Bay Show now seems to have established itself firmly as the model of how a Wild Flower Show should be run. That at least was the opinion of Dr Douglas Hey the Director of Nature and Environmental Conservation in the Cape; as it is his department which issues the permit allowing the Show to be run and the flowers to be picked, one could not have a more authoritative opinion. It is a "specimen" show with many varieties as can be found including the common ones which are so often ignored.

Examples of other tangible outcomes, discussed earlier in this chapter and supported by extracts, include the report by a hack convenor, Silberbauer, claims that the Hack Group was responsible for keeping 89% of Betty's Bay relatively free of aliens (22 October 1991)¹⁷⁶.

Finally, community involvement in lobbying initially for better management of the penguin colony produced outcomes that have contributed to the protection of the African penguins and ensured further recruitment. Initially the Society concentrated on lobbying the local municipality to address the conservation of the penguins. Later they became involved in raising funds for an enclosure and a viewing site. They also urged the Council to declare the penguin reserve a local

¹⁷⁵ Appendix 102: Report on the Wild Flower Show of 1977 written by Heesom (November 1977).

¹⁷⁶ Appendix 103: Letter written by Silberbauer to Dr G. Brits, Houteq (Pty) Ltd (22 October 1991).

nature reserve and to draft a management plan for Stony Point. The first record of the Wild Flower Society's interest in the penguin colony was recorded in the minutes of a committee meeting held on 17 November 1984. Over the next ten years the Society discussed their interests and concerns with respect to the conservation of the penguin colony. Table 5 summarises the main issues that were discussed and actions taken by members of the Society.

Table 5: Actions and decisions taken by the Wild Flower Society (Source: Minutes of the Wild Flower Society and Botanical Society, 1984 to 1994).

Date	Issues discussed	Actions/ decisions taken
17 – 11 – 84	Colony requires fencing	Conservation motivation to be drafted with estimation of costs
28 - 06 – 86	Funds need to be raised. Municipality has to approve plan to build a wall.	Awaiting decision from Percy Fitzpatrick Institute and Municipality
15 – 11 – 86		Dr Hey agreed to chair a fund-raising committee to build a wall.
03 – 01 – 87 AGM	Reports of many penguins being killed by a leopard	
30 – 05 – 87		A green fence to be erected around colony. SA Nature Foundation to provide funds (R5500). Mrs Smitherman to design a viewing platform.
22 – 08 – 87		Fence had been erected and handed over to the Municipality by the Nature Foundation
20 – 02 – 88	No action on viewing platform. An alternate builder was required.	Mrs Fourie to keep statistics of birds.
30 – 04 – 88	Suggested a style over the fence into reserve to allow human access because cormorants were breeding too fast.	Letter to be written to the Municipality informing them of the situation.
06 – 05 – 89	Proposal that the Penguin colony should be given municipal nature reserve status.	Letter to be written to the Municipality.
07 – 04 – 90	Need for notice boards to indicate directions to Stony Point penguin colony	Letter written to Mr Soutter of SA Nature Foundation – funding request.
28 – 12 – 94 AGM		Reports that a request was made to Hangklip Council to have penguin colony declared a nature reserve. Some assurances given that this would be done following a public meeting (18-11-93).

The Avian Demography Unit at the University of Cape Town monitors trends in the breeding pairs of African Penguin annually. The Unit is responsible for conducting counts during the peak of the breeding season at 12 colonies in the Western Cape. Between 1992 and 2003 the breeding pairs of African Penguin increased by 7.4% per annum (du Toit, *et.al.*, 2004). In 1986, the Unit recorded 40 nests at Stony Point, Betty's Bay. Between 1992 and 2003 this colony doubled in size, increasing at a rate of 10.4% per annum which is two percent more than any other site in the Western Cape. Figure 12 graphically illustrates the increase in breeding pairs between 1992 and 2003. This data provides evidence that the Society and local authority have demonstrably contributed to the protection of the colony through judicious measures to enclose the area to predators and to prevent the public from disturbing the birds particularly during the breeding season. Du Toit, Underhill and Crawford (2004) report that despite these measures, the colony has expanded beyond the enclosure making the birds vulnerable to disturbance and predation. They report that in the summer of 2003/2004, Caracals started preying on adult penguins at Stony Point. Subsequently, the Local Authority arranged for the caracals to be caught and relocated.

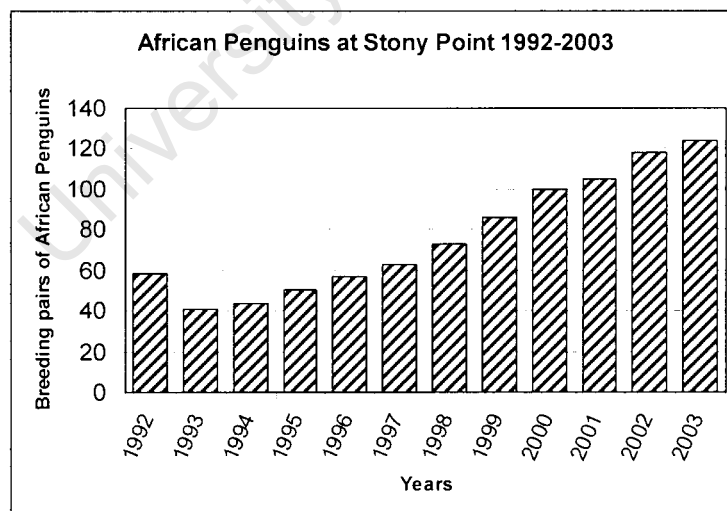


Figure 12: The increase in breeding pairs of African Penguins at Stony Point (1992 - 2003) (du Toit, Underhill & Crawford, 2004).

The Society no longer plays a role in the affairs of the Stony Point penguin reserve. The management of the reserve is the responsibility of the Local Authority. In 1986, the Hangklip-Kleinmond Municipality Advisory Board drafted management plans for the Penguin Colony (11 June 1996)¹⁷⁷. These plans are summarised in the form of primary and secondary objectives:

Primary

- 1.1.1 *To protect and sustain the Penguin Colony*

Secondary

- 1.2.1 *To preserve and protect the natural environment including flora, fauna and landscape*
- 1.2.2 *To encourage public viewing of the reserve from outside the boundary fence*
- 1.2.3 *To provide information to raise the appreciation of the reserve by visitors and scholars*
- 1.2.4 *To minimise the impact of the reserve upon adjacent property owners*
- 1.2.5 *To encourage research into all aspects of the penguin colony*

Plans also include the establishment of the Stony Point Advisory Committee consisting of five members represented by experts who were also property owners at Betty's Bay, interested residents and a representative from the Local Authority. The formation of this Board has brought the Local Authority into direct involvement in the day-to-day management of the penguin colony. Since 2003, a number of plans have been put into operation: a public broadwalk has been erected from a nearby car park to the viewing site overlooking the colony; a control point has been built at the start of the broadwalk; and staff from previously disadvantaged circumstances have been trained to manage and procure a small fee from the visiting public. The initiative no longer involves the Society directly.

¹⁷⁷ Appendix 104: Draft Management Plan presented at the Hangklip-Kleinmond Advisory Board (11 June 1996).

6.7 Conclusion

The interests and concerns of the Wild Flower and Botanical Societies were predominantly about conservation and protection of the biophysical environment. Voluntary participation in various matters of environmental concern is demonstrated over a reasonably long period of time. These include the physical work of hacking and removing alien vegetation; co-operating together to present flower shows; and lobbying the Local Authority on issues such as the conservation of the penguin colony and contributing to an environmental management plan for Betty's Bay. The Botanical Society continues to convene the alien vegetation hacks and supports the management of the Harold Porter Gardens. With respect to the latter, volunteers assist with the potting of plants and support various public education efforts such as arranging the display of plants at the entrance to the reserve and acting as guides for visiting school groups.

Chapter 7

Sewage and Water Initiative

There is potential to facilitate learning about complex environmental issues and problems that beset communities by providing an approach to learning that is inclusive, participatory, revelatory and allows for deliberative decision-making.

O’Riordan, 2000, p.10

7.1 Introduction

In 1936, Hangklip Beach Estates (Pty) Ltd. applied to the Townships Board¹⁷⁸ for approval of septic tanks and soakaways as the preferred sanitation system in the absence of a waterborne sewage reticulation system. An application was necessary because the Townships Board only agreed to approve the use of septic tanks if the sewage from a single house was ‘allowed to drain into each tank when the density of the tanks is only one per acre’¹⁷⁹. This condition did not suit the developers of the estate because the plots (referred to as erven) at Betty’s Bay were approximately one third of an acre in size. In many cases this would mean that all three erven would have to be sold before a septic tank could be installed. Representatives from Hangklip Beach Estates met with the Townships Board (4 January 1937)¹⁸⁰ to seek a waiver to this stipulation. The outcome of the meeting resulted in an agreement being reached that a single tank could be installed at every house provided the ground was suitable for the use of a septic tank system, failing which the property would have to be fitted with a vacuum tank, also known as a conservancy tank. The responsibility for deciding which of the two types of sewage tank systems should be installed was

¹⁷⁸ The relevant authority in the Cape Province responsibility for township development in the 1930s.

¹⁷⁹ Appendix 105: Letter written by the Secretaries, Messrs Leith, Freake and Cade of the Hangklip Beach Estates Limited to the Secretary, Office of the Townships Board (10 December 1936).

devolved to the district authority, the Caledon Regional Council. At the time, septic tank systems were the preferred options in non-sewered areas but it has been proven that these systems do not function effectively when the water table is high. A Water Research Commission study reveals that septic tanks fail in conditions where there is less than 3 metres of unsaturated soil between the drainage field of the tank and the water table (WRC Report No. 597/1/99, 1999). In many low lying areas at Betty's Bay the surface soils remain saturated for 3 to 4 months of the year during the winter rainfall season.

In 1984 the Municipality admitted that a history of poor management of sewage in the past could result in the pollution of the freshwater lakes at Betty's Bay. Aware of this failure, the Town Clerk of Betty's Bay appealed to the Director of the Department of Nature and Environmental Conservation to incorporate these lakes into a provincial nature reserve as a means of bringing attention to the conservation worthiness of these water bodies (25 October 1984)¹⁸¹:

These water bodies and their immediate surrounds are significant wetland areas with interesting floral and avifaunal values. As prime examples of the very few remaining 'blackwater' lakes of the South-west Cape, they have, in addition, considerable scientific interest from a limnological aspect.

...it is intended to include the lakes in the proposed State Nature Area, but their conservation even under such status presents a challenging problem. It will be clear to you that earlier bad planning and disregard for conservation values (by land developers against the wishes of a former Municipal Council) which permitted residential plots so close to the shores, complicates the whole issue of conservation and protection considerably.

Messrs Field and Munro, the planners and architects of the Betty's Bay Municipality, also expressed concern about possible pollution of the lakes. In a

¹⁸⁰ Appendix 106: Extract from minutes of the 302nd meeting of the Townships Board (4 January 1937).

¹⁸¹ Appendix 107: Letter written by the Town Clerk, Betty's Bay Municipality, to the Director of the Department of Nature and Environmental Conservation (25 October 1984).

letter to the Town Clerk (25 June 1986)¹⁸², they advocated better control over planning, installation and management of septic tank systems:

The whole of your municipal area is likely to be dependent on septic tanks for a considerable period. We think it would be very appropriate for Betty's Bay to adopt and apply a stringent code on the construction of septic tanks and soakaways.

In practice, we suspect, relatively few septic tanks conform: septic tank details are rarely adequately shown on drawings and reliance is placed on a note to the effect that septic tanks, etc. must meet Municipal requirements. By the time the Building Inspector sees what has been done he is presented with a completed and probably covered up septic tank. At this stage he has to be a more than usually tough person to get it uncovered, and if non-conforming, broken down and rebuilt.

In addition, a small group of concerned conservationists, who were also residents of Betty's Bay, requested the Municipality to formulate a management plan for the lakes. In 1995, this concerned group, calling themselves GAMMY (Geriatrics Against Mad Municipal Yesmen), wrote a strongly worded letter to the Town Clerk of Hangklip-Kleinmond Municipality expressing their frustration over the lack of progress in protecting these lakes (1 July 1995)¹⁸³:

The importance of Grootwitvlei and Grootrondevlei for conservation and recreation has long been recognised by various Local Authorities over the years. Yet there has been no indication of wise management – in fact (in our opinion), unwise actions have been taken in the past.

The Grootwitvlei has potential, with correct management, to become a significant wetland area for birds: "No other blackwater-derived system have been noted with such a prolific and seemingly, permanent population of birds" (Report by A. Gardiner and J. A. Day, UCT June 1982).

Many of the problems covered could be solved, or at least alleviated, by the Council's adoption of a management plan. We do not consider it necessary to await the long overdue Structure Plan before this is effected. We would be happy to put forward suggestions for management if council so desires and believe the

¹⁸² Appendix 108: Letter written by Town Planner, G. Field of Field and Munro, to the Town Clerk, Betty's Bay Municipality (25 June 1984).

¹⁸³ Appendix 109: Letter written by GAFFERS to the Town Clerk, Hangklip-Kleinmond Municipality (1 July 1995).

matter could best be handled by a preliminary meeting with the relevant sub-committee of Council.

In January 1998 the pollution of Bass Lake was brought to the attention of the researcher. Local residents and visitors, who had used Bass Lake for recreational swimming and boating, complained that the water smelt of 'rotting vegetables'. In response, the researcher collected water samples along the eastern and western shores of Bass Lake and had these samples analysed by an independent laboratory. The results showed that *Escherichia coli* (*E.coli*) levels exceeded those acceptable for human contact according to the South African Water Quality Guidelines¹⁸⁴ (DWAF, 1996). In February 1998, the researcher initiated a pilot study of Bass Lake as a 4th Year project in Environmental and Geographical Science at the University of Cape Town (Schachtschneider, 1998). The study included the testing of surface- and groundwater in and around Bass Lake. Eight well points were excavated at selected sites, each being between 1.5 and 2.5 metres deep (Figure 13). In total, seven parameters of physical and chemical water quality were chosen as indicators of water quality and subsequently used in all the studies that were undertaken between 2000 and 2005. The parameters were chosen because they are both convenient and a conventional means of establishing water quality. Tests were carried out to establish: temperature, pH, orthophosphate, ammonia, total nitrogen, *Escherichia coli* (*E.coli*) and total coliform.

¹⁸⁴ Appendix 110: Swift Laboratory report. *E.coli* levels on western shore of Bass Lake – 350 c/100ml; *E.coli* levels on eastern shore of Bass Lake – 220 c/100ml.

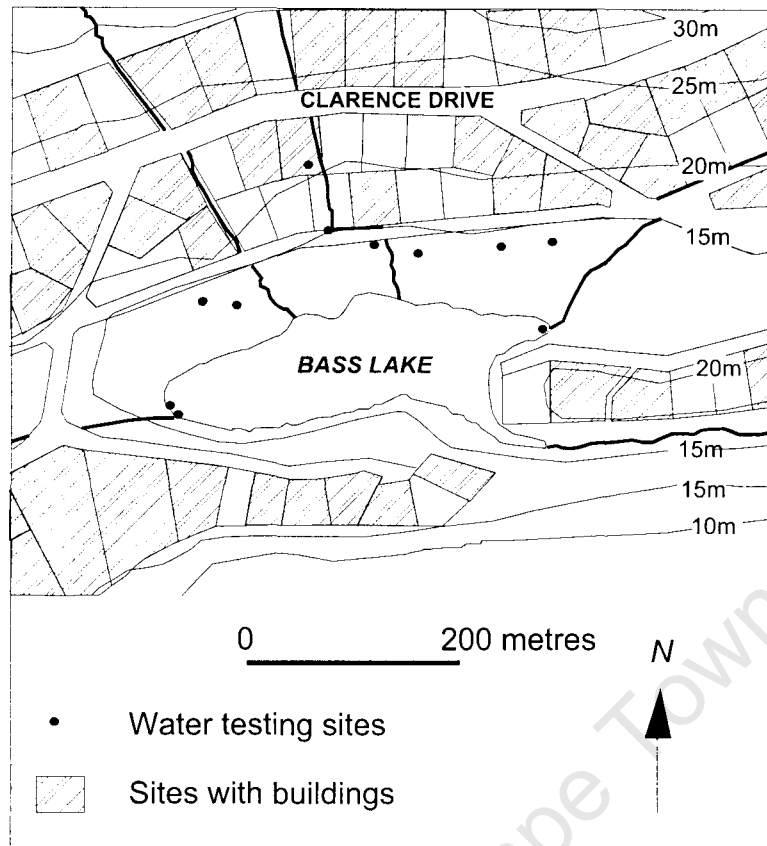


Figure 13: Test sites used for collecting water samples in and around Bass Lake in 1999.

The results of Schachtschneider's study were sent to the Hangklip-Kleinmond Municipality in October 1998, but no response was forthcoming. In April 1999 the researcher submitted the same report to the Betty's Bay Ratepayers' Association which responded soon thereafter by forming a sub-committee called the 'Sewage and Water Committee'. This committee, which forms the focus group involved in the Sewage and Water Initiative in this study, met for the first time in March 2000. The initial objective was to clarify the results of Schachtschneider's study conducted at Bass Lake. A representative of the BBRA, Mrs Avril Nunn, a retired chemist, chaired this committee and remained in this position during the entire period of this study. Nunn had had a longstanding involvement with other interest groups and initiatives at Betty's Bay, and held various portfolios with the Wild Flower and Botanical Societies.

On the 3rd January and 5th April 2000, the researcher observed algal blooms at Bass Lake. These blooms were visible as a green 'scum' on the surface of the lake. Water samples collected from the western shore of Bass Lake at the time of the first observed bloom, indicated the presence of *Anabaena*¹⁸⁵, a blue-green toxic algae. Algal blooms are not expected in acidic water bodies in the south-western Cape because these water bodies tend to have a low nutrient level. The low pH and acidic qualities of the water suppresses algal production (Gardiner, 1988). The Sewage and Water Committee informed the Municipal engineer of these events and urged the Local Authority to place signboards at Bass Lake warning the public that it was unsafe to swim in the lake¹⁸⁶.

The researcher was invited to become a member of the Sewage and Water Committee from its inception. Committee meetings were held three or four times a year. These meetings were well organised and usually accompanied by an agenda which was followed by a record of minutes soon after each meeting. It is significant that officials of the Hangklip-Kleinmond Municipality responsible for engineering, health and environment, frequently attended these committee meetings in their professional capacities. The researcher was able to observe developments and processes involved in this initiative firsthand through participant observation and by conducting action research with the committee. The conditions surrounding this initiative were somewhat different compared to the two other initiatives presented in the previous two chapters. Nevertheless, this case study uses the same elements of the theoretical framework, and uses documents as primary sources to ensure a controlled research approach and structure so as to make viable comparisons across all three cases.

¹⁸⁵ Verified by Dr Bill Harding, Southern Waters, University of Cape Town (4 January 2000).

7.2 Attributes of Collective Involvement

7.2.1 Working for the Common Good

Initially the Sewage and Water Committee focused attention on the pollution of Bass Lake. This shallow, small freshwater lake, measuring approximately 380 metres in length and 120 metres wide, reaching depths of no more than 3.5 metres, provides a safe recreational swimming and boating venue especially for children. It is particularly popular at the peak of the summer school holiday season when as many as 120 people can be observed in and around the lake at peak times.

The possibility that the lake could pose a risk to human health was raised by a parent who wrote a letter to the Municipality because she suspected her child had contracted *Giardiasis* from swimming in Bass Lake. Schachtschneider (1998) reported on this case in her research. She made contact with the author who informed her of two other families whose children had had similar symptoms after swimming in Bass Lake in April 1998. One child was positively diagnosed with *Giardiasis*. These symptoms presented 4 to 5 days after their visit to Betty's Bay. Both children were reported to have swum in Bass Lake, although one had also swum in the Disa River at the Botanical Gardens (Schachtschneider, 1998). The Ratepayers' Association were particularly concerned about the potential risk to health and were keen to resolve the problem as a matter of urgency. In April 2000 the Chairperson of the Sewage and Water Committee informed the Ratepayers that although the conditions at Bass Lake were being addressed, they were '...sitting on a time bomb'¹⁸⁷. An extract from her report outlined the problem, described the steps taken and stated that the problem of pollution had

¹⁸⁶ Appendix 111: Memorandum from the Sewage and Water Committee to Hangklip-Kleinmond Municipality (March 2000).

¹⁸⁷ Appendix 112: Memorandum written by Nunn, Chairperson of the Sewage and Water Committee, to the Ratepayers' Association, April 2000.

to be solved for the sake of the ratepayers' children and grandchildren (another passing reference to future generations):

It was suspected that there was something wrong with the water in Bass Lake.

Monitoring of E-coli was started by Kevin Winter, as it is an indication of contamination by human beings.

The concentration of E-coli was found to be dangerously high at times, which coincided with high house occupancy, at the very time when children, especially, were using the lake for recreation.

It was then realized that this problem of contamination had to be addressed.

Later it was seen that there was an alarming proliferation of algae on the lake. This is a poisonous algal growth. It is an indication of high phosphate and nitrate concentrations in the lake, which could come from leaking septic and conservancy tanks, and from the grey water from baths and kitchens.

The increase in ambient temperatures in the last couple of years would aggravate the problem.

The problem MUST be solved unless we want to lose one of our major attractions for ratepayers with small children or grandchildren. If it is not solved we shall lose the lake altogether and totally pollute the whole area.

In November 2000 the monitoring programme was extended under the guidance of the researcher and students from the Environmental and Geographical Science Department, University of Cape Town. Ground- and surface water sampling sites were identified in collaboration with the researcher and members of the Sewage and Water Committee. Given the fluctuating levels of subterranean flow at Betty's Bay, it was assumed that pollution of the groundwater was a direct result of effluent flowing from domestic sewage systems situated in the near vicinity of Bass Lake. Figure 13 shows the selected ground- and surface water sites and their proximity to the Bass Lake. An analysis and interpretation of water quality is discussed further in Section 7.6.

A proliferation of common reeds, *Australis Phragmites*, together with information about water quality in and around Bass Lake, provided conclusive evidence that at least two septic system systems were in a poor condition. These observations were supported by the fact that soils in the near vicinity of these sewage systems

had a higher than normal level of organic content thus creating conditions conducive to the invasion of *Australis Phragmites* (Davies & Day, 1998). In December 2000 and February 2001 respectively, these two suspect septic systems were replaced. The municipality financed the replacement of these systems¹⁸⁸.

The water quality in Bass Lake improved within two years of the replacement of these systems. In the minutes of the Sewage and Water Committee (4 February 2002) it is suggested that the replacement of the two sewage systems may have been a contributing factor¹⁸⁹:

7. Conditions: In general the water quality in Bass Lake for the summer of 2001/2002 appears to be better than in 1999/2000 when similar rainfall conditions existed. It cannot be compared with the summer of 2000/2001 because the rainfall was extremely low during this period.

The fact that Bass Lake was in a reasonable condition this summer might be attributed to:

- a. Repairs made to leaking septic tanks above the Lake*
- b. Increased public awareness*
- c. More consistent monitoring at Bass Lake*

The growth of reeds along the shores of Bass Lake may well indicate that soils have become saturated with higher than usual nutrient load which cannot be handled by the natural systems.

By 2003 the researcher's report on Bass Lake indicated a significant improvement in water quality. The committee felt that the problems at Bass Lake were largely solved, at least in the short term, although this conclusion always remained tentative. There was a strong possibility that other septic tanks in the vicinity of Bass Lake were also leaking, but the volume of effluent from these tanks appeared minimal by comparison.

Following the relative success at Bass Lake, the committee turned its attention to monitoring other low-lying areas and lakes at Betty's Bay. The decision to shift

¹⁸⁸ Appendix 113: Letter of consent signed by a property owner (30 November 2000).

¹⁸⁹ Appendix 114: Minutes of the Sewage and Water Committee (4 February 2002).

attention to other parts of Betty's Bay is recorded in an extract of the Sewage and Water Committee minutes (7 February 2003) describing some results captured during the summer monitoring period of December/January 2002/03. The report declares that Bass Lake contained very little pollution, but groundwater samples extracted from shallow depressions in the vicinity of Vlei Road remained a concern¹⁹⁰:

6. Kevin Winter's Report on the summer monitoring.

A written draft report was tabled.

The year 2002/2003 was the best year ever. It may be due to the very low summer rainfall during that period, hence lower ground water levels, and the Septic Tanks would then be able to operate.

Better use of detergents and general maintenance by Ratepayers may play a part in this good year.

It was decided to monitor the necessary sites after the next rain. Hanie will inform Kevin when it rains here.

Louis Nel will monitor at the same time, for comparison.

There is cause for concern about the cumulative pollution in the depressions around the lakes.

There were high levels of e-coli at the culvert at the south western end of the Lake.

There were phosphate spikes at Edwards Road storm water pipe. Possibly due to a septic tank in poor condition?

General coliform levels were high in Groot Witvlei, possibly due to houses, or birds on the island.

There were very high phosphate levels at points surrounding Groot Rondevlei and Groot Witvlei

The final extract in this section provides a further illustration of the willingness of the Sewage and Water Committee to contribute towards the 'common good'. The committee realised that replacing old, dysfunctional septic tanks was only a short-term solution and that a long-term solution to managing sewage was necessary. The following extract outlines the intentions and efforts made by the committee to investigate alternative sewage systems at Betty's Bay. Furthermore, the record indicates the committee's collective understanding of

¹⁹⁰ Appendix 115: Minutes of the Sewage and Water Committee (7 February 2003).

why old septic tank systems fail and justifies the need for an alternate system (12 November 2002)¹⁹¹:

7. *Sewage Tanks leak with time. Causing a dangerous sewage problem. There is no cleansing action by the dry sand, to eliminate the bacterial contaminants.*
8. *Most Septic tanks are made of cement. This is alkaline. Our water and ground water is acid. This acid water reacts with the cement, corrodes it, and eventually the tanks leak. This leaking effluent enters the ground water and drainage channels, and often then enters our lakes which are at the lower levels of the land. This untreated effluent contaminates our lakes and ground water, and is a considerable sewage problem.*
9. *Storm water drainage is NOT THE problem, merely an additional one.*
10. *This Committee of the Ratepayer's Association, and the whole Association, would like to assist the Municipal Council in all ways which we can.*
11. *We are hoping to identify an alternative sewage treatment system to the conventional one. There are many, and we have been collecting information on these. We shall visit some in the near future.*

This extract above summarises the efforts made by the Sewage and Water Committee from 2000 to 2002. It describes the goals of the committee, namely: to implement and sustain a monitoring programme; to contribute to the analysis and interpretation of results obtained from the monitoring programme; to expand the programme to other parts of the Betty's Bay; and finally, to seek advice and to research the possibility of an alternate sewage system. While there is no evidence of a clear expression of 'acting towards the common good', the extracts cited above emphasise the shared goals that ultimately led to an improvement in the condition of Bass Lake as a public asset and amenity.

7.2.2 Working as a Collective

As mentioned earlier, it was the Ratepayers' Association that was responsible for establishing a sub-committee to investigate the problem at Bass Lake. The

¹⁹¹ Appendix 116: Minutes of the Sewage and Water Committee (12 November 2002).

Ratepayers' initial concern was to understand the extent of problem at Bass Lake, particularly the risk to recreational users of the lake¹⁹².

Co-operation in this initiative is limited to the efforts of the committee. Committee members were invited to join the committee because they were known to the Chairperson as having an interest and experience in water and sanitation. In the first year of meeting, the membership represented the Ratepayers' Association, local authority officials from the Engineering, Environment and Health Departments, and the researcher. The attendance of a least one local authority official at subsequent committee meetings served as an important information and communication link between the Ratepayers, the Local Authority and the researcher.

The extract that follows illustrates the issues that were considered, the allocation of tasks to various individuals and provides some insight of the capacity of the committee (26 January 2002)¹⁹³:

¹⁹² Appendix 117: Letter written by Mr P. Berrisford, Chairperson of BBRA to the Chief Executive Town Clerk, Hangklip-Kleinmond Municipality (8 October 1999).

¹⁹³ Appendix 118: Minutes of the Sewage and Water Committee (26 January 2001).

Minutes of the Meeting of Tuesday 26th January, 2001, at 2pm. in the Betty's Bay Municipal office.

1. *The Chairman welcomed the members present.*
2. *Present A. Nunn (Chair & Resident)
K. Winter (Researcher, UCT)
L. Nel (Health Officer, Overstrand Municipality)
H. Hanekom (Resident).*
3. *Apologies
A. Heydorn (Ratepayer), M. Baartman (Engineer, Overstrand Municipality).*
6. *Recommendations.*
 - A. *Residents should be advised and encouraged to use phosphate free or very low phosphate household cleaners. Household cleaning products will be tested by Kevin Winter, following which an information sheet would be prepared by this Committee. This would be distributed as widely as possible, by the BBRA. and as many publications as possible. K.W.
& All*
 - B. *Well points/Test holes. More of these would be prepared in the vicinity of the three lakes, Bass Lake, Grootwitvlei, and Rondevlei, as well as near other septic tanks which are suspect. Hanie offered to assist Kevin with this work. The offer was gratefully accepted. K.W. & H.H*
 - C. *Ground Water Map. Work has started on mapping the Ground Water. This information will help in determining which specific type of tank will be effective in each area.*
 - D. *Septic /Conservancy Tanks. In future all tanks will have to comply with regulations laid down by the Municipality*
 - E. *The Sleepy Hollow Tank must be replaced, with the owner's permission, as was the Wood tank, for proper evaluation. K.W.*
 - F. *Intensive Monitoring should continue through the April and June/July holidays, as times of increased resident population. K.W. & L.N.*
 - G. *Water Samples. Louis Nel is continuing to take samples. He will report back at the next meeting L.N.*

The researcher and a local authority official were usually always present at committee meetings because the Chairperson ensured that the date of a meeting was convenient for these individuals before confirming the date of forthcoming committee meetings with other members. In the extract above, most of the work

was assigned to the researcher who was responsible for collecting water sample from sites in and around Bass Lake, and for expanding the monitoring to other areas of Betty's Bay. Students from the University of Cape Town were employed during their vacation period to collect and analyse water samples. The Local Authority provided financial support for the monitoring programme by paying for student travel expenses and providing them with a small stipend¹⁹⁴.

7.2.3 Acquiring Knowledge

The monitoring programme required specialist knowledge of water chemistry; diffuse pollution; testing procedures; hydrology; environmental management; and research methods. The researcher was able to contribute knowledge and experience, but the approach to learning about the problem was frequently characterised by collaboration and joint decision-making. For example, a joint decision was taken to expand the monitoring programme involving the identification of further sites from which to extract water samples in the area surrounding Grootwitvlei and Grootrondevlei lakes (26 January 2001)¹⁹⁵. The sites were selected by considering the proximity to streams, wetlands and developed properties. The control site (situated furthest north in Figure 14) was selected upstream of these two lakes which was considered sufficiently far away from any houses that could pollute the control sample. The control site was approximately 16 metres above mean sea level. Figure 14 identifies the selected sites. A contractor was hired by the Municipality to excavate the holes at each site because the hard mudstone, lying 2 to 3 metres below the surface, made it impossible to excavate by hand. The cost of excavating these holes was borne by the Municipality.

¹⁹⁴ Appendix 119: An example of an invoice submitted to the Overstrand Municipality to claim costs of monitoring (2002).

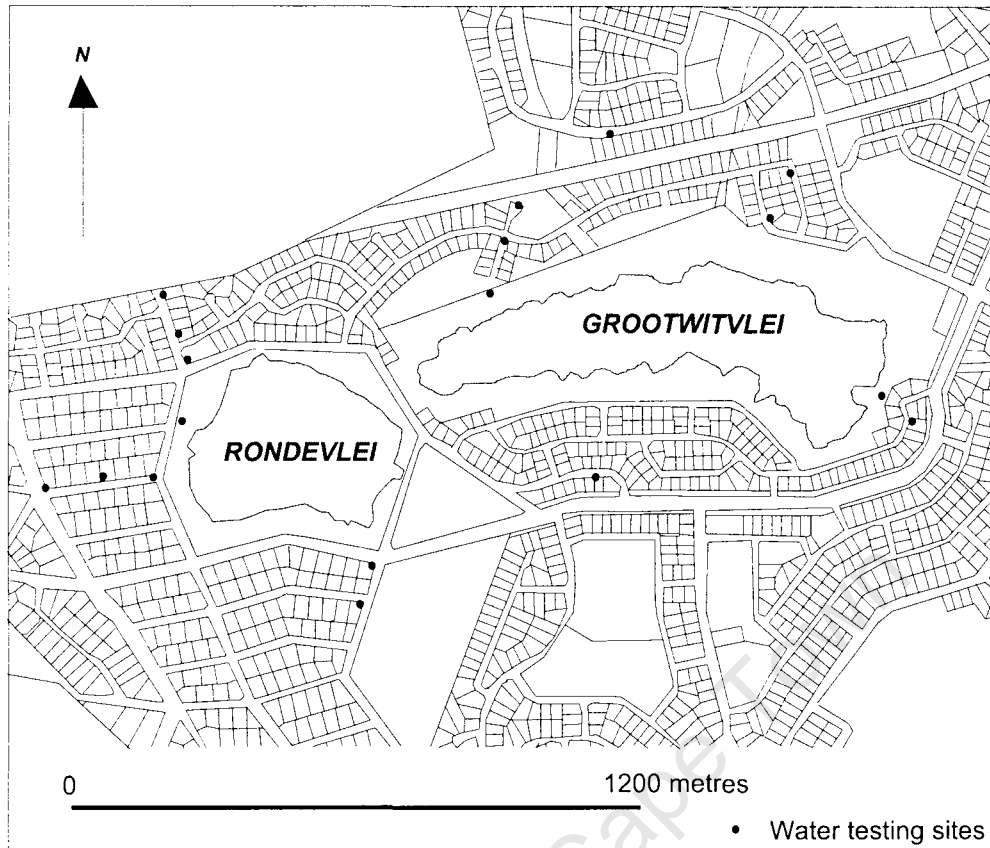


FIGURE 14: Sites used for collecting water samples in the vicinity of Grootwitvlei and Rondevlei.

The committee also took responsibility for researching alternate technologies to the existing systems. In 2000 the committee visited a biolytic sewerage system at Spier Wine Estate, Stellenbosch, in order to gain firsthand information about the operation and management of this system. In addition, water and sewage consultants were invited at regular intervals to present information and products to the committee. The search for an appropriate system continues to be one of the main tasks facing the committee. To-date there has been limited success in proposing a suitable alternative. One of the main concerns of the committee has

¹⁹⁵ Appendix 120: Minutes of the Sewage and Water Committee (26 January 2001).

been to find a technology capable of preventing phosphate and nitrogen from being released into either the soil or sea¹⁹⁶.

Residents and ratepayers were kept informed about the project at various times through local newspapers, the Ratepayers' Association newsletters or through pamphlets such as one entitled "Managing your Sewage"¹⁹⁷. The latter was designed by the committee and given to all to those who attended the AGM of the Ratepayers in December 2001. At this AGM, the researcher addressed the meeting on the progress of the initiative¹⁹⁸. Efforts to inform ratepayers about progress and to communicate information were seen as one of the strengths of the initiative¹⁹⁹.

The expertise and experience of committee members of the Sewage and Water Committee is an important factor contributing to the acquisition of knowledge and understanding. For example, a query was raised concerning the possibility that *Australis phragmites* (common reeds) was choking the outlet of Bass Lake and preventing polluted water from flowing into the sea. Dr Allan Heydorn, an environmental consultant and a member of the Sewage and Water committee, was asked to investigate. He presented a comprehensive report²⁰⁰ to the committee and concluded that the reeds were not restricting the flow of Bass Lake (23 December 2002). His investigation was helpful in informing the committee that it was not necessary to embark on drastic steps to dredge the estuary between the lake and the sea²⁰¹:

¹⁹⁶ Appendix 121: Minutes of Water and Sewage Committee meeting (August 2003).

¹⁹⁷ Appendix 122: Education pamphlet, entitled 'Managing your Sewage' which was drafted in 2001.

¹⁹⁸ Appendix 123: Minutes of BBRA meeting– progress report in minutes (December 2001).

¹⁹⁹ Appendix 124: Evaluation of the Sewage and Water Committee (February 2005).

²⁰⁰ Appendix 125: Heydorn, A 2002 Brief report on an inspection of the outlet of Bass Lake, Betty's Bay. Unpublished.

²⁰¹ Appendix 126: Minutes of the Sewage and Water Committee (23 December 2002).

The committee, in collaboration with the municipal Engineering and Nature Conservation Departments, is giving ongoing attention to amelioration of the unacceptable conditions. Attention has been focussed essentially on improvements to the sewerage systems, through replacement of offending septic tanks with properly constructed conservancy units, through improvements to stormwater management systems and through more effective control of people and their dogs who use the lake for recreation and swimming.

A further aspect which has been discussed, is whether the outflow from the lake could be improved so as to facilitate a better throughflow of water. In the discussions it was recognised that care has to be taken in any manipulation of the natural outlet, so that the basic hydrological equilibrium of the lake is not disturbed.

A summary of the knowledge and understanding of Sewage and Water Committee is presented in a letter submitted to the Executive Council of the Overstrand Municipality (November 2002)²⁰²:

- 1. Septic tanks cannot operate safely unless there is between one and a half to 3 metres of dry sand between the bottom of the soak-away and the ground water at all times of the year.*
- 2. As shown by our research results, due to ground water level, and leaking tanks, the Septic Tanks identified around the Malkopsvlei (Bass Lake) needs to be replaced as a matter of urgency...*

Information and an understanding of the problem of pollution were acquired largely as a result of the high social capital of committee members. This was achieved partly as a result of the connectedness and ability to access a variety of networks. For example, the researcher, being in contact with research institutes such as the Water Research Committee (WRC), was able to refer the Committee to a report published on Septic Tank Systems in a Coastal Zone (WRC Report No. 597/1/99, 1999). This report described the construction requirements for septic tanks and soakaways, and methods for monitoring groundwater flow surrounding a drainage field. The report guided the researcher and committee members to improve the method of extracting water samples from septic tanks

²⁰² Appendix 127: Letter written by Chairperson of the Sewage and Water Committee addressed to the Executive Council, Overstrand Municipality (12 November 2002).

and drainage fields, and subsequently to identify two defective septic tanks (30th November 2000). As mentioned earlier, the committee requested the Municipality to fund the replacement of these defective tanks, and furthermore, to continue the financial support for monitoring ground- and surface water during the summer of 2000/2001 (30 November 2000)²⁰³:

[the Sewage and Water Committee requests]...the Municipal Council to release the money already budgeted for this study, so that we may use the window of opportunity provided by this dry period of high occupancy to ensure that we know how to deal with our problem, and that we are able to suggest real solutions. All ratepayers too, will be delighted to know that their Council is tackling this long standing problem.

From 2001, the monitoring programme was confined to periods of peak occupancy of holiday homes at Betty's Bay. This period coincided with the summer school holidays between mid-December and mid-January. Following each monitoring period, the researcher submitted a written report and presentation to the committee. The presentation of the written reports was interspersed with colour graphics so as to improve the interpretation for all committee members. The presentation of research findings and reports was identified as a source of stimulation by one of the committee members in response to an evaluation of the achievements of the Sewage and Water Initiative²⁰⁴. Despite the interest, the researcher concedes that the development of site-specific knowledge and an understanding of the analysis remained largely within the domain and control of the researcher. The opportunity to build capacity, aside of creating awareness and discussion among committee members, remained limited. O'Riordan (2000) argues that there is potential to facilitate learning about complex environment issues and problems by providing an approach to learning that is inclusive, participatory, revelatory and allows for

²⁰³ Appendix 128: Letter from Chairperson of the Sewage and Water Committee sent to Overstrand Municipal Council (30 November 2000).

²⁰⁴ Appendix 129: An evaluation of the Sewage and Water Committee initiative (February 2005).

deliberative decision-making. These characteristics are encapsulated in 'civic science' that recognises that society has to be involved in order to make fairer and more comprehensive decisions (O'Riordan 2000). This approach to science therefore has the explicit intention of empowering and achieving forms of action to resolve relevant problems. In this initiative, the committee had some opportunity to engage in joint thinking and deliberation in considering the results of the monitoring programme.

The generation of a time series analysis of water quality at Bass Lake shows a decline in the level of pollution over time. Committee members had the opportunity to deliberate over the data and reports. A committee member felt that the opportunity to discuss the results of the monitoring programme was its strength²⁰⁵. An action research approach to scientific enquiry, opportunities for deliberation and to generate new proposals concur strongly with O'Riordan's interpretation of civic science.

The knowledge generated by this study led to some informed decisions. For example, by establishing the height of the water table in low lying areas surrounding Grootwitvlei and Rondevlei, the research determined that no septic tank systems were likely to function effectively in any area lying below 16 metres above mean sea level (See Figures 19 and 20). Subsequently, the Engineering Services Department of the Overstrand Municipality has accepted this finding. As policy, conservancy tanks are the only sanitation option permitted at new houses being built in low-lying areas at Betty's Bay.

At present, the monitoring programme continues to inform the committee, but in the long term, the problem of preventing pollution from entering the groundwater and lakes at Betty's Bay is likely to require a considerable capital investment,

²⁰⁵ Appendix 129: An evaluation of the Sewage and Water Committee initiative (February 2005).

logistical planning and technological experience that are likely to be beyond the capacity of the Sewage and Water Committee.

7.2.4 Taking responsibility

It has already been mentioned that the Executive Committee of the Betty's Bay Ratepayers' Association was anxious to resolve the problem of pollution at Bass Lake largely because of the potential health risks, especially to young children. The initial brief to the Water and Sewage Committee indicates an awareness of the problem and the need to take responsibility (8 October 1999)²⁰⁶:

Objective

Betty's Bay Ratepayers are very concerned that ground water and lakes in the area are being polluted by effluent from septic tanks (both from those functioning correctly and those in high water table situations), as well as those from conservancy tanks that either leak, or flood or are not pumped out satisfactorily. Pollution falls into two broad categories, either emanating from sewage, or from "grey water".

Requirement

There is clear evidence that pollution exists. Council, the Municipal Officials and the community at large require a report that analyses and interprets these results. The extent of the threats to health and the environment should be presented in a format that is easy to understand by non-technical readers so that they can be guided in formulating plans and policies to deal with the threats.

The Ratepayers' Association took the initial responsibility to establish an interest group to examine the problem of surface- and groundwater pollution. The Executive Committee was keen to understand the nature and extent of the pollution in order to formulate plans and recommend policies to the Municipality.

²⁰⁶ Appendix 130: Letter written by Berrisford, Chairperson of BBRA to the Chief Executive Town Clerk, Hangklip-Kleinmond Municipality (8 October 1999).

Financial support was required to sustain the monitoring programme. The Sewage and Water Committee felt that the cost of monitoring had to be met annually from the municipal budget. A request for funding for the 2003/4 financial year was submitted by the Chairperson of the Sewage and Water Committee to the Local Authority (November 2003). In the motivation, it is suggested that funding was necessary to ensure that ongoing investigations were not abrogated²⁰⁷:

Funds are needed for the ongoing investigation into Bass Lake and a reasonable solution to Sewage in Betty's Bay.

During the present Budget period, 2003, there were no funds provided for this long standing problem. In spite of this, one of our Ratepayers has continued our investigation, for which the Community and the Council is greatly indebted, but we cannot abrogate our responsibilities in this manner. It is a legal requirement that the Council provides a safe environment and safe sewage disposal. Our Committee is trying to assist in this.

The Committee believed that by encouraging homeowners to use phosphate (PO₄) and ammonia (NH₃) free products, and by reducing household water consumption, the problem of pollution could be reduced. The committee took responsibility to inform homeowners about alternative products. An information pamphlet entitled, 'Managing your Sewage'²⁰⁸, was distributed at a Ratepayers' meeting and was 'dropped-off' at approximately 15 homes in the vicinity of Bass Lake. The pamphlet described different brands of household cleaning products that were tested by the researcher and found to be phosphate- and/or ammonia free products. No follow-up was conducted to test whether any households responded to this information.

The Sewage and Water Committee dealt with the problem of diffuse pollution in a number of ways: by monitoring water quality over a five year period; by meeting three or four times a year to discuss the results of the monitoring programme and

²⁰⁷ Appendix 131: Motivation for Funding for 2003-2004 written by Nunn (November 2003).

to consider decisions arising from this information; by making decisions to intervene and to expand the programme; and by providing information to the community of ratepayers on the progress. However, opportunities to involve a larger number of ratepayers in the programme were limited by a lack of available finances and capacity, and by a lack of authority to undertake tasks as recommended by the Committee. These views were expressed by a committee member in an evaluation of the initiative²⁰⁹.

7.3 Attributes of Social Capital

This section identifies some attributes of social capital that were evident in meeting the goals of the Sewage and Water Initiative. The process of working as a committee has already been described as one that involved a willingness to deliberate and consider information collected from the monitoring programme. The voluntary involvement of the researcher, and support of students from the University of Cape Town over a five year period, appears to be crucial factor that sustained the initiative. This is confirmed in an evaluation of the initiative²¹⁰. Since 1998, eight students have completed 4th year research projects in Environmental Science focusing on water quality and environmental management at Betty's Bay²¹¹. The involvement of the researcher together with the experience and expertise of committee members, represented a strong internal and external connectedness. Committee members were able to draw on their internal and external connections and networks to access ideas, knowledge and skills from within the community of ratepayers and from institutions such as the University of Cape Town. Members of the committee were experienced in the field of engineering, chemistry, environmental science and management,

²⁰⁸ Appendix 122: Pamphlet: 'Managing your Sewage'.

²⁰⁹ Appendix 129: Evaluation of the Sewage and Water Committee initiative (February 2005).

²¹⁰ Appendix 129: Evaluation of the Sewage and Water Committee initiative (February 2005).

²¹¹ Appendix 132: Reference list of 4th Projects completed by EGS students at the University of Cape Town (1999 to 2005).

planning, research and community work²¹². This 'connectedness' extended beyond the committee members as became evident from the external contacts that were forged during the course of this study. For example, knowledge of consultants working in the field of sewage and water meant that these experts could be invited to address the committee at various times²¹³.

Members of the Sewage and Water Committee never explicitly expressed the idea of reciprocity. It appears that individuals gave of their time and expertise willingly in the interests of dealing with the problem of pollution. Likewise, the notion of trust was never explicitly expressed, although this is arguably seen in the commitment of volunteers to meet on a regular basis, to travel to meeting places without charging for the cost of their transport, and by being prepared to co-operate with each other over a five year period in an effort to seek solutions. There is also no clear evidence of norms, sanctions or rules being exercised at any stage during the lifespan of the initiative. Social capital, therefore, appears to be limited to the internal and external connectedness of committee members. The evidence does suggest that without the external connectedness, that is the support of the 'outside' researchers, it is unlikely that this initiative could be sustained. It is impossible to speculate what might have happened if the initiative were not established.

7.4 Relations with Institutions

From the inception of the Sewage and Water Initiative, the Municipality provided nominal financial support to the monitoring programme. Funds were used to purchase chemical reagents for field tests and to reimburse university students involved in the monitoring programme. Support from the Local Authority was essential to sustain the programme. A brief report on the Municipality's

²¹² Appendix 133: Members of Sewage and Water committee (2003).

²¹³ Appendix 134: Minutes of Sewage and Water committee (September 2003).

participation (22 August 2000)²¹⁴ illustrates the involvement of the Engineering Services of the Hangklip-Kleinmond Municipality. An extract from the report suggests that a number of resolutions were envisaged in order to address the problem of pollution at Bass Lake:

1. *That Mr K Winter's quotation (Annex B) for the implementation of the monitoring programme be approved.*
2. *The identification of the leaking septic/conservancy tanks be conducted and reported on with recommendations as to repairing/replacing the proposed method, costs of repairing/replacing them.*
3. *That the monitoring programme conducted by Mr K Winter be financed out of the vote for the Sewage Project (Bass Lake area).*

As already mentioned, the attendance of at least one local authority official at committee meetings provided an important link between the Ratepayers and the researcher. Not only did this ensure a direct line of communication with officials responsible for conducting the relevant municipal services, but gave the Committee access to technical and planning information. Furthermore, it also gave the Committee insight of the municipal budget and priorities in relation to the entire municipal district under the administration of the Municipality²¹⁵. The communication link with the Local Authority appears to be one of the key strengths of the process towards solving the problem of water pollution. In addition, a committee member of the Sewage and Water Committee suggested that the opportunity to generate proposals and to transmit these directly to local authority officials was a further strength of the initiative. The presence of local authority officials at committee meetings is one of the successes associated with this initiative.

²¹⁴ Appendix 135: Report submitted by the Head of Engineering Services to the Environment Advisory Board (22 August 2000).

²¹⁵ Appendix 134: Minutes of Sewage and Water committee (January 2003).

7.5 Addressing Imperatives

To-date the initiative has sought to understand the problem of diffuse pollution by establishing a monitoring programme and, as a result, has intervened by strategically replacing two septic tank systems. From the outset the committee intended to act on the information generated by the monitoring programme. For example, the Minutes of one of earliest committee meeting reflects nine resolutions that were adopted (20 March 2000)²¹⁶:

1. *IT WAS DECIDED that we now know that there is e.coli contamination, and it is no longer necessary to continue these tests.*
2. *IT WAS DECIDED that it is necessary to test for nitrates and phosphates to find out the extent of the problem. These inorganic salts can come from grey water seeping into the lake.*
3. *IT WAS DECIDED that (Mr.) Craig (Spencer) and Mr. Louis Nel (Environmental and Health Officer of the Hangklip-Kleinmond Municipality respectively) would do the testing for nitrates and phosphates at the spots identified for the testing. Mrs. Nunn offered her professional supervision to certify that the tests were being performed accurately.*
4. *IT WAS DECIDED that the tests would be performed weekly around Bass Lake.*
5. *IT WAS DECIDED that the Tests would start as soon as the kits have been obtained, through Kevin Winter.*
6. *IT WAS DECIDED that the Tests at the other lakes would be less frequent, e.g. at times of high frequency of occupation of the houses.*
7. *IT WAS DECIDED that meanwhile the channel outflow from the lake would be cleared of some vegetation, to try to regain a free flow of water from the lake. However the water level in the lake would not be lowered.*
8. *IT WAS DECIDED that a Budget for this work must be drawn up for the Council, as well as a motivation.*
9. *IT WAS DECIDED that meanwhile the pilot study for a Biolytix system of sewage treatment be set up in the house(s) identified for it, as soon as possible.*

The committee resolved to continue to monitor, to increase the extent of the monitoring programme to other parts of Betty's Bay, and to enlist the support of the municipal officials in the initiative. All of these actions, and those more clearly

²¹⁶ Appendix 136: Minutes of Water & Sewage Committee Meeting (20 March 2000).

identified with the outcomes of this initiative (discussed in Section 7.6), focus on efforts to address the problem of pollution that threatened the biophysical environment and posed a risk to recreational users.

7.6 Outcomes

The Sewage and Water Committee reported a steady improvement in the water quality at Bass Lake. During six weeks of monitoring, involving the collection of water samples from between 12 December 2003 and 17 January 2004, there were increasing signs that the replacement of two septic tanks in the vicinity of Bass Lake may have been responsible for the overall improvement in water quality. An account of the activities leading up to the replacement of two septic tanks was reported by the Chairperson of the Water and Sewage Committee to the Betty's Bay Ratepayers' Association AGM (December 2001)²¹⁷:

Your Committee examined the sewage tanks around Bass Lake, and noted which might be causing pollution problems. Well points were dug in the plume of the effluent from these French Drains, and these were monitored for pollution. One of the tanks was definitely leaking and polluting the ground water, so, with the co-operation of the owner and the Municipal Council, this was replaced by a sealed Conservancy tank, as a matter of urgency, under the supervision of Kevin Winter. Continued monitoring of the Bass Lake showed an improvement, but that there must be a further source of pollution.

A second polluting tank was identified, and this too, replaced. There has been no pollution in Bass Lake since then, except for one very high phosphate level after the first heavy rain of the winter. The latter may be partly due to result of a rapid flushing effect of the rain on the phosphate accumulated in the soil during the dry weather in the summer and autumn.

Bass Lake is in a safe condition for recreation use. There is no pollution at the moment. Monitoring is continuing.

A time series analysis of total phosphate (PO) at Bass Lake is illustrated in Figures 15 and 16 below. The water samples used in this analysis were collected from the shoreline at opposite ends of Bass Lake (See Figure 13) from

²¹⁷ Appendix 137: Report presented to BBRA, December 2001.

November 2000 to January 2005. These graphs show the extrapolation of time over this period each represented by approximately 24 water samples. In both cases, the r^2 value shows a low variance between total phosphate (PO) and time that is not coincident ($r^2=0,1781$). This means that there is a high level of confidence in the declining PO levels over this period. Data collected from the eastern shore of Bass Lake indicates an increased variance as shown by a slightly larger r^2 value. Earlier it was suggested that the decline in pollution levels in Bass Lake might be due to the replacement of two septic tanks in December 2000 and February 2001. This intervention could account for the decrease in the nutrient load.

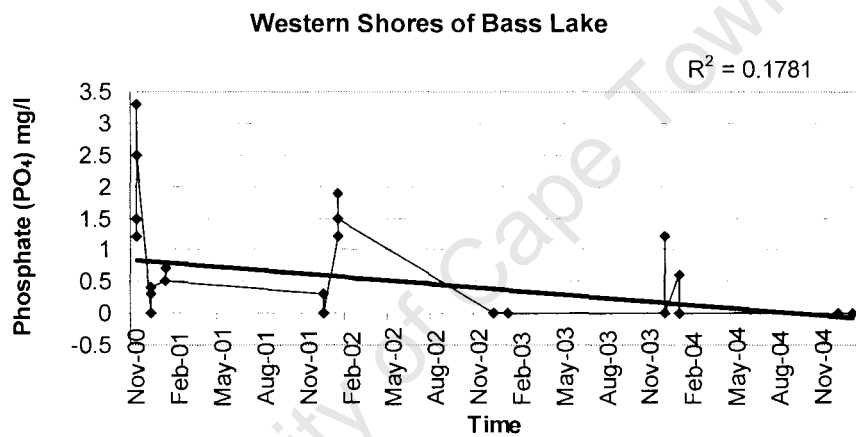


Figure 15: An analysis of phosphate in water samples collected from the western shores of Bass Lake

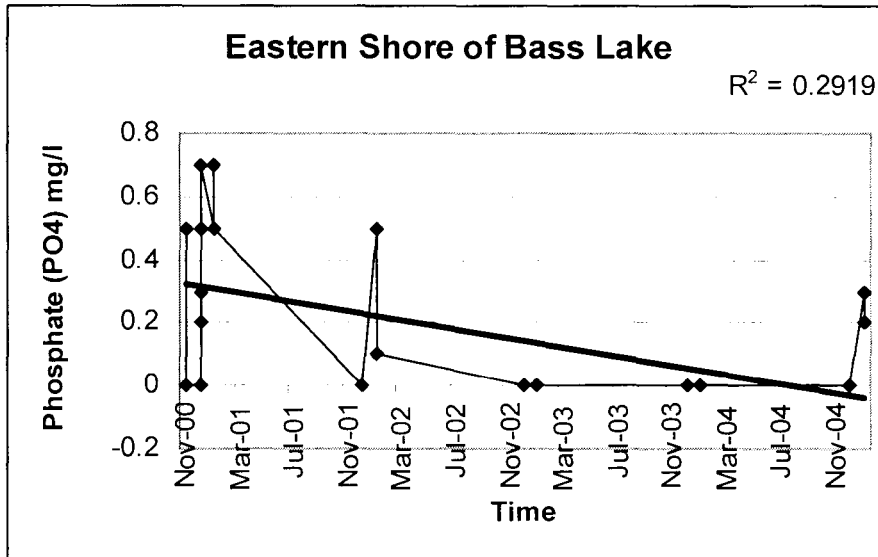


Figure 16: An analysis of phosphate in water samples collected from the eastern shores of Bass Lake.

The initial response of the Betty's Bay Ratepayers' Association to establish this initiative was because of the potential health risk to children swimming in Bass Lake. The report by Schachtschneider (1998) indicated that *e.coli* counts were over 240 per 100ml in January 1998. The South African Water Quality Guidelines for Recreational Use (1996) suggest that level of risk to those in contact with water containing *e.coli* begins at 130 counts/100ml (DWA, 1996). Figure 17 indicates high levels of *e.coli* at certain times of the year, but that these levels peak during the earlier stages of the monitoring programme. A trendline superimposed on the data suggests the *e.coli* levels declined since January 2002 and have not been detected since December 2003. The relatively high r^2 value indicates a considerable variance between *e.coli* levels over time, nevertheless, a decrease in *e.coli* is clearly shown by the graph at Bass Lake. It is possible to conclude that the replacement of two faulty septic tank systems led to a steady improvement in the water quality at Bass Lake and has reduced the risk to human health.

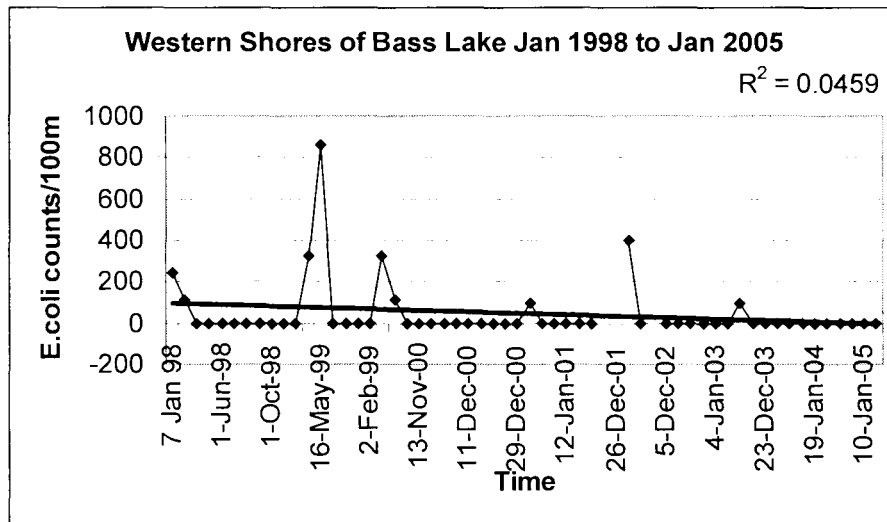


Figure 17: An analysis of *e.coli* found in water samples collected from the western shore of Bass Lake.

Towards the end of the 2001 the committee turned their attention to low-lying areas surrounding Grootwitvlei and Rondevlei. In particular, the committee were keen to establish the quality of groundwater in shallow depressions surrounding these lakes. Consequently, ground water tests sites were located around these two lakes (See Figure 19). Samples extracted from the groundwater at Vlei Road, situated immediately south of Grootwitvlei, consistently revealed high levels of phosphate for the duration of the monitoring programme (December 2001 to January 2005). A trendline in Figure 18 indicates a general decline in PO, but the values still remain high. On a number of occasions the levels of phosphate were above 5 mg/l, beyond the range that field test kits were capable of detecting.

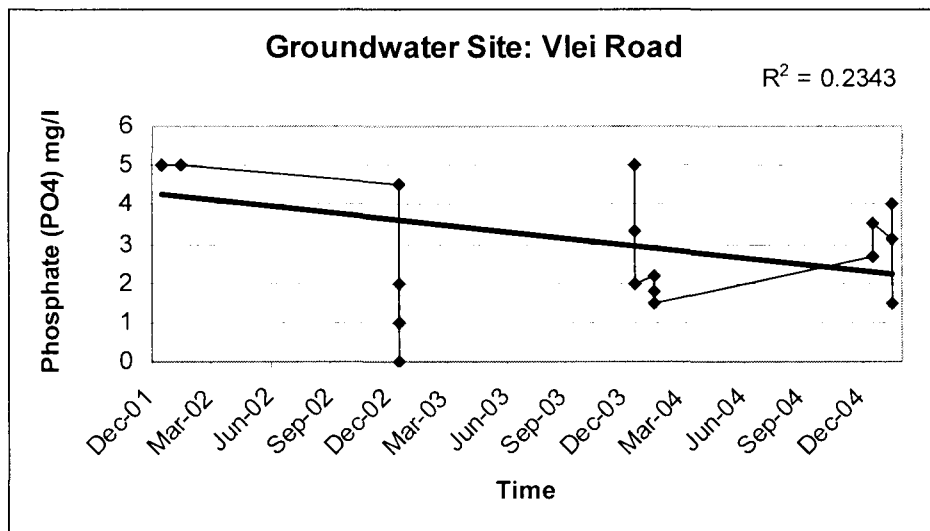


Figure 18: An analysis of phosphate levels extracted from groundwater samples at Vlei Road.

Thus far nothing has been done to address the high level of groundwater pollution in these low-lying areas other than to continue to monitor the situation and to establish a verbal agreement with the Engineering Services Department of the Overstrand Municipality that no new houses should be permitted to install a septic tank system. Early in the development of this initiative, Hayes (2001) had determined that sites below 16 metres above sea level were unsuitable for septic tank systems because three metres of unsaturated soil could not be guaranteed. She used a Geographic Information System (GIS) to identify those areas that were unlikely to offer sufficient unsaturated soil that is necessary to service a septic tank and soakaway effectively. Two maps from her study are used to illustrate the extent of soil saturation during June and July 2001. Figure 19 indicates that only a small section of land to the north and in the south-east could possibly accommodate a septic tank system. However, following 332 mm of rainfall between 21 June 2001 and 27 July 2001, no areas were found to be appropriate (Figure 20).

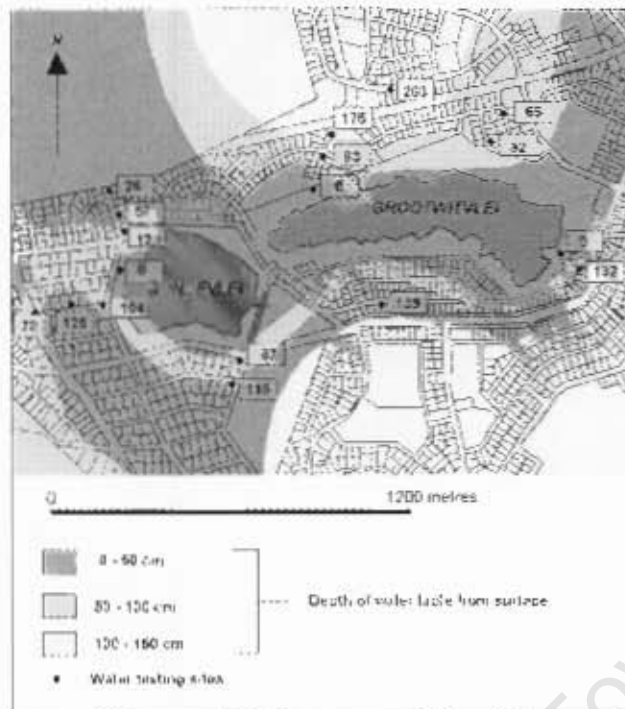


Figure 19: Map of the water table in low-lying areas surrounding Grootwitvlei and Rondevlei (21 June 2001).

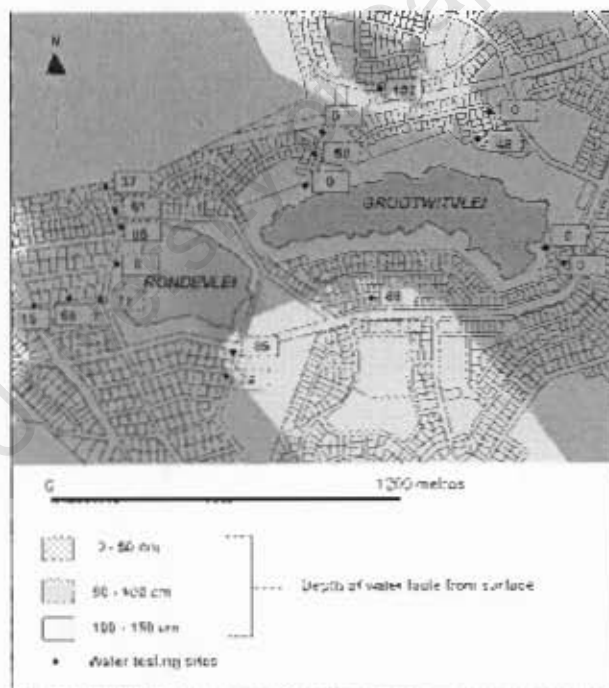


Figure 20: Map of the water table in low-lying areas surrounding Grootwitvlei and Rondevlei (27 July 2001).

There has been limited progress towards a long-term solution of the problem of ground- and surface water pollution because of a combination of factors: financial constraints; no suitable alternative systems have been found; and that the Sewage and Water Committee does not have the power to implement any new sanitation system. The Committee could only make recommendations.

7.7 Conclusion

The evidence suggests that this initiative has been sustained by a number of factors:

- (a) the development of a community forum in which collaborative and joint decision-making occurred;
- (b) efforts to reach consensus on methods of monitoring and sites for collecting water samples;
- (c) regular reporting of information; and
- (d) supportive relationships directed towards achieving goals and solutions.

The success of the Sewage and Water Initiative is measured by the general improvement in water quality at Bass Lake and also in the identification of low-lying areas where septic tank systems are unsuitable. The ongoing search for an alternate system, and therefore a sustainable solution to the problem, has had limited success thus far.

Chapter 8

Analysis and Discussion

Whilst the more ambitious rhetoric about deliberate and inclusive processes cannot be substantiated, the active engagement of citizens in sustainability initiatives is likely to produce modest and incrementally valuable results

Selman, 2001, p.14

8.1 Introduction

The previous chapters presented three environmental initiatives each bounded by unique circumstances occurring in the same geographic setting and in a similar social context, but over a slightly different time period. This chapter commences by identifying patterns of commonality and differences between these initiatives, and evaluates these against social theory discussed earlier in this study. The evaluation commences by organising the empirical findings into a series of tables subdivided into categories so as to perform systematic and stable comparisons.

A second component of the analysis focuses attention on understanding the outcomes of each initiative in order to address one of the objectives of this study that is fundamental to answering the main research question: it seeks to understand what the public can be expected to achieve by being involved in environmental initiatives at a local scale. The analysis explores a multitude of outcomes associated with each initiative and discusses these in relation to the 'prism of sustainability'.

Finally, the analysis entails a detailed discussion on the nature of public involvement as determined by the empirical evidence gathered in this study. This discussion draws on the work of Bhaskar (1987) and Harvey (2002). It proceeds

to construct an empirical framework through deductive reasoning in order to explain how interest groups develop capabilities to contribute to sustainable development.

These three components of the analysis contribute to answering the key research question and to reach a conclusion in the final chapter.

8.2 Evaluation of the Initiatives: Similarities and Differences

Patterns of similarities and differences between the environmental initiatives are identified and presented in Tables 6 to 10. A simple scoring system is shown in the right hand column of each table so as to emphasise results, while the common feature(s) of each category are placed in bold text. A score of three, for example, suggests the strongest measure of congruency, whereas a score of zero indicates no congruency whatsoever. In addition, the information presented in these tables includes page reference numbers in order to reference the information to the previous chapters. The title of each table corresponds to the categories identified in the conceptual framework (See Figure 8).

8.2.1 Expectations of Collectives

In all three initiatives the dominant aim of each group is a focus on the conservation, protection and improvement of the biophysical environment. Secondary aims focus on efforts to inform and educate ratepayers. In the presenting each initiative it was suggested that that these aims were directed towards the common good. This suggestion is justified on the basis that each initiative contributed towards the conservation and improvement of public open space. This is seen, for example, in the protection of indigenous flora found on public land and in efforts to improve the water quality at Bass Lake. There are no clear statements in the primary evidence to indicate why these interest-based

groups wanted to achieve these goals for the common good, other than in the case of the Sewage and Water Initiative. In this most recent initiative the Ratepayers' Association were concerned about the potential risk to recreational users caused by water pollution. In the case of the other initiatives, only implicit explanations can be gleaned. For example, in an interview with R. Attwell (2001), he claimed that the natural beauty of the area affected the way people perceived the environment at Betty's Bay. He suggests that people became involved in initiatives, such as the Hack, because they recognised the natural beauty of Betty's Bay and the need to protect the environment as a natural asset²¹⁸:

'...the mere presence of the core fynbos biome has indirectly affected a lot of people. Certainly in our own case, we came here because of the fynbos and certainly others have come here for the same reason. The sheer beauty of the fynbos; the lack of pressure of population...'

However, Attwell (pers.comm., 2001) also suggests that voluntary involvement is not as forthcoming in recent times despite the fact that the population of ratepayers had grown by nearly four to five times since the 1980s. He expressed pessimism about the future involvement of younger people in continuing to contribute to voluntary initiatives at Betty's Bay.

Further reasons offered to explain why volunteers were motivated to contribute to the common good are found in a report presented by van t'Hoogerhuys at the Ratepayers' Association meeting held on 22 December 1984. An expanded account of this report was quoted earlier in this study. The extract below suggests that there is a common, shared love of the natural beauty found at Betty's Bay and it is for this reason that some ratepayers decided to take responsibility for the environment²¹⁹:

We, the ratepayers of Betty's Bay come here for different reasons. It may be the mountains, the sea, the fynbos, the flowers, the birds or the animals, or a

²¹⁸ Appendix 138: Transcript of an interview with R. Attwell (February 2001).

²¹⁹ Appendix 14: An address presented by van t'Hoogerhuys to BBRA AGM (22 December 1984).

combination of these things. We all have something in common – we love Betty's Bay.

There is sufficient evidence to suggest that volunteers worked co-operatively together. This is demonstrated in all the initiatives by the regularity in which interest groups participated in various activities over a reasonable period of time. Without such co-operation, it is unlikely that interest groups could have achieved the kinds of outcomes described in each case. For example, the Sewage and Water Initiative can claim that a sustained co-operation between ratepayers, researchers and municipal officials over a 5 year period led to an improvement in the water quality of Bass Lake. Similarly, volunteers regularly attended the Hack to remove alien vegetation from public open spaces in which there is evidence of camaraderie among a small group of volunteers and a willingness to work with each other over a long period of time. An account described earlier suggested that this camaraderie and friendship was furthered at the 'Aftermath', a social event held at the completion of each Hack.

Convenors, and those closely involved in the Hack, and the Wild Flower and Botanical Societies acquired specialist knowledge about alien plants and the skills to manage the eradication thereof. Much of this knowledge and skill was developed through firsthand experience. By contrast, the acquisition of knowledge and understanding concerning the Sewage and Water Initiative was confined largely to committee members. In all three initiatives there is evidence to suggest that interest groups used internal and external connectedness to acquire information and specialist knowledge. This is developed further in Table 7 dealing with social capital. What is not evident is a clear expression of socially constructed knowledge. This form of knowledge is underpinned by values and norms that are constantly evolving and are contested over time (Hannigan, 1995). A conception or notion of conservation, for example, is formed by an acceptance and adherence to values and norms that rest on a range of negotiated experiences (Hannigan, 1995). In this study, interest groups

demonstrate a strong propensity and orientation for conserving the biophysical environment, but this is based on a set of unspoken values and norms. It has already been argued that a strong conception of conservation, underpinned by norms, values and moral ethics, was responsible for directing interest groups to take responsibility for the environment.

In summary, it can be inferred from the empirical evidence that interest groups worked towards the common good of others and the environment; that they worked co-operatively and collegially with each other; that they were able to construct knowledge about the biophysical environment, along with knowledge and understanding of concepts and terms associated with the respective initiatives; and that members of interest groups were willing to take responsibility to achieve shared goals. All four of these theoretical perspectives are common to each initiative. It can be concluded that, where the public have a direct interest in issues and problems affecting an immediate or local environment, individuals can be expected to take responsibility and to work together to achieve shared goals for the common good. In the process of this involvement, individuals and interest groups acquire and can construct knowledge that is used to direct their interests, and in so doing, has the potential to contribute to decision-making and problem solving. The circumstances and capacity of interest groups to meet these expectations is discussed further in Section 8.4.

Table 6: Expectations of collectives

Criteria	Alien Vegetation Campaign	Wild Flower & Botanical Society	Sewage and Water Initiative	Score
Expectations of Collectives				
Does involvement contribute towards the common good?	Clearance of alien vegetation to conserve & protect <i>fynbos</i> ^(xx) ; inform, educate & communicate ratepayers ^(xx) ; conserve heritage of public land ^(xx)	Present flower shows ^(xx) ; educate public & ratepayers ^(xx) ; clear alien vegetation ^(xx) ; conserve plant biodiversity on public land ^(xx) ; efforts to establish a nature reserve ^(xx)	Solve problem of pollution ^(xx) ; monitor water quality ^(xx) ; inform & educate ratepayers ^(xx) ; search for alternatives ^(xx) ; improve lake ^(xx)	3
Is there evidence of co-operation?	Camaraderie ^(xx) ; organized by individual leader ^(xx) ; volunteer support ^(xx) ; collective action to clear alien vegetation ^(xx)	Collective effort demonstrated in preparing flower shows ^(xx) ; volunteer support in removal of alien vegetation ^(xx) ; support given to HP Botanical Garden ^(xx)	Small group committee meetings to deliberate results of monitoring ^(xx) ; collaborative effort of committee in discussion, decisions & actions ^(xx)	3
Is knowledge acquired and constructed?	Acquired knowledge of alien plants & their management ^(xx) ;	Acquired specialist knowledge of indigenous vegetation ^(xx) ; use of specialists to assist flower shows ^(xx) ; specialist knowledge of alien vegetation management ^(xx)	Local knowledge used to identify sites for monitoring programme ^(xx) ; 'civic science' approach to resolving problem ^(xx) ; acquire specialist knowledge controlled largely by researchers ^(xx)	3
Is there evidence of values, norms and taking responsibility?	Responsibility for clearing vegetation becomes a regular, exercise ^(xx) ; took responsibility to educate property owners ^(xx) ; planted indigenous vegetation ^(xx)	Preparation of flower shows; responsibility for clearing vegetation ^(xx) ; lobbying local authority to conserve penguin colony ^(xx) ; support Botanic gardens ^(xx) ; educate public & property owners ^(xx)	Responsibility taken to establish and ensure ongoing monitoring programme ^(xx) ; seek funding ^(xx) ; educate & inform residents ^(xx) ; search for alternative systems ^(xx) ;	3

8.2.2 Social Capital

There is no explicit evidence to suggest that individuals became involved in any of the initiatives because they expected some form of reward or return for their efforts. However, it is conceded that the nature of the primary sources informing this study make it unlikely that matters of reciprocity or exchange would be expressed in written documents or could emerge during interviews held with various role players. It is therefore difficult to recognise or interpret statements in the primary sources as expressions of a personal desire to establish some form of reciprocity. Nevertheless there is an argument, supported by the literature, to suggest that interest groups can be expected to act out of concern for future generations. In this sense, reciprocity is perceived not for the gain of the current generation, but for future generations (Pretty & Ward, 2001). It suggests that individuals might derive satisfaction from devoting time and effort to conserving and improving the environment for the sake of their children, and their children's children. Two statements were found in the primary sources that support this idea. The first is a reference to removing alien vegetation 'as an unspoilt heritage for the sake our children'²²⁰, and the other is an assertion that Bass Lake needs to be managed as a recreational asset for the sake of 'our children and grandchildren'²²¹. However, the dearth of evidence focusing on future generations confirms a concern identified earlier that one of the most troubling features of modern society is a widespread lack of concern for future generations (Hannigan, 1995; Dunlap *et al.*, 2002; Dobson, 2003). In this study there is some evidence to suggest that voluntary actions could be directed towards securing the needs of future generations. Reciprocity could be a means of raising awareness and concern for the needs of future generations.

²²⁰ Appendix 29: Article written for the BBDR Newsletter written by Bevan (September 1962).

²²¹ Appendix 112: Memorandum written by Nunn, Chairperson of the Sewage and Water Committee, to the Ratepayers' Association, April 2000.

Trust is one of the key attributes of social capital, yet there is no explicit expression of trust or mistrust by individuals involved in interest-based groups according to the empirical evidence. This absence is again explained by the nature of the primary sources. Furthermore, in voluntary organisations and initiatives, individuals are likely to leave when they encounter actual or perceived mistrust. Nevertheless, trust can be inferred by a long-term willingness on the part of volunteers to work together, to attend meetings, to participate in activities of a group, and to trust others to do likewise. It is unlikely that groups would be able to achieve goals and outcomes without some measure of trust. All three initiatives achieved tangible outcomes through individual and group effort. This suggests that volunteers exercised trust in the leadership of the group and in each other in order to achieve various goals over a reasonable period of time.

The most convincing evidence of an attribute of social capital is demonstrated in the strong internal and internal-external connectedness. A variety of examples have been presented earlier to explain how individuals were invited to serve on the committees and how, through their interest and expertise, they were able to draw on social capital internal to the committee or from members of the interest group who were not holding positions on a committee. Examples were also used to show how connectedness with persons and institutions external to the initiative played an important role in acquiring knowledge, expertise and in directing the initiatives.

Finally, norms, rules and sanctions were difficult to identify or interpret from the primary evidence. Norms are underpinned by values, beliefs and attitudes, and are constantly evolving and being constructed through social processes (Hannigan, 1995). Despite scant evidence of expressions of norms and values, an implicit acceptance is demonstrated by co-operation and agreement within the respective interest groups. Such behaviour is informed by social interaction and communication, and indirectly reflects norms and values (Parsons, 1937;

Sztompka, 1991). There is no evidence of rules or sanctions being applied in any of the initiatives either from within interest groups or external to these groups.

In summary, the attributes of social capital are best demonstrated by the internal and external connectedness of groups, and by a level of inferred trust in the leaders, in the organisation of the initiative and in the manner in which volunteers trusted each other to support the work. There is limited evidence to suggest that reciprocity is a factor motivating the current generation to volunteer their time and effort on behalf of future generations. Finally, no evidence could be found to identify the explicit application of norms, rules and sanctions in any of the initiatives.

Table 7: Social capital

Social Capital	<i>Alien Vegetation Campaign</i>	<i>Wild Flower & Botanical Society</i>	<i>Sewage and Water Initiative</i>	Score
Is there evidence of reciprocity and exchange among volunteers?	Removal of alien vegetation to preserve the floral diversity of Betty's Bay for future generations^(xx)	None	Ensure clean water and a healthy environment for future generations^(xx)	2
Is there evidence of trust among volunteers?	Inferred sense of trust – trust in leader(s)^(xx); trust in the purpose of the exercise^(xx)	Inferred trust in leaders & committee^(xx); trust in purpose of activities^(xx)	Inferred trust in leaders & committee^(xx); trust in purpose of activities^(xx)	3
Is there evidence of different levels of connectedness and networks among volunteers?	Internal connections^(xx); sense of purpose^(xx); Association with SA Botanic Society^(xx); Society & local authority^(xx)	Internal connections^(xx); internal-external connections between Society & SA Botanical Society, & local authority^(xx)	Internal connections^(xx); internal-external connections with the Local Authority and university researchers^(xx)	3
Is there evidence of norms, rules and sanctions among volunteers?	Regularity of activity ^(xx) ; camaraderie and a sense of belonging to a social group ^(xx)	Meaningful activity; camaraderie, identity with a social group ^(xx) ; learning together ^(xx) ;	Collaborative process ^(xx) ; discussion and deliberation to resolve the problem ^(xx) ;	0

8.2.3 Relations with Institutional Authorities

In the 1960s and 70s the Village Management Board was required to provide services to less than 100 permanent residents living in the municipal area of

Betty's Bay (See Table 1). The scale of operations at the time meant that individuals or groups could exert a certain amount of influence on the day-to-day functions performed by the Local Authority. Under the Divisional Council Ordinance No. 10 of 1921, a representative of the Ratepayers' Association was elected to serve on the Board for a period of one year. During this time, the Ratepayers' Association were closely involved in the affairs at Betty's Bay. They enjoyed a relatively sustained period of amicable relations between the Local Authority and interest-based groups. Projects such as the Hack and the Beautification of Betty's Bay all received a measure of support from the Local Authority. Furthermore, some local councillors frequently attended public meetings of interest groups including committee meetings.

Relations between the Botanical Society and local authority appear to deteriorate in the 1990s. As already outlined, the Society was frustrated by the lack of action on the part of the Local Authority to establish a structure plan that incorporated an environmental management plan for Betty's Bay. Deteriorating relations were also reflected in the interaction between the Ratepayers' Association and elected Municipal Councillors, particularly in the period immediately prior to local elections in 2001. The Chairperson of the Association claimed that the Ratepayers' Executive Committee had made sincere efforts to work with the Municipality, but felt that they were being treated poorly:

....the Council have tried to give the impression that they have made changes in an attempt to make themselves look good, whereas to a large extent they have mostly been obstructive. In actual fact there have been inefficiencies in the municipality and the whole set up there is such that it makes it very hard to make progress.... We have been very sincere to try to get these folk to say look we need to work together. The problem is that the Councillors want you to crawl. If you want anything done you need to come bowing and scrapping... (Berrisford, pers.comm. 2001).

In 2000 there were further changes to the administrative structures of the Municipality with jurisdiction over Betty's Bay. The Overstrand Municipality was

established under the Provincial Notice (PN 494/2000) published in Provincial Gazette 5591 (Western Cape). This enlarged municipal district is the result of an amalgamation of four previously disestablished municipalities of Hangklip-Kleinmond, Greater Hermanus, Stanford and Gansbaai. The Provincial Notice incorporated a municipal area of approximately 2125 km², with a coastline of over 200 kilometres stretching from Rooi Els in the west to Quinn Point in the east (See Figure 5). During the same year, the Local Government Municipal Systems Act 32 of 2000 was promulgated. This Act required each municipality to establish an Integrated Development Planning (IDP) process to ensure that changing needs, concerns and priorities of citizens were addressed. The IDP process has a number of implications for this study particularly with respect to the Sewage and Water Initiative since this is the most contemporary of the three environmental initiatives highlighted and most directly affected by the administrative changes.

The previous chapter highlighted the preparedness of the Local Authority to engage with the public in the Sewage and Water Initiative. Local authority officials regularly attended committee meetings of the Sewage and Water Initiative. In so doing, they interacted with committee members, ensured some financial support from within the municipal budget to sustain the monitoring programme, and intervened in the process of replacing faulty septic tanks in the vicinity of Bass Lake. The Local Authority is likely to continue to operate in this way in the medium-term since the cost of installing a waterborne sewage treatment system is capital intensive and appears financially prohibitive especially in relation to other priorities in the district. The Head of Engineering Services intimates that sewage problems and concerns at Betty's Bay are relatively small in comparison to similar concerns elsewhere in the Municipal district. He cited Gansbaai as one of the towns requiring urgent attention (Bartman, 2004, per.comm.)²²². The priorities of the Overstrand Municipality are

²²² Minutes of Sewage and Water Committee (2004).

reflected in the Integrated Development Plan for the district (Overstrand Municipality Integrated Development Plan, 2004/5). For example, in 2005 ten informal settlements, all predominantly inhabited by Black South Africans, all require cleansing, water, electricity and sewerage services. In addition, there is an estimated backlog of approximately 10 000 subsidised housing units which need to be addressed over the next 2 to 3 years. The Municipality also aims to have a 25% operational sewage disposal network by 2007/8. The delivery of houses and services to people, previously disadvantaged by Apartheid, conforms to a national strategy that aims to ensure that reconstruction and development contributes to the upliftment of social and community living standards (Growth, Employment and Redistribution Policy, 1996)²²³.

Given these circumstances, the success of the Sewage and Water Initiative thus far, is largely the result of an engagement and co-operation between the Local Authority, the Ratepayers' Association and researchers. It is through this co-operation and interaction that the committee has been able to access financial resources and effectively extend the network of social capital by drawing on a range of expertise and experience. The Sewage and Water Initiative has sought to engage the Local Authority in a joint effort to acquire knowledge and understanding of water pollution in the groundwater and lakes. A joint co-operation approach conforms to the policy expressed in the IDP document in which public participation is incorporated into planning processes:

'it is our intention to continue to actively engage with our stakeholders and citizens to refine the thinking and strategies both through discussion and from learning by doing'.

Overstrand Municipality IDP, 2004/5, p.82

²²³ GEAR is a macro-economic strategy that aims to ensure the following: the delivery of housing and related services; steady improvement in the quality of education; universal access to primary health care; access to land and agricultural support for emergent farmers; electrification of all urban areas and an increasing number of rural communities; reliable water supplies and appropriate sanitation infrastructure; improved postal and telecommunications services; and a broad social security net, comprising social grants and targeted welfare services (<http://www.polity.co.za/html/govdocs/policy/growth.html>).

All three initiatives present some evidence of the involvement of the Local Authority although the extent of this involvement varies over time. Before 2000, when the township of Betty's Bay was located in a relatively small municipal district, the ratepayers and interest groups enjoyed greater access to officials and councillors. It is suggested that during the 1960s and 70s access to and support from a small local authority was at its greatest compared to the 1990s, and especially after 2001 when the municipal district was expanded to form the Overstrand Municipality. Municipal structures have changed radically since the 1960s. This offers new challenges to interest groups that may have certain expectations that the Local Authority will continue to deliver services and to deal with the public as in the past. Nevertheless, the common pattern in all three initiatives is a measure of joint participation, support and co-operation between the interest groups and the Local Authority.

The account given by Nunn (pers.comm., 2001), an experienced activist who has been involved in interest groups and the Ratepayers' Association since the 1980s, sums up the strategic role of the Local Authority, and indicates her perception and attitude to the Local Authority²²⁴:

There is wonderful co-operation with the local authority. No problem at all. All you have to do is to go there and say this is what we need. This has been my experience. I go there with an attitude that I am going to get it and I have never had a cross word or any unpleasant word with any one of them. They have always co-operated never have they turned me down. You have to pin them down, but you have to work out your strategies and they will work with all the societies. When I have found the going tough then I have demanded to see the mayor. It is no use confronting, if you want something from someone you have to be pleasant.

²²⁴ Appendix 138: Transcript of interview with Mrs A. Nunn (February, 2001).

Table 8: Relations with institutional authorities

Relations between interest group and authority	<i>Alien Vegetation Campaign</i>	<i>Wild Flower & Botanical Society</i>	<i>Sewage and Water Initiative</i>	Score
Is there evidence of communication and interaction between interest-based groups and the Local Authority?	Co-operative relations between leader of the initiative and local authority in 1960s & 70s^(xx)	Local councillors often attended meetings^(xx); Municipality seeks advice from the local Botanical Society on alien vegetation types^(xx); local authority gives support the Hack^(xx); Relationships and communication deteriorates in 1990s^(xx)	Relationships and communications varies ^(xx) ; participation of local authority officials including financial support^(xx)	3

8.2.4 Summary

The evidence indicates that in each case the initiatives were directed by shared goals and activities to the benefit of the public and the environment. Support from the Local Authority, researchers and professionals served to strengthen and maintain group interest and to give direction to the initiatives from time to time. Social interaction and communication is evident in the records of meetings and events such as annual general meetings, committee meetings and in newsletters. On some occasions meetings presented opportunities for members to express their values and desires, but in general such expressions were largely absent from the written sources. The discussion has highlighted the critical role that norms and values play in the social construction of knowledge and in reaching shared agreements. The dearth of evidence on norms and values partly reflects the limitations inherent in the nature of the primary sources used in this study.

8.3 Evaluation of Initiatives: Contribution to the Environment and Sustainability

This section evaluates the actions performed by interest groups and the main outcomes of each initiative. It seeks to explain what can be expected of public involvement in a local setting.

8.3.1 Actions

'Caring' and taking responsibility for the conservation of the biophysical environment is the only common form of action that can be identified in all three initiatives (Table 9). There is no expressed intention to address broader principles and attributes of sustainability as suggested by the 'prism of sustainability'. However, it is unfair to expect interest groups at Betty's Bay to address all or even some of the imperatives of sustainability. However, Reid and Taylor (2003) contend that it is not enough for civic environmentalism to focus only on the preservation of 'wilderness' or 'biodiversity' alone. They state that ecological concerns should be integrated into all aspects of social, political, economic and cultural life. Thus far, the environmental initiatives in this study show no evidence of dealing with issues such as poverty alleviation, job creation or ensuring greater opportunities for previously disadvantaged citizens.

The application of democracy, as characterized by openness, transparency and fair opportunity to participation, is not examined in this study. While a committee and an organisational structure can facilitate democratic participation, it can also exclude the public from participation. A limited expression of norms and values, as highlighted many times throughout this study, might be one reason why 'outsiders' feel uncertain about becoming members of interest groups especially if the intentions of such groups are largely unknown. The result is exclusion (Coleman, 1994).

Table 9: Actions

Do social actions show evidence of:	<i>Alien Vegetation Campaign</i>	<i>Wild Flower & Botanical Society</i>	<i>Sewage and Water Initiative</i>	Score
Care for the environment?	Systematic removal of alien vegetation^(xx); planting to conserve biodiversity^(xx); education of ratepayers^(xx);	Presentation of Flower Shows ^(xx) ; removal of alien vegetation to conserve biodiversity^(xx); conservation of Penguin colony^(xx) ; contribute to structure plan of Betty's Bay ^(xx) ; stakeholders in nature reserve plans and Biosphere Reserve ^(xx)	Sustained monitoring programme ^(xx) ; research effort and intervention to ensure the conservation of freshwater lakes^(xx) ; lobbying authority ^(xx) ; seeking financial assistance ^(xx)	3
Burden sharing of others?	None	None	None	0
Social justice?	None	None	None	0
Access to resources?	None	None	None	0
Democratic processes?	Privately organised ^(xx)	Committee structure to enable participation ^(xx) ; participation of Councillors at committee meetings ^(xx) ; Potential to exclude the public is unknown	Participation in committee meetings ^(xx) ; participation of local authority officials at committee meetings ^(xx) ; potential to exclude the public is largely unknown.	0
Eco-efficiency in the decision-making?	None	None	Attempts to find an alternate sewage system appropriate to the conditions at BB, but still to be achieved	0

8.3.2 Outcomes

The most significant outcomes have been described in the previous chapters. These outcomes have contributed to the conservation and improvement of the biophysical environment, but they are limited in contributing towards sustainability (Table 10). The success of these outcomes is the result of a combination of factors including the leadership and vision of individuals; the willingness, perseverance and commitment of volunteers; the involvement of other institutions, most notably the Local Authority; and the organisational structure of interest groups.

Table 10: Outcomes

Outcomes	<i>Alien Vegetation Campaign</i>	<i>Wild Flower & Botanical Society</i>	<i>Sewage and Water Initiative</i>	Score
What evidence indicates that the initiative has contributed to sustainable development?	Cleared public land of alien vegetation^(xx);	Organised five Flower Shows ^(xx) ; continue to clear alien vegetation^(xx) ; raised funds and gave initial support to penguin colony ^(xx) ; stakeholders in applying for the KBR ^(xx)	Improvement in water quality of Bass Lake^(xx); continue to monitor water quality with the support of local authority^(xx)	3

8.3.3 Summary

This study is unable to present conclusive evidence to show that one initiative has been more successful than another. Each initiative has achieved a certain amount of success in contributing to the conservation and improvement of the environment. These outcomes are common to each initiative even though different issues were being addressed. Interest groups at Betty's Bay have demonstrated a capacity to take responsibility and to care for the biophysical environment through collective action and activities. However, there is no explicit evidence to suggest that the initiatives address the imperatives of sustainability.

8.4 Public Involvement: an Empirical Framework

The analysis continues with the construction of an empirical framework to explain the nature of public involvement as dialectic between structure and agency. The framework also seeks to explain the capacity of interest groups to contribute to sustainable development. This framework is developed from Bhaskar's and Harvey's transformation models applied to a local setting. Central to Bhaskar's transformation model is the recognition that membership of a community provides the social and material possibilities for social reproduction and transformation of social structures. In this study the empirical framework seeks to demonstrate the potential of interest groups to contribute to sustainability by

being able to operate within a set of cultural traditions and within the material and ecological boundaries of a real community (Harvey 2002). Harvey argues that it is not possible for groups of people to operate independently of society or human agency if they wish to develop aspirations of self-cultivation or self-realisation. In the context of this study, the argument could be interpreted to mean that interest groups are unlikely to advance their interests in changing social and political circumstances if they are unable to retain membership of a group or work within the social, physical and material bounds of such a group. The implications of this argument are discussed further in combination with a detailed description of the empirical framework.

8.4.1 The Influence of Society on Human Agency

A discussion on the construction of an empirical framework begins with the left hand column of the diagram shown in Figure 21. This column identifies the Durkheimian triad of Society – Socialisation – Individual Agent. Society represents any cluster of socially constructed institutions, relationships and forms of conduct that are reproduced over time and space (Johnston *et.al.*, 1995). The Betty's Bay Ratepayers' Association therefore represents such a society by virtue of the fact that it is a socially constructed organisation representing ratepayers and has an organisational structure that varies over time depending on factors such as leadership, demands of membership and structural arrangements that are either imposed on the association or voluntarily accepted. The BBRA provided a forum of expression, and in a few instances, an opportunity for members to clarify norms and values. These expressions were presented formally in quarterly newsletters and at ratepayers' meetings. However, the extent to which the Ratepayers' Association contributed to the socialisation and social control of its members is unknown. The broken line that connects individuals to the Association depicts this uncertainty (See Figure 21). By inference, the Association provided an organisational structure. It is assumed

that individuals became members of this organisation based on some knowledge of the goals and objectives of the Association. The voluntary nature of the organisation meant that members were free to disagree with the decisions taken by the leadership of the Association and were equally free to resign their membership from the organisation if their interests were not met. Unfortunately the primary sources of evidence used in this study do not give an explicit account to support this assumption. There is, however, reasonable evidence to show that the Association provided a forum for interaction between members, between members of interest groups, and between the Local Authority and interest groups. Furthermore, the Ratepayers' Association provided an organisational structure from which to launch initiatives and to give some measure of support to its members either through social interaction, access to social capital from within its membership, and some financial support.

Time is shown along the horizontal axis in Figure 21. This is one of the distinguishing elements of public involvement as opposed to short-term public participation in projects or programmes. It has been demonstrated that interest groups at Betty's Bay have operated over a reasonable period of time during which an implicit acceptance of trust, norms and values was generated. In addition, over time a stable set of relations were established within the organisational structure of the Hack and the Botanical Societies. In addition, while organisation structures develop over time, individuals also develop over time. In the empirical framework individual agents are shown to shift their self-actualising aspirations over time as a result of their interaction with and membership of a group or community. Over time individuals become increasing confident and capable of addressing their interests and those shared by the group through a general acceptance and adherence to norms and values of the interest group.

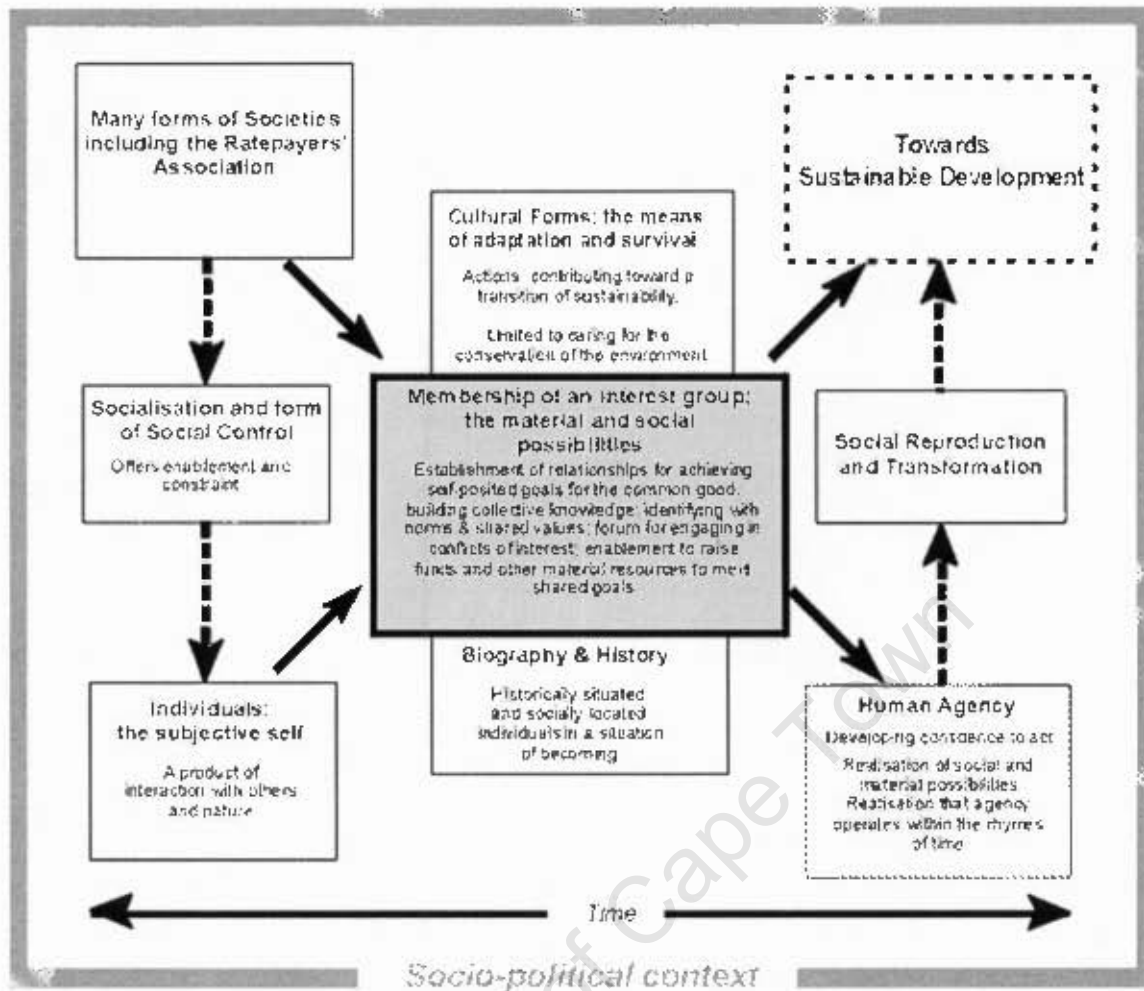


Figure 21: Empirical framework (Adapted from Harvey, 2002)

8.4.2 Social and Material Possibilities

The central column of the empirical framework makes an important contribution in answering the study question because it explains how interest groups have the capabilities of transforming social structures (Figure 21). In Bhaskar's (1987) transformation model, he describes how socialisation, and social reproduction and transformation, mediate between the human agent and social structures. He states that this mediation occurs in real communities in which there is access to social and material possibilities to enable human agents develop capabilities and access resources in order to achieve self-realisation, to adapt and even

transform society. This social and material nexus is central to the dialectic. In this study, there is evidence to suggest that the involvement of interest groups improves opportunities of collectives to access material and social possibilities.

These possibilities include:

- (a) access to social capital through connectedness and extended networks;
- (b) material and financial resources made available to interest groups by virtue of their adherence to an organisation structure and organisational capacity;
- (c) opportunities to participate as a collective in various activities;
- (d) capacity and confidence of individuals to take responsibility because of the potential support available to them; and
- (e) developing a confidence that results from a shared acceptance and adherence to norms, values, shared goals and knowledge of a group.

The lowest block of the central column (Figure 21) recognises that individuals are in a state of 'becoming' as a result of their interaction with others and with nature (surrounding circumstances and influences). Individuals do not simply find themselves attached to the membership of a group and subsequently lose their individual identity, but they continue to carry a unique biography and history that enables them to identify with causes and activities from their perspective as individuals (Harvey, 2002). Group membership does not necessarily stifle self-actualisation.

The central box in Figure 21 has a grey tone to emphasise how the dialectic is resolved through social and material possibilities. This nexus represents a combination of socialisation and social reproduction processes and is realised through membership of an actual community. Membership has the potential to support individuals and groups to realise the possibilities of accessing social capital, financial resources and other resources to support the aspirations of a collective or group.

Finally, the uppermost block in the central column illustrates the potential of members to adapt, survive and develop towards a desirable form of self-cultivation. These aspirations are met through efficacy and advocacy that are carried out either with the view to continue maintaining the *status quo* or to forge new ideals. The possibility of contributing to sustainability is achieved when and if self-cultivation, adaptation or mere survival cause human agents to collectively decide on how to change their circumstances whilst adhering to the principles of sustainability.

8.4.3 The Influence of Agency on Society

The right-hand column of the empirical framework shows the Weberian 'Human Agent–Social Reproduction–Society' triad dealing with the power of human agency to reproduce and even transform society. In this situation agency is capable of adapting and acting in response to the individual's biography and history, but at the same time is strengthened by their membership and involvement in an organisation or group (Giddens, 1984). In the right hand column the arrows pointing towards the potential 'state' of sustainable development are depicted using a broken line similar to the column on the far left. In this study a broken line is used because is uncertain whether agency has contributed conclusively to sustainable development. Three reasons are given to substantiate this statement:

- (a) initiatives are limited to 'caring' for the environment and in taking responsibility for conserving natural resources;
- (b) there is insufficient evidence to suggest that interest groups have influenced social reproduction and transformation of structural influences within the Ratepayers Association or the public in general; and

- (c) there is insufficient evidence of expressions of norms and values linked to cultural aspirations that recognise the need to accept and adhere to the principles and imperatives of sustainability.

8.4.4 The Nature of Public Involvement

This study has sought to examine the nature of public involvement through a combination of social theory and the empirical findings in the context of environmental initiatives in a local setting. To begin this discussion on the nature of public involvement, it is first necessary to reiterate that public involvement described in this study does not conform exactly to any forms of participation identified in EIAs (Figure 1) or any position on Arnstein's 'ladder of participation'. In both these cases, neither time nor context is described adequately. Short term, project driven public participation, particularly that which is incognisant of social processes over time and space, is unlikely to transform social structures and agency. By contrast, public involvement in this study involves understanding of an evolving social context over time in which collectives construct and contest knowledge, formulate and adhere to agreements, and engage in activities that are informed by norms and values that conform broadly to the aspirations and interests of individuals who are also members of an organised interest group. Understanding public involvement therefore involves understanding social processes and their evolution over time.

The second major contrast between public involvement and public participation lies in the membership of interest groups. Membership is central to understanding how the organisational structure of a group is able to mediate the aspirations of individuals as human agents in combination with the cultural aspirations of a group. Mediation is a process in which social interaction and communication provides a means for norms and values to be clarified, accepted and adhered to in order to access social and material possibilities.

Finally, public involvement has demonstrated that interest groups achieved some success in their efforts to conserve and improve the biophysical environment by accessing social capital through internal and external connectedness. Each initiative was able to draw on social capital to strengthen individual and group capacity, acquire and construct knowledge from social networks, and to use social capital to maintain their interest in initiatives. Furthermore, it has been shown that individuals co-operated with each other because of their trust in each other and trust in the leadership of the group.

Chapter 9

Conclusion

... the most decisive reason for the establishment of groups...collectively, a group of people are in a favourable position to negotiate successfully with a local government than individuals are on their own"

Bekker, 1996, p.29

9.1 Introduction

This study has evaluated three environmental initiatives at Betty's Bay using theory and empirical data in order to explain why it is necessary to involve people in managing environmental issues and problems, and to assess the potential of interest groups to contribute to sustainability in a local setting. The results of the study reveal five major findings which are offered as contributions to the literature on public participation and environmental management. The first conclusion deals with the contribution of interest groups towards sustainability; the second establishes the reasons for involving the public in environmental initiatives; the third explains how interest groups access social and material possibilities that could contribute towards a transition to sustainability; the fourth establishes how institutions direct and sustain local initiatives; and finally, the study identifies the attributes of interest group involvement. The concluding discussion uses these findings to answer the study question: *why involve the public in environmental initiatives?*

9.2 Contribution of Interest Groups to Sustainability

It has been shown in this study that interest groups demonstrate goodwill, commitment and an adherence to shared goals. It has been shown that acts of goodwill contribute to the common good through efforts to conserve and improve

public open space and a public amenity at Betty's Bay. In the examples highlighted in this study, a number of outcomes have been identified and discussed to substantiate these claims. These include:

- (a) the conservation of floral biodiversity through the systematic removal of alien vegetation over 40 years or more;
- (b) an awareness among ratepayers of the need to preserve and protect indigenous flora at Betty's Bay. This was achieved by designing and disseminating information to ratepayers; by creating public displays at the Harold Porter Botanic Gardens; and through 'hands-on' learning at the Hack;
- (c) by lobbying and supporting the establishment of a penguin reserve at Stony Point which resulted in the development of a public amenity of interest and of educational value; and
- (d) by acting jointly with ratepayers, local authorities and researchers to improve the water quality at Bass Lake so as to ensure its continued use as a recreational amenity.

These outcomes are arguably contributions towards environmental sustainability and demonstrate the capability of interest groups to care for the biophysical environment. The sustained involvement of interest groups in these initiatives is laudable, but these contributions are unlikely to cause a shift in the social, economic, environmental and institutional arrangements and circumstances at Betty' Bay. In South Africa, and in the municipal district in which Betty's Bay is located, issues of poverty, unemployment and social inequality are major challenges to the long-term sustainability of the municipal district and the country as a whole. Interest groups at Betty's Bay have focused predominantly on conserving and improving the biophysical, but have not included other processes and actions necessary to achieve an increased state of sustainability that incorporates a wider range of imperatives.

At the same time, as discussed earlier, it might be unreasonable to expect interest groups to address the range of processes associated with the 'prism of the sustainability'. Interest groups at Betty's Bay were established to address particular environmental interests and concerns. Attention remains largely focused on these interests. However, one of the concerns raised by this study is that existing and future sustainability demands the pursuit of a wider range of social actions in order to meet pressing social and ecological imperatives. A failure to ensure an integrated approach will have limited long term success given the pressing priorities of social inequality, injustice, poverty and unemployment in South Africa. It makes little sense to preserve or protect the natural resource base found in the Overstrand Municipality if this excludes access to those who depend on these resources either for daily survival or as a potential source of income. Initiatives that fail to acknowledge social and economic imperatives may encourage illegal and uncontrolled extraction of natural resources.

9.3 Contribution of Interest Groups to Managing Environmental Issues

Despite the limitations of interest groups with respect to achieving a convincing path towards sustainability, the study has identified and confirmed a number of important reasons for involving the public in environmental initiatives.

Firstly, all three initiatives were started because individuals identified an environmental problem or issue at Betty's Bay. In each case, public interest in the local environment led to the identification of issues worthy of the attention and involvement of volunteers.

Secondly, the sustained effort of interest groups over a reasonable period of time is characterised by co-operation, trust, collegiality, camaraderie and a sense of purpose. The evidence indicates that these attributes were maintained through

ongoing communication, interaction and an implicit understanding of the norms and values that served to inform behaviour. These attributes are deemed necessary to sustain the long-term involvement of the public.

Thirdly, interest groups increased their collective capabilities by accessing social capital available through the internal and external connectedness of individuals and the group. Access to these networks might otherwise not have been available to individuals or local authority officials had they acted alone. In the case of the Sewage and Water Initiative, for example, the initiative was sustained largely because of access to a wider social network, and included the participation of local authority officials, the involvement of researchers, and the input of invited consultants. In this case, the water monitoring programme informed decision-making, stimulated interest in the project and supported an intervention that led to the improvement in the water quality at Bass Lake.

Fourthly, interest groups at Betty's Bay pursued their interests despite a fragmented civil society and near absence of any broad-based environmental movement. In addition, socio-political change and structural adjustments that ensued during the period of Apartheid and post-Apartheid appear to have had little or no influence on these interest groups. It could be argued that these interest groups were largely unaffected by socio-political changes in South Africa. However, from a theoretical perspective, it could also be argued that these interest groups could continue to pursue their interests because of the stability of the organisation of the initiative, the leadership of the group, and the availability of financial and material resources to support their efforts to achieve certain shared goals.

Finally, the findings suggest the possibility that interest groups were able to evoke the concept of reciprocity by applying this for the sake of future generations. Although only scant reference was made to future generations, two

accounts suggest that individuals were prepared to engage in voluntary initiatives in order to conserve and protect the biophysical environment for the sake of future generations.

9.4 Involvement of Local Authorities

Sustainable development in the Overstrand Municipality is unlikely to lie in the contributions of interest groups alone. The challenge lies in the development of a strong functional municipality and its officials who recognise the value of engaging in participatory processes with interest groups, individuals and the public in general (Plummer, 2002). The Water and Sewage Initiative has demonstrated that joint efforts on the part of the public, local authority officials and researchers can lead to worthwhile improvements in the condition and management of the environment. This initiative has been sustained through the support of the Local Authority that ensured ongoing research and led to informed decisions. Thus far this initiative has achieved convincing short-term results although the medium- to long-term scenario remains uncertain.

9.5 Contribution to Social Theory

An empirical framework was constructed through deductive reasoning in order to examine the potential of interest groups to contribute to sustainability. The framework is underpinned by a critical realism perspective which accepts that social reality can be understood by applying the rules of logic and by accepting that conclusions are likely to be tentative and without closure. The empirical framework in this study utilises social theories to construct a number of reasoned arguments. Firstly, membership of an organisation offers opportunities to individuals and/or groups to access social capital. In particular, the sustained interest, support and development of knowledge and understanding of environmental issues is achieved through the internal and external

connectedness of the membership. Secondly, membership of a real, existing community or organisation increases the likelihood of accessing material possibilities that could otherwise not have been achieved if individuals were acting alone. The material possibilities include access to financial and logistical support. The organisational structure of each initiative provides possibilities to raise funds, accept and manage donations, and organise logistical support. Thirdly, the theoretical treatise of this study has served to emphasise the importance of norms and values, not only in supporting human agents to identify with members of a community or organisation, but in strengthening the possibilities of achieving self-cultivation based on shared goals and collective social action (Sztompka, 1991). There is scant evidence to suggest that members of the Ratepayers and/or interest groups had sufficient clarity of norms and values to inform their behaviour. Nevertheless, the emergence of norms and values are inferred from the kinds of social structures that emerged, in cordial social activities that took place, and in the interaction and communication that occurred over a considerable period of time.

In summary, the study confirms the theoretical perspectives discussed earlier in Chapter 2: interest groups are capable of contributing to sustainability provided at least three conditions are met. These are: the necessity of social interaction; access to material possibilities; and a clarification of norms and values that underpin the principles of sustainability.

9.6 Contribution to Public Participation Theory

This study has evaluated the contribution of these initiatives to the conservation and improvement of the environment, and to sustainability. In so doing, it has shown that the form of public participation is considerably different from that which is associated with EIAs or short-term projects and programmes. The form of public participation identified in this study is explained as medium- to long-term

involvement of organised community-based interest groups that share common interests and goals, and whose efforts are directed towards the common good. Four attributes of this form of public participation were identified from the empirical findings. These attributes of involved interest groups are:

- (a) the ability to work together for the common good;
- (b) the ability to work co-operatively and collegially;
- (c) the ability to acquire and construct knowledge and understanding; and
- (d) the ability to acquire and adhere to norms and values.

These attributes are open to considerable challenge and conflict over time. Changing social structures in a modern and post-modern society, and changing structural influences caused by a shift of power relations within the macro socio-political context of South Africa, are some of the challenges and conflicts highlighted in this study. However, interest groups at Betty's Bay have sustained their involvement by drawing on social capital, by finding ways to establish joint co-operation with local authority officials, and by involving researchers in action research projects to generate information relevant to decision-making and problem solving.

9.7 Why Involve the Public?

The analysis explains the limitations of interest groups with respect to their collective contribution to sustainable development. Despite this disappointment, there are at least five reasons to assert the importance of involving collectives in environmental matters. First, interest groups identify environmental issues and problems in a local setting and are capable of formulating goals in pursuit of the common good of the public and the environment. Second, interest groups can procure social capital resulting in greater access to knowledge, skills and expertise that may otherwise be unavailable to individuals or local institutions if they had acted alone. Third, membership of an organisation offers greater

opportunity for a group to access a range of material possibilities, including financial support. Fourth, interest groups are capable of taking collective responsibility to address interests and aspirations. Finally, interest-based groups are capable of establishing modest and incrementally valuable results over time as demonstrated by the outcomes of each initiative.

9.8 Recommendations and further Research

The study revealed a relative absence of any expressions of norms and values. Only two accounts were found in the primary sources in which individuals reported on their desires and concerns about the conservation of the environment, and highlighted the need to protect the aesthetic and floral diversity at Betty's Bay. This narrow focus on environmental conservation reflects an eco-centric perspective that may limit interest groups from considering a holistic interpretation of sustainability. In addition, the near absence of an expression of values by interest groups may, in turn, limit the diversity of membership and interests of members or potential members. 'Outsiders' remain uncertain about the intentions of groups, while insiders become increasingly traditional or territorial in their efforts to achieve their aspirations (Coleman, 1994). These concerns could be at the root of the problem expressed by Attwell (pers.comm., 2001) who claimed that he was not optimistic about the future of volunteerism at Betty's Bay since younger people were not being attracted to serve in similar ways as in the past. A failure to articulate norms and values could result in the continuation of narrow interests with limited outcomes and little hope of enabling society to achieve a transition to sustainability.

Further research should attempt to establish how interest groups clarify and develop an understanding of norms and values that is aligned to the discourse of sustainable development; to establish ways of building the capacity of interest groups to express norms and values; and to seek answers to a another simple

but complex question, similar to the one posed in this study: *why are norms and values of interest groups central to achieving sustainability?*

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Appendices

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