

**Understanding the Role of Collaborative Planning in Resolving the Conflict
between the Three Fundamental Goals of Planning for the Purpose of
Contributing to the Achievement of Sustainable Development in Contested
Areas: The South Durban Basin (SDB)**

Nenekazi Jukuda

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**A short dissertation submitted in partial fulfilment of the requirements for
admittance to the degree of Masters in Town and Regional Planning (MTRP) in
the School of Architecture, Planning and Housing; University of KwaZulu-Natal.**

DECLARATION

I declare that this dissertation is my own unaided work. It is being submitted for the degree of Masters in Town and Regional Planning in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, South Africa. It has not been submitted before for any degree or examination in any other University.

Nenekazi Jukuda

Student Name

Student Signature

Dr. Awuorh-Hayangah

Supervisor

08 September 2010

Date

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Abstract

The field of planning has been defined by conflicts between the three fundamental goals of planning: economic development; social equity; and environmental development. These conflicts have been caused by competition between two worldviews, namely the expansionist and ecological perspectives. The expansionist perspective favours the conventional economic imperative to maximize production. The ecological perspective favours the ecological imperative to protect the ecosphere and the social equity imperative to minimize human suffering. Though these perspectives are in competition, the expansionist perspective is dominant in the planning profession. Despite the perpetuation of the conflicts by the dominance of the expansionist perspective in the planning profession, practitioners continue to use conventional planning to advance economic development over social equity and environmental protection. These conflicts have implications for the sustainability of development.

In the South Durban Basin, the competition between the expansionist and the ecological perspectives and the dominance of the former is manifested in the conflict between the scales of need; at the national and local scales. The research discovered that the conflict between the scales of need presented a dilemma for planners because they are obligated to plan for the conservation of the environment, and at the same time plan for the growth of the economy for the benefit of all people in society. Invariably, planners find themselves responding more to needs of those with power; at the national scale, whose interest is economic growth. In order for the planners to respond equally to their multiple obligations, they need to integrate the expansionist and ecological perspectives. The study sought to prove that the integration can only be achieved through collaborative planning, so that sustainable development emerges as the framework policy. Ultimately, as this study actually proved, the South Durban Basin is such a contested landscape to the extent that collaborative planning was found not to be possible. The lack of collaborative planning therefore means that sustainable development cannot be achieved, as the study of South Durban Basin conclusively proved.

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Chapter One: Introduction

1.1. Background to the Research

The main inspiration of this research was Scott Campbell (1996) who wrote the landmark article called *Green Cities, Growing Cities, Just Cities: Urban Planning and the Contradictions of Sustainable Development*. The researcher sought to prove whether collaborative planning can achieve the planning goal of sustainable development, using the contested landscape of South Durban Basin (SDB) as the area of study. The research was also inspired by the likes of Gunder 2006 (*Sustainability: Planning's Saving Grace or Road to Perdition?*); Campbell 2000 (*Sustainable Development: Can the Vision be Realized?*); Cullingworth 1996 (*The Elusiveness of Sustainability*); Berke 2002 (*Does Sustainable Development Offer a New Direction for Planning?*). While Campbell (1996) proposes the pursuit of sustainable development in the planning profession, these other authors are in agreement that the concept is idealistic and therefore elusive.

1.2. Research Problem

According to Campbell (1996) there is fragmentation within the professional practice of planning that can be attributed to modernity, a concept developed by the Enlightenment Thinkers (Harvey, 1989: 12). Underneath the surface of the legacy of modernity is the triumph of purposive-instrumental rationality which leads to disorder, anarchy, destruction, individual alienation and despair, adding up to domination and oppression (Harvey, 1989; Ley, 1987).

Central to the theory of modernity is the expansionist perspective (Jepson, 2005), and when it comes to urban development, the kind of planning that has in its foundations in the theory of modernity is conventional planning. In the era of modernism, conventional planning was used as a way for modernity to respond to the challenge of establishing social order for a mass society rooted in the marketplace (Ley, 1987).

Conventional planning has been the dominant method of planning used to advance economic development over the social equity and environmental conservation because of the dominance of expansionist perspective in the planning arena. There is another perspective that is in competition with the expansionist perspective and it is the ecological perspective (Jepson, 2005). It is upheld by those fighting for the equal advancement of social equity and environmental conservation.

In planning there are conflicts between the fundamental goals of planning: economic development, social equity and environmental conservation because of the aforementioned competition (Campbell, 1996). As a result of the conflict the project of modernity was deemed a failure by Habermas (1984), who proposed the communicative approach to development as opposed to the conventional approach which is based on the purposive-instrumental rationality of modernity. The problem is that, despite the perpetuation of the conflicts by the dominance of the expansionist perspective in the South Durban Basin, practitioners continue to use conventional planning to advance the goal of economic development over the others. The unresolved conflicts have implications for sustainable development.

For the purpose of this research, the South Durban Basin was used as a study area to examine the ability of collaborative planning to balance economic development with social equity and environmental conservation, by using conflict resolution and consensus-building to contribute to the achievement of sustainable development. To this end, the researcher argues that collaborative planning can be used to achieve sustainable development because it provides equal treatment to the three fundamental goals of planning, namely economic growth, environmental protection and social equity (Campbell, 1996). Communicative planning and collaborative planning will be used interchangeably from now on.

1.3. Research Objectives and Questions

The main objective of this research project is to examine the extent to which collaborative planning can resolve the conflict between the goals of planning and contribute to the achievement of sustainable development.

The broad research question is: to what extent can collaborative planning minimize the conflict between the three fundamental goals of planning and contribute to the achievement of sustainable development? The sub-objectives and sub-questions are listed in table 1.

Table 1: sub-objectives and sub-questions

Theme	Objectives	Research questions
Conflict between the goals of planning	To analyze the nature and understand the intensity of the conflict between the goals of planning	What characterizes the conflict between the goals of planning?
Collaborative planning	To explore the extent to which collaborative planning can resolve the conflict	To what extent to can collaborative planning resolve the conflict between the goals of planning?
Sustainable development	To understand the relevance of sustainable development to planning	What is the relevance of sustainable development to planning?

1.4. Research Hypothesis

In order to achieve sustainable development, conflicts in South Durban Basin can be resolved through collaborative planning by building consensus through negotiations and cooperation.

1.5. Rationale for the Research

The current state of development in South Durban Basin requires that there be a balance between environmental protection, economic development and social equity in order to achieve sustainable development. In South Durban Basin, there is conflict because of the promotion of economic development at the expense of environmental conservation and social equity. To support this observation Scott (2003: 245) argued that the rationale for the then emerging blueprint plan for South Durban Basin was the goal to promote economic development and create jobs via planned industrial development.

Since environmental protection, economic development and social equity are goals of planning, it is argued in this research that it is the duty of planners to ensure the balance between these goals and achieve sustainable development in South Durban Basin. This is because there is an inherent congruity between planning, as a future-oriented activity, and the concept of sustainable development, which concerns the extent to which we bequeath environmental assets, services and qualities to future generations (Owens, 1994 cited in Rydin, 1995: 370). The balance that planners need to achieve can only be achieved through continuous periods of conflict resolution, negotiation and cooperation (Campbell, 1996) which can only be undertaken within collaborative planning.

It is clear that the conflicts between the fundamental goals of planning exist because of the continuous promotion of economic growth over environmental protection and social equity. This is because the expansionist worldview is a dominant social

paradigm. So long as it continues to be dominant, it is unlikely that sustainable development can emerge as an effective framework for public policy (Jepson, 2004a). The expansionist worldview remains dominant because it is supported by conventional planning which has always been its promoter since the modernist era (Ley, 1986).

Against this background, the rationale for the research is to find out whether collaborative planning can resolve the conflict between the three dimensions of planning and contribute to the achievement of sustainable development in South Durban Basin.

1.6. Research Methodology

The research undertaken was qualitative in nature, hence the data is qualitative. Qualitative research is a free-form research technique that is used to gain insight into the underlying issues surrounding a research problem, by gathering non-statistical feedback and opinions rooted in people's feelings and attitudes, often from small samples.

(www.glencoe.com/sec/busadmin/marketing/dp/mktg_research/gloss.shtml).

According to Miles and Huberman (1994: 10), there are three important aspects of qualitative data. The first major feature of qualitative data is that they focus on naturally occurring, ordinary events in natural settings, so that the researcher has a strong handle on what "real life" is like. Such understanding is strengthened by local groundness, meaning that the data were collected in close proximity to a specific situation, rather than through the mail or over the phone. The influences of the local context are not stripped away, but are taken into account. The possibility for understanding latent, underlying, or non-obvious issues is strong. The second feature of qualitative data is their richness and holism, with strong potential for revealing complexity; such data provide "thick descriptions" that are vivid, nested in a real context, and have a ring of truth that has strong impact on the reader. The

third aspect of qualitative data, with their emphasis on people's "lived experience," is that they are fundamentally well suited for locating the meanings people place on the events, processes, and structures of their lives: their "perceptions, assumptions, prejudices, presuppositions" connecting these meanings to the social world around them.

1.6.1. Data Collection

Data collection is the process of generating data for the purpose of analysis in the light of the research problem. This research is qualitative. There is more to undertaking qualitative-based data production than just conducting interviews, observing people or undertaking secondary analysis of archival sources (Kitchen and Tate, 2000: 211). What qualitative data consists of are words, pictures and sounds, and these are usually unstructured in nature. Data collected using qualitative techniques are not analyzed using dreaded statistics like in the case of data collected using quantitative techniques. The kind of data collected in this research is qualitative primary and secondary data.

1.6.2. Sources of Data

Secondary sources of data included mainly e-journals and books on planning theories on sustainable development and planning, collaborative planning, the role of planners in collaborative planning and power issues in collaborative planning. Also reviewed in this research project are policies and legislation pertaining to the topics of sustainable development.

The sources of primary data included eight respondents. Six of the eight respondents can be described as key informants because they were specifically and purposefully selected for their special knowledge of South Durban Basin (SDB). The two other respondents were sampled randomly based on their availability and expert knowledge as planners. They were selected for the purpose of balancing out

the responses of one of the key informants on questions not specific to the study area.

The six key informants included: a planner commissioned by the ABM to develop the Spatial Development Framework for the SDB; chairperson of the South Durban Community Environmental Alliance (SDCEA); chairman of Clairwood Ratepayers' Association (CRA); the planner from the South Durban Basin (SDB) Area Based Management (ABM); the ward councillor for Wentworth, Merebank and Jacobs; and the Environmental Manager of Engen Oil Refinery. The two randomly sampled respondents were professional planners from the local government. One was from the LED Unit of the eThekweni Municipality and the other was from the eThekweni Municipality's Development Planning Department.

1.6.3. Tools of Data Collection

The primary information used in this dissertation was collected through open-ended and conversational interviews. "The interview is probably the most commonly used qualitative technique. It allows the researcher to produce a rich and varied data set in a less formal setting. The interview allows a thorough examination of experiences, feelings or opinions that closed questions could ever hope to capture. Interviews are often described as entering and maintaining a conversation" Kitchen and Tate (2000: 213). The researcher discovered that the use of conversational interviews with open-ended questions enabled the collection of essential information that might have been missed had the interviews conducted through closed-ended questions.

1.6.4. Data Analysis

Table 2: Data Analysis

<i>Steps in data analysis</i>	<i>Data analyzed</i>
Data description: describes qualitative data as being usually more “thick” in nature because it provides a more comprehensive description of the subject matter. It includes information concerning the situational context, the intensions and meanings associated with an act, and the process in which the situation is embedded (Kitchen and Tate, 2000).	The analysis began with the transcription of field notes; the transcribed data were then summarized by focusing of highlights and answers that were directly relevant to the questions. The data was reduced from chunks of information into summaries that are relevant to the questions.
Data classification: the researcher interprets and makes sense of data. The classic way to start to make sense and interpret qualitative data is to “break up” the data into constituent parts and then place them into similar categories or classes. By classifying the data the researcher can start to make more effective comparisons between cases; this kind of classification is systematic and explicit (Kitchen and Tate, 2000).	Data was classified by categorizing it into master themes under the concepts that framed the study. The master themes were conflicts between the goals of planning, collaborative planning and sustainable development. The purpose of the classification of data was to show patterns or trends in the responses in order to easily draw conclusions about the thematic areas framing the study.
Data connections: this involves interconnections between the different master themes derived from categories formed during data classification (Kitchen and Tate, 2000).	The master themes were interconnected because of their relation and relevance to each other; relation and relevance that were developed when the data was classified into categories. The resolution of conflicts between the goals of planning was connected to sustainable development through collaborative planning.

1.7. Limitations of the Study

The limitations included time constraints and lack of familiarity with locations of some respondents within the study area. The researcher had to make multiple trips in order to get to a respondent. In one case, an interview had to be cancelled.

Another major limitation was one key respondent's reluctance to participate in the interview process because, from her point of view, some of the questions were irrelevant to her position as an environmental manager of an oil refinery and were prejudiced against her organization. However, the researcher's view was that the questions directed at her were about the conflicts in South Durban Basin and sustainable development and were therefore relevant because the organization's pollution is one of the reasons there is conflict in SDB. The questions were not prejudiced against her organization because the blame for pollution in the area was not fully placed on the organization, it was only partially placed. She was merely questioned about the organization's part in the problem and the organization's part in the solution. She requested that the questions be changed to suit her, and that was not done. However, her non-participation was counted as participation because it signified the big industries' reluctance to collaborate and cooperate with those affected by their pollution.

1.8. Structure of Dissertation

This dissertation has five chapters. Chapter one is the introduction to the dissertation. It contains the background to the research, the description of the research problem, the research objectives and questions. It also contains the rationale for the research and the research methodology. Chapter two deals with the conceptual framework, which includes the examination of conflicts between the goals of planning, and the exploration of collaborative planning as the method through which the conflicts can be resolved. It also includes the examination of the definitions of sustainable development and the relevance of sustainable

development to planning. The third chapter examines the geographical, historical and situational analyses of South Durban Basin. Chapter four analyses the legislation relevant to the situation of South Durban Basin. Chapter five presents the findings of the research and the analysis of the findings. The sixth chapter contains the conclusions and summary of the findings and recommendations.

Chapter Two: Theoretical Framework

The aim of this study is to examine the extent to which the process of collaborative planning can resolve the conflict between the fundamental goals of planning, and contribute to the achievement of sustainable development. This chapter presents the theoretical framework of the study. Section one includes the examination of the conflicts between the three goals of planning. Section two analyzes the role of collaborative planning in the resolution of the identified conflicts. Section three examines sustainable development as the goal that is to be achieved after the resolution of the conflicts through negotiation and cooperation in the process of collaborative planning for the good of current and future generations.

2.1. The Conflict between the Fundamental Goals of Planning

There are numerous goals of planning but according to Campbell (1996) there are three that are fundamental. These are environmental protection, economic growth and social equity. Historically, there has been a conflict between these goals of planning and planners are currently preoccupied with the task of resolving the conflict and achieving sustainable development which has become an imperative in the contemporary planning arena. The conflicts are both an inherent and a necessary aspect of planning for sustainable development because of the pursuit and balancing of the three main goals of environmental protection, social equity, and economic development (Conroy and Berke, 2004: 1383).

The conflicts among these goals go to the historic core of planning, and are a leitmotif in the contemporary battles in both the cities and the rural areas, whether over solid waste incinerators or growth controls, the spotted owls or nuclear power (Campbell, 1996: 296). The conflicts are not only embedded in the history of planning and manifested in the contested landscapes, but they also reflected in

today's development policies which favour economic development over environmental protection and social equity (Harrison et al, 2008).

The conflicts are caused by competition between two worldviews namely the expansionist and ecological worldviews. The proponents of economic development hold the expansionist perspective of the world while the proponents of social equity and environmental protection hold the ecological perspective. The expansionist perspective views the human system growth as virtually unlimited and mechanistic due to the unique capacity of human beings to utilize, adapt, and innovate and the controlling effects of prices (Jepson, 2004a: 3). This perspective assumes that the economic system functions independently of both nature and the rest of society and, that social goals are dependent on economic goals and environmental outcomes are residuals (Levett, 1998: 295) (Refer to figure 1).

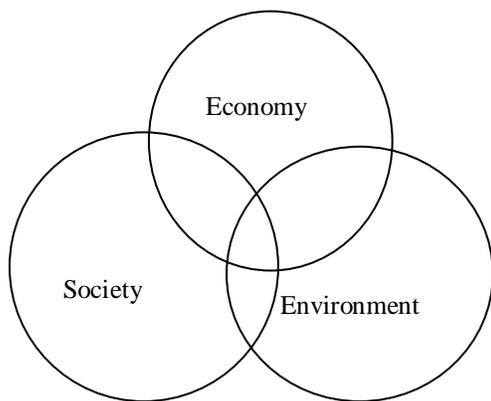


Figure 1: three-ring circus model (source: Levett, 1998)

However, this perspective is flawed because, first of all, the environment is a precondition for the society and the economy. Without the planet's basic life-support systems, there can be no society or economy. Secondly, the economy is not the end in itself or a force of nature. It is a social construct. It only works as it does because human societies have created the institutions and inculcated the assumptions, expectations and behaviours which make it so. The only reason for

keeping it thus and not otherwise is that society assumes that it will be good at meeting its needs (Levett, 1998: 295).

Therefore, the researcher is of the view that the more appropriate perspective is the ecological perspective because it is of the belief that there are limits to the ability of the natural environment to support human beings and that the level and character of human activity must be tempered by an appreciation of the effects of that activity on natural resources and characteristics. The human society must live within the environment's limits and the economy meet society's needs (Jepson, 2004a, 4; Levett, 1998: 295). The model that aptly depicts this perspective of the world is called the Russian Dolls model (figure 2).

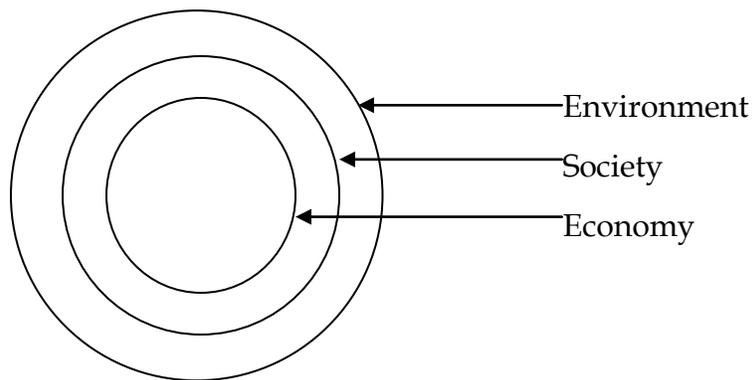


Figure 2: Russian Dolls model (source: Levett, 1998)

The advent of sustainable development has presented an opportunity to turn the conflicts between the three fundamental goals of planning into coordination and cooperation through collaborative planning in order to operationalize the concept of sustainable development into a reality (Campbell, 2000)¹. Sustainable development is a perfect ideal for planning because it embraces social, economic and environmental dimensions of planning as part of an interrelated whole (Campbell, 2000: 259). Metaphorically, sustainable development can be

¹ Campbell (2000) and Campbell (1996) are not one author. Campbell (2000) is Heather Campbell and Campbell (1996) is Scott Campbell

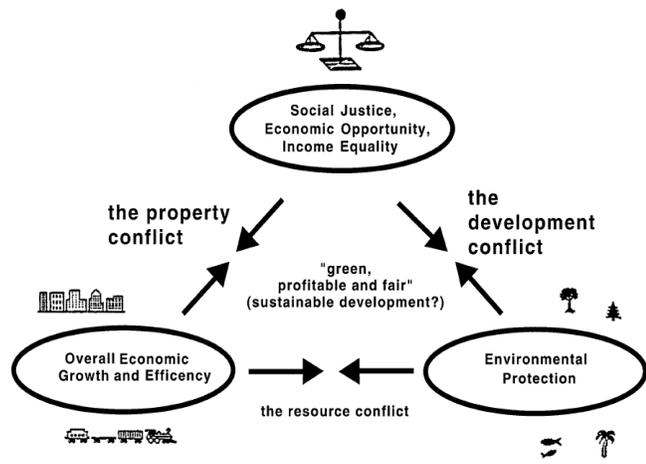
understood as a piece of furniture “structurally” dependant on its social, ecological and economic “legs” being given equal measure (Kear, 2007: 330). Formulating a concept which embraces social, economic and environmental dimensions as part of an interrelated whole and establishing it as part of the everyday vocabulary of the times is the easy part. The real challenge lies in the translation of sustainable development into action, more particularly the implementation of initiatives that do not merely pay lip service to the words but actively do justice to the original concept (Campbell, 2000: 259; Cullingworth, 1996: 213).

Although sustainable development aspires to offer an alluring, holistic way of evading these conflicts; they cannot be shaken off so easily (Campbell, 1996: 296).² Campbell (1996: 297) argued that sustainability, if redefined and incorporated into a broader understanding of political conflict in the industrial society can become a powerful and useful organizing principle for planning. The idea of sustainable development will be particularly effective if, instead of merely evoking a misty-eyed vision of a peaceful ecotopia, it acts as a lightning rod to focus conflicting economic, environmental, and social interests. The more it stirs up conflict and sharpens the debate, the more effective the idea of sustainability will be in the long run.

² The reason the repeated reference to Campbell (1996) is because the topic for this dissertation is based on paper by Campbell called “*Green Cities, Growing Cities, Just Cities?: Urban Planning and the Contradictions of Sustainable Development*”. Campbell (1996) is named Scott Campbell

2.1.1. The Position of Planners on the Goals

According to Campbell (1996: 296), there is nothing inherent in the planning discipline steering planners specifically toward environmental protection, economic development or social equity. Instead, planners work within the tension generated among these three fundamental aims, which, collectively, is called the “planner’s triangle,” with sustainable development located at its centre (refer to figure 3). This centre cannot be reached directly, but only approximately and indirectly, through a sustained period of confronting and resolving the triangle’s conflicts. The position of planners is to reconcile the conflict by “growing” the economy, distributing this growth fairly, and in the process not degrade the ecosystem (Campbell, 1996).



SOURCE: Campbell (1996).

Figure 3: Planner’s Triangle (Source: Campbell, 1996)

Campbell (1996) argued that ideally, planners strive to serve the broader public interest by holistically harmonizing growth, preservation, and equality for the purpose of balancing the three goals. However, in reality and in practice, professional and fiscal constraints drastically restrict planners to serving the narrower interests of their clients. This means that planners usually represent one particular goal while neglecting the other two. They could be planning either for increased property tax revenues (economic growth), or more open space preservation (environmental conservation), or better housing for the poor (social

equity). The dilemma is in what or who determines which goal a planner will represent. Campbell (1996) argued that how planners understand the function of the city determines the goal that a planner is likely to represent and that understanding is illustrated by the extract below:

“The environmental planner sees the city as a consumer of resources and a producer of wastes. The city is in competition with nature for scarce resources and land, and always poses a threat to nature. Space is the ecological space of greenways, river basins, and ecological niches. The economic development planner sees the city as a location where production, consumption, distribution, and innovation take place. The city is in competition with other cities for markets and for new industries. Space is the economic space of highways, market areas, and commuter zones. The equity planner sees the city as a location of conflict over the distribution of resources, of services, and of opportunities. The competition is within the city itself, among different social groups. Space is the social space of communities, neighbourhood organizations, labour unions: the space of access and segregation” (Campbell, 1996: 298).

2.1.2. Conflict Resolution

The researcher is of the view the responsibility of achieving the goal of sustainable development lies with the planning professionals because turning concepts into reality must lie at the very heart of what planning is about. There is an inherent congruity between planning as a future-oriented activity, and the concept of sustainable development, which concerns the extent to which we bequeath environmental assets, services and qualities to future generations (Campbell, 2000: 259; Owens, 1994 cited in Rydin, 1995: 370). Thus the question posed by this research is how planning professionals can resolve the age-old conflict between the three goals of planning and achieve sustainable development. The hypothesis put

forward by the researcher is that this can be achieved through collaborative planning as argued by the scholars below:

“Researchers on sustainability are united in their argument that the best way to address these conflicts is through a community-based collaborative planning process partnering planners and citizens. In an ideal collaborative approach, there is a genuine exchange of needs, ideas, responsibilities, and control in the planning process; though this ideal may be a challenge in practice. A collaborative approach is fundamental to the sustainability paradigm and is linked with promoting a sense of community, equity, and empowerment. Collaborative planning processes recognize the complexity of the planning environment and look to minimize the destructive aspects of disputes by getting issues and concerns onto the discussion agenda for resolution” Conroy and Berke (2004: 1382-1383).

Collaborative planning promises the integration of these opposing worldviews and minimization of the conflicts between the fundamental goals of planning. The integration of the two worldviews would ensure the expansionist worldview is no longer a dominant social paradigm, thus making it likely for sustainable development to emerge as an effective framework for public policy.

2.2. Collaborative Planning-cum-Communicative Planning

Collaborative planning and communicative planning are used interchangeably because in places like the UK, the communicative approach has been referred to as collaborative planning (Allmendinger and Tewdwr-Jones, 2002). The essence of communicative planning is that through learning how to collaborate and through successful communication it is possible to resolve conflicts and obtain agreement and consensus (Healey 1999 cited in Holgersen and Haarstad, 2009: 350).

Collaborative planning on the one hand is a process of collaboration between different stakeholders in different settings. The settings include regulatory negotiation, public-private partnerships, community gatherings and public meetings. Butler and Goldstein (2010: 239) argue that stakeholders with a shared interest assemble to diagnose a problem and develop understanding of how to address it. This includes mediating differences because even when collaboration is initiated in order to advance a shared vision, stakeholders are anxious to advance their own interests. Effective collaborative processes could reduce adversarial relationships and redress power and resource disparities among stakeholders.

Communicative planning, on the other hand, has been widely accepted as planning theory's emerging paradigm and is now dominating planning scholarship and practice (Innes, 1995: 183; Berke 2002:22). This is because many planners today agree that planning should be a process of facilitating community collaboration for consensus-building (Voogd and Woltjer, 1999: 835; Yiftachel and Huxley, 2000). It is particularly popular to local and regional planning because of its many recognized social and organizational benefits such as broader stakeholder involvement (Mandarano, 2008: 457).

The communicative rationality is the original work of Habermas (Tewdwr-Jones and Allmendinger, 1998: 1975). Central to Habermas's communicative rationality is the role of language and the search for undistorted communication as a basis for consensus action. In Habermas's ideal speech situation, communication will no longer be distorted by the effects of power, self-interest or ignorance (Tewdwr-Jones and Allmendinger, 1998).

In support of Habermas in his claim of the effectiveness of communicative planning, Doehler (2002: 364) argued that planners must be champions of communication. They need to speak several languages to assist the process of

communicative planning. This involves understanding how different stakeholders such as the economist, environmentalist or community representatives communicate within their fields. Based on what Habermas says about communicative planning, power must be eliminated from all relations between stakeholders and the relations must be based on trust. In such relations, decisions are reached through collaboration and communication and end with a consensus on central issues. Foucault argued that trust is a necessary condition for any kind of communication, understanding, knowledge or learning. Relations based solely on power could not generate any kind of communication and the very possibility of truth, understanding, knowledge or learning would be ruled out (Harper and Stein, 2003: 136).

2.2.1. From Conventional Planning to Collaborative Planning

This section compares between conventional planning with collaborative planning for the purpose of emphasizing the benefits of collaborative planning.

Table 3: *Conventional Planning versus Collaborative Planning*

<i>Conventional Planning</i>	<i>Collaborative Planning</i>
The conventional planning processes can be described as being more top-down rather than bottom-up (Voogd and Woltjer, 1999: 835).	Collaborative planning processes add the missing bottom-up component to what has traditionally been a top-down process of planning and thereby produce a more effective result (Salsich, 2000: 740; Mandarano, 2008).
Professional approaches of conventional planning are often criticized as being technocratic and rigid (Voogd and Woltjer, 1999: 835).	Collaborative planning processes are more flexible than conventional planning methods because they are driven by forces of communication and trust (Voogd and Woltjer, 1999, 835; Harwood and Zapata, 2006; Habermas, 1993).
Conventional planning approaches emphasize instrumental rationality (Voogd and Woltjer, 1999, 840).	Collaborative planning processes emphasize communicative rationality (Voogd and Woltjer, 1999: 840; Healy, 1999).
The conventional planning principles are based on utilitarian ethics- emphasize scientific knowledge and instrumental rationalism (Voogd and Woltjer, 1999: 844), They are focused mainly on what Healey (1997) calls the 'hard' infrastructure, such as policy measures.	Collaborative planning is based on communicative ethics- emphasizing the importance of 'soft' infrastructure, the process of consensus-building (Habermas, 1990 cited in Voogd and Woltjer, 1999: 844).

<p>Link to the theories of modernism: conventional planning emphasizes instrumental rationality (Voogd and Woltjer, 1999: 844), which can be strongly linked to modernist planning (Ley, 1987: 40)</p> <p>The modernist movement on architecture and planning projects a functional and universal rationality to space (Ley, 1987: 40).</p>	<p>Link to the theories of postmodernism-collaborative planning can be linked to postmodernist planning because it emphasizes communicative rationality (Voogd and Woltjer, 1999: 844).</p> <p>Postmodern currents pose a more personal and contextual design to solution (Ley, 1987: 40).</p>
<p>The rationale for linking conventional planning to the theories of modernism is to show that the fragmentation in planning and hence the conflict between the afore-mentioned goals of planning emanate from modernist planning central to which is the conventional kind of planning.</p>	<p>Postmodernist planning embraces difference and diversity just as collaborative planning does (Watson, 2003).</p>

The table above has shown that the focus of planning theory of has shifted from physical design to process. Process emphasizes diversity, openness, and consensus but is not fully equipped to offer a shared vision in political arenas dominated by fragmentation and conflict (Berke 2002: 21). In support of the hypothesis, it is important to point out that, because the process of collaborative planning is driven by forces of communication and trust, consensus on ways to resolve the conflicts in South Durban Basin can be reached.

2.2.2. Role of Collaborative Planning in Conflict Resolution

The communicative action theory emphasizes that planning decisions should be reached through collaborative processes involving all stakeholders, and conforming to particular rules which ensure that participation is fair, equal and empowering (Watson, 2003: 397- 398). Embedded in this approach are the assumptions that community divisions can be overcome and consensus can be reached on planning issues; that collaborative processes involving primarily civil society-based groups can act to put pressure on the state to act more responsibly; and that collaboration can provide a learning environment and can serve to build social capital within communities (Salsich, 2000: 739).

Collaborative planning offers an exciting promise for producing more realistic and effective plans because it begins with an invitation to a wide variety of stakeholders to participate in the process (Salsich, 2000: 740). Within the collaborative planning processes, stakeholders engaged face to face form new relationships, trust and mutual understanding, facilitating collective problem solving. By working collaboratively, formerly disparate entities can produce not only high-quality agreements but also social and organizational changes that enable the community to achieve higher levels of performance in complex, uncertain, and fragmented policy contexts (Mandarano, 2008: 456).

2.2.3. Criticism of Collaborative Planning

Collaborative planning promotes the broad participation of all concerned stakeholders which is the way to build a stronger sense of community and create shared values as well as understand what both planner's and community members' values are (Jepson, 2005; Harwood, 2006). The examination of the values that are being served ensures that the participants have the ability to appreciate the "other person's point of view", thus ensuring successful collaborative planning effort (Salsich, 2000, 739). Nonetheless, there are inherent limitations in the potential of participatory processes to lead to real change because the participatory processes in themselves do little to change the power relationships that exist in a community (Flyvbjerg, 1998; Tewdwr-Jones and Allmendinger, 1998; Fainstein, 2000; Gunder, 2003; Jepson, 2005; Harwood, 2006).

However, the biggest criticism of collaborative planning is that it is too idealistic and utopian in nature, therefore theoretically, it is beautiful, but it is not practical. One has to ask: "how does collaborative planning deal with the complex configuration of power relations in which planners are enmeshed?" In planning theory, such questions are difficult to answer and have been pushed to the background (Tewdwr-Jones and Allmendinger, 1998: 1988).

In a collaborative process, though representatives of all affected groups may be encouraged to participate in the process, the communicative model offers no guidance on empowerment. If less powerful groups do not have the capacity to influence policy implementation after they leave the negotiating table, consensus based agreements may be altered and unfairly implemented to preserve the interests of those in power (Berke 2002:24-25). Therefore the success of collaborative planning depends on dissolving of existing institutions which favour traditional planning methods (Tewdwr-Jones and Allmendinger, 1998).

Collaborative planning may seem idealistic and utopian in nature, incapable of resolving conflicts and producing tangible results, but is capable producing more realistic and effective plans because it begins with an invitation to a wide variety of stake-holders to participate in the process. Within the collaborative planning processes, stakeholders engaged face to face form new relationships, trust and mutual understanding, facilitating collective problem solving (Salsich, 2000; Mandarano, 2008: 456). Through this process conflicts are eradicated and a stage is set for producing more realistic and effective plans. Collaborative planning is a process that involves a variety of stakeholders but it is not possible without the planners.

2.2.4. Role of the Planner in Collaborative Planning

With the collaborative planning approach gaining ground, authors such as Voogd and Woltjer (1999: 848-849), are left wondering as to what role professional knowledge and expertise of planners plays. A strong theme of the communicative rationalist's theory is to deny a central coordinating or expert role for planners in the discourse arena. This is because the planner often is tarnished with the power and political trappings of the administrative elite (Tewdwr-Jones and Allmendinger, 1998). There's an assumption here that planners (if indeed one accepts a need to retain planners at all within a collaborative technique), will act or be forced to act democratically, or at least be supportive of increasing progressive democratic pluralism (Tewdwr-Jones and Allmendinger, 1998).

As much as some theorists seem to be calling for planners to adopt open and pluralistic stances and for them to be treated the same as all other stakeholders, they do not go so far as to question the role of professionalism within collaborative planning (Tewdwr-Jones and Allmendinger, 1998). The removal of the central coordinating or expert role of the planner from the collaborative process brings into jeopardy the role of professionalism within the process. There needs to be a

person who possesses the expertise in planning techniques and knowledge and skills in conflicts resolution. There is no need to remove the professional role of planners as experts in order to have a collaborative process that is democratic in nature. What is needed is an interactive relationship between the experts and the stakeholders they serve. A planner needs to act as a “knowledge mediator and broker” or as “a critical friend”, communicator and intermediaries among stakeholders (Forester, 1996; Healy, 1997; Berke 2002). Planners must develop capabilities, among which are vision, comprehensiveness, technical competence, innovativeness, fairness, consensus-building, conflict resolution and negotiation skills (Voogd and Woltjer, 1999; Kaiser et al, 1995). Rather than providing technical leadership, the planner is an experiential learner through listening to subjective statements, providing information to participants to ensure informed deliberation, and fostering convergence while ensuring no interest dominates (Healy, 1997).

2.2.5. The Guide to the Collaborative Process of Planning

To ensure that the collaborative process of planning is democratic and fair, the researcher proposed the use of criteria for collaboration, and to understand the depth of citizen participation in processes of collaboration, the researcher proposed the use of a ladder of citizen participation.

2.2.5.1. The Criteria for Collaboration

To guide the analysis of collaboration in any planning project, a set of criteria was developed by Hajer (2005). The criteria can be used to understand the democratic quality of any discussion and are as follows:

Reciprocity: discussions must be conducted through an argumentative exchange, hearing both sides, and responding to one another’s arguments.

Inclusiveness: debates require that 'stakeholders' are made part of the argumentative exchange, and that everyone with a stake can have his or her say.

Openness: the way in which the debate is staged and conducted must avoid unnecessary barriers, including that of (professional) language.

Integrity: the debate requires honesty and no double play.

Accountability: those involved are accountable to political bodies and to the public at large, also with regards to the degree to which the rules as laid out have been guaranteed.

Dialogue: learning through an iterative process in which knowledge is mobilized and enriched through confrontation with a variety of stakeholders and experts (Hajer, 2005: 450).

These criteria are important for the analysis of collaborative planning processes that have taken or are taking place in development of South Durban Basin.

2.2.5.2. Typology of Participation and 'Non-Participation'

To show the type and levels of community participation in planning projects, Arnstein (1969) developed a typology of eight levels. For illustrative purposes the eight types are arranged in a ladder pattern with each rung corresponding to the extent of citizens' power in determining the end product (refer to figure 3)

Manipulation and Therapy: these two bottom rungs of the ladder describe levels of 'non-participation' that have been contrived by some to substitute for genuine participation.

Informing, Consultation and Placation: the third, fourth and fifth rungs progress to levels of 'tokenism' that allow the have-nots to hear and to have a voice. But under these conditions they lack the power to insure that their views will be *heeded* by the powerful.

Partnership: is the sixth rung of the ladder that it enables citizens to negotiate and engage in trade-offs with traditional power-holders. It is the lowest of the levels of citizen power and starts the increasing degrees of decision-making clout.

Delegated Power and Citizen Control: the seventh and eighth rungs of the ladder are the highest of the levels of citizen power. At these levels the have-not citizens obtain the majority of decision-making seats, or full managerial power.

Table 4: Eight rungs on a ladder of citizen participation

8	Citizen control	Degree of citizen power
7	Delegated power	
6	Partnership	
5	Placation	Degree of tokenism
4	Consultation	
3	Informing	
2	Therapy	Non-participation
1	Manipulation	

2.3. Sustainable Development

Sustainable development has been touted as a new planning agenda (Campbell, 1996 and Jepson, 2005) because of the detrimental effect of human actions on the natural environment such as increasing greenhouse gas emissions. Development is exploiting the world's natural resource reserves at alarming rates. By many accounts, this exploitation is unsustainable and this has led to increased advocacy for more sustainable land use practices (Fergus and Rowney, 2005; Berke and Manta Conroy 2000).

2.3.1. Definition of Sustainable Development

Sustainable development is significant to the well being of humanity because it is “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (Brundtland Commission, 1987). The central goal of sustainable development is intergenerational equity, which implies fairness to coming generations. Thus, to help nations achieve this goal, the Commission took a holistic and inclusive view of the future of society by attempting to weave together multiple values to confront the challenges of reversing environmental degradation and reducing overconsumption and grinding poverty. These values are sometimes referred to as the three Es of sustainable development: environment, economy, and equity. The Brundtland Commission recognized that the conventional economic imperative to maximize economic production must be accountable to an ecological imperative to protect the ecosphere and a social equity imperative to minimize human suffering (Berke 2002: 30). There is now a stronger emphasis on the ‘triple bottom line’ concerns of environmental sustainability, shared economic growth and social inclusion (refer to figure 4), instead of the single bottom line of the conventional economic imperative (Boraine, 2006: 261).

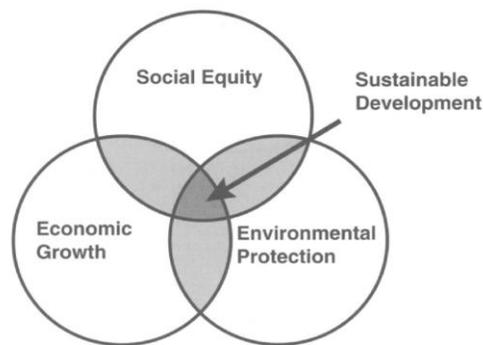


Figure 4: The triple bottom line (Source: Boraine, 2006)

Therefore sustainable development is a strategy of development that results in the enhancement of the quality of life for all human beings now and into the future in a just and equitable manner. It is a strategy that also results in the simultaneous minimization of negative environmental impacts because it encourages people to

live within the limits of supporting ecosystems (Agyeman, Bullard, and Evans, 2003; Jepson, 2001; Berke, 2002). In essence, sustainable development is concerned with how the human community can maintain itself indefinitely under conditions of resource consumption and waste generation. Both of these conditions imply the existence of limits (most resources are not infinitely available) and the need for adaptability (things are constantly changing) (Jepson, 2005: 167).

There are five underlying themes that determine a sustainable development agenda as identified by Jepson (2005: 168) and they are: (1) a long-term perspective, (2) a holistic outlook, (3) the acceptance of limits, (4) a focus on place, and (5) active involvement in problem solving. Therefore public policy that is incompatible with any one of these themes in terms of its formulation, character, or impacts is by definition not policy for sustainability.

2.3.2. Relevance of Sustainable Development to Planning

The concept of sustainable development is general enough to find applicability in a variety of areas, which makes it both widely accepted and widely disputed (Manta Conroy and Berke, 2004:1381). However, within the planning profession, there has been a growing recognition and acceptance of sustainable development as a conceptual framework for community development and local planning, and planners are increasingly finding themselves either leading or being expected to contribute to local “sustainable development” efforts (Jepson, 2001: 2004a 499). There are many reasons why sustainability and planning are so inextricably linked and mutually relevant and Jepson has identified five:

The first, the constituent concepts that compose sustainability are considered by many of its proponents to be most applicable at the same level at which most planning occurs and on which it is most focused, that is, the local or regional level).

The second reason is that in this era of large development projects and accordingly large development effects, of interconnections and “global

hinterlands”; urban land use market mechanisms left unrestrained have the potential of producing significantly negative environmental damage. The most effective means by which such mechanisms can be controlled is through the application of planning tools and methodologies.

The third reason is the recognition that all facets of planning for the welfare of humans have effects on the flows and processes of the natural environment and that this is particularly the case with respect to land use planning.

The fourth reason is that both planning and sustainability are concerned with integration as a central conceptual challenge. The integration that is sought within both of these theoretical constructs is of four kinds: the first is across disciplines, so as to produce a more coherent and complete public policy; the second is across diverse actors in a productive process, with a focus on communication; the third is across values, that is, right and wrong/good and bad; and the fourth is across institutions, so as to produce an approach that is cooperative and integrated.

The final reason: planning-perhaps more than any other profession-is closely associated with sustainable development in terms of both principles and the requirements of professional intervention (Jepson, 2001; 2004b and Fergus and Rowney, 2005:17).

2.4. Conclusion

This chapter has identified conflicts between the three fundamental goals of planning namely environmental protection, economic growth and social equity. It has been shown that the conflicts between these goals go to the historic core of planning, and are a leitmotif in the contemporary battles in both the cities and rural areas (Campbell, 1996: 296). It has been argued that the conflicts between the fundamental goals of planning stem from a competition between two worldviews, the expansionist and ecological perspectives. The former favours economic development and growth at the expense of environmental protection and social

equity while the latter which requires that human activities be contained within environmental limits.

It has been argued that sustainable development offers an attractive alternative to the conflicts in planning, however, in order to achieve sustainable development the conflicts must be resolved. It has been argued that the conflicts can only be resolved through collaborative planning because of its capability to bring together opposing views and reach a consensus through negotiation and cooperation. This collaborative process can also be referred to as the operationalization of sustainable development from concept to reality (Campbell, 2000: 259).

Sustainable development is necessary to planning because it holds environmental protection and social equity as being equal to economic development and embraces them as part of an interrelated whole (Campbell, 2000: 259). Therefore, sustainable development has been accepted by the planning proponents as a conceptual framework for local planning (Jepson, 2004a).

Chapter Three: Study area: South Durban Basin

The South Durban Basin is a place with a deep history of conflict between the industries, communities and the community-based organizations representing the interests of the environment and the communities. This chapter presents the analysis of the regional and local contexts of the geographical location and the historical background of South Durban Basin. It also presents a situational analysis of the area, specifically outlining the current challenges facing the area in relation to the conflicts observed by researcher as per research problem.

3.1. Geographical Analysis

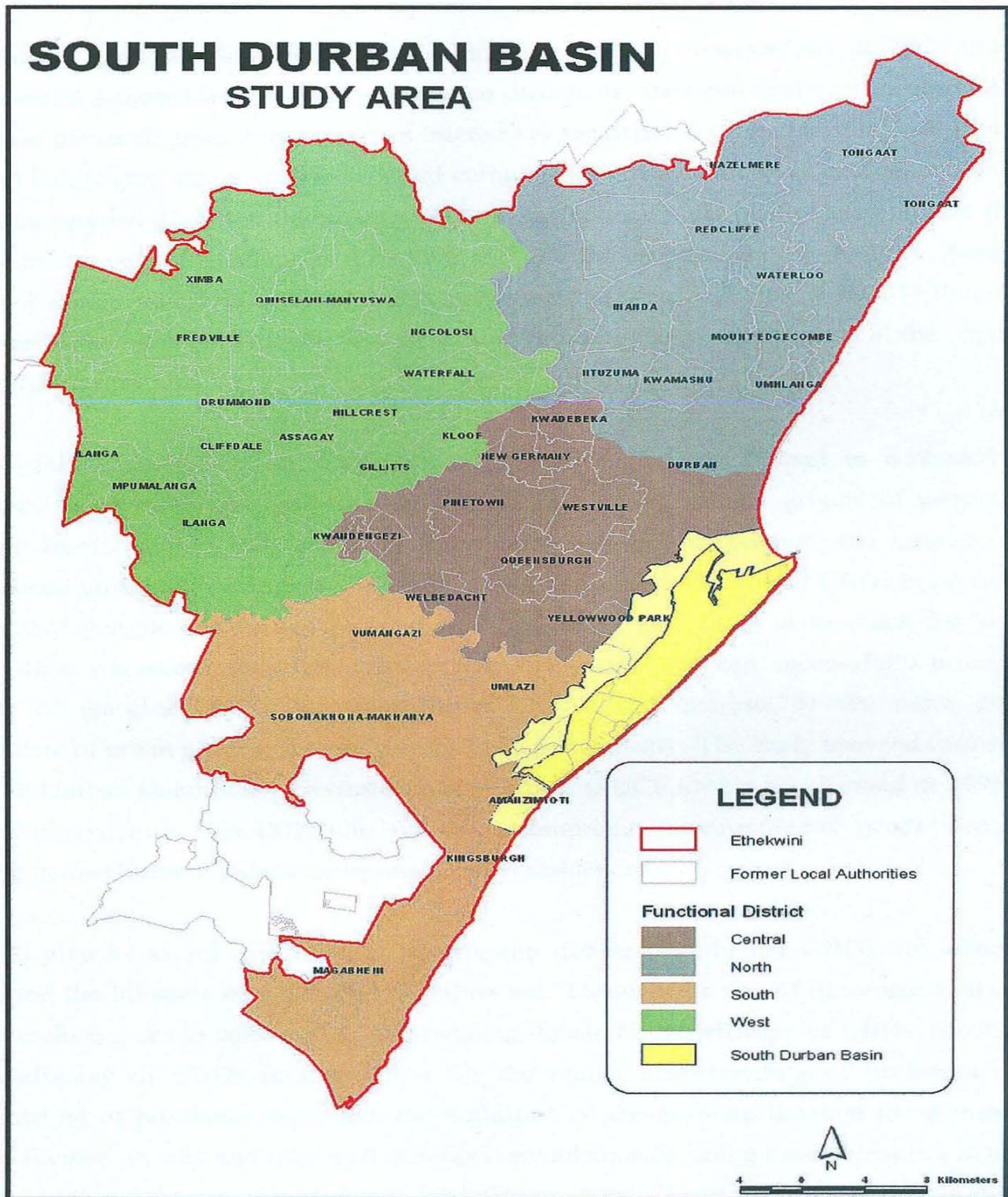
3.1.1. Regional Context

South Durban Basin is located along the coast of Durban (Refer to map 1); a major port city of Southern Africa. Its location puts it on shipping and trade routes reaching most major markets on the globe; making it a strategic area of national significance. Durban is built around a natural bay, which plays a key role in the city's economy as well as that of South Africa (Iyer Rothaug collaborative, 2004: 6).

3.1.2. Local Context

South Durban Basin starts from the tip of the Durban Harbour and expands as far as Umkomass in the south (D'Sa and Reid, undated: 35). It is an approximate 4 km wide area on the eastern seaboard of South Africa, extending south from the Durban Central Business District (CBD) for 24 km to Umbogintwini and has an area of 100km². It includes the CBD and Port of Durban, which is the busiest in Africa and the main point of entry for containers into South Africa. The "basin" is bordered on its seaward side by ancient sand dunes parallel to the coast, attaining a height of some 70 to 110m, and on the landward side by a ridge of hills 100 to 150 m high, which are the start of rising topography extending inland.

Map 1: Study Area



Source: Godfrey Musvoto (2007_eThekwni Municipality GIS Department)

3.2. Historical Analysis

South Durban Basin was once a green area with pristine bush, cultivated land and rivers with a bustling marine life, dune vegetation that was intact, and mangrove swamps were found in places in the area. However, harbour development over the years led to the complete destruction of all indigenous flora, fauna and marine life and highly toxic chemicals are now stored in the area in massive volumes and in very close proximity to the residents and Durban's Central Business District (SDCEA, 1998: 2).

According to Scott, as early as 1938, the South Durban Basin area was identified by the Durban Town Council as the site of the town's future industrial area as it stretched south of the harbour and provided flat accessible land. The Council ratified a plan to create a productive zone surrounded with racially zoned Suburbs to provide labour for the emerging industrial zone (1998). The vision of an industrial landscape in South Durban was a powerful motive that led to institutional changes and the promulgation of legislation at both the local and particularly the national level, to enable the vision to become a reality (Scott, 2003: 237).

The industrial development of South Durban Basin started in the mid-1950's, with most industry located on the flat areas comprising the remnants of the Umlazi, Isipingo and Umbogintwini flood plains within the SDB. Development progressed in a haphazard way, with little consideration for the pollution load into the atmosphere and the combined effects of air pollution (Guastella and Knudsen, 2007: 7).

The importance of this evaluation is to show the how the study area of South Durban Basin came to be a contested landscape. Central to the research problem is

the conflict between the occupants of South Durban Basin, the industries and the local government and planners.

3.3. Situational Analysis

The South Durban Basin has two major land uses which include industrial and urban formal, and the minor land uses are rail, major recreation and state/institutional. The area has a total population of 121 559, a population density of 20 people/ha and average household size of 3 people (South African Consensus 2001).

The area has about 600 industries located within its boundaries. These include two of the country's largest oil refineries Sapref and Engen, a paper pulp plant (Mondi), sugar refineries (Illovo and Tongaat Hullett), chemical industries, the busiest port in Africa, and the airport. The South Durban Basin is the economic hub of Kwazulu-Natal (KZN), contributing some 8% of the GDP (Chetty, 2005 cited in D'Sa and Reid, undated: 35; Guastella and Knudsen, 2007: 7).

The heavy industries are in very close proximity to the residential communities especially Wentworth and Merebank, which are described as living cheek-by-jowl with the heavy industries (see figure 5). This is the result of poor Apartheid spatial planning which had little consideration for the cumulative effects of air pollution and its associated health effects on the surrounding communities (Guastella and Knudsen, 2007; Chari and Scott, 2005). The communities also have to deal with tankers and heavy vehicles that travel to and from refineries and other industries and share roads originally designed for residential purposes and the airport's air traffic and road traffic that cause high levels of noise pollution during the day as well as night (SDCEA, 1998: 2). This has made South Durban a melting pot of conflicts between competing economic, social and economic needs (Guastella and Knudsen, 2007).



Figure 5: Proximity of industries to residential areas (Sources: Guastella and Knudsen, 2007)

In addition to the social ills that the communities experience, it seems that there are more risks than benefits in the location of industries and the airport in the South Durban Basin. The “industrial development” seems to be largely supporting the accumulation of capital, instead of creating jobs and this adds, to the conflicted area, a problem of poverty (D’Sa and Reid, undated: 36).

The industries’ proximity to communities and the emission of pollutants, the noise from air traffic due to the location of the airport, the use of residential roads by tankers and big trucks, and the low levels of employment all culminate into a conflict between the affected and interested parties. According to (Sparks, 2006: 1), the people living in area of South Durban Basin are deeply concerned about their health and constantly complain about the poor living conditions in their neighbourhoods. They feel that neither the authorities nor the polluting industries have taken their concerns seriously. The continued experience of pollution associated, in particular, with the ‘big 3’ industrial complexes in the area (Mondi, Sapref and Engen), has led to increasing frustration and anger among residents about perceived political complicity with environmental abuses by oil companies.

The conflict between the interests of the communities, industries and local government gives South Durban Basin the status of a contested landscape.

According to Massey, 1992 (cited in Kong and Law 2002: 1503-1504), landscapes and places are complex sites of meaning, and a place is formed in part out of the particular set of social relations which interact at a particular location. Understanding the conflict of landscapes involves unsettling existing social constructions and exposing dominant ideologies that underline such constructions, the institutions that aid those constructions, the groups that are privileged by them and the urban landscapes that naturalize them (Kong and Law 2002: 1503-1504).

In the case of South Durban Basin, the research uncovered a society that is unequal, where marginalized communities are suffering at the hands of big industries. The dominance of the expansionist perspective underlines such social constructions and the local government is aiding these constructions to the detriment of the communities and for the benefit of the big industries.

Chapter Four: Legislation for the Promotion of Sustainable Development in SDB

The purpose of legislation is to control and regulate development. It is especially essential in today's world where development has gotten out of hand, hence the situation in South Durban Basin. The regulation and control of development is important for the achievement of sustainable development, however the conflicts in planning have implications on sustainable development. Contained in this chapter are tools for promoting Sustainable Development, one of which is legislation, such as Section 24 of the Constitution of the Republic of South Africa No. 108 of 1996 and the National Environmental Management Act 107 of 1998.

4.1. Generic Tools for Promoting Sustainable Development by Governments

Taxes: Governments can levy taxes on industries or practices that are unsustainable.

Tax breaks: Governments can cut the taxes of industries or individuals that act sustainably.

Subsidies: Governments can create an incentive for sustainable behaviour by providing the funds to start up sustainable projects create or update infrastructure to make industries more sustainable.

Enactment of laws and regulations controlling environmental pollution and regulating development: such laws and regulations limit the amount of water or air pollution caused by factories; prevent development on environmentally sensitive land; protect the constitutional right to a healthy environment; encourage communities to become involved in decisions that affect them, such as what type of development should take place.

Provision of good environmental services to the people – many governments, including that of South Africa currently do not do enough to deliver quality environmental services (such as water and sanitation, effective waste collection and disposal systems, good drainage to prevent flooding, safe and convenient transport, parks

and other recreation facilities, and effective planning for urban communities) to all people.

Environmental education and awareness – Governments can do much to educate the public about environmental issues that affect countries and local communities in particular.

(<http://www.saep.org/media/docs/123444107312.pdf>)

4.1.1. South African Laws and Regulation

This section expands on the above generic tools for promoting sustainable development in the context of South Africa which thus, to date enacted various pieces of legislation. The legislation includes the following:

4.1.1.1. Constitution of The Republic of South Africa No. 108 Of 1996

Section 24 of the Constitution was selected for the purpose of linking it to the case of South Durban Basin where people are living in an environment that is harmful to their health and wellbeing. They live in area that is characterized by water, air and land pollution because of the polluting industries in the area. Their rights are violated on a daily basis as demonstrated in the discussion of the findings of this research. Section 24 stated that 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.

“Thus the traditional concept of sustainable development is based on two major premises – equity within generations and between generations, and maintaining the integrity of natural, financial and human capital, to ensure that economic and social development is reconciled with environmental protection” (United Nations Development Programme, 2003 cited in Department of Environmental Affairs and Tourism, 2006).

4.1.1.2. Environmental Management White Paper 1997

The policy emphasizes that integrated sustainable management of the environment, now and into the future, is the essential basis of sustainable development in all areas of human activity. The relevant sustainability principles that are the basis of the South African environmental vision are equity, environmental justice and inclusion. The principle goal of the policy is sustainable development. The industrial activities in South Durban Basin are not controlled by this policy, given the current situation of the area. This makes it easy for the researcher to conclude that the enactment of such a policy is payment of mere lip service.

4.1.1.3. National Environmental Management Act 107 of 1998

The aim of this section is show what the law stipulates about ensuring that development is sustainable and all factors pertaining to sustainable development are considered. Section 3 of the legislation stated that development must be socially, environmentally and economically sustainable, and in South Durban Basin, development isn't.

4.1.1.4. National Environmental Management Act: Air Quality Act 39 of 2004

This legislation is particularly related to the regulation of pollution emissions and air quality, and was therefore selected for its relevance to the polluted conditions

of South Durban Basin. The preamble of this legislation aptly describes the condition of South Durban Basin when it stated that

- i. The quality of ambient air in many areas of the Republic is not conducive to a healthy environment for the people living in those areas let alone promoting their social and economic advancement;
- ii. The burden of health impacts associated with polluted ambient air falls most heavily on the poor;
- iii. Air pollution carries a high social, economic and environmental cost that is seldom borne by the polluter;
- iv. Atmospheric emissions of ozone-depleting substances, greenhouse gases and other substances have harmful effects on the environment both locally and globally;
- v. Minimization of pollution through vigorous control, cleaner technologies and cleaner production practices is key to ensuring that air quality is improved

This is a legislation that regulates air quality in order to protect the environment by:

- i. Providing reasonable measures for the prevention of pollution and ecological degradation;
- ii. Securing ecologically sustainable development while promoting justifiable economic and social development;
- iii. Providing for national norms and standards regulating air quality monitoring, management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.

4.1.1.5. Local Agenda 21: Principles of Sustainability

The principles of sustainability were taken from the United Nations' Local Agenda 21. The ones listed below were chosen because of how they specifically speak to the values of sustainable development and relate to the condition of South Durban Basin.

- i. Principle 1: Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.
- ii. Principle 3: The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.
- iii. Principle 4: In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.
- iv. Principle 8: To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.
- v. Principle 10: Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information of hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

- vi. Principle 13: States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage.
- vii. Principle 15: In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

In conclusion, this chapter has presented the tools to promote sustainable development among which is legislation which regulates and controls development for the purpose of sustainable development. The legislation includes section 24 of the Constitution of the Republic of South Africa No. 108 of 1996 which stipulates that everyone has the right to an environment that *is* not harmful to their health or well-being. The legislation also includes the National Environmental Management Act 107 of 1998 which stipulates that development must be socially, environmentally and economically sustainable. All these tools promote the balance between the goals of planning for the purpose of achieving sustainable development.

Chapter Five: Findings and Analysis

The aim of the research in the South Durban Basin was to understand the extent to which collaborative planning can resolve the conflicts between the three fundamental goals of planning as reflected in the contested nature of the study area. The main hypothesis of the research was that resolution of the conflicts would create the platform for the achievement of sustainable development.

The first part examines the conflicts in South Durban Basin and their causes and the second part examines the application of collaborative planning in resolving the conflicts in the study area.

5.1. Conflicts between the Goals of Planning in SDB

The establishment of the South Durban Basin was premised upon the expansionist perspective which views the human system growth as virtually unlimited and mechanistic due to the unique capacity of human beings to utilize, adapt, and innovate and the controlling effects of prices (Jepson, 2004a: 3). This perspective supports the conventional economic imperative to maximize economic production and it is linked to the economic efficiency of industries. "The rationale for the emerging blueprint plan for South Durban Basin was the goal to promote economic development and create jobs via planned industrial development" Scott (2003).

The first section examines the conflict between scales of need; a reflection of the competition between the expansionist and the ecological perspectives and the dominance of the former, the second analyzes the consequence of the dominance of the economic imperative and the third examines the conflicts associated with such consequence. The responses were collected from community representatives, a Special Assignment documentary and a planning practitioner that worked in South Durban Basin.

5.1.1. Conflict between the Scales of Need: Competition and Dominance

Planning practitioners working in South Durban Basin are faced by the conflict between the scales of need. A planning practitioner described the conflict between the scales of need as follows: the demands at the higher scale (national) require planners in South Durban Basin to plan for and promote economic development. At the local scale planners are required to protect the environment and communities from the consequences of economic development such as industrial pollution from industries, and ensure equitable distribution of the economic benefits. This causes a dilemma for planners because they have an obligation to plan for economic development, environmental protection and social equity. Generally, planners strive to resolve the conflict, however in the end planners tend to plan for and promote economic development at the expense of environmental conservation and social equity due to the strong demands at the national level. The researcher argues that this is because economic development benefits a large number of people at different scales (national levels, provincial and city), while the benefits of environmental protection and social equity are place- and people-specific.

The community representatives stated that in South Durban Basin, economic efficiency of industries has been promoted at the expense of the health and well-being of the local communities and the environment. Due to the fact that economic growth has far-reaching benefits; “a few people must be sacrificed for the benefit of many” (practitioner, 2009). The South Durban Basin is the economic hub of Durban and KwaZulu-Natal with over one hundred small and big industries that employ thousands of people (practitioner, 2009). The industries are a critical component of South Africa’s economy which is vitally linked to the South Durban Port. The industries such as Engen together with Sapref account for 55% of SA’s fuel supplies and Mondi is the largest paper mill in the country (practitioner, 2009, Iyer Rothaug collaborative, 2004 and Special Assignment documentary, 2008).

The conflict between the scales of need is evidence of the competition between the expansionist and ecological perspectives. The dominance of economic development is evidence of the dominance of the expansionist. The ecological perspective is of the belief that there are limits to the ability of the natural environment to support human beings and that the level and character of human activity must be tempered by an appreciation of the effects of that activity on natural resources and characteristics (Jepson, 2004a, 4; Levett, 1998, 295). This perspective supports the ecological imperative to protect the ecosphere and a social equity imperative to minimize human suffering (Berke, 2002: 30).

In SDB the economic imperative to maximize production is linked to the economic efficiency of industries and the ecological imperative to protect the ecosphere is linked to the polluted air, water and soil; the consequence of the dominance of the expansionist perspective. The social equity imperative to minimize human suffering is linked to the communities that live in the polluted environment.

5.1.2. Pollution: The Consequence of the Dominance of the Expansionist Perspective

The dominance of the expansionist perspective means that the conventional imperative to maximize production is dominant over the ecological imperative to protect the ecosphere and a social equity imperative to minimize human suffering (Berke, 2002: 30). The consequence of this dominance is various forms of pollution that impact on the health and well-being of communities.

The major sources of pollution in South Durban Basin are the industries (Community Representatives, 2009). There are about one hundred industries in South Durban Basin emitting pollution but the major polluters are the big companies. For instance companies such as Sapref, Engen Oil Refinery, Mondi

Paper Mill, Tongaat Hulett Sugar Refinery, Illovo Sugar contribute 80% of the sulphur dioxide (SO₂) emitted in the area (Special Assignment, 2008).

To show that these major companies are huge polluters, air outside Engen Oil Refinery was sampled using a method called Bucket Sampling and was sent to USA for testing. The sampling was conducted by the South Durban Community Environmental Alliance (SDCEA), Groundworks and the Special Assignment team. The test showed the sampled air had 26 pollutants. The pollutants included propane, a highly flammable gas, benzene and toluene as well as sulphur dioxide (Special Assignment, 2008).

The community representatives and the practitioner agreed that the industrial pollutants tarnish the quality of air, soil and aquatic systems (refer to figure 6). They argued that the effects of air pollution on the health and well being of the communities take the form of diseases such as leukaemia, cancer, skin diseases, liver problems and mental illnesses as well as respiratory problems such as asthma and bronchitis. One community representative went on state that soil pollution affected vegetation and the ability of water to infiltrate the soil during a rainy season because of the chemical deposits in the soils. The chemicals in the run-off contaminate canals, rivers and the ocean thus causing the depletion of marine populations in SDB (refer to figure 7).



Figure 6: Air and water pollution in South Durban Basin (Source: SDCEA, 2009)



Figure 7: Effects of water pollution: depletion of marine life (Source: SDCEA, 2009)

When the environment is impacted the communities suffer. Such is the case of children in a school located in close proximity to Engen Oil Refinery. A research conducted by the Nelson Mandela Medical School in 2008 showed that at the Settlers' Primary School there was a high prevalence of asthma due to the high levels of sulphur dioxide emissions. One particular girl was documented as stating that when she visited relatives in another area of SDB, she experienced lower levels of asthma when compared with being in the Settlers' School and her home which are both in close proximity to the Refinery (Special Assignment, 2008).

The heavy vehicles that the industries utilise to transport chemicals are also a source of pollution. The chemical laden vehicles sometimes cause oil spills and leaks and emit pollution that contributes to a deadly cocktail of pollutants in the air, on the ground and in the water in the residential areas (practitioner, 2009). The presence of industrial traffic within the residential areas also poses the threat of physical harm on the communities. The chemical vehicles drive on roads

designated for residential traffic to travel to and from the industries (community representatives, 2009).

5.1.3. Protests: Reaction to Pollution

Due to the fact that the interests of the industries have been placed over those of the local communities and the environment, the local communities and the CBOs have an adversarial relationship with the industries. The communities are fighting the cost of pollution to their health and environment by documenting all the accidents, incidents, explosions and leaks on a daily, weekly monthly and yearly basis. The community representatives use information to write to the government hoping that government will make the industries accountable for their actions. When nothing comes from writing to government, the CBOs utilize the permit system to pressure industries into compliance. Most importantly, the communities and activists hold mass protests and picket at the gates of the industries; there were twelve protests in 2008 in front of Engen (refer to figure 8).



Figure 8: Protests Organised By SDCEA (Source: SDCEA, 2009)

The notion of “sacrificing of a few for the benefit of many” is a clear violation of the Constitutional right of all South Africans to an environment that not harmful to the health and well-being of everyone. However, the researcher found no evidence of the use of the Section 24 of the Constitution of the Republic of South Africa No. 108 of 1996 against the industries or the government to date.

The government has made strides towards regulating the activities of the industries. It has now started to hold polluting companies accountable for their activities and is reviewing their permits. The national government has put together a policy called Annual Pollution Performance Review which requires companies to produce an annual report of activities; positive and negative (ward councillor, 2009).

Despite the development of the Annual Pollution Performance Review, the only evidence of government action in regulating the industrial pollution of the industries is a fine of R10 000 against Engen for when it exceeded its pollution quota in 2004. Community representatives, otherwise feel like the government is happy with the status quo of SDB. The researcher argues that the state of South Durban Basin is not evidence of weak laws and regulations but rather weak implementation of the legislation (Special Assignment, 2008).

The conclusion is that for the benefit of economic development and growth of South Africa, Kwazulu-Natal and Durban, the locals and the environment of South Durban Basin have to bear the costs in the form of health problems related to pollution from industrial activities. Because of the impact of pollution on their lives, the CBOs and the communities are conflicting with the industries in the form of mass protests at the gates of the industries.

The analysis of the conditions in South Durban Basin and the understanding of the conflict between the scales of need lead the researcher to conclude that it is the competition between the expansionist and the ecological perspectives that causes the conflict between scales of need. And it is the dominance of the expansionist perspective that is responsible for the polluted and conflicted condition of SDB. The industries uphold the expansionist perspective and the CBOs representing the

interests of local communities and the environment uphold the ecological perspective. Against the background, the research sought to answer the question: what are the chances of sustainable development in an area where the expansionist perspective is dominant? The researcher argues that given the conditions in the SDB, sustainable development is a necessary goal. Sustainable development requires that the conventional economic imperative to maximize economic production be accountable to the ecological imperative to protect the ecosphere and the social equity imperative to minimize human suffering (Berke 2002, 30). In order to ensure the accountability, the expansionist and ecological worldviews need to be integrated through collaborative planning. The researcher argues that collaborative planning is capable of integrating opposing views and eliminating conflict for the purpose of creating a platform (consensus) for sustainable development.

5.2. The Application of Collaborative Planning in South Durban Basin

The South Durban Basin was planned and designed through conventional planning which is informed by the expansionist perspective. Upon examination, the researcher argues that there was obviously no collaboration with and participation of communities in its development. The SDB is evidence of the lack of consideration of the possible impact of industries on the communities. As a result of the lack collaboration in the initial development of South Durban Basin, the area is contested.

This section is comprised of five subsections. The first subsection examines the criteria for collaboration and the ladder of participation which will aid in understanding the processes of collaboration and participation in the present development of SDB. The second and third subsections analyze the collaboration and participation processes in the development of the SDB Spatial Development Framework and the Back of Port Spatial Development Plan using the criteria for

collaboration and the ladder of participation. The fourth subsection examines whether the relationship between communities, industries and the municipality is collaborative or not. The fifth subsection analyses sustainable development as the outcome of collaboration

5.2.1. Criteria for Collaboration and Ladder of Participation

The criteria for collaboration, developed by Hajer (2005) are to guide the analysis of collaboration in a democratic discussion. The criteria include reciprocity, inclusiveness, openness, integrity, accountability, dialogue (refer to chapter two for the full description of the criteria). The purpose of the ladder of participation (refer to figure 4), developed by (Arnstein, 1969) is to identify the type and level of participation of communities in the process of developing a plan (refer to chapter two for full description of types and level of participation and non-participation). The plans, whose formulations were examined using the criteria and the ladder, are the South Durban Basin Spatial Development Framework (SDF) and the Back of Port Spatial Development Plan.

Table 4: Eight rungs on a ladder of citizen participation (Source: Arnstein, 1969)

8	Citizen control	Degree of citizen power
7	Delegated power	
6	Partnership	
5	Placation	Degree of tokenism
4	Consultation	
3	Informing	
2	Therapy	Non-participation
1	Manipulation	

5.2.2. Collaboration and Participation in Development of SDB SDF

The South Durban Basin Spatial Development Framework (SDF) was developed in 2004 as a proposal for development in the area by a private practitioner commissioned by the SDB Area-Based Management (ABM). As the major plan of SDB, the researcher was interested in the extent of collaboration and the level of community participation in the development of the Spatial Development Framework. For the analysis of collaboration in the development of this plan, key respondents including chairpersons (also referred to as the community representatives) of the South Durban Community Environmental Alliance (SDCEA) and the Clairwood Ratepayers' Association (CRA) and two practitioners were interviewed. These key respondents were asked about the extent of their collaboration and the level of their participation in the development of the SDF. The development of the SDB SDF should have included conception, formulation and implementation.

The community representatives stated that they were not involved in the conception and formulation of the SDF. When the plan and report of the SDF was completed, it was placed in a library of one community of SDB for the public to view and submit comments. The type of community participation that took place was informing and consulting and the level was a degree of tokenism. Arnstein (1969) argued that when this type of participation occurs, citizens may indeed hear and be heard through public comments. But under these conditions they lack the power to ensure that their views and comments will be heeded by the powerful (the ABM and the private practitioner). When participation is restricted to these levels, there is no follow through, no 'muscle'; hence no assurance of changing the status quo.

The development of the SDF allowed for limited participation because the process did not meet the criteria for collaboration. The two themes common to the criteria

for collaboration are debates and argumentative exchange. Debates and argumentative exchanges occur in settings such as regulatory negotiation, public-private partnerships, community gatherings and public meetings (Butler and Goldstein, 2010). The process of developing the SDF did not have these settings for collaboration with the communities.

One practitioner argued that the reason for the participation process in the development of the SDF being informing and consulting is that the conception and formulation stages of the Spatial Development Frameworks “are too technical for many communities”. At these stages “planners usually seek input from the educated stakeholders, which includes community representatives because poor communities prefer to see something happening at the ground level, i.e. precinct plans”. The researcher discovered that this was not true in the case of South Durban Basin SDF. The chairpersons of the SDCEA and CRA were left out in formulation of the SDF; they were invited to view the document along with other members of the communities of South Durban Basin when the public comments were required.

5.2.3. Collaboration and Participation in the Development of Back of Port SDP

This plan was developed by the ABM in co-operation with the Development Planning Department of eThekweni Municipality. The process of developing the Back of Port Spatial Development Plan (SDP) was also analyzed alongside that of the South Durban Basin SDF. For this section four respondents were interviewed: a practitioner from the ABM and an outsourced practitioner from the private sector, chairpersons of the SDCEA and CRA and practitioner from the Development Planning Department of eThekweni Municipality.

The Back of Port proposed the development of a new road. The practitioner from the ABM claimed that the project has produced concepts that would aid in the development of a dedicated truck route that would remove trucks from residential

areas, steering them onto the N2 and N3. The researcher argues that the redirecting of trucks from residential roads into the N2 and N3 would lessen the danger that trucks impose on the inhabitants of the community, resolve the conflict between the residential and industrial traffic and would also reduce levels of pollution from the automobiles. The redirecting of trucks is a tangible way of achieving high levels of sustainability and some quality-of-life in the area. The practitioner from the private sector stated that the road would run through the Basin and link the various communities to the CBD as well give the greater neighbourhood, not just the properties along it, a choice of movement. However, the communities “were up in arms” about the proposed new truck route because of the changes the route would have on the impact of their properties (practitioner, 2009). Their complaints were quite justified because the plan not only proposed a new route but it also referred to some parts of South Durban Basin including Clairwood as the Back of Port. According to the chairperson of the CRA, one moment Clairwood was part of the South Durban Basin, the next it was part of an area called the Back of Port. The chairperson argued that before their area was called the Back of Port, they were not even informed or consulted about the name change. They were just presented with a plan called the Back of Port Spatial Development Plan for public comments. The plan was wholly rejected by the communities and at the time of the interview it had not been implemented and was still sitting on the desk of a chairperson of the CRA.

There was no collaboration between the ABM and the Development Planning Department of eThekweni Municipality and the community-based organizations such as the Clairwood Ratepayers’ Association and the South Durban Community Environmental Alliance. There was only collaboration between the ABM and the Development Planning Department of eThekweni Municipality and the planner from the private sector.

The type and level of community participation in the formulation of Back of Port plan was the same as that of the SDB SDF because the communities were asked for

comments after the plan was already formulated. Therefore the process of formulation did not meet the criteria for collaboration.

Consequently the question that one has to ask is: if there was collaboration in the formulation of the plan, would communities have been “up in arms” about the proposed development? Would the plan have been wholly rejected by the communities? The communities would probably have worked out an outcome with the practitioners and the local municipality that would have been beneficial for all.

5.2.4. Collaboration between Communities, Industries and the Municipality

The researcher was interested in understanding whether the relationship between industries, communities and the local municipality is collaborative one or not in the development of South Durban. There was a consensus between the chairpersons of Clairwood Ratepayers’ Association and of the South Durban Community Environmental Alliance and a Ward Councillor that there is no collaboration between the local communities, planning practitioners, the industries and local government. The chairperson of SDCEA stated that the industries’ idea of collaboration with communities is meeting with the local government behind closed doors and then just informing communities about a proposed development for the area. The communities are then given a few days to respond. He argued that the communities’ concerns and views are not just sidelined, but the communities get completely cut out of decision making processes. For instance the chairperson of SDCEA was excluded in the development of an incinerator at Engen. The chairpersons of the SDCEA and CRA believe that the local government is colluding with the industries behind closed doors and is allowing them continue to pollute because it favours what the industries are doing for the economy of the city.

According to a practitioner, the best way to solve the conflict in South Durban Basin is to apply methods that integrate all aspects of the conflict instead of focusing on just one, such as improving the air quality of the area. The integrative method would ensure improved air quality and also take into consideration the economic and social benefits of industries. Instead of cutting down the number of industries by 50% in order to improve air quality, industries could cut down pollution emissions by 50% by introducing new technologies that would reduce air pollution and increase production.

The conclusion that can be drawn is that there was no application of collaborative planning in the formulation of the two key plans, namely SDB SDF and the Back of Port SDP. The kind of planning that was used in the conception and formulation of the SDB SDF and the Back of Port SDP was conventional planning which is top-down in nature, local communities and community representatives were only involved through the request for public comments. The general relationship between the industries, planning practitioners and local government is therefore not a collaborative one.

The lack of collaboration with communities and community representatives not only exacerbates the conflicts in the area; it is the cause of conflict in itself. The ward councillor and a practitioner from the ABM confirmed that the lack of collaboration with communities and the lack of community participation in development in the SDB has also been a cause of conflict.

The researcher argues that the communities of South Durban Basin are excluded from collaboration in the development of South Durban Basin because of the conflict between the scales of need. Collaborating with communities would mean taking into consideration the impact of pollution on the environment and the health and well-being of the communities at the local level and that would mean change the status quo. Accommodating the communities' needs would have implications on the success and economic efficiency of the industries. The lack of

collaboration signifies satisfaction with the state of quo of SDB. And the refusal of the environmental officer, of the oil refinery that was sampled for an interview, to participate in the interview process is a sign of the industry's reluctance to collaborate with the people affected by pollution and with those who are trying to understand the industry's point of view and stand-point.

Most importantly, the lack of collaboration prevents the integration of the expansionist and ecological perspectives in order for a win-win position for all parties to be arrived at. The lack of integration means that, in SDB, the conventional economic imperative to maximize economic production cannot be made to be accountable to the ecological imperative to protect the ecosphere and the social equity imperative to minimize human suffering (Berke 2002, 30). In that case, the expansionist perspective continues to be dominant in the development arena.

5.2.5. Sustainable Development: the Outcome from Collaboration

The researcher argues that by involving communities in the collaborative processes of planning, development can be sustainable. A respondent argued that in order for any development to be sustainable, the community needs to participate in, own, and monitor the development. This is because sustainable development is development that involves people for their benefit and for the benefit of future generations and it is development that can achieve the best possible result from an environmental, financial, resource-both natural and human- points of view. However, one respondent argued that the current understanding of sustainable development depicted using the three-ring circus model reveals the silos within which each of three spheres (economic development, social equity and environmental protection) operate.

The researcher argues that the silos can be integrated when there is collaboration between the three spheres. This means that in planning a project that would be sustainable, collaboration with all the affected (such as immediate communities) and interested parties is necessary. Given the lack of collaboration and the dominance of the expansionist perspective, the goal of sustainable development in South Durban Basin is in jeopardy.

Chapter Six: Summary of Findings, Conclusions and Recommendations

This chapter is comprised of three sections, the first of which are the summary and conclusion of the findings. The summary and conclusion have been connected to the hypothesis, main objective and main research question. The second section contains the recommendations for the use the criteria for collaboration and the ladder of participation. The criteria are for analyzing planning processes for the purpose of ensuring that the resolution of conflict between competing points of view is possible. The ladder of participation is for analyzing the typology and level of participation in planning processes. The last section is comprised of lessons learnt from the research.

6.1. Summary of Findings

South Durban Basin is a landscape that was developed through conventional planning, purely for economic purposes. The individuals that have a big stake in the landscape are the industries, the local people and the municipality, but the stakes are uneven. Due to the fact that area was designed upon the expansionist perspective, planners working in SDB are faced by the conflict between scales of need; demands at the national and local scales. The needs and demands at the national scale require planners to plan for and promote economic development, and in SDB, this through industrial activities. The demands made at the national scale on planners working are fed by the dominance of the perspective upon which the SDB was developed, the expansionist perspective.

The dominance of the expansionist is linked to the economic efficiency of industries and the consequence of this dominance comes in the form of pollution from the industries. There are about 100 industries in South Durban Basin emitting pollution but the major polluters are the big companies such as Sapref, Engen Oil Refinery, Mondi Paper Mill, Tongaat Hullett Sugar Refinery and Illovo Sugar.

The pollution affects the quality of air, soil and aquatic systems. The effects on the environment are felt the communities through diseases such as leukaemia, cancer, skin diseases, liver problems and mental illnesses as well as respiratory problems such as asthma and bronchitis.

Due to the fact that industrial pollution has dire effects on health and wellbeing of the local communities and the environment; the communities and CBOs have an adversarial relationship with the industries. The community representatives fight against the activities of the industries by staging mass protests at the gates of the industries. These organizations base their protests against industries on the ecological perspectives.

The polluted and conflicted condition of SDB makes sustainable development a necessary goal. However, so long as the expansionist perspective continues to be dominant, it is unlikely that sustainable development can emerge as an effective framework for public policy (Jepson, 2004a). For the emergence of sustainable development as an effective framework for public policy in SDB, the conventional economic imperative to maximize economic production must be accountable to the ecological imperative to protect the ecosphere and the social equity imperative to minimize human suffering (Berke 2002: 30). This can only be achieved through the integration of the expansionist and ecological perspectives through collaborative planning.

In investigating the application of collaborative planning in the development of SDB, the researcher found that collaboration with communities and their representatives did not exist and community participation was limited to informing and consulting. The inherent lack of collaboration suggests that the kind of planning used in SDB is conventional planning, which was used to develop the area.

6.2. Conclusion of Findings

With regards to the conflicts in SDB, the researcher concludes that for the sake of economic development and growth of South Africa, Kwazulu-Natal and Durban, the locals and the environment of South Durban Basin currently have to bear the costs in the form of health problems related to pollution from industrial activities. And because of the impact of pollution on their lives, the CBOs and the communities are engaged in ongoing conflicts with the industries in the form of regular mass protests at the gates of the industries.

The analysis of the conditions in South Durban Basin and the understanding of the conflict between the scales of need lead the researcher to conclude that it is the competition between the expansionist and the ecological perspectives that causes the conflict between scales of need. And it is the dominance of the expansionist perspective that is responsible for the polluted and conflicted conditions of SDB. The industries uphold the expansionist perspective and the CBOs representing the interests of local communities and the environment uphold the ecological perspective. What are the chances of sustainable development in an area where the expansionist perspective is dominant? The researcher argues that given the condition of SDB, sustainable development is a necessary goal. Sustainable development requires that the conventional economic imperative to maximize economic production be accountable to the ecological imperative to protect the ecosphere and the social equity imperative to minimize human suffering (Berke 2002, 30). In order to ensure this accountability of the proponents of the expansionist perspective to the environment and marginalized communities, the expansionist and ecological worldviews need to be integrated through collaborative planning. The integration of the two worldviews would ensure the balance between three fundamental goals of planning and the achievement of sustainable development.

However, in South Durban Basin, there was no application of collaborative planning in the formulation of the two key plans, namely SDB SDF and the Back of Port SDP. The kind of planning that was used in the conception and formulation of the SDB SDF and the Back of Port SDP was conventional planning which is top-down in nature. Local communities and community representatives were only involved through the request for public comments. The general relationship between the industries, planning practitioners and local government is not a collaborative one.

The communities of South Durban Basin are excluded from the collaboration about the development of South Durban Basin because of the conflict between the scales of need. Collaborating with communities would mean taking into consideration the impact of pollution on the environment and the health and well-being of the communities at the local level and that would mean change the status quo. Accommodating the communities' needs would have implications on the success and economic efficiency of the industries. The lack of collaboration signifies satisfaction with the state of quo of SDB.

The lack of collaboration prevents the integration of the expansionist and ecological perspectives. The lack of integration means that, in SDB, the conventional economic imperative to maximize economic production cannot be made to be accountable to the ecological imperative to protect the ecosphere and the social equity imperative to minimize human suffering (Berke 2002, 30). In that case, the expansionist perspective continues to be dominant in the development arena. For as long as the expansionist perspective remains dominant, sustainable development cannot emerge as an effective framework for public policy in SDB.

6.3. Lessons Learnt

The researcher started the research with the assumption that the conflicts in South Durban Basin are caused by sources at the local level; however the researcher learnt that these conflicts are tied to the provincial and national levels. The demands at national level exacerbate the conflict at the local level because they encourage the industries to pollute for economic efficiency. The researcher also learnt that the criteria for collaboration should be used for analysis of plan formulation at the precinct level for precinct plans and not for Spatial Development Frameworks because ground-level planning allows for broad participation and the criteria is suitable for community planning.

6.4. Recommendations

The researcher recommends the use of Hajer's (2005) criteria for collaboration for the facilitation of planning processes, in general. These criteria are guaranteed to ensure the resolution of conflict between competing and conflicting points of view.

6.4.1. The Criteria for Collaboration

The criteria refer to the democratic quality of a discussion and are as follows:

Reciprocity: discussions must be conducted through an argumentative exchange, hearing both sides, and responding to one another's arguments.

Inclusiveness: debates require that 'stakeholders' are made part of the argumentative exchange, and that everyone with a stake can have his or her say.

Openness: the way in which the debate is staged and conducted must avoid unnecessary barriers, including that of (professional) language.

Integrity: the debate requires honesty and no double play.

Accountability: those involved are accountable to political bodies and to the public at large, also with regards to the degree to which the rules as laid out have been guaranteed.

Dialogue: learning through an iterative process in which knowledge is mobilized and enriched through confrontation with a variety of stakeholders and experts (Hajer, 2005: 450).

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Appendices

A. Interview questions for the Ward Councillor

1. Which communities of South Durban do you represent?
2. What are your duties as the councillor of these communities in South Durban?
3. In your view, what do you understand about sustainable development?
4. What programmes has the government initiated to help the communities of South Durban Basin deal with pollution?
5. If any, are the people satisfied with such programs and are such programs successful in combating pollution in South Durban?
6. What has the government, as the regulating body, done to reconcile the conflict between the environmental, community and industries, in terms of formulating policies that incorporate sustainable development?
7. What evidence of sustainable development have you observed in recent and current ABM projects in South Durban Basin?
8. What is the nature of your relationship between you and the ABM and planners who plan the development of South Durban Basin?
9. As member of the council, what role do you play in the planning and development of South Durban Basin?
10. How would you like to see South Durban develop in the future?

B. Interview questions for the planner that has been working in the South Durban Basin

1. How would define your role as the planner in society and in planning?
2. How do you think the contesting three fundamental goals (environmental protection, economic development and social equity) of planning can be reconciled?
3. What do you know and understand sustainable development to be?
4. Given the conflict between the industries, environment and community in this South Durban Basin, how do you think sustainable development can resolve the conflict between environmental protection, economic development and social equity?
5. Would you say that collaborative planning is the only planning method through which sustainable development can be achieved and ensure reconciliation between the three fundamental goals of planning in SDB?
6. What is the role of the planner in collaborative planning?
7. Based on your experience, do you think that collaborative planning is practical?
8. In the process of collaborative planning, how has power affected the process, if at all?
9. As an experienced planner, what do you think is more important, a harmonious process of collaborative and deliberative participation with intangible outcomes or planning processes that come up with tangible outcomes, but lack the democratic aspect of collaborative planning?

C. Interview questions for the chairperson of South Durban Community Environmental Alliance (SDCEA)

1. What do you understand about sustainable development?
2. When was the South Durban Community and Environment Alliance established and upon which principles of community service?
3. What were the reasons behind the establishment of the organization?
4. Do you think that the organization is still serving its initial purpose and has not been influence by factors either than those it is defending?
5. What are your main responsibilities as representatives of the marginalized groups?
6. What is the nature of the organization's relationship with the polluting companies?
7. What have been the highlights of the organization's operations?
8. What methods does the organization use to combat pollution?
9. What effects of pollution do you think have had the most significant impact on the community and the on the environment?
10. What major obstacles have you had to overcome in order to be successful in your fight against pollution?
11. As an organization, have you reached a point in which you think you have been effective in your fight against pollution and have made a difference in the lives of the people in South Durban Basin?
12. Do you think that the industries are doing enough to mitigate the impacts of their activities, and what more can they do?

D. Interview Questions for municipal planners

1. What factors make sustainable development relevant to planning?
2. To what extent has sustainable development been the conceptual framework for plans that you have formulated?
3. In your experience, is the path to sustainable development filled with conflict (between economic development, environmental protection and social equity) that planners must negotiate through?
4. How can collaborative planning be used to reconcile the conflict between environmental protection, economic growth and social equity and thereby contribute to the achievement of sustainable development?
5. What is the cause of the conflict between the three fundamental goals of planning; environmental conservation, economic growth and social equity?
6. Has collaborative planning become the dominant paradigm in the field of planning?
7. How would you define your role as the planner in the process of collaborative planning?
8. In the process of collaborative planning, how do planners deal has power affected the process, if at all?
9. Based on your experience, do you think that collaborative planning is practical?
10. As an experienced planner, what do you think is more important, a harmonious process of collaborative and deliberative participation with intangible outcomes or planning processes that come up with tangible outcomes, but lack the democratic aspect of collaborative planning?
11. In your experience have you ever had a collaborative process that was democratic and produced tangible results?
12. To what extent can collaborative planning achieve sustainable development?
13. Who do you see as a client, beneficiaries or the developers?

E. Interview questions for the South Durban Basin Area-Based Management (ABM) planner

1. What is the meaning of sustainable development to you based on your expertise and experience?
2. Do you see it as an overall framework or a just part of a project?
3. How would you define the role of the South Durban Area Based Management in this area of such conflict between the industries, environment and community?
4. How is this conflict affecting the planning and development of South Durban?
5. What role is the ABM playing in the process of reducing the conflict in this area?
6. What have the ABM's planning interventions been in South Durban over the last ten years?
7. How have the interventions addressed sustainable development?
8. What are the ABM's current planning initiatives in South Durban?
9. How will these initiatives change the future of South Durban with regards sustainable development?
10. How can an outcome of sustainable development be achieved through the process of planning?