

FINAL DRAFT

NATIONAL FRAMEWORK DOCUMENT

STRENGTHENING SUSTAINABILITY IN THE INTEGRATED DEVELOPMENT PLANNING PROCESS



Department of Environmental Affairs and Tourism (DEAT)

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SECTION 1: INTRODUCTION

1.1 Introduction and Purpose of this Document

Local government in South Africa has a key role to play in addressing the social and economic needs of communities while ensuring that the resource base upon which life depends is conserved and well managed. Meeting these responsibilities is especially demanding given the inequitable development patterns and the variety of environmental contexts that exist in the country.

It is within this national context that the focus of planning in South Africa has shifted away from the control of land use and development activities towards a more developmental role, which includes the goal of facilitating sustainable development. Thus planning and environmental management in South Africa aims to use scarce resources and limited capacity wisely, and to re-orientate approaches and management tools, so as to achieve a greater level of equity, service provision and sustainability in the country.

Integrated Development Planning (IDP) has been introduced to provide a framework for the developmental role of local government. The central aims of IDP are to provide a holistic, integrated and participatory strategic plan guiding the work of the municipality (IDP Guide Pack 1, 2001):

Integrated Development Planning

- Helps to eradicate the inequitable development legacy of the past;
- Improves the quality of life through developing integrated and sustainable projects and programmes;
- Creates community ownership;
- Enables local government transformation;
- Ensures appropriate allocation of resources and facilitates delivery;
- Acts as a measure for accountability by politicians and officials.
- Enables co-operative governance through facilitating alignment, and acting as a mechanism for co-ordination between local, provincial and national departments.

Since these aims are closely aligned with many of the principles of sustainability, IDPs can be used as a strong vehicle for promoting sustainable development approaches and practices at the local level.

Although IDP is potentially an important tool for drawing sustainability concerns into planning and decision-making at the local level, there are a number of challenges that need to be addressed. Limited resources and low levels of capacity of many local authorities are one such constraint. The environment is often defined narrowly, focusing on biophysical issues, rather than social, economic and natural environmental concerns. This results in a fragmented approach where the relationships between the different components of the environment are considered separately. Perhaps the greatest challenge is that meeting the extensive needs within local authorities in a sustainable way requires trade-offs, and these

should be carefully considered so that a balance is found between social needs, economic demands and ecological sustainability.

Even with many potential problems, the incorporation of sustainability principles into IDPs should improve the well-being of communities, protect natural systems upon which life depends and result in long-term development successes. This document develops a framework, which illustrates the ways in which sustainability principles can be integrated into IDPs. It is anticipated that this framework will support those involved in the development and implementation of IDPs to strengthen sustainability within their local authorities.

The first round of IDPs has tended to focus on social and economic aspects of development. Many IDP assessments have shown that existing IDPs, with some exceptions, have concentrated less on the biophysical and ecological aspects of sustainability. In order to address this imbalance within IDPs, this document will place greater emphasis on issues related to ecological sustainability - although these issues will be raised in an integrated manner with strong linkages to economic and social sustainability concerns. It is hoped that the emphasis on natural environment issues will strengthen concern for ecological sustainability in the IDP process and in the subsequent development activities within local authorities. However, in order to promote sustainability in the municipal context, economic, social and ecological issues need to be addressed in an integrated and holistic manner.

This framework document aims to provide a broad understanding of the potential linkages between sustainability and IDPs within the developmental and legislative context of South Africa. It focuses on ways in which sustainability principles can be integrated into IDPs through the application of various environmental management tools so as to improve decision-making and implementation. In addition, various key questions are presented to provide ideas on sustainability issues that need to be considered in each phase of the IDP process. It is intended that more detailed guidelines for integrating sustainability principles into the IDP process will be developed.

1.2 The Target Group of this Document

This framework document has been specifically developed to aid IDP managers and planners responsible for preparing the IDPs to strengthen sustainability considerations in the IDP process. It is also a useful framework for environmental specialists responsible for addressing sustainability principles in IDPs. Provincial authorities that have a key role to play in providing support and information to local municipalities and ensuring that IDPs are aligned with provincial plans and programmes, as well as technical teams working from PIMMS centres would also find the document useful.

It must be emphasised that this is a framework document and that detailed guidelines for utilising the tools and ideas presented in this document are still to be developed.

1.3 Structure of the Document

This framework document is divided into 6 sections that address the key issues for the integration of sustainability principles into Integrated Development Planning.

In Section 1, a brief introduction to the current role of local government in South Africa is provided. The emergence of new planning procedures in South Africa and the need to integrate sustainability issues into IDPs are discussed. The challenges facing local government in this task have been identified. The purpose of the document and the target audience are discussed.

Section 2 provides an overview of the concepts and principles of sustainability. It examines the benefits of incorporating sustainability issues in planning and explores the role of local government in promoting sustainability. It concludes with an overview of the policy and legislative framework that requires the incorporation of sustainability into local government activities in South Africa.

The IDP process is briefly described in Section 3. The purpose of integrated development planning and the role of IDPs in achieving sustainability are examined in this section.

Section 4 focuses on key elements for strengthening sustainability within each phase of the IDP process. This section examines each phase of the IDP process and addresses key questions that should be asked and tools and resources that can be used to strengthen sustainability within IDPs. Examples of useful tools and resources are given and cases of best practice are presented to illustrate how sustainability principles can be incorporated into local government planning processes.

In Section 5, the challenges that need to be addressed in order to strengthen sustainability in the IDP process, are discussed. A key concluding point is that actions to strengthen sustainability should be sensitive to local contexts, and to local priorities and dynamics.

SECTION 2: SUSTAINABILITY

2.1 Introduction

The concept of sustainable development is now widely accepted in planning and development arenas both internationally and in South Africa (O’Riordan, et al, 2000, Sowman, 2002; Scott, et al, 2001). A sustainability agenda recognises the importance of maintaining natural systems while developing and enhancing social capital, considering the future, involving people in decision-making, addressing issues of social and environmental justice, and ensuring that decisions that are taken are economically viable and sustainable in the long term. Although sustainability is a core element of policy and legislation both in South Africa and internationally, its implementation still remains weak.

The emergence of sustainability

Historically, environmental issues and development were considered as mutually exclusive, and as conflicting needs within society. However, in the early 1970s people began to consider the relationship between development and the environment as having inter-related impacts. Development impacts on the environment, but at the same time, degraded or hazardous environments impact on the quality of life of people. The need to consider this relationship was first raised at the United Nations Conference on the Human Environment in Stockholm in 1972. At this meeting the causal relationships between poverty, the environment and development were explored. It became clear that development decisions that ignored environmental opportunities and constraints impacted most on the lives of the poor, increasing levels of risk and further trapping people in poverty.

The World Conservation Strategy (1980), the Brundlandt Report (1987), and the United Nations Conference on Environment and Development (UNCED), also known as the Rio Earth Summit in 1992, amongst others, were instrumental in shaping the concept and principles of sustainable development. Since the Rio Earth Summit several international events have taken place where sustainable development thinking and principles have featured prominently and influenced outcomes and recommendations. For example, the United Nations Conference on Human Settlements, Habitat II, in 1996 embraced the notion of integrating sustainability principles and concerns into human settlement planning and development. More recently ideas of weak and strong sustainability have been debated and considered as the role of the global capitalist economy in shaping the sustainable development agenda is questioned. Internationally, neo-liberal policies have led to an increasingly market based and inter-dependent global economy, which has been associated with rising global poverty and inequality, and growing environmental degradation. Strong sustainability calls for a re-conceptualisation of the relationship between people and the environment both at the global and local level and for a new way of thinking about economic growth and development¹.

The World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, reaffirmed international and local commitment to sustainable development and Agenda 21, the long term action plan for sustainable development that emanated from the Rio Earth Summit in 1992. However, these goals need to be implemented so as to ensure that the principles of sustainability become more than just rhetoric. Integrating sustainability principles into IDP offers one such opportunity in South Africa (see also section 2.5 below).

2.2 Defining Sustainability

Sustainable development is defined in many different ways. The most widely accepted definition is 'development that meets the needs of present generations without

¹ *Unsustainable South Africa* by Patrick Bond (2002) provides a critique of why many development decisions in South Africa, both at the national and local level, continue to degrade the environment and impact on the quality of people's lives.

compromising the ability of future generations to meet their needs (WCED, 1987). The key contention in the sustainable development debate is whether the pursuit of economic growth can ever be sustainable. 'Deep greens' or 'deep ecologists' argue that there is total incompatibility between high levels of economic growth and sustainable lifestyles, as the one systematically undermines the other. At the other end of the spectrum are those who believe that nature's ability to recover and the ingenuity of people will lead to new technologies and solutions able to address emerging problems. At the core of the Bruntland Report is the assertion that equity, growth and maintenance of environmental integrity are simultaneously possible as long as the key principles of sustainability, including the 'precautionary principle', are applied.

Even though the definitions of sustainable development are numerous, the concept contains a core set of principles that can be applied in different national, regional and local contexts. Many researchers and practitioners prefer to use the term sustainability since it defines how the world should be rather than how it is. Sustainable development implies an end point whereas the concept of sustainability is more about a pathway – a direction in which to move (O'Riordan, et al, 2000). It is therefore a framework that can be used to guide decision-making. The principles of sustainability provide the key elements of the framework. Environmental management tools can be used to enhance integration of sustainability principles in decision-making, implementation, monitoring and evaluation so as to move towards sustainable development.

2.3 Sustainability Principles

Sustainability is an approach to decision-making, based on a core set of principles.

2.3.1 Three Broad Principles

The first set of broad principles that need to be considered are those of social, ecological and economic sustainability. In making development decisions, trade-offs are usually made between these three dimensions of sustainability. It is important that all three of these principles are addressed and carefully considered in planning and decision-making.

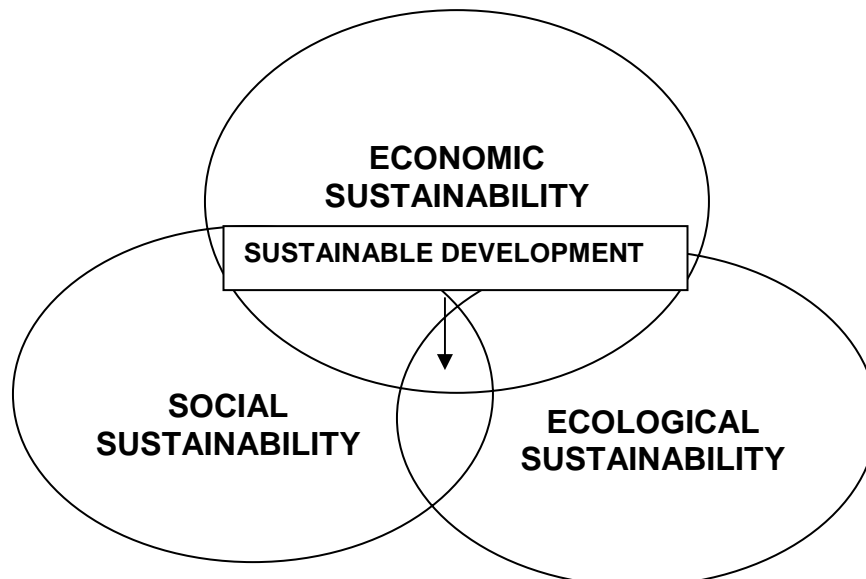


Figure 1: Sustainable Development Conceptual Framework

Economic sustainability: economic viability and integrity

Focuses on economic growth that is viable and fair, and which occurs at a rate which does not exceed the ability of natural and social systems to support this growth. It also considers how wealth is distributed and it questions the inequality of the current neo-liberal global economic system.

Ecological sustainability: The conservation of biodiversity and the maintenance of ecological integrity

Limits the use of natural resources to a level that allows nature to regenerate resources and minimises the use of non-renewable resources. It aims at reducing the amount of waste and pollution that is released into the system, and so does not over-extend the carrying capacity of the global sinks such as the oceans and atmosphere. It recognises the intrinsic value of the natural environment.

Social sustainability: social justice and equity

Stresses community participation and social justice, paying particular attention to the most vulnerable people in society. Value is attached to social capital and social networks. It supports the use of appropriate technology, and meeting people's basic needs without degrading ecological systems.

Governance and management need to be considered in the trade-offs that are made between the social, economic and natural environment dimensions of sustainability. Governance and management is key to ensuring fair and wise decision-making and well-managed implementation.

2.3.2 Other Core Principles of Sustainability

The list below provides a generic set of broadly agreed upon sustainability principles. The National Environmental Management Act (NEMA) also identifies a core set of sustainability principles that should receive attention in all planning and decision-making activities, from project to policy-making processes. The NEMA principles are listed in Appendix B.

Box 1: List of Sustainability Principles

Satisfaction of basic human needs such as food, shelter, water, energy
 Conservation of biodiversity
 The health and vitality of natural systems is enhanced and maintained
 Participation of individuals and communities in activities and decisions affecting them
 To support the development of partnerships: government, community, private sector partnerships
 Futurity: concern for future generations

Ensuring environmental justice: the fair distribution of environmental 'goods' and 'bads'

A systemic approach

Assessment of alternatives in decision making

Accountability

Recognising the linkage between global and local systems

Use of local knowledge and skills

Commitment to training and capacity building at all levels

Ensuring and supporting monitoring and evaluation

Precautionary principle: to proceed with caution if there is uncertainty with regard to environmental impacts

Adapt human activities to natural cycles and systems

Understand the world as a complex web of interconnecting systems and therefore adopt an integrated approach.

(Source: NEMA, 1998; INR, 2002).

While the adoption of these principles will enable municipalities to chart a development path which is more sustainable, successful pursuit of sustainable development also requires the adoption of approaches that are holistic, integrated, adoptive, have a systems-orientation, and, most importantly, are participatory. The application of these principles and approaches is not straightforward. It requires a change in attitude and behaviour, institutional reform, a change in priorities, and ongoing capacity building.

2.4 The WSSD, 2002

The World Summit on Sustainable Development held in Johannesburg in 2002 reaffirmed sustainable development as a central element of the international and local agenda and gave new impetus to global action to fight poverty and protect the environment. The understanding of sustainable development was broadened and strengthened as a result of the Summit, especially the important linkages between poverty, the environment and the use of natural resources. Governments agreed to and reaffirmed a wide range of concrete commitments and targets for action to achieve more effective implementation of sustainable development objectives. The WSSD resulted in the formation and launching of partnership programmes with other spheres of government and other sectors. These were referred to as "Summit Outcome Type 2 and Implementation Partnerships" and are designed to accelerate the implementation of strategies such as LA21. During the Local Government Session, local governments made the commitment of eradicating poverty, correcting the imbalances between the developed and developing world and fundamentally reshaping the world. It was recognised that for such a commitment to be achieved practical, realistic action plans must be implemented. This resulted in the launch of "Local Action 21 – a new phase of Local Agenda 21", which is a new toolbox of quantifiable actions based on the LA21 process. This will be the implementation mechanism of the Local Agenda 21 vision for the next 10 years. Through Local Action 21, local governments have committed themselves to the principles of sustainable development to achieve the following:

- To call for Local Action 21 – the motto for accelerated implementation of sustainable development in the decade following the WSSD.

- To call for Local Action 21 – a mandate given by the WSSD to local authorities worldwide to engage in the implementation of local agendas and action plans.
- To call for Local Action 21 – a movement of cities, towns, and countries and their associations towards action for sustainability.
- To enter a decade of accelerated effective action to create a sustainable community and protect the common goods.
- To work towards ensuring viable local economies, peaceful communities, eco-efficient cities, as well as secure and resilient communities which are able to respond to change, while ensuring safe and accessible water supplies and protecting our climate, soil, biodiversity and human health.
- To reinforce their commitment to Local Agenda 21 and its implementation throughout the next decade of Local Action 21.

The IDP provides the ideal vehicle for giving effect to these commitments.

2.5 The Policy and Legislative Framework for Sustainable Development in South Africa

In South Africa, environmental concerns have received significant attention in the new wave of policies and laws promulgated since 1994. The Constitution, which provides the point of departure for policy and law making in this country, contains far-reaching clauses relevant to the environment. Embedded within the Bill of Rights, is an environmental clause which provides that ‘...everyone has the right to an environment that is not harmful to their health or well-being’ (section 24, Act 108: 1996). Part (b) of this clause gives government the responsibility to take reasonable measures to ensure that the environment is protected for the benefit of present and future generations.

Including environmental rights as a fundamental human right, by necessary implication requires that appropriate environmental administrative systems be put in place to give effect to these rights (Glazewski, 1999). Various other clauses within the Constitution such as the administrative justice clause, the access to information right, as well as the liberalisation of *locus standii* rule, have far-reaching implications for greater involvement of civil society in environmental management and decision-making.

The Constitution also provides a clear mandate for local government to take on environmental management responsibilities. Section 152(1) states that the objectives of local government include ‘...sustainable provision of services to communities...and promoting a safe and healthy environment.’ The Constitution introduces the principle of co-operative governance and requires that the different spheres of government must co-operate and consult with one another to ensure effective governance. This constitutional perspective supports the principles of integration, participation, co-operation fundamental to working towards sustainable development.

A key piece of legislation, which has far-reaching implications for environmental management in South Africa, is the National Environmental Management Act 107 of 1998 (NEMA). NEMA provides an overall framework for general law reform in the environmental management field and provides an enabling context for environmental management to take place in a more pro-active, co-operative and conciliatory manner. NEMA is largely based on the principles and strategic goals and objectives contained within the White Paper on Environmental Management Policy for South Africa (1998). NEMA embraces the concept and principles of sustainable development as contained in the Brundtland Report (WCED, 1987) and promotes the notion of co-operative governance and partnerships.

Of relevance to local government is that the 18 environmental principles articulated in NEMA apply to all organs of state². In practice, these principles need to be applied to all local government planning and decision-making activities (refer to Appendix B). The environmental rights clause, as well as other provisions in the Constitution and NEMA, mean that the public can take legal action against local government if they fail to adhere to these principles during the course of executing their functions.

Of particular relevance to local government, is the White Paper on Local Government (Republic of South Africa 1998), which expands the local government's mandate to include environmental management responsibilities and charges it with adopting sustainable approaches in performing its functions. The White Paper also provides for inclusion of environmental considerations in the Integrated Development Planning process. Section 2.2 specifically states that "...planning for environmental sustainability is not a separate planning process, but is an integral part of the process of developing municipal Integrated Development Plans."

Since 1998, three key pieces of legislation have been promulgated to give effect to the system of developmental local government. One of these, the Municipal Systems Act 32 of 2000, sets out the basic principles and mechanisms to be used to achieve the vision of developmental local government. According to chapter 5 of this Act, all municipalities are required to develop an integrated development plan (IDP) which is the principle planning instrument that guides and informs all planning and development in a municipality. Furthermore, the Act recognizes the links between environment, development and poverty, and states that it is the general duty of a municipality to provide municipal services that are both financially and environmentally sustainable, as well as in a manner that is equitable and accessible to all communities, residents and ratepayers. Service provision must also be carried out in a manner that makes effective use of available resources and is conducive to the improvement of standards of quality over time.

² 'Organs of state' is defined in the Constitution as: (a) any department of state or administration in the national, provincial, or local sphere of government: or (b) any other functionary or institution - (i) exercising a power or performing a function in terms of the Constitution or a provincial constitution; or (ii) exercising a public power or performing a public function in terms of any legislation, but does not include a court or judicial officer.

The Municipal Systems Act defines **environmentally sustainable services** as those where the risk of harm to the environment and to human health and safety is minimized and the potential benefits maximized as far as reasonably possible.

Thus the criteria for service provision set out in the Municipal Systems Act are consistent with the principles of sustainable development and with the broader sustainable development policy framework contained in other national policy and legislation.

The Municipal Planning and Performance Management Regulations, promulgated in 2001 in terms of the Municipal Systems Act, describe the content requirements of IDPs. The Regulations (Chapter 2, s2(4)(f)) state that the spatial development framework reflected in the municipality's IDP must "contain a strategic assessment of the environmental impact of the spatial development framework". The White Paper on Spatial Planning and Land Use Management, published by the Department of Agriculture and Land Affairs in 2001 provides policy details on land use planning. The White Paper (section 3.2.1) states that each municipality must compile a spatial development framework, and that one of the components of this framework must be a "strategic environmental assessment". This is the only piece of legislation in South Africa that requires an SEA to be undertaken. This is discussed in more detail in section 4 of this document.

2.6 Sustainability and Local Government

Local government is especially important in the pursuit of sustainability due to the localized nature of many environmental problems and concerns. The policies and practices of local government can therefore be an important channel for the implementation of sustainability principles at the local level. Local environmental quality and the outcomes of development interventions are often dependent on the practices and decisions made by local councils.

In South Africa many laws and policies now have sustainable development as a guiding principle. Since local government is responsible for developing local policies and plans in alignment with provincial and national policies, it has a duty to incorporate sustainability principles into these activities. The strengthening of sustainability in all aspects of local authority activity will have long-term benefits for improved quality of life within the local authority and should not be viewed as an additional burden for local authorities to carry.

IDPs are seen as the principal planning tool of local government and can be instrumental in charting a sustainable pathway for a municipality. Further, the notion of sustainability potentially provides municipalities with a conceptual base or a starting point for the integrated development planning of activities that will have long lasting socio-economic benefits and that will not degrade the quality of the environment. By adopting the principles and approaches of sustainability local authorities are provided with a strong set of values

and principles against which development can be assessed. This contributes both to the immediate and the long-term success of local government activities.

2.6.1 Local Agenda 21

As part of their attempts to promote sustainability, many local authorities have responded to the international call contained in chapter 28 of Agenda 21, to develop a Local Agenda 21 (LA21) programme.

Agenda 21 which was one of the key outcomes of the Rio Earth Summit in 1992, sets out an action plan for sustainable development - the sustainability agenda for the 21st century. Agenda 21 argues that local authorities are important players in the implementation of sustainable development due to their planning and development activities and because they are the level of government closest to the public. Local Agenda 21 is the process used around the world to translate Agenda 21 into action at the local level. Since its inception, LA21 has been adopted by many local authorities and has been used extensively to further the goals of sustainability on a local scale.

As an international agreement, Local Agenda 21 exists as a broad framework for sustainability to be applied across a multitude of local authorities with their unique needs, histories and resources. Local Agenda 21 includes the following principles:

- Participation and the need for partnerships to strengthen decision-making
- Accountability and transparency
- The recognition of ecological limits, conservation of biodiversity and maintenance of ecological integrity
- Local level planning
- Concern for the future
- Equity and justice
- Satisfaction of basic human needs
- The adoption of a systematic approach
- Economic viability/integrity
- Accountability
- Concern for future generations
- Linkage between global and local dimensions
- Use of local skills and talents
- Commitment to training and capacity building of the local community

These principles emanate from the principles of sustainability and have been adapted for use by local authorities. When attempting to incorporate sustainability principles into local authorities, and especially into IDPs, these sets of principles can be used in combination with one another as they support the same overall vision of sustainability.

Along with a firm commitment to sustainable development, Local Agenda 21 has been formally adopted by the South African government. In terms of its principles and process, Local Agenda 21 is closely aligned with the IDP process (see Appendix C).

LA21 places a strong emphasis on the creation of partnerships between local communities and local authorities as a means to accomplishing local level sustainability (Urquhart and Atkinson, 2002). The formation of partnerships is an important element in the preparation process of an IDP. In its second phase, LA21 focuses on community-based issues analysis. This activity is a useful example of a needs analysis that is undertaken in the first phase of an IDP. Furthermore the formation of objectives, strategies and projects through the IDP is similar to the process of action planning advocated by the LA21 process. The LA21 process places great value on monitoring, evaluation and feedback. These are necessary for appraising progress towards sustainability. The LA21 process itself and the large volume of associated materials associated with LA21 can be a useful source of information for those developing IDPs (refer to Appendix C and D). Past experiences with the process of implementing LA21 can provide both good examples and sound practices that facilitate the incorporation of sustainability principles into local government activities; these could contribute to the strengthening of sustainability in IDPs. Full integration of these two processes is not absolutely necessary and local authorities can benefit from the incorporation of some of the elements of LA21 into their IDP process. It is critical that LA21 and IDP processes are not seen as competing and separate processes, but rather that LA21 or local sustainability principles are incorporated within the various stages of the IDP.

SECTION 3: INTEGRATED DEVELOPMENT PLANNING

3.1 What is Integrated Development Planning?

Integrated Development Planning (IDP) is a participatory planning process aimed at developing a strategic development plan to guide and inform all planning, budgeting, management and decision-making in a municipality. It views development problems and solutions in an integrated, multi-dimensional way. It seeks to support the appropriate integration of sectoral strategies, in order to achieve the optimal allocation of scarce resources between sectors and geographic areas and across the population in a manner that promotes sustainable growth, equity and the empowerment of the poor and marginalized (IDP, 1995). It is therefore a process that is closely aligned with the principles of sustainable development. IDP is the key planning tool in South Africa at present and so provides a vehicle or mechanism through which sustainability principles can be integrated into development planning in local areas.

An IDP is a process through which municipalities prepare a strategic development plan, for a five-year period. The IDP is the “principle strategic planning instrument, which guides and informs all planning, and development, and all decisions with regard to planning, management and development in the municipality (Municipal Systems Act No 32 of 2000, S35 (1)).” According to the Municipal Systems Act all municipalities (i.e. Metropolitan Councils, District Municipalities and Local Municipalities) have to undertake an IDP process to produce Integrated Development Plans. The IDP is a legislated plan that supercedes all

other plans that guide local development (DPLG and GTZ, 2001). The Municipal Systems Act lists two main principles to be adhered to in the IDP process, namely:

- Planning must be developmentally oriented. Planning must support the role of local government as an agent of development and therefore an IDP is a tool for developmental local government; and
- Planning must take place within the framework of co-operative governance. Municipal planning cannot take place in isolation. It must be aligned with the plans and strategies of national and provincial government as well as other municipalities.

Sustainability principles should provide the framework within which an IDP is developed. i.e. the 'circle' which forms the framework for the IDP (see Figure 2). Environmental concerns should also be included as a separate issue i.e. a focus in their own right, or as a 'slice', so as to ensure that specific environmental issues are addressed in the IDP process (see Figure 2). The IDP Guides contain many of the social and economic principles relevant to environmental issues and so in this document the environmental concerns within this 'slice' are more heavily biased towards natural environment issues. However, the inter-relationships between and interconnectedness of biophysical, social and economic systems and issues must be recognised in the drive towards sustainability.

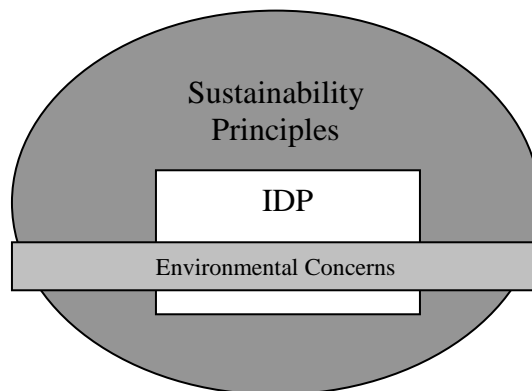


Figure 2: Sustainability as a framework and a 'slice'

Planning and development takes place within the environment and therefore it is critical that sustainability principles are integrated into all phases of the planning process. The environmental assets of an area for which an IDP is being prepared should form the starting point for planning and decision-making, since it is the environment that provides the opportunities and constraints for development (Oelofse, G, 2002). Figure 3 below shows the relationship between the IDP and sustainability.

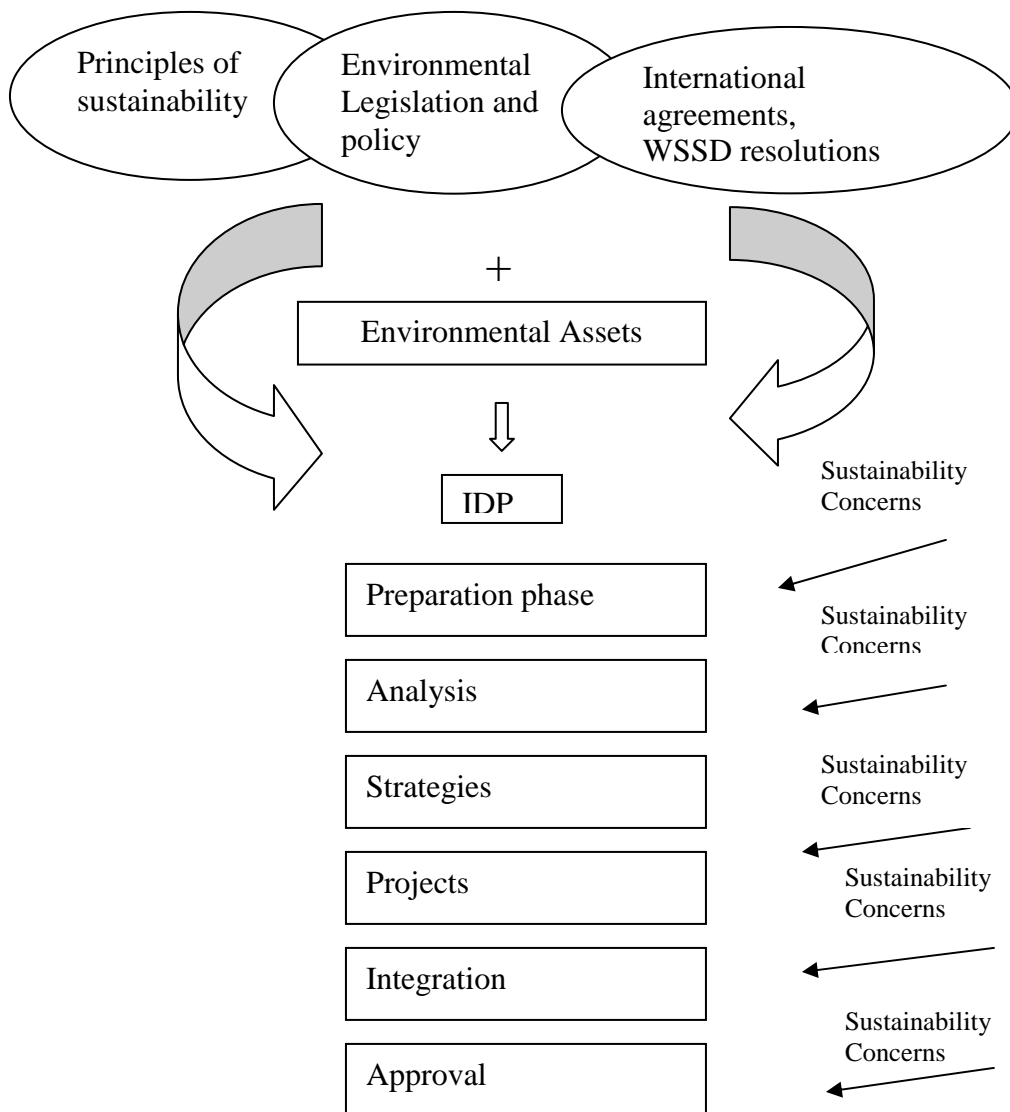


Figure 3: The relationship between IDP and Sustainability

3.1.1 What are the minimum content requirements of an IDP?

The Municipal Systems Act 32 of 2000 lists minimum requirements in terms of the content of the IDP, without which the plan cannot be legally adopted. These requirements are listed below. The link between these requirements and sustainability is provided by the text in italics.

- An assessment of existing levels of development, including the identification of communities excluded from services;
An assessment of the environmental assets upon which this development depends or will depend

An assessment of environmental opportunities and constraints in terms of service provision and development.

Identification of causal factors of environmental degradation and environmental risks linked to current development.

- A vision for long-term development, with special emphasis on the municipality's development and internal transformation needs;
A vision that is based upon and supports the principles of sustainability.
- Development priorities and objectives, including local economic development aims;
Development priorities should be assessed in relation to criteria for sustainability: objectives should include meeting sustainability goals and targets. Major environmental problems and threats must be reflected in the objectives.
- The Development strategies, which must be aligned with national and provincial plans and planning requirements;
Strategies should be informed by and developed with the guidance of sustainability principles. The environmental implications of alternative strategies need to be examined. Specific strategies should be closely aligned with the goals of environmental strategies and guidelines and should meet the requirements of environmental legislation and policy.
- A spatial development framework, including basic guidelines for land use management;
An environmental sensitivity map, which includes all environmental assets, problems, and areas of environmental sensitivity, should inform the spatial development framework. The 'value' (economic, social, ecological, spiritual, etc.) of various environmental assets (eg public open space) should also inform the spatial development framework.
- The operational strategies;
These should not compromise sustainability principles. Certain operational strategies will require detailed environmental assessment, mitigation measures and even environmental management plans. Operational strategies to achieve the aims of environmental policies will also need to be developed and should be linked to environmental strategies, environmental policies and environmental management plans.
- Disaster management plans;
These should include environmental risks and hazards.
- A financial plan, including a budget projection for at least the next three years; and
Budget should be made available for specialist environmental studies and for the use of environmental management tools and implementation of environmental management plans. Budgets should reflect the real costs and value of environmental resources where possible.
- The key performance indicators and key performance targets.
These should form part of a set of sustainability indicators that are developed for the IDP.

The various phases of the IDP process are presented in Appendix A. The main planning events and outputs are listed in Section 4 of this document according to each phase of the IDP process.

3.2 Management and Co-ordination

In terms of the Municipal Systems Act, the executive committee or the executive mayor has the responsibility to manage the preparation of the IDP, or assign this responsibility to the municipal manager. In most municipalities, the IDP coordinator reports directly to the municipal manager (DPLG and GTZ, 2001). The drafting of the IDP is therefore initiated and managed at the highest political and administrative level of the municipality. A council must review its IDP annually in accordance with its system of performance management. No single executive decision may be in conflict with the IDP.

3.3 The Role of the Provinces

The provincial minister for local government (MEC) may monitor the drafting process and assist in the drafting, adopting and reviewing IDPs. The MEC may also facilitate the alignment of the IDPs of various municipalities as well as align IDPs with national and provincial programmes. Municipalities are required to submit their IDP to the MEC once it has been adopted. The Municipal Systems Act does not require the MEC to approve the IDP. However, the MEC can request a municipality to adjust its IDP if it does not comply with the Act, or is not aligned with the plans and strategies of other affected municipalities or other spheres of government. The roles and responsibilities of the provincial line departments include:

- Coordinating training;
- Providing financial support;
- Providing general IDP guidance;
- Monitoring the IDP process in the province;
- Facilitating coordination and alignment between district municipalities;
- Facilitating alignment with sector department policies and programmes;
- Assessing IDPs;
- Contributing expertise and technical knowledge; and
- Being guided by IDPs in the allocation of resources.

Provincial environmental departments are also required to produce provincial environmental implementation and/or management plans. These provide an important source of information for IDPs, and are dealt with more fully in the following section.

3.4 Support Mechanisms

A variety of support mechanisms have been set up to build capacity around the IDP. The most significant of these are the development of a set of Guides, to which this document makes extensive reference, and the establishment of the Planning and Implementation Management Support System (PIMSS). PIMSS Centres have been established in many district municipalities in the country to provide technical support to municipalities in developing their IDPs.

The following section examines each phase of the IDP and provides guidance/ideas on potential means of strengthening sustainability in the main planning events and outcomes of the IDP.

SECTION 4: STRENGTHENING SUSTAINABILITY IN EACH PHASE OF THE IDP PROCESS

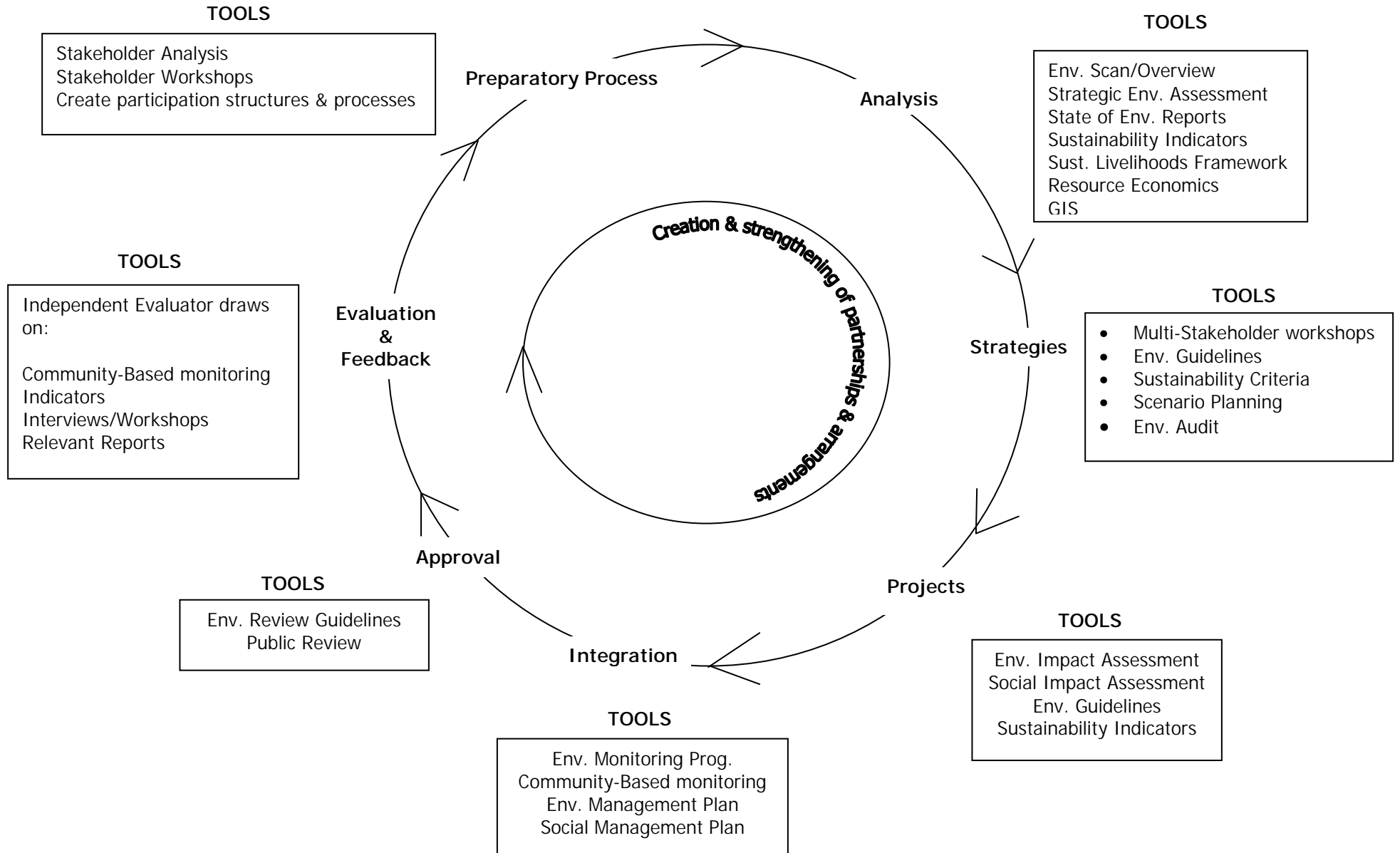
4.1 Introduction

The first part of the document examined the concept of sustainability and drew links between sustainability and integrated development planning. This section considers in more detail how sustainability can be strengthened in each phase of the IDP process. The focus is on ways to enhance sustainability thinking as well as on highlighting ecological/natural environment concerns that might be considered in an IDP. Figure 4 provides a diagram illustrating the different phases of the IDP process and the environmental tools that can be used to assist in addressing sustainability issues at each particular phase. The discussion of each phase is structured as follows:

- A brief outline of the IDP phase, and a discussion of where and how sustainability principles and approaches could be incorporated.
- A set of key questions to stimulate thinking. These questions are not comprehensive, but rather provide ideas on issues relevant to thinking about sustainability.
- A set of tools that might be useful. These tools are not purely technical but also include a range of analytical and procedural methods to assist in decision-making. These tools arise largely from the field of environmental management, and are often designed for use on their own. Since many aspects of development in a municipality will be considered in an IDP, and it is important to avoid duplication, tools may need to be adapted to fit the local context and the other processes being undertaken.
- A set of resources that could provide relevant information. The detailed references for these resources are provided in Appendix D.

Addressing sustainability issues during the early phases of the IDP process will ensure that at the IDP integration phase, the draft projects and strategies will already be reasonably consistent with sustainability principles. A basic activity in each phase of the IDP is to ensure that the key sustainability principles listed in Box 1 are considered at each phase of the IDP process.

Figure 4: Integrating Sustainability Issues into the IDP Process



It should be noted that this document does not explain the IDP process in detail. It is therefore important that this section is read in conjunction with the Integrated Development Planning Guide II: Preparation, and Guide III: Methodology (Department of Provincial and Local Government (DPLG) and the German Agency for Technical Cooperation (GTZ)). These are part of a set of Guides published by DPLG and GTZ, and all information concerning the IDP process comes from them.

4.2 Preparation Phase

The preparation phase sets up the organisation of the IDP as a planning process. It establishes “what is to happen when, by whom, with whom, and where” (Guide II, p.7). It sets up the participatory process, the programme for the development of the IDP, and the budget for the planning process. In addition, it provides for an identification of policy and legislation that needs to be reflected in the IDP.

What Does This Stage of the IDP Process Involve?

The Preparation Phase includes the following main planning activities:

- *Clarification of roles and responsibilities;*
- *Establishment of organisational arrangements;*
- *Design of a programme for the planning process;*
- *Creation of mechanisms and procedures for community and stakeholder participation in the planning process;*
- *Identification of national and provincial binding legislation, and other relevant policies, programmes and funding sources;*
- *Engaging with national and provincial departments to ensure alignment with their requirements;*
- *Development of a budget for the planning process*

The main outputs of this stage are:

- *An IDP process plan;*
- *An agreed participatory process;*
- *Understanding of policies, plans and programmes*

Source: IDP Guide II: Preparation (DPLG and GTZ, 2001)

How Can Sustainability be Strengthened in the Preparation Phase of the IDP?

The expectation that IDP planners should familiarise themselves with national and provincial policies, plans and programmes provides an important opportunity for

strengthening sustainability. Sustainability provisions contained in legislation are provided in Section 2. This legislation stresses the need to incorporate sustainability principles and adopt integrated and participatory approaches in planning and decision-making. Coordination of sustainability principles should be the key point of departure for the IDP, and should influence how the analysis is undertaken and how strategies and projects are identified. It is rarely the case that more than cursory attention is paid to principles at this stage, but sustainability principles can provide an important set of ideas to frame the IDP, and thus should be considered from the beginning of the process (see Figure 2 and 3). Environmental policies and programmes at national and provincial level can also be identified at this stage.

The IDP is intended to be a highly participatory process, and this is consistent with LA21 principles. From a sustainability perspective, the setting up of forums for participation should be seen as the first stage of a process of establishing long-term organisational structures and partnerships between the municipality, communities and stakeholders. These structures could provide a mechanism for ongoing citizen involvement over the long term, as well as for monitoring the implementation of policies, programmes and projects. They also provide the opportunity to raise issues that should inform the development of sustainability indicators. The development of partnerships may in addition offer alternative ways of responding to identified issues as opposed to the standard top-down approach.

In the first round of IDPs, interest-based stakeholders such as environmental groups and business were not always strong participants in the IDP process. Experience in organising around LA21 processes suggests the importance of specifically targeting interest groups, and engaging with them in interest based forums, as well as including them in the broader Representative Forum. Engagement specifically with environmental groups is of obvious importance from a sustainability perspective, but should not be confined to groups concerned solely with 'green agenda' issues. Setting up such representative structures at the outset of the IDP process would allow for a stronger articulation of environmental concerns in the IDP.

What Questions are Helpful to Ask in the Preparation Phase?

- What are the requirements and implications of environmental legislation at national and provincial level?
- What are the implications of national and provincial environmental policies and programmes for the municipality? These include for example policies such as coastal management, catchment management, conservation of biodiversity, pollution control and waste management.
- Does the participatory process meet the principles of procedural equity expressed in Guide II and in sustainability principles?
- Is there adequate representation of environmental groups, and do they reflect the range of environmental interests – beyond purely 'green' concerns?
- Are participatory structures set up in ways that allow partnerships to develop over time?

- Has specific budget been allocated to deal with the environmental analysis that will be required?

What tools can be used in the Preparation Phase?

- Stakeholder analysis
- Stakeholder workshops
- Creating participatory structures and processes

What Resources can be used in the Preparation Phase?

- Several provincial environmental departments have set up checklists which include legislation and policy
- Provincial environmental implementation and/or management plans provide a compendium of provincial legislation, policy and programmes, and also analyse the way environmental issues/impacts are dealt with in sectoral plans.
- Previous development processes within a municipality, including Local Economic Development Initiatives and Environmental Impact Assessments processes, are likely to have set up participatory structures or engaged with communities in particular areas. Stakeholder lists may already exist for an area. These could potentially be brought into the IDP process.

4.3 Analysis

The purpose of the analysis phase is to understand the existing situation within the municipality. Both technical analysis of information, and engagement with communities and stakeholders, are used to generate an analysis of the key conditions, trends, and issues. The analysis required goes beyond a descriptive account of conditions, to include an understanding of the causal factors underpinning priority concerns, and the linkages between issues. It thus calls for a complex and holistic analysis.

What Does this Stage of the IDP Process Involve?

The Analysis Phase includes the following main planning events:

- *Compilation of existing information;*
- *Community- and stakeholder-level analysis;*
- *Reconciling the compilation of existing information and the community/stakeholder analysis;*
- *Municipality-level analysis;*
- *Spatial analysis;*
- *Environmental analysis;*
- *Socio-economic analysis;*
- *Identification of municipal priority issues/aggregating priorities; and*
- *In-depth analysis of priority issues.*

The main outputs of this stage are:

- *An assessment of the existing level of development;*
- *Priority issues;*
- *Information on context, causes and the dynamics of priority issues; and*
- *Information on available resources and potentials.*

Source: IDP Guide III: Methodology (DPLG and GTZ, 2001)

How can Sustainability be Strengthened in the Analysis Phase of the IDP Process?

The analysis phase represents a key area where sustainability concerns can be strengthened. Guide III: Methodologies in fact calls for an environmental analysis, which can be used to consider many of the environmental issues which are often seen as missing in IDPs. These could include an analysis of the state of the natural environment, current trends and environmental issues, and their link to the social and economic dynamics in the area. The identification of the environmental assets of the area for which the IDP is being created is a critical first step in the analysis phase. The set of environmental assets are the resources upon which development in the area depends. Considering the environment as having a valuable set of assets that need to be protected and well managed provides a proactive approach. Assessments usually focus on environmental problems and this provides a more reactive and negative approach to managing development.

The following box provides examples of typical environmental issues that might be considered. From a sustainability perspective, it would be important also to understand the social and economic dimensions of these environmental issues, and the causal factors.

Box 2: Basic checklist to guide environmental analysis

- Are there areas with geological, soil or slope conditions that are problematic for construction eg steep slopes, waterlogged soils, unstable underlying rock such as dolomite?
- Are there water bodies with significant ecological, conservation or recreational value eg wetlands, lakes, estuaries, dams, rivers?
- Are there significant groundwater sources? Are these being threatened by any sources of pollution?
- Are there air, soil and water pollution problems?
- Are there vegetation areas of particular conservation or recreational value eg natural areas with special features such as attractive and shady trees?
- Are there areas where rare or endangered species of plants and animals are found?
- Are there areas of historical, archaeological or cultural value eg memorials, rock painting sites, areas used for initiation rites?
- Is there a rapid growth of informal settlements?
- What are the environmental health issues in the area?
- Are there adequate facilities and infrastructure such as water supply, sanitation, waste disposal, electricity, storm water drainage, housing, clinics, schools and recreational facilities?
- Do services provided contribute to quality of life and avoid harmful impact on the environment?
- Are there any envisaged developments with regard to urban agriculture, marine resources or water features?

The emphasis on a holistic and complex understanding of issues in the IDP is an important strength from a sustainability perspective, which also attempts to view issues in an integrated way. The challenge then is to infuse an understanding of issues with sustainability thinking. The Guides suggest a combination of technical analysis and community based issue analysis. Community based issue analysis can be an important way of engaging with groups around their experience and perception of environmental issues, and of raising awareness of these concerns. They can be used to ground environmental concerns in local experience. The raising of issues by stakeholders provides the first step in the development of sustainability indicators. The analysis phase can therefore be used to develop sustainability indicators that can be utilised for monitoring and assessment throughout the IDP process.

The case of Ugu District Council, which drew on LA21 principles, provides a good example of both issue analysis based on sustainability considerations and engaging with communities.

Box 3: Ugu District Council – Issue Analysis

The Ugu District Council used a variety of information sources and photographs of core issues to stimulate concrete cross-sector discussion on the causes of problems. Discussions were held with both communities and stakeholders using the photographs to link environmental issues with local concerns and felt needs. A Strategic Environmental Assessment was undertaken to enhance an understanding of environmental opportunities, constraints and interdependencies. Issues discussed were not simply ‘green’ but included fundamental issues of social sustainability and justice, such as the need for the provision of sustainable roads, cemeteries and energy. Links were made between ecological and social concerns within issues identified. For instance, given rising levels of AIDS and death rates, the sustainability of traditional burial practices was called into question since it has been associated with pollution of ground water and wetlands.

In-depth issue analysis summary sheets with photographs were created. These recorded the issue, community and district perspectives, causes, possible solutions and cross-sector linkages. Seven in-depth summary sheets based on LA21 principles were created.

What Questions are Useful to Ask in the Analysis Phase?

- What are the key environmental assets in the municipality, and how do they underpin local development?
- What are the key resources that must be protected from development?
- What is the state of biophysical resources and what are the current trends? What social and economic dynamics underpin these patterns?
- How do economic activities, livelihoods and social processes interface with the natural environment?
- How does the environment impact on social and economic processes? Do environmental problems increase levels of vulnerability?
- How sustainable are current patterns of development and settlement?
- To what extent have past development projects taken into account sustainability principles?
- What are the major trends that are likely to affect sustainable development in the area?
- What are the major environment laws, policies and programmes that must be considered?

What Tools Could be Useful in the Analysis Phase?

- *Environmental Overview* is a tool that uses a set of questions to identify key environmental issues. It is a streamlined approach that enables a quick assessment of the environment. Issues identified in an environmental overview can then be investigated in greater detail using other environmental management tools such as Strategic Environmental Management (SEA), Environmental Impact Assessment (EIA) and sustainability indicators.

- *State of Environment Reporting.* The purpose of State of the Environment (SOE) Reporting is to provide data for developing and monitoring sustainable development strategies, programmes and projects. SOE Reporting includes information on the causes and effects of environmental change and can provide recommendations for responses to such change (DEAT and CSIR, 1999). The information contained in State of the Environment (SoE) reports on social, economic and biophysical resources and systems, can be used in the analysis phase of the IDP process. SoE reports can also provide a useful structure for presentation of the information that is collected during the IDP Analysis Phase. A number of metropolitan areas and some provinces have compiled SoE reports.

Examples of SOE reporting at municipal level in South Africa are presented in Box 4.

Box 4: Examples of State of the Environment Reporting in South Africa

The Midrand State of the Environment Report provides information on air quality in Midrand, in relation to national guidelines and World Health Organisation (WHO) standards. This information could be used in the definition of limits of acceptable change and the IDP working objectives in the next phase. The Midrand State of the Environment Report also includes a guide to environmentally sensitive areas in Midrand. This guide contains a description of the location, importance and threats to the environmentally sensitive areas (eg Wetlands, riparian zones and areas of cultural and historical importance in Midrand). This description could be used in developing guidelines for development and conservation in the Strategies phase

The Cities Environment Report on the Internet (CEROI) project is an international project initiated by the United Nations Environment Programme (UNEP) and the Norwegian Government. The cities of Cape Town, Durban, Johannesburg and Pretoria are participating in this project. SOE Reports for these cities are available at the following website: <http://www.grida.no/city>.

- *Strategic Environment Assessment* can be an important tool of analysis as it typically includes a situation assessment or description of the current state of the environment; an analysis of trends in the social, economic and biophysical environment, and a description of relevant institutions, legislation, policies and plans (DEAT and CSIR, 2000). SEA's provide an overview of environmental opportunities and constraints and so are useful in terms of identifying the nature of development that the environment can sustain. Undertaking SEAs at this early phase of planning ensures that cumulative and large-scale effects that build up incrementally over time can be identified and addressed.
- *Sustainable livelihoods* is a methodology for assessing how communities derive livelihoods from alternatives available, especially in rural areas. Links are made to the use and sustainability of natural resources. This can be a useful tool for poor rural

areas, especially where information on the structure, function and coping mechanisms of households is available. See www.livelihoods.org and de Satge, et al, 2002.

- *Environmental sensitivity mapping* can be used to indicate areas which should be protected from development, or where special assessments need to be undertaken before development can occur. Mapping of this sort can also indicate significant environmental assets that must be conserved or well managed, and ecological 'hotspots' that should be addressed. This 'layer' of analysis can form an important input into the spatial framework, and can help to make it clear to both public and private developers where development will not be approved, or where special assessments will be required.
- *Sustainability indicators* comprise of a web of criteria, indicators, measures and standards. They provide a useful tool for monitoring and evaluating the current state of the environment, pressure in the environment and response to policies, programmes and plans. They provide early warnings signs of changes or problems in the environment and also reflect on the interconnected nature of environmental problems. Sustainability indicators need to be established at the outset of the IDP process since they are developed using issues raised by stakeholders. They provide information on trends and changing patterns and so can be used for monitoring and evaluation throughout the process. See INR, 2002.
- *Environmental matrices and checklists*, such as those developed by several provincial environmental departments, provide a useful set of questions or issues for ensuring sustainability concerns are addressed.

What Resources are useful in the Analysis Phase?

- Provincial Environmental Management Plans (EMPs) and Implementation Plans (EIPs), which have been undertaken by several government departments in the provinces, provide a wealth of information on national and provincial policies and legislation with regard to environment issues that may need to be considered in IDPs. EIPs provide information on government activities that may impact on the environment, and what measures are being taken by sectoral departments to minimise or avoid these impacts. EMPs on the other hand provide information on the environmental management functions of different sectoral departments, difficulties and challenges facing officials in implementing these responsibilities and how these are being addressed. Reference to these EIPs and EMPs during the development of IDPs will ensure that environmental issues and areas of concern are incorporated into planning, highlight areas of duplication and possible mechanisms for co-operation. The first round of these plans assess the way environment is considered in provincial departments and thus provides a useful perspective on a range of sectors to be considered in the IDP. They also consider areas of duplication, and mechanisms for co-operation, and are thus useful in understanding the institutional issues relevant to an IDP. Later rounds of EIPs/EMPs will consider the relationship between provincial and local government more directly.

- ENPAT is both a tool and source of information. It provides data on a range of environmental conditions on GIS, including sensitivity analysis.
- Previous SEA processes, Environmental Impact Assessments (EIAs), and environmental audits that have been undertaken within the municipality may assist in the collation of information in the IDP process. Information concerning the social, economic and biophysical environment can be obtained in EIAs; as well as information concerning project-specific impacts, which could relate to other developments of a similar nature.
- Other municipal plans and programmes will frequently contain information of relevance to an IDP.
- Indicators that have been developed for specific sectors such as the set of Criteria, Indicators and Standards developed for forestry in South Africa may be useful.

Box 5: Examples of municipal plans and programmes

- Environmental Significance Mapping and municipal plans
The City of Cape Town has prepared a GIS based city-wide environmental significance map. This database informs city-wide development plans, the Spatial Development Framework, the development of a Metropolitan Open Space System and is a tool against which development proposals are assessed. The Environmental Significance Database is updated annually and consists of seven layers of information, namely
 - a) Terrestrial ecology
 - b) Marine and coastal
 - c) Heritage
 - d) Geophysical
 - e) Visual
 - f) Aquatic (freshwater)
 - g) Areas of social significance
- Some metropolitan councils and other local authorities have undertaken land audits to establish land suitable for development, or where areas of sensitivity exist. For example, the Gauteng Open Space GIS system indicates areas of sensitivity, and can be used in the development of the Spatial Framework to indicate where development is potentially problematic.

4.4 Strategies

The Strategies phase is perhaps the most important part of the IDP since it is here that the municipality decides on its future development direction. The municipality develops a vision, a set of objectives to meet the vision, and strategies to fulfil objectives. Both the overall direction, and alternative strategies to meet the vision should be intensely debated. This idea is very different from the fragmented and incremental way in which municipalities have worked in the past. Perhaps as a consequence, in the first round of IDPs, the strategies phase was often weakly developed, and there was pressure to move directly from a needs analysis to projects (Rauch, 2002). There needs to be a greater emphasis on the strategies phase, and a stronger incorporation of sustainability principles within it.

What does this stage of the IDP process involve?

The Strategies Phase includes the following main planning events:

- *Formulation of the Vision and Objectives;*
- *Development of the Localised Strategic Guidelines;*
- *Formulation of the Development Strategies (including a District-wide Development Workshop); and*
- *Identification of projects.*

The main outputs of this stage are:

- *A vision of the municipality;*
- *Objectives for each priority issue;*
- *Development strategies for each priority issue; and*
- *Projects.*

Source: IDP Guide III: Methodology (DPLG and GTZ, 2001)

How can Sustainability be Strengthened in the Strategies Phase of the IDP Process?

The concept and principles of sustainable development can form a powerful focus for the strategy phase. These principles should be considered in the formulation of the municipality's vision, in the development of objectives, in the policies formulated as part of the localised strategic guidelines, and in the strategies developed. Central to this concept is meeting the needs of both current and future generations; and acceptance of the limitations imposed by society on the ability of the environment to meet those needs (Lebel and Kane, 1990). The vision developed to guide the municipal planning process should reflect the values that are important to the municipality's perspective of sustainability (ICLEI, IDRC and UNEP, 1996). Box 6 provides an example of an IDP vision incorporating sustainability principles.

Box 6: Examples of vision statements incorporating sustainability

By 2009 Ugu will have developed sustainable agriculture, tourism, and commerce with balanced infrastructure and social amenities. Its people will be empowered through education, skills development, good health and safety. There will be sufficient water services and land for development, investors and settlement. The imbalances of the past, gender equity, and the needs of the youth, the elderly and people with disabilities will have been seriously addressed.

Ugu IDP, 2002

'We must continuously strive to develop all the resources of the Richtersveld, including its natural, cultural and human resources, in a manner that is sustainable and benefits the people of the region so that our future will be secure.'

Richtersveld IDP, 2002

The strategies phase is the main arena within which the larger debates over alternative development paths should occur. It can play a significant role in highlighting major strategic decisions and trade-offs that the municipality must confront. Although the IDP is focused on a five-year period, it is possible to locate it within a much longer term framework, as for example, the Ethekewini municipality has done (see for example Box 9). Within this context, the elaboration of scenarios can be used to highlight the long-term environmental consequences of alternative development paths.

An orientation to sustainability in the vision can be translated into strategic objectives, which should reflect environmental goals and targets, amongst others. The following questions need to be asked in the formulation of the IDP working objectives:

- Do the working objectives developed incorporate the principles of sustainable development? It is suggested that the full list of IDP working objectives are evaluated in terms of an agreed set of sustainability principles such as those contained in Box 1.
- Do the working objectives relate to the maintenance and /or enhancement of the resources (environmental assets) identified in the Analysis Phase?
- What are the limits of acceptable change of the resources identified, that should be considered in the formulation of the objectives? These limits could be quantitative (levels of pollutant emissions), qualitative or spatially based (e.g. a defined urban edge beyond which development is not permitted).
- How can sustainability indicators be aligned with the strategic objectives so as to develop a streamlined single system of monitoring and evaluation?

The targets identified at the WSSD Johannesburg Summit can also be used to guide the strategic objectives.

Box 7 provides an example of strategic objectives related to air, biodiversity, water and waste.

Box 7: Examples of strategic objectives related to air, biodiversity, water and waste

ISSUE	OBJECTIVE
Poor air quality	Reduction of the ambient pollutant concentrations in urban areas to X percent within the next 5 years.
Loss of biodiversity	To maintain and improve ecosystem composition, structure and functioning within the municipality.
Poor water quality	To improve the water quality within the municipal area.
Lack of waste disposal facilities	To ensure that there are adequate and safe waste management facilities to meet the demand within the next five years.

Sources: Centre of Excellence for Sustainable Development

<http://www.sustainable.doc.gov/measuring>; CSIR et al., 2001; DEAT 2001; Hart Development Data, 1996; Meadows, 1998.

IDP Guide III suggests the development of Localised Strategic Guidelines for all cross-cutting issues, including environment. The intention is to ensure that these issues are considered when strategies are developed, and projects formulated. Localised Strategic Guidelines for Environment should outline how national and provincial environmental principles and policies will be applied locally, and can include recommendations on how to address the resource constraints identified in the Analysis Phase and to maximise the opportunities. Here reference must be made to the general sustainability principles (see Box 1) as well as the LA21 principles (see page 11). These recommendations should then inform the creation of alternative strategies in the IDP process.

Box 8 provides an example of localised sustainability guidelines relevant to service delivery.

Box 8: Example of Localised Sustainability Guidelines**Principles for sustainable service provision**

- Consider alternative types of services and educate people about the advantages and disadvantages of different options, so that they can make an informed choice.
- Consider affordability – both initial and ongoing. Affordability includes the ability of the community to pay and/or of the state to subsidise.
- Minimise the impact of services on the natural environment. Consider how installation of services will affect or be affected by geology, soil, slope, drainage, climate, vegetation and animal life.
- Technology used must be appropriate to social needs and capabilities of residents to operate and maintain the services in the long term. Training should be provided where necessary.
- Needs of people and their ability to pay changes constantly. Consider the need for future upgrading and expansion, and allow for flexibility.
- During planning, bear in mind that services are interrelated. For instance, the type of stormwater management you need depends on the water supply and type of sanitation system (as well as rainfall and slope).

Source: A Place Called Home. Sowman and Urquhart, 1998

Once objectives and strategic guidelines are developed, alternative strategies are formulated. The environmental issues considered in the analysis phase should be the subject of strategy development in their own right, but need to be considered in a holistic way, including social and economic dimensions. The municipality needs to indicate how it intends to manage the environment in a sustainable way. The development of a strong, clear environmental policy, set of environmental strategies, and principles against which decisions can be assessed, are critical to making environmental and sustainability concerns central to the IDP.

Box 9 provides an example of an environmental policy and strategies in Durban, now part of the Ethekewini Metropolitan Council.

Box 9: Example of an Environmental Policy and a Strategy

Environmental Management Policy for the Durban Metropolitan Area (Durban Metro, 1998).

Sustainability is one of the principles underpinning the Environmental Management Policy for the Durban Metropolitan Area (DMA)(1998). It is stated in this policy that, “Environmental management should seek to facilitate and enhance development which is sustainable, in order to meet the needs of present generations without compromising the ability of future generations to meet their own needs. This includes the sustainable use of resources, and should reflect a balance between social justice, economic efficiency and ecological integrity” (Durban Metro, 1998: 3).

A number of goals, objectives and policy statements are listed in the Policy according to the following themes: Environmental Management System; Development and Planning; Human Health and Safety; Pollution and Waste Management; Environmental Resource Management and Education, Training and Awareness. These goals, objectives and policy statements may assist in translating the NEMA principles into Localised Strategic Environmental Guidelines for Durban. For example, the NEMA principle related to waste management could be “localized” using the following objectives and policy statements from the Environmental Management Policy:

Goal:

To contribute to a sustainable economy and a clean and healthy metropolitan environment through establishing an integrated system of pollution and waste management.

Objective:

To develop an efficient system of reducing and managing substances produced in the DMA that are hazardous to human health and the environment.

Policy statement:

Local government shall co-operate with industry to phase out the usage of hazardous elements and materials in the DMA, as part of the national waste management strategy.

(Environmental Management Policy for the Durban Metropolitan Area, 1998: 19 and 22)

Box 9: Continued*The Durban Metropolitan Open Space System (D'MOSS)*

The Durban Metropolitan Open Space System (D'MOSS) Framework Plan is an example of an environmental strategy in Durban.

The purpose of this plan is to “provide a framework for the physical development, conservation and management of the open space system within the recently established DMA (Durban Metropolitan Area) (Durban Metro, 1999: 1). “ The D'MOSS Framework Plan includes identification of the open space asset within the DMA and the management actions required for each open space land cover type (eg forests, grasslands, rocky shore, wetlands) within each catchment. This plan therefore relates to the NEMA principle concerning the use and exploitation of renewable resources.

The development of a spatial framework is a legal requirement of the IDP. The spatial framework provides both an indication of the desired spatial pattern of development over the long-term, and the location of prioritised investment over the duration of the IDP. Although the Guides suggest that this be done in the Integration phase, it is more usefully developed under Strategies, as an extension of Strategic Spatial Guidelines, allowing more time to discuss its implications.

The analysis of environmental assets and sensitivity conducted in the previous phase can provide an important layer in developing both the Strategic Spatial Guidelines and the Spatial Framework. In terms of legislation (see page 10) a Strategic Environmental Assessment must be undertaken to inform the Spatial Development Framework. This provides an important opportunity for ensuring that environment concerns are considered and integrated into spatial planning. A 'layer' of this sort can be used to provide guidance on the location of environmental assets and constraints highlighting where development should be avoided; and where special assessments need to be conducted for particular activities. The development of the spatial framework will need to take account of competing demands for land, particularly in metropolitan areas. A critical issue in practice is likely to be the debate over conservation of land seen as sensitive versus land for the development of well-located low-cost housing. Both 'sides' are consistent with sustainability thinking – the former due to its emphasis on preserving environmental assets, and the latter due to its impact in reducing transport and energy demands, its lower cost for low-income households and better access to employment, and by limiting urban sprawl with its impact on land on the periphery. There is no easy answer to this debate, but it is important that it is dealt with

directly in the strategies phase, rather than on a piecemeal basis, where it is difficult to see the 'bigger picture'

An important part of the IDP is the debate over alternative strategies to meet strategic objectives. This is a process in which the environmental trade offs between alternatives can be highlighted and debated, and where alternatives can be assessed against sustainability principles and policies. The criteria for deciding between alternative strategies should be formulated with the participation of all sectors (e.g. representatives from the community and from the social, economic and biophysical sectors). As an input into the overall list of criteria, it is suggested that the Localised Strategic Guidelines and the Working Objectives are translated into criteria for the evaluation of alternative strategies. This will ensure that national, provincial and local priorities are included in the list of criteria and that there is consistency between the strategies and the original objectives identified.

What Questions are Useful in Developing Strategies?

- How can the environmental opportunities and constraints in the Analysis Phase be addressed in order to achieve the working objectives identified?
- What are the implications of each strategy for the environment, and the sustainability of resources?
- Is the proposed strategy compatible with sustainable development principles, the local environmental policy and strategies?
- What are the implications of national, provincial and local environmental policies, strategies and programmes for the IDP, and how can a positive linkage be created (e.g. Catchment management, coastal management)?

What Tools can be used in the Strategies Phase?

- Reference to the *Strategic Environmental Assessment* (SEA) undertaken during the analysis phase is important in this stage, as it can be used to highlight environmental issues associated with key choices and trade-offs, as well as cumulative impacts associated with a particular strategy.
- *Environmental Audits and Resource Economics* provide a scientific base for decisions where major choices have to be made, but are expensive, and can probably only be used by well resourced municipalities, or where well defined and highly significant trade-offs are to be made.
- *GIS* can be used for the spatial recording and analysis of data. GIS is a powerful tool for assessing different elements that should be taken into account in decision making.
- *Multi-Stakeholder Workshops* can be used to debate the implications of alternative strategies, as well as to highlight sustainability issues, and to broaden an understanding of these concerns. For example, in the Ugu IDP, a two-day Strategies workshop enabled debate on alternative strategies required to address identified issues. Sustainability principles were used as a criterion for assessing strategies. Workshops of this sort can draw on the Representative Forum, but could also draw in additional groups to ensure that a range of interests are represented.

- *Sustainability Criteria and Indicators.* Sustainability criteria and indicators can be used in the Strategies phase as they provide a holistic overview of sustainability and are therefore useful in guiding the development of strategies. They provide information on the current state of the environment and as well as pressures on the environment and therefore can guide decision making with regard to the assessment of alternative strategies. They should also be closely aligned with or form part of the objectives of the strategy phase.
- *Environmental Guidelines or Environmental Strategies* that have been developed for specific sectors or provincial or local areas should be considered in the formulation of strategies and objectives. Environmental guidelines and environmental strategies provide specific information on how to address environmental issues and these need to be used in assessing alternative strategies. They can form part of the set of criterion used to assess alternatives. For example, environmental guidelines developed for low cost housing in South Africa can provide a useful framework to guides the development and assessment of alternative strategies. They are also useful in the development of specific objectives.

Box 10: The use of environmental strategies in informing the IDP process

The City of Cape Town's Draft Biodiversity strategy

Cape Town is located within the Cape Floristic Kingdom, one of only six floral kingdoms in the world. It is the smallest of the world's floral kingdoms but also one of the richest with a high proportion of endemic species (i.e. species which occur nowhere else) and endangered species.

The goal of the Biodiversity Strategy is to ensure the long-term conservation, protection and enhancement of Cape Town's unique biodiversity. To achieve this, the draft strategy has identified seven strategic objectives, namely to:

- Establish a Primary Biodiversity Network of reserves and protected areas.
- Establish a Secondary Biodiversity Network incorporating for example public open spaces and river corridors to enhance the protection of biodiversity.
- Conserve rivers and wetlands as ecological corridors and links.
- Manage invasive alien vegetation which poses one of the biggest threats to biodiversity.
- Develop and implement Biodiversity legislation.
- Establish a Biodiversity database and monitoring system to facilitate effective decision-making.
- Promote Biodiversity education and awareness, as knowledge is empowerment.

The City of Cape Town's Coastal Zone Strategy

The City of Cape Town has developed a Draft Coastal Zone Strategy that integrates the management of social, economic and natural coastal issues. This is achieved by adopting a holistic approach to dune management, the optimisation of recreational activities, management of infrastructure, safety and security and others within one city wide strategy. This is strengthened institutionally by the management and implementation of the strategy by a coastal technical co-ordinating committee (officials) and a coastal steering committee (Directors) that represent all relevant line functions within the administration that play a role in coastal management.

- *Scenario Planning.* This is a standard part of strategic planning in which different scenarios for the future are developed in order to understand the implications of different possible futures, and to make conscious choices about future directions for development. By considering the environmental costs and benefits of the different scenarios, those planning scenarios which promote sustainability can be identified.

What Resources can be used in the Strategies Phase?

- State of the Environment (SOE) Reporting discussed above can be a useful source of information concerning the limits of acceptable change of various resources. This information should be considered in the development of the IDP working objectives. SOE Reporting can also assist in the formulation of Localized Strategic Guidelines in the IDP process
- Provincial EIPs and EMPs provide information on sector specific environmental issues and how these are being addressed, as well as institutional arrangements relevant to environmental management issues.
- Relevant national and provincial legislation and guidelines
- Existing municipal reports, policies and plans, particularly spatial and sectoral plans are likely to provide information of relevance to decision-making.
- Policies, objectives and standards may exist, on an international (eg World Health Organisation (WHO) standards), national (eg SABS standards, National Environmental Indicators), provincial (eg Environmental Implementation Plans) and regional level (eg Resource Quality Objectives (RQO) will be defined in terms of the National Water Act 36 of 1998). Information on how RQO may assist in the Strategies Phase is given in Box 11. These objectives and standards may assist in defining the levels of acceptable change of a resource that should be considered in the development of the IDP working objectives. They may also need to be considered in the development of Localized Strategic Guidelines.

Box 11: The National Water Act 36 of 1998

The National Water Act 36 of 1998 (the Act) obliges the Minister to develop a classification system for water resources (ch3 s 12 (1)). Once the classification system is established, the Minister must determine the class of each significant water resource and its related Resource Quality Objectives (RQO). These RQO are based on the class of the water resource. (Glazewski, 2000)

Once the RQOs have been set, license applicants are required to show their use of water cannot be foreseen to negatively impact on the RQO. (Xu, et al, Water Research Commission, 2001)

- It is stated in the Act (ch3 s 3(3)) that the RQOs may relate to:
- the Reserve³;
- the instream flow;
- the water level;
- the presence and concentration of certain substances in the water;
- the characteristics and quality of the water resource and the instream habitat⁴ and riparian habitat⁵;
- the characteristics and distribution of aquatic biota;
- the regulation or prohibition of instream or land-based activities which may affect the quantity of water in or the quality of the resource; and
- any other characteristic of the water quality in question.

The RQOs would therefore provide information on the goals and/or limits of acceptable change for the management of a significant water resource, within certain defined management classes (Xu, et al, Water Research Commission, 2001). These goals and/or limits of acceptable change will provide important information that may influence, for example, the nature of land use activities permitted in a certain area or the water supply targets set. For example, in a groundwater recharge area, the RQOs may set goals for the quality of water infiltrating to the aquifer. This would restrict potentially polluting activities such as the siting of petrol stations and landfills. The RQO's could therefore provide an input into the formulation of IDP objectives. Furthermore, the RQO's may provide relevant information for the formulation of Localized Strategic Guidelines related to the NEMA principle concerning the use and exploitation of renewable resources.

³The "reserve" is the quantity and quality of water required to satisfy basic human needs and to protect aquatic ecosystems for ecologically sustainable development (summarized from ch1 s1(xviii)).

⁴ This includes " the physical structure of a watercourse and the associated vegetation in relation to the bed of the watercourse (ch 1 s1 (xi))".

⁵ This includes the physical structure of a watercourse and the associated vegetation (summarized from ch1 s1(xxxi)).

4.5 Projects

Once strategies are developed, a series of projects are identified to give effect to the strategies. The purpose of the Projects phase is to develop project proposals, and to undertake sufficiently detailed project planning to ensure that there is an effective link between planning and delivery. The projects are developed by task teams comprising relevant stakeholders and professionals. The choice and design of projects, and the development of indicators to measure their success, are areas where sustainability should receive attention.

What does this stage of the IDP process involve?

The Projects Phase includes the following main planning events:

- *Formulation of project task teams;*
- *Allocation of preliminary budgets per project; and*
- *Designing project proposals.*

The main outputs of this stage are:

- *Indicators for each objective;*
- *Outputs for each project with spatial locations and targets;*
- *Major activities to be undertaken (including a description of time frames and responsible agencies); and*
- *Budgets and sources of finance.*

Source: IDP Guide III: Methodology (DPLG and GTZ, 2001)

How Can Sustainability be Strengthened in the Projects Phase of the IDP Process?

The intention of the IDP is to ensure that projects cascade from strategies, and that an integrated set of projects, which collectively give effect to strategies and objectives, are formulated. In practice, however, projects are sometimes chosen on a political basis, or are drawn from an existing pool. From a sustainability perspective, it is important to ensure that there are good linkages between the issues identified, the objectives and strategies, and projects. The case of Ugu IDP provides an example of links between strategies and projects.

Box 12: Links between Strategies and Projects in the Ugu District IDP

Strategy:

Integrated environmental management/sustainable livelihood development programme for the entire District:

Proposed Projects:

- Ocean-based and inland sustainable livelihoods feasibility study
- Environmental management/hands on education programme for community driven ocean harvesting and agricultural enterprises for sustainable livelihoods
- Community based agricultural enterprises monitoring project

Although the intention of the IDP is that there will be a close fit between strategies, projects and budgets, in practice this is difficult to achieve since most local governments are poorly resourced, and rely on funding through national and provincial departments and parastatals to finance projects. In this context, it is likely that projects identified will be far in excess of existing resources, and that some form of prioritisation process will occur. It is critical that sustainability principles, and/or criteria developed from objectives and strategic environmental guidelines are considered as a key factor in prioritisation.

Both the choice of projects and the detailed design of project proposals are areas where consideration of environmental issues needs to be strengthened. It is often in the sphere of implementation that environmental issues are neglected. It is desirable that Task Teams include members who are aware of environmental issues, that budgets are available to undertake the necessary environmental investigations, and that the environmental impacts and implications of particular activities is considered. Proposals for projects and their location need to be checked against the spatial framework, and its environmental component, which would be based on the sensitivity and assets mapping in the analysis phase. It will not necessarily be possible to develop project proposals to the level of detail required for implementation, but it is important that environmental concerns are not neglected at this level. Potential environmental impacts should at least be identified at this stage and a preliminary assessment made as to whether significant negative impacts can be addressed. The reason for this is that many activities will legally require an Environmental Impact Assessment (EIA) and the development of Environmental Management Plans. Thus if projects identified have failed to address environmental issues, lengthy delays in approval could be experienced. In some cases, identified projects could be refused on the basis of the EIA. Projects that will require EIAs should thus be clearly indicated. It is important to avoid the impression that the IDP gives permission in its own right for particular activities: the IDP is a strategic document that does not necessarily provide finality to such issues.

The design of projects can also benefit from the holistic orientation of sustainability thinking. Although there is often a tendency to treat projects in a sectoral way, as belonging to particular departments, the IDP Guides emphasise understanding development problems in a multi-dimensional way, and developing integrated solutions. Thinking about the economic, social, and ecological dimensions and impacts of projects is an important way of strengthening sustainability.

Finally, improving environmental awareness, developing environmental capacity and promoting an understanding of sustainable development within local government, are important ways of enhancing sustainability, and might usefully be cast as projects within the IDP.

Sustainability indicators, developed during the analysis phase of the IDP, should be used during the projects phase. A set of sustainability indicators will include criteria, indicators, measures and standards or aspirational goals (INR, 2002). Some of the standards or aspirational goals can be used as the objectives in the project phase. Trends and environmental 'hotspots' identified by the indicators should be used to guide the prioritisation and choice of projects. Sustainability indicators can also be used for the

monitoring and evaluation of projects. It is suggested that a set of sustainability indicators is developed during the analysis phase. This would include aspects that need to be monitored and evaluated in each specific project. Other indicators may be developed and added to the set that specifically address the projects. However, all of these indicators would be included in one set so as to streamline the monitoring and evaluation process. Key performance indicators for the projects would be included under the governance and management theme of the set of sustainability indicators (the four themes are aligned with sustainability principles and are ecological, social, economic and governance and management)

What Questions are Useful in Developing Projects?

- Do projects meet sustainability criteria and principles?
- Are the proposed projects likely to result in any significant environmental impacts?
- Are there mitigation measures that could minimise or avoid harmful environmental impacts?
- Have environmental assessments that will be required been budgeted for?
- Do Task Teams include people who are knowledgeable about environmental issues?

What Tools can be used in the Projects Phase?

- *Environmental Impact Assessment (EIA)* is an environmental management tool specifically designed to assess the impacts of development on the environment. An EIA is project specific procedure that is a requirement of the Environmental Conservation Act (1989, amended 1997). An EIA is required for a development that requires a change in land use, or for projects that are associated with particular activities or which are located in sensitive environments. EIA's include an extensive public participation process that lead to the identification of key issues and concerns. Specialist environmental studies may also form part of an EIA. These provide detailed environmental information that is very useful in an IDP. An EIA can result in the development of an Environmental Management Plan, which provides guidelines on the mitigation of environmental impacts associated with project implementation.
- *Social Impact Assessment (SIA)* forms part of an EIA but needs to be conducted as a separate specialist environmental study. SIA is often confused with the public participation process within an EIA. An SIA provides very specific information and analysis of the social impacts of a project (Scott, et al, 2001). It includes a list and profile of primary and secondary stakeholders, a history of the area and affected communities, the social context within which the development will take place with particular emphasis on the impact on vulnerable communities, future development plans for the area and issues and concerns raised by stakeholders.
- *Environmental Guidelines and Environmental Strategies* that have been developed for specific sectors or provincial or local areas should be included in the design of projects. Environmental guidelines and Environmental Strategies provide specific

information on how to address environmental issues and these should be included in the design and implementation of projects.

- *Sustainability Indicators.* As discussed above sustainability indicators can be used to set objectives, as part of the criteria used to prioritise projects and in the monitoring and evaluation of projects. Specific indicators for projects should also be identified at this stage.

What Resources can be used in the Projects Phase?

- The Integrated Environmental Management Procedure guideline series (DEA, 1992) provides guidance on environmental assessment issues and processes. The Review Guidelines for Environmental Impact Assessment in the Cape Metropolitan Area-Addenda (deVilliers Brownlie Associates 2000) also provides useful information on decision-making principles and criteria to promote sustainable development as well as examples of international EIA best practice.
- Good examples of projects that meet sustainability criteria can be found on various websites, including the Habitat Best Practices database (www.bestpractices.org), and the ICLEI database (www.iclei.org). Journals with good case studies of projects include *Local Environments*, and *Environment and Urbanisation*.
- The set of criteria, indicators, and standards developed for sustainable forest management in South Africa provide a useful resource for the development of sustainability indicators for an IDP. See INR (2002), DEAT (2002) and Hart 1997.

4.6 Integration

The main purpose of the Integration phase of the IDP is to draw together the outcomes of previous phases, and to check that project proposals are in line with the vision, objectives, strategies and resources. Projects may also be refined and are drawn into programmes that work well together in terms of their contents, timing, and location. The harmonization process results in a consolidated set of programmes, including an environmental programme, and a spatial, financial and institutional framework for implementation. Ideally, the main conceptual work for these programmes should have been done in the Strategies phase through the development of strategic guidelines, and strategies. It is not appropriate to first begin to think about environmental policies and strategies, or the development of a spatial framework, at this stage. From a sustainability perspective, this phase then offers an opportunity to check the outcomes of the previous phases against sustainability principles, and to consolidate the development of an environmental policy and programme.

What Does this Stage of the IDP Process Involve?

The Integration Phase includes the following main planning events:

- *Screening of draft project proposals;*
- *Integration of projects and programmes; and*
- *Compilation of integrated sector programmes.*

The main output of this stage is:

An Operational Strategy including

- *Revised project proposals;*
- *Sectoral programmes;*
- *Financial/Capital Investment Plan;*
- *Integrated Spatial Development Framework;*
- *Integrated programmes related to cross-cutting dimensions (Local Economic Development (LED), environmental issues, poverty alleviation, gender equity and HIV/AIDS);*
- *Integrated Institutional Programme;*
- *Monitoring and Performance Management System (with indicators); and*
- *Disaster Management Plan.*

Source: IDP Guide III: Methodology (DPLG and GTZ, 2001)

How can Sustainability be Strengthened in the Integration Phase of the IDP Process?

While projects should have been checked against sustainability principles in the previous phase, the Integration phase does provide an opportunity to ensure that all projects are assessed against these principles, and against the objectives and strategies in the first phase.

What questions can assist in screening projects in the Integration phase?

- Is consideration of the social, economic and biophysical impacts and implications of the project included in its planning?
- Are the projects consistent with sustainability principles and criteria?
- How do the projects impact on the environmental assets of the area?
- Where environmental impacts have been identified, do feasible mitigation measures exist?
- Will the project be undertaken in a participatory way?
- Are the potential benefits of the project equitably distributed?
- Are the outcomes of the project likely to be sustainable (not only consideration of short-term gains)?

- Have the cumulative impacts of the suite of projects been considered in terms of the environmental analyses (e.g. SEA) undertaken in Phase 1 of the IDP process?
- Are there clear indicators for monitoring the progress made towards achieving the objective of the project?
- Does the institutional, financial and human capacity exist for the effective implementation of the project?

The criteria formulated in the Strategies Phase could also assist in the development of the criteria for the screening of projects.

The integration phase provides the opportunity to develop an overall sustainability framework, and to develop programmes, including an Integrated Environmental Programme, drawing together the various environmental policies, guidelines, strategies and projects. The case of Ugu District is interesting in the way it developed both a sustainability framework, and a sustainability programme, containing a set of strategies and projects.

Other aspects of the Integration phase can also be strengthened by a consideration of environmental concerns. As argued in the Strategies phase, the Spatial Framework, which is finalised at this stage, should include an environmental sensitivity and assets analysis that provides guidance on how to manage key environmental assets, where development should be avoided or specially assessed. The SEA undertaken as part of the development of the Spatial Framework should be used to ensure that environmental concerns have been included in the IDP process. The development of broad Land Use Management Guidelines should similarly incorporate environmental considerations. Likewise, the Disaster Management Plan, and several of the sector plans need to incorporate environmental concerns, although this should have been done at earlier stages.

The Integrated Institutional Programme indicates the organisational arrangements and management reforms that need to be undertaken to implement the IDP. Questions of training, environmental awareness, the institutional location of champions for sustainability and the environmental programme, will also be important issues for consideration here.

The Integration phase develops a 5-year financial plan, and capital investment programme. Environmental projects and the costs of environmental assessments need to be factored into these plans. Should prioritisation occur linked to the 5-year action programme, processes of prioritisation need to include sustainability as a criterion, as suggested under Projects.

Finally, the setting up of Monitoring and Review processes which incorporate sustainability considerations is a crucial activity and can strengthen the IDP. The development of sustainability indicators in the early phases of the IDP provide an important base for monitoring the overall state of sustainability in the municipality over the long term, and is a critical way of measuring the extent to which IDPs are achieving their broader objectives. The participatory structures set up in the first phase, and consulted with in all phases of the IDP, will also be an important base for monitoring and review over the long term. Following approval, monitoring and review can also be done by an independent evaluator

drawing on existing participatory structures, indicators developed, workshops, and relevant reports.

Box 13: Ugu District's Sustainability Framework, Programme and Strategies.

Sustainability Framework:

“The sustainability framework stresses that the developmental task of the IDP is that of changing the direction of local development towards sustainability so that poverty and social justice can be genuinely addressed while the economic base of the district is strengthened.

The sustainability framework is directed towards:

- Sustainable gender equity and barrier free access across the district
- Sustainable conservation and harnessing of natural assets
- Combating poverty by enabling the poor to achieve sustainable livelihoods
- Sustainable agriculture, poverty alleviation, tourism and economic development
- Sustainable infrastructure development
- Sustainable social services, health, water and sanitation provision
- Sustainable financial and institutional development”

(Ugu IDP, 2002, p.2)

Integrated Sustainability Programme:

The integrated sustainability programme addresses the following issues:

- “ High poverty levels and undeveloped employment opportunities
- Poor management of inland and coastal resources (dunes, wetlands, alien invasive plants, rare birds, and fauna and flora in general
- Inappropriate pesticide and medicinal plant use
- Unco-ordinated agricultural development
- A historical bias to ‘beach’ –‘urban’ development
- Various forms of pollution
- Inappropriate stormwater and wetland management
- Environmental degradation and associated health risks” (Ugu, 2002, p.3)

Strategies within the Integrated Sustainability Programme:

- Develop an integrated environmental management/sustainable livelihoods programme for the district
- Maintain and improve the coastal belt with the simultaneous identification and development of tourism products based on environmental assets
- Integrate the use of open space across the district
- Promote sustainable agricultural development
- Establish an integrated land use management system which is user friendly, tourist, community and environmentally sensitive
- Promote sustainable infrastructure development

What tools are can be useful in the Integration phase

- An environmental monitoring programme which monitors impacts (both positive and negative, expected and unexpected) and outcomes as well as compliance with assessment recommendations or conditions provides a useful means of monitoring the extent to which sustainability objectives and targets are being met. The development of a community-based monitoring system, ensures that communities affected by development are integrally involved in monitoring impacts, outcomes and identifying problems as they arise.
- An Environmental Management Plan will identify, quantify and specify the actions or procedures that need to be implemented during the project implementation phase so as to assure that impacts associated with the project are avoided, minimised or appropriately managed.
- A Social Management Plan, like an Environmental Management Plan (EMP) provides clear guidelines on the mitigation measures required to avoid, minimise or manage social anticipated social impacts, as well as monitor compliance with social assessment recommendations and conditions.
- The Environmental guidelines, policies and strategies developed in the Strategies phase can be used to check projects.
- Monitoring and review through representative structures, indicators, workshops/interviews, and relevant reports
- Environmental Management Systems (EMS) that are developed by Municipalities or as part of programmes or projects can be linked to the Integration phase of the IDP. An EMS would usually be developed as a separate process usually linked to the environmental functions of a municipality but it should be integrated with and should feed into the IDP process. The EMS developed for a municipality should take cognisance of the IDP.

Box 14: Community based monitoring in KwaZulu-Natal

Permit Advisory Panels: South Coast KwaZulu-Natal

Permit Advisory Panels (PAP) have been established along the Upper South Coast of KwaZulu-Natal to monitor effluent disposal in the marine environment. The PAP's consist of representatives of industry, communities, environmental NGOs and CBOs and the authorities (DWAF). These panels have developed both scientific and community based monitoring systems to monitor effluent disposal. In the case of the Sappi Saiccor PAP, a methodology for analyzing data collected by divers off the Aliwal Shoal has been developed and is used by the PAP to support the data collected by the environmental officer of Sappi Saiccor.

The Water Research Commission has produced a set of guidelines for including public participation in the permitting process, which requires that the PAP's are established and maintained. See Scott, 1999: Guidelines for including public participation in the permitting process, WRC Report KV125/00.

What resources are can be useful in the Integration phase?

- The Criteria, Indicators and Standards developed for sustainable forest management in South Africa provide a useful resource for monitoring and review. (see INR, 2002).
- The National set of Environmental Indicators for National State of the Environment Reporting developed by CSIR for DEAT (2002) provide a useful resource.
- The Integrated Environmental Management Guideline Series, Guideline Document 4 “Review” prepared by The Department of Environment Affairs (1992) and the Review Guidelines for Environmental Impact Assessment in the Cape Metropolitan Area (deVilliers Brownlie Associates, 2000) provide useful guidance on questions to ask, issues to consider during the IDP Integration Phase.

4.7 Approval

The purpose of this stage of the IDP is to ensure that all interested parties and stakeholders have been given a chance to comment on the draft IDP, before it is adopted by the Council. The main consideration here is the inclusion of environmental stakeholders in the review process.

What Does this Stage of the IDP Process Involve?

The approval phase includes the following main planning events:

- *Providing an opportunity for comments from provincial/national government;*
- *District-level workshop for horizontal co-ordination;*
- *Providing opportunity for comments from the public;*
- *Incorporating/responding to comments from the public, district and some provincial/national departments;*
- *Final adoption by the Municipal Council; and*
- *District-level summaries of local IDPs.*

The main output of this stage is:

- *An amended and adopted Integrated Development Plan.*

Source: IDP Guide III: Methodology (DPLG and GTZ, 2001)

How can Sustainability be Strengthened in the Approval Phase of the IDP Process?

In terms of the integration of sustainability into the approval process, it is important that all interested parties and stakeholders, including environmental stakeholders, are given sufficient opportunity to comment and that their comments are either incorporated into the IDP, or reasons are provided for not incorporating their comments (e.g. a Comments Report is produced which indicates the responses to the comments received). At Provincial level, the document will also be reviewed by the department in charge of Integrated Development Planning, and other departments, including the provincial environmental department. It is however crucial that the input of this department is provided throughout the process and is not confined to the approval stage. Nevertheless review processes do allow for the addressing of gaps, as has occurred in 2002, and this does provide a last chance opportunity to address missing concerns.

4.8 Evaluation and Feedback

Evaluation and Feedback should provide information and experience that ensures that there is continual improvement in the IDP process. Although this is not a formal part of the IDP process, it should be included as part of strengthening sustainability in the IDP process. Evaluation and feedback is usually not adequately addressed in planning and project cycles. Evaluation and feedback should be conducted on both the specific outcomes of the IDP and on the process of developing an IDP. Information and knowledge gained from evaluation should feed in to the next round of IDP development. Sustainability indicators are a very useful tool for evaluating and monitoring both the outcomes and performance of the IDP process. Community based monitoring provides local knowledge and experience that can be used in providing feedback on the IDP. Community based monitoring will also provide insight into the extent to which the IDP process has included local people through participation processes. Interviews and workshops held with all key and relevant stakeholders can also provide information that can be used for evaluation and feedback. Relevant reports that have emanated from the IDP or which are linked to strategies and projects can also provide useful material for the evaluation and feedback phase.

SECTION 5: CHALLENGES AND CONCLUSIONS

Local authorities shoulder environmental management responsibilities within a framework of limited resources and the pressures arising from the need to facilitate rapid development in previously disadvantaged areas. Although a worthwhile process, it is often difficult to

implement sustainability and local authorities face a number of challenges as they attempt the strengthening of sustainability within the IDP process.

It is important to recognise that these challenges exist so that expectations are realistic and actions that address sustainability can be tailored to suit the specific contexts of individual municipalities in South Africa.

The challenges that municipalities are likely to face include the following:

- Gaining a practical understanding of the meaning of sustainability that is applicable to the specific context of each municipality. IDP guidelines have adopted sustainability as both a cross-cutting dimension and as an independent sector. It is important that when strengthening the IDP both these ways of viewing the environment are considered. This will enable the strengthening of environmental concerns in all phases of the IDP but will also ensure that the environment is considered as an independent sector in its own right. Consequently, this important aspect of municipal activities is not neglected in any way.
- Adapting sustainability concepts and tools to the process of IDP. To ensure that sustainability considerations are effectively incorporated into the IDP process, principles of sustainability should be mainstreamed into the planning process, rather than being seen as a separate or competing process. Appropriate environment/sustainability tools should be identified and used flexibly and modified if necessary. The focus should be on integrating sustainability principles and considerations into planning rather than reorganising it.
- Developing the institutional structures and procedures required for a cross-sectoral approach to addressing sustainability issues. This requires changes in the way in which projects and programmes are developed and implemented.
- Developing and implementing strategies and projects that may not show short-term gains, but may assist the municipality in moving towards sustainability. This requires the balancing of short-term development demands and long-term sustainability benefits through the formulation of a variety of strategies and projects that satisfy both immediate and long-term needs.
- The growing of leadership. There needs to be a champion for sustainability in a municipality to facilitate both the initial and continuing incorporation of sustainability issues into IDP and local government activities. In addition, the establishment of strong political support for the strengthening of sustainability in both the planning and implementation of the municipality's IDP is important.
- Ensuring that there is adequate human capacity within the municipalities to embrace sustainability principles and approaches. Adequate capacity is vital for the effective planning, implementation and management of interventions for the strengthening of sustainability. In many cases there are insufficient numbers of people to carry out the necessary tasks. In addition, many decision-makers and service providers are inexperienced in the implementation of development strategies in an environmentally sustainable manner. Therefore the capacity of politicians, officials and service providers needs to be developed. This process requires time and resources, which are often in short supply at the municipal level.

- Developing support for overcoming resistance to the strengthening of sustainability within IDP. It is important to recognise that municipalities have large demands placed on them in terms of development needs, and moreover, despite the acceptance of sustainability principles at national level, several policies run counter to these principles, or make them difficult to achieve at local level. The inevitable tensions between the need for short-term delivery and longer-term quality of life and environmental considerations will need to be addressed through understanding arguments, and developing creative responses that meet expressed concerns. In addition, it is likely that some role players will view consideration of sustainability issues and environmental management as an unnecessary demand on the scarce resources of local government. If sustainability is to be accepted as a key principle within IDPs, strong links need to be made to local concerns, particularly the addressing of poverty, basic needs, and the quality of life of the poor. This does not deny the importance of 'green agenda' issues, but these should not be the sole focus of the environmental agenda. Those driving the process of strengthening sustainability considerations within IDP should expect to encounter resistance to the incorporation of sustainability principles into IDP process and must be prepared to champion these principles.
- Considering the local context. Sustainability cannot be achieved immediately nor through the application of a formula therefore the process of strengthening sustainability principles in IDPs should take careful note of the opportunities and constraints within a particular municipality. This will ensure that locally important sustainability issues are addressed in a manner that is appropriate to the available resources and capacity of a local authority. In other words, municipalities should start with what they can do immediately and plan to progress towards further strengthening of sustainability efforts.
- Obtaining baseline information concerning the current state of the environment and defining the limits of acceptable change of social, economic and biophysical resources. The availability of this information is essential for the strengthening of sustainability in many phases of the IDP. Often baseline data for key elements of sustainability is unavailable and needs to be specifically collected. In addition, obtaining the appropriate information requires that the correct questions be asked initially therefore role players need to know what kinds of information they need.
- Making good quality information available at the correct time. Those involved in IDP need to obtain useful information at the correct time in the planning process. Having good quality information timeously can improve the decision-making process and therefore the outcomes of the IDP.
- Making trade-offs between the various elements of sustainability (i.e. social, economic and biophysical concerns) that will lead the municipality towards its vision of a desirable future. Moving toward sustainability will require that municipalities make trade-offs between the benefits and negative impacts of development. These trade-offs are difficult to make and should be carefully considered before projects are implemented. Long-term benefits and impacts should be considered and the quality of environmental assets should not be compromised when making trade-offs.
- The identification of appropriate indicators and the development of an effective monitoring system. Monitoring is an important aspect of sustainability and should be strongly incorporated into the development and implementation of IDPs. Sustainability

indicators can play a key role in determining the success of development activities but are sometimes difficult to develop. Municipalities need to address this issue and develop indicators at the outset of an IDP process to monitor changes to quality of life, environmental assets and resources in areas under their jurisdiction.

Although it may seem that these challenges are overwhelming, especially for the smaller and most severely under-resourced municipalities, potential difficulties need to be kept in perspective. The IDP process provides many opportunities for the integration of sustainability principles into the planning and development functions of local government enabling a move towards greater sustainability at the local level. IDP should be seen as an opportunity to address not only social and economic issues but to incorporate natural environmental issues into plans and projects, enabling development that is integrated, holistic and contributes to an overall improvement in quality of life.

Given the challenges facing local authorities, this document provides an initial input into the strengthening of sustainability in the IDP process. It serves to assist key role-players in their efforts to take sustainability issues into consideration when developing strategic development plans and projects.

These activities towards strengthening of sustainability in IDP will take place in the unique contexts of particular municipalities. It is suggested that the elements and actions proposed in this framework document be incorporated into municipal IDPs in a manner that is appropriate to their particular levels of financial and human capacity. The selection of actions to strengthen sustainability should be applicable to local priorities and conditions. However, it is proposed that municipalities apply a principle of continual improvement to their actions. In this way municipalities should aim to continually improve their efforts to achieve sustainable development goals within their local area.

South Africa has a well established policy and legislative framework that requires that sustainable development and sustainability principles and approaches be integrated into planning, development activities and decision-making. IDP is a requirement of law in South Africa and so provides an ideal vehicle for putting sustainability onto the local government agenda. It is hoped that this framework will provide a useful platform for those responsible for Integrated Development Planning as they move toward sustainability.

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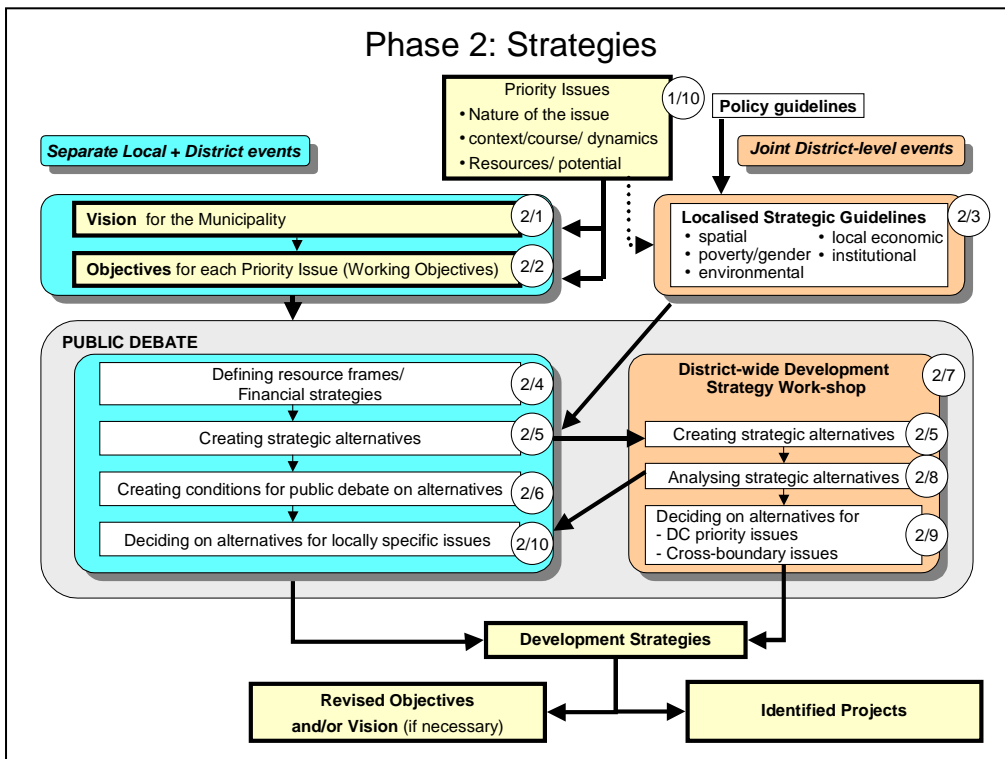
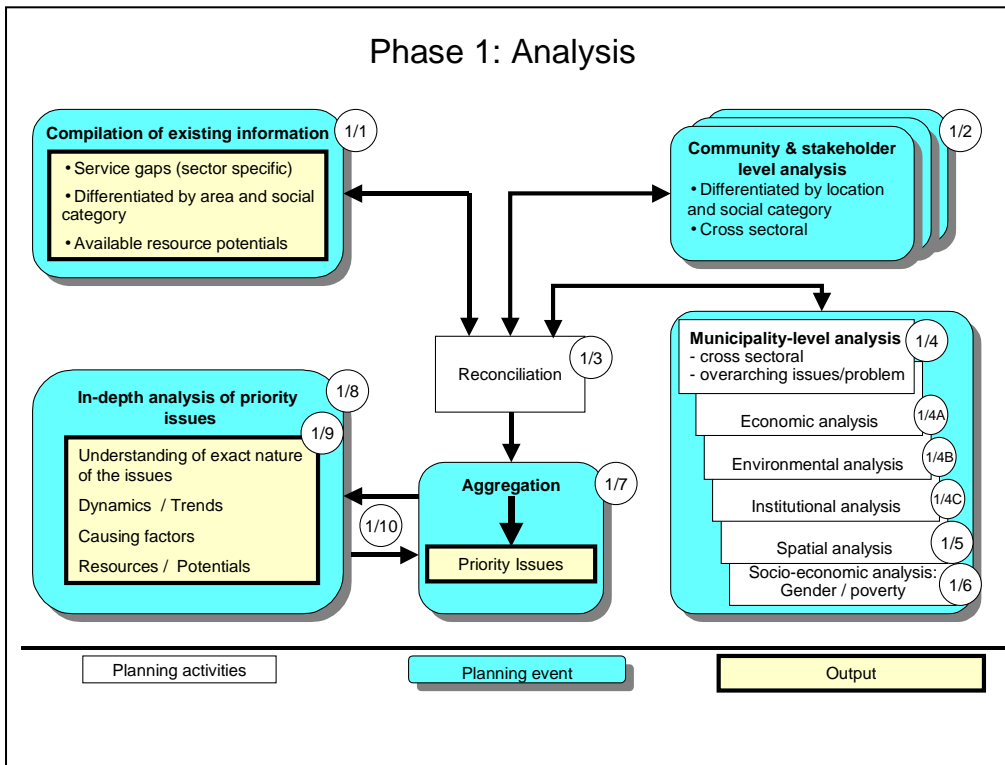
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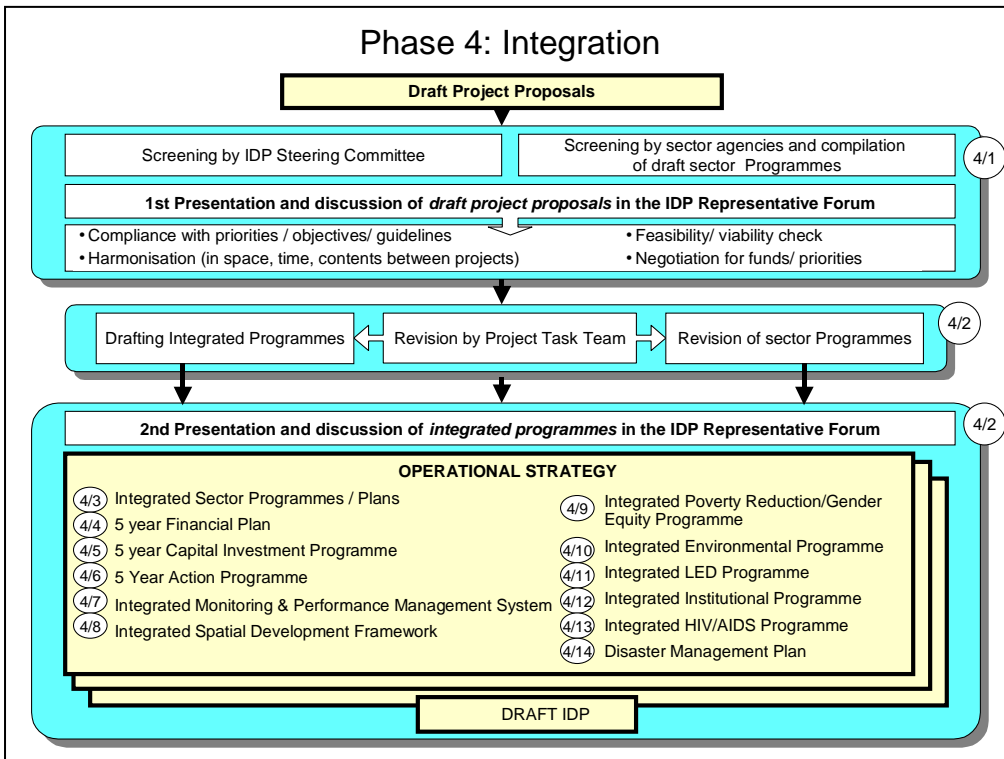
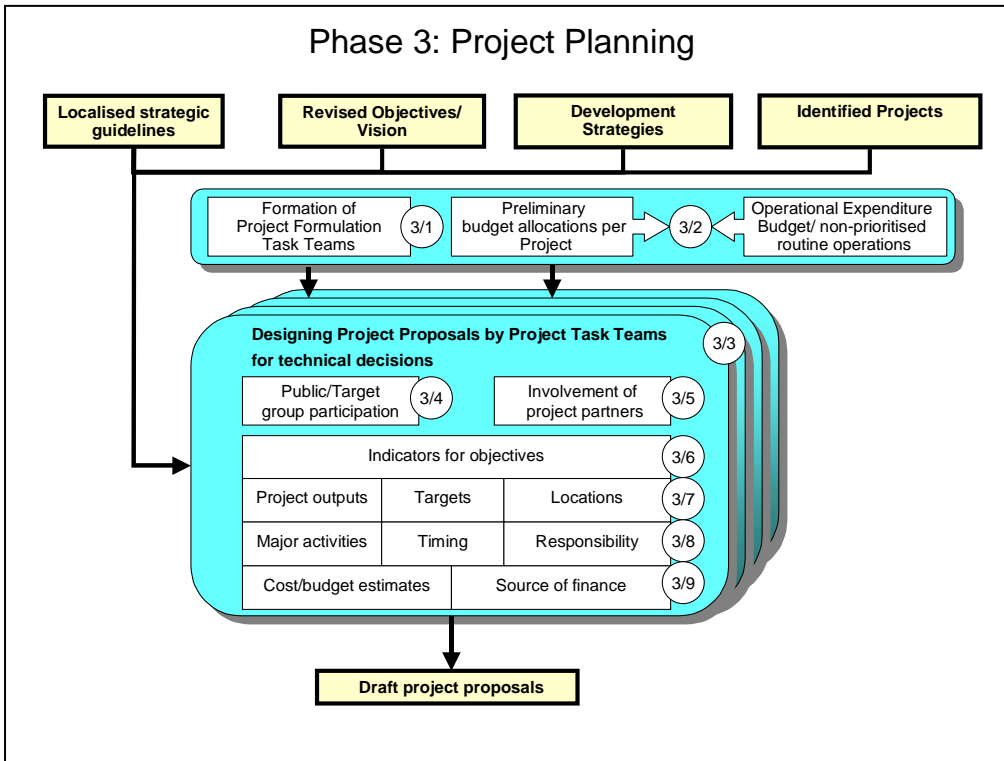
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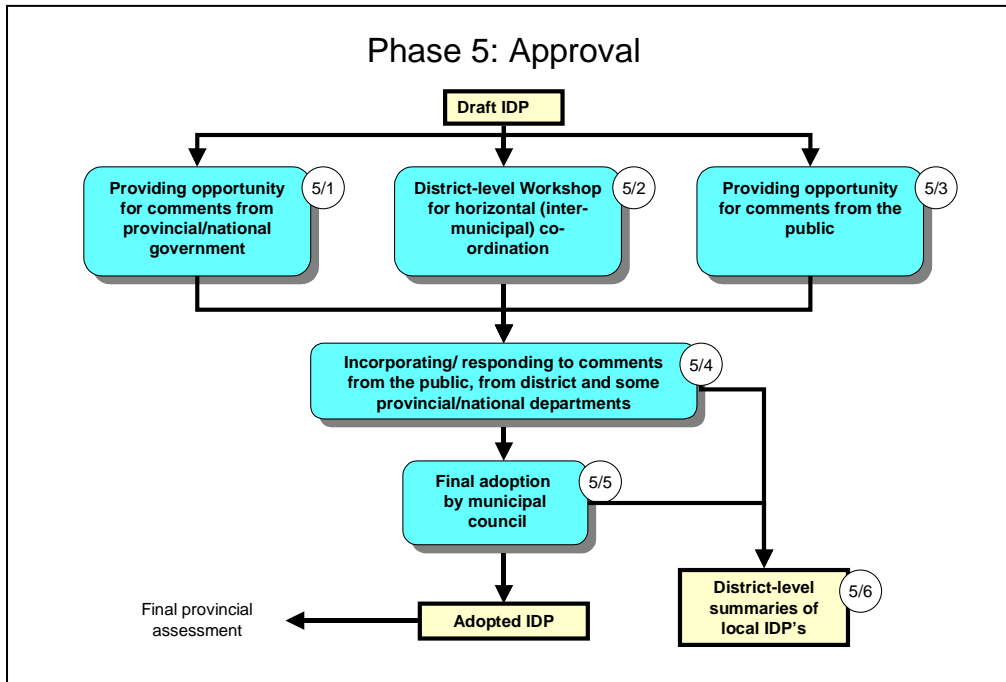
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APPENDIX A Phases of the IDP Process - Overview







Source: IDP Guide Pack : Guide III: Methodology; Department of Provincial and Local Government (DPLG) and the German Agency for Technical Cooperation, 2001:23.

APPENDIX B

National Environmental Management Principles

National Environmental Management Principles as contained in Section 2 of the National Environmental Management Act, 107 of 1998

<i>THEMES</i>	<i>NEMA PRINCIPLES</i>
Sustainable Development	<ul style="list-style-type: none"> ▪ Development must be socially, environmentally and economically sustainable. ▪ Pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied. ▪ Waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner. ▪ The use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource. ▪ The development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised.
Environmental Justice and Equity	<ul style="list-style-type: none"> ▪ Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interest equitably ▪ The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers must be respected and protected. ▪ The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage. ▪ Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons. ▪ Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination. ▪ Negative impacts on the environment and on peoples environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.
Participation, Empowerment &	<ul style="list-style-type: none"> ▪ The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the

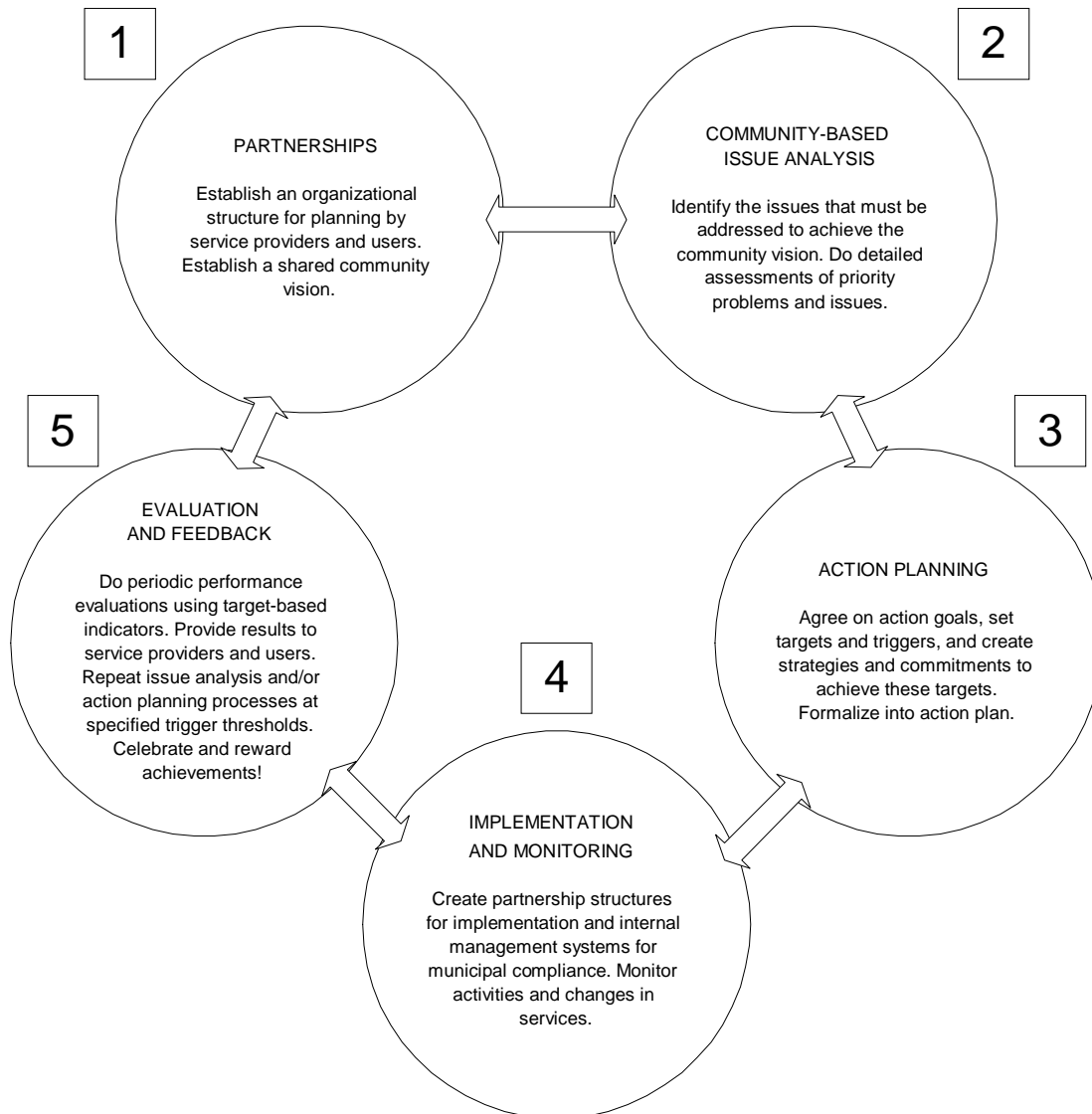
Transparency	<p>understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged peoples must be ensured.</p> <ul style="list-style-type: none"> ▪ Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognizing all forms of knowledge, including traditional and ordinary knowledge. ▪ Community well being and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means. ▪ Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law. ▪ The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted.
Cooperative Governance	<ul style="list-style-type: none"> ▪ There must be intergovernmental co-ordination and harmonisation of policies, legislation and actions relating to the environment. ▪ Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures. ▪ Global and international responsibilities relating to the environment must be discharged in the national interest.
Ecological Integrity	<ul style="list-style-type: none"> ▪ The disturbance of the ecosystem and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied. ▪ The disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied. ▪ The development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised. ▪ Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, wetlands and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.
Integration of environmental considerations into decision - making	<ul style="list-style-type: none"> ▪ Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option. ▪ Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle.

	<ul style="list-style-type: none">▪ The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution; environmental damage or adverse health effects must be paid for by those responsible for harming the environment.▪ A risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions.▪ The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment▪ Negative impacts on the environment and on peoples environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.
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Source: Directorate Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province (2001/2002). **Integrating Environmental Issues Into Integrated Development Plans (IDPs): Guidelines.**

APPENDIX C

The Local Agenda 21 Process



APPENDIX D

List of Resources and Useful Contacts

DEAT – Department of Environmental Affairs and Tourism

National Government Department
Private bag X447
Pretoria
0001
Tel: 012 310 3911
Fax: 012 726 3633

Department of Water Affairs and Forestry

National Head Office
Private Bag X313
Pretoria
0001
Tel: 012 338 7500
Fax: 012 326 2715

EEASA – Environmental Education Association of South Africa

Umgeni Valley project/ Sharenet
PO Box 394
Howick
3290
Tel: 033 330 3931
Fax: 033 330 4571

Institute of Natural Resources (INR)

Private Bag X01
Scottsville
Pietermaritzburg
3209
Tel: 033 146 0796
Fax: 033 146 0895

Built Environment Support Group (BESG)

University of Natal
Dalbridge
Durban
4041
Tel: 031 260 2267
Fax: 031 260 1236

Centre for Integrated Rural Development

Private Bag X5002
Stellenbosch
7599
Tel: 021 887 6870
Fax: 021 887 9741

Share-Net

PO Box 394
Howick

3290
Tel: 033 230 3931
Fax: 033 230 4576

Wildlife and Environment Society of Southern Africa

National Office
PO Box 394
Howick
3290
Tel: 033 330 3931
Fax: 033 330 4571

UNDP-SA, SALGA, GTZ and DPLG 2002 Local Pathway to Sustainable Development in South Africa, Package presented at the World Summit on Sustainable Development, contains Case Studies on Sustainability in -Local Governance, including the IDP, and a paper linking IDP to LA21 principles.
Environmental Evaluation Unit, University of Cape Town.

APPENDIX E

GLOSSARY

<i>Integrated Development Planning</i>	IDP is a participatory planning process aimed at integrating sectoral strategies, in order to support the optimal allocation of scarce resources between sectors and geographic areas and across the population in a manner that promotes sustainable growth, equity and the empowerment of the poor and marginalized (IDP, 1995).
<i>Integrated Development Plan</i>	“The Integrated Development Plan (IDP) is a product of the integrated development planning process. The IDP is a principal strategic planning instrument which guides and informs all planning, budgeting, management and decision-making in a municipality (DPLG and GTZ, 2001:Section 2)”
<i>Environment</i>	<p>Our surroundings, including living and non-living elements, e.g. land, soil, plants, animals, air, water and humans. It also refers to our social and economic surroundings, and our effect on our environment.</p> <p>NEMA defines environment as “the surroundings within which humans exist and that are made up of-</p> <ol style="list-style-type: none"> i. the land, water and atmosphere of the earth; ii. micro-organisms, plant and animal life; iii. any part or combination of (i) and (ii) and the inter-relationships among and between them; and <p>the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being (National Environmental Management (NEMA) Act No 107 of 1998; Definitions: S(1)(xi)”</p>
<i>Integrated Environmental Management</i>	“A philosophy which prescribes a code of practice for ensuring that environmental considerations are fully integrated into all stages of the development process in order to achieve a desirable balance between conservation and development.” (Department of Environmental Affairs (DEA), 1992)
<i>Indicator</i>	A variable or a measure of the state of the environment and it helps you to know if you are succeeding in reaching your goals. Indicators are often used in a State of Environment Report to measure how we are managing our resources.
<i>Stakeholders</i>	People and organisations that are involved or interested in an area or an issue e.g. residents, councillors, business people, trade unions, etc
<i>Integration</i>	Integration in the context of IDP in South Africa has

	a number of implications. These include the need for sectoral integration, institutional integration between government agencies, coordination of the delivery of infrastructure and services, linkages between the various stages in the planning process and spatial integration between, for example, rural and urban areas.
<i>Agenda 21</i>	Agenda 21 is the document developed at the 1992 United Nations Conference on Environment and Development, called the Rio Earth Summit. It is a global plan of action to stop environmental degradation and promote equitable development.
<i>Local Agenda 21</i>	LA21 is the process used internationally to translate Agenda 21 into action at the local level. It is a long-term strategic local action plan developed by citizens in partnership with local authorities.
<i>Environmental Impact Assessment</i>	A study of the likely effect on the environment of proposed activities or development. EIAs help bodies like local authorities to decide if they should accept proposals, e.g. to develop a piece of land for housing, or to require changes to the proposal, or to reject it.
<i>Environmental audit</i>	A detailed assessment to check if an organisation is following the law, its environmental policies, and its Environmental Management System. The results of the audit help the organisation to improve its environmental policies and management systems.
<i>Sustainable development</i>	<p>Sustainable Development is defined by the Brundtland Commission (1989) as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”</p> <p>The National Environmental Management Act (NEMA) No 107 of 1998 (Definitions, S(1)(xxix)) defines sustainable development as “the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations.”</p>
<i>Sustainability</i>	This term means that activities or a condition can be maintained into the future without constant external inputs. When considering sustainability, we need to consider economic, social, ecological and institutional factors in an integrated way. In the long term, sustainability requires a change of values away from materialism towards social and cultural enrichment
<i>Natural Resources</i>	These are resources that occur in nature that can be used to create wealth. Examples include oil, coal, water and land.

<i>Strategic Environmental Assessment (SEA)</i>	There is no common definition of SEA, however, it has been defined in the White Paper on Environmental Management Policy for South Africa (1998) as “a process to assess the environmental implications of a proposed strategic decision, policy, plan, programme, piece of legislation or major plan” (DEAT and CSIR, 2000).
<i>Sphere of governance / government</i>	There are three different spheres of government (national, provincial and local). Each sphere has constitutional autonomy. Relationships between spheres – cooperative governance – should be encouraged.
<i>Precautionary Principle</i>	The precautionary principle is defined as the need to apply a “risk averse and cautious approach, which takes into account the limits of current knowledge about the consequences of decisions and actions”

APPENDIX F

Environmental Policies and Laws and Related Legislation

The following is a brief summary of acts and policies which have as their primary purpose environmental management and environmental quality and protection or which contain some provisions related to environmental protection and sustainable development.

National Environmental Management Act (Act 107 of 1998)

The National Environmental Management Act (NEMA) is the first step in giving legal effect to the environmental right in the Constitution (section 24) and to the White Paper on Environmental Management Policy.

The Act:

- Establishes principles to guide the decisions and actions of all organs of state (NEMA Principles)
- Establishes institutions to:
 - co-ordinate and harmonise the environmental functions of organs of state
 - promote the participation of stakeholders in environmental governance
- Establishes procedures for co-operative governance
- Establishes procedures for conflict management
- Promotes integrated environmental management by establishing minimum procedures for environmental impact assessments, and enabling any national or provincial permitting authority to prescribe environmental impact assessment regulations
- Establishes procedures for ratification of, and giving effect to international environmental instruments
- Promotes compliance and enforcement by means of provisions on:
 - the duty of care
 - protection of workers refusing to do environmentally hazardous work
 - control of emergency incidents
 - access to environmental information and protection of whistle blowers
 - legal standing to enforce environmental laws
 - private prosecution
- Promotes co-regulation by enabling the establishment of environmental management co-operation agreements to promote the principles of environmental management. The Minister and every provincial government and local authority may enter into environmental management cooperation agreements with any person or community for the purpose of promoting compliance with the principles laid down in the Act.

Environment Conservation Act (Act 73 of 1989)

The purpose of the Environmental Conservation Act (ECA) is to provide for the effective protection and the control of activities that may have a detrimental effect on the environment. The following sections are important:

Waste Management and Littering

- Sections 19 and 19a provide for a general prohibition against littering and the removal of litter
- Section 20 deals with waste management, including the establishment and operation of waste disposal sites. Such sites may only be operated under a permit issued by the Minister of Water Affairs

- Section 21 provides for the identification of waste and sewerage disposal and chemical treatment activities by DEAT, specifically those activities which may have a substantial detrimental effect on the environment
- In terms of Section 24 of this Act, the Minister of Environmental Affairs and Tourism has prescribed regulations on waste management (Government Notice R1196, 8 July 1994), requiring a permit for the establishment and operation of a waste disposal site. The Department of Water Affairs and Forestry has published Minimum Requirement Guidelines, which can be included as permit conditions.
- Section 26 (b, c, and j) provides for regulations for collection of information on generation and disposal of waste.

Environmental Impact Assessment (EIA)

- Regulations were promulgated under sections 21, 22 and 26, in September 1997 (Government Gazette No's R1182, R1183 and R1184). The regulations list activities that may not be commenced without an environmental impact assessment, prescribe the EIA procedure, and designate the province as the competent authority. Applications in respect of listed activities are directed to the relevant provincial authority (for Mpumalanga the relevant authority is the Department of Agriculture, Conservation and Environment)

Limited Development Areas and Protected Natural Environments

- Section 16 and 17 provides for the establishment of Protected Natural Environments (PNE's) and management advisory committees in respect of PNE's.
- The purpose of a PNE is to promote the preservation of specific ecological processes, natural systems, natural beauty or species of indigenous wildlife or the preservation of biotic diversity in general within a designated area.
- Section 23 and 27 provide for the declaration of Limited Development Areas. Certain developments or activities within a Limited Development area are prohibited, unless authorised by the Provincial MEC.

White Paper on Environmental Management Policy (April 1999)

The White Paper on Environmental Management Policy is an overarching policy framework that sets out a vision, policy principles and strategic goals for environmental management and sustainable use of natural resources in South Africa. Sectoral policies must subscribe to this policy framework.

The vision projects an integrated and holistic management system for the environment aimed at achieving sustainable development now and in the future. The 7 goals of this policy include:

- Establishment of an effective institutional and legislative framework
- Promotion of sustainable resource use and impact management
- Development of mechanisms to ensure that environmental considerations are effectively integrated into existing and new government policies, legislation and programmes.
- Establishment of mechanisms and processes for effective public participation in environmental governance
- Promotion of environmental literacy, education and empowerment
- Development and maintenance of an information management system to provide accessible information that will support effective environmental management
- Development of mechanisms to deal effectively, and in the national interest, with international issues and obligations in respect of environmental management

White Paper on Integrated Pollution and Waste Management for South Africa (May 2000)

The White Paper on Integrated Pollution and Waste Management (IPWM) sets out the government's vision and strategic goals for integrated pollution and waste management in

South Africa. The vision of the policy is to: “Develop, implement and maintain an integrated pollution and waste management system which contributes to sustainable development and a measurable improvement in the quality of life, by harnessing the energy and commitment of all south Africans for the effective prevention, minimization and control of pollution and waste”.

The 7 strategic goals include:

- The establishment of an effective institutional framework and legislation
- Mechanisms to promote holistic and integrated pollution and waste management
- Mechanisms to ensure holistic and integrated planning approaches and processes
- Mechanisms to ensure effective public participation in integrated pollution and waste management governance
- Education and empowerment of South Africa’s people to achieve integrated pollution and waste management
- Mechanisms to effectively deal with international issues affecting pollution and waste, in the national interest
- The development of databases and information management systems

The approach of the IPWM is to prevent pollution, minimise waste and to control and remedy impacts. It is intended that the management of waste be implemented in a holistic and integrated manner, extending over the entire waste cycle, from “cradle to grave”, including the generation, storage, collection, transportation, treatment and final disposal of waste.

White Paper on the Conservation and Sustainable Use of South Africa’s Biological Diversity (July 1997)

The White Paper identifies a number of strategies to be developed to give effect to the specific policies. The actions required range from enhancing the protected area network to the development of specific strategies such as one on the conservation and sustainable use of reptiles and amphibians. The vision of this White Paper is “A prosperous, environmentally conscious nation, whose people are in harmonious co-existence with the natural environment, and which derives lasting benefits from the conservation and sustainable use of its rich biological diversity”.

The goals of the policy are to:

- Conserve the diversity of landscapes, ecosystems, habitats, communities, populations, species and genes in South Africa
- Use biological resources sustainably and minimise adverse impacts on biological diversity
- Ensure that benefits derived from the use and development of South Africa’s genetic resources serve national interests
- Expand the human capacity to conserve biodiversity, to manage its use and to address factors threatening it
- Create conditions and incentives that support the conservation and sustainable use of biodiversity
- Promote the conservation and sustainable use of biodiversity at the international level.

Atmospheric Pollution Prevention Act (Act 45 of 1965)

Part 2 of the Act sets out requirements for the control of noxious or offensive gases resulting from the operation of Scheduled Processes in industry. There are 72 Scheduled Processes in Schedule 2. Certificates are issued which contain requirements specifying minimum norms and standards for the operating of Scheduled Processes. This section is administered by the national DEAT Chief Air Pollution Control Officer.

Section 3 deals with Smoke Control by enabling the declaration of smoke controlled areas by local authorities. Local Authorities can apply to the Minister, on a voluntary basis, to declare their area a smoke control area.

Section 4 regulates dust from gold and asbestos waste dumps and is administered by the Government Mining Engineer in the Department of Minerals and Energy.

Section 5 deals with the Control of Motor Vehicle Emissions. Provisions currently only address the use of diesel. The administration of this section is also delegated to local authorities on a voluntary basis.

Section 44 makes provision for the prevention and control of air pollution from chemical processes and non-hazardous and hazardous waste incineration plants and waste sites. It also controls dust from landfill activities.

The Constitution of the Republic of South Africa (108 of 1996)

The Constitution has created the framework for environmental governance in South Africa, by:

- Creating the **right** to an environment that is not harmful to health and well being;
- Balancing the **right** to have the environment protected, with an emphasis on promoting valid economic and social development;
- Allocating environmental functions to a wide range of government agencies, in all spheres
- Requiring co-operation between government agencies and spheres.

Minerals Act (Act 50 of 1991)

This Minerals Act provides for the administration of minerals and mineral development in the country. The act is administered by the Department of Minerals and Energy. The act requires that Environmental Management Programme Reports (EMPR's) must be compiled for all mining and prospecting operations. EMPR's are statutory instruments to ensure that the environmental impacts of all mining operations are managed and that post-closure rehabilitation of mined areas is ensured. Mining includes large scale and small scale mining as well as borrow pits and sand mining.

Conservation of Agricultural Resources Act (Act 43 of 1983)

The act regulates agricultural natural resources and the conservation, management and use thereof. The act is administered by the Department of Agriculture (national) and the Provincial agriculture departments.

The act:

- Regulates the cultivation of virgin soils; cultivation of land with a slope; protection of cultivated land against erosion; protection of waterlogging and salination of irrigated land; utilisation and protection of vlei, marshes, water sponges and watercourses; utilisation and protection of veld and grazing management.
- Provides for the declaration of weeds and invader plants and the control thereof.
- Provides for weed and bush control schemes.
- Provides for soil conservation schemes

National Forests Act (84 of 1998)

The purpose of this act is to control and regulate activities related to the management of indigenous forests, woodlands and plantations in South Africa by:

- Promoting the sustainable management and development of forests for the benefit of all.
- Creating the conditions necessary to restructure forestry in state forests.
- Providing special measures for the protection of certain forests and trees.

- Promoting the sustainable use of forests for environmental, economic, educational, recreational, cultural, health and spiritual purposes.
- Promoting community forestry.
- Promoting greater participation in all aspects of forestry and the forest products industry by persons disadvantaged by unfair discrimination.

National Water Act (36 of 1998)

The purpose of the act is to regulate the protection, use, development, conservation, management and control of water resources through inter-alia:

- The development of a national water resource strategy.
- The establishment of Catchment Management Agencies and Water User Associations and Catchment Management Strategies.
- The classification of water resources and resource quality objectives
- Pollution prevention and emergency incidents
- Controlling and authorising water use activities
- Financial provisions for water use

White Paper on Energy Policy for RSA (1998)

The policy sets out Governments vision and strategic goals for the energy sector in the country, including both demand sector and supply sector objectives. The policy includes cross-cutting issues such as energy efficiency and environmental, health and safety.

Source: Directorate Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province (2001/2002). **Integrating Environmental Issues Into Integrated Development Plans (IDPs): Guidelines.**

APPENDIX G

Examples of Key Questions

The following list provides some key questions which can be asked in order to assess and measure whether adequate consideration of environmental issues and concerns have been incorporated within Integrated Development Planning.

The Natural Environment

- Is there an alternative to taking up new areas?
- Does the decision make the natural environment less diverse?
- Are green areas reduced on the housing area level/city district level?
- Does the decision have an effect on the mass of green matter?
- Is the reduction of green mass compensated?
- Has the decision an effect on the number of protected areas, their condition, safety zones and mutual connection?
- Has the effect of the decision on threatened species been taken into account?
- Does the decision leave flexibility in a way that new demands can be taken into account?
- Has the capacity of the nature to bear stresses in the area to be affected been investigated?
- Does the decision safeguard the productivity of the soil?
- Does the solution save land on which growth of green matter is possible?
- Does the decision affect/impact on water resources (rivers, marshes and wetlands)
- Does the decision involve clearing of pristine/undisturbed natural areas?
- Does the decision occur on already disturbed areas?
- Does the decision alter significantly the physical characteristics and topography of the area?
- Does the decision occupy highly productive and high potential agricultural soils?
- Is the decision compatible with adjacent land uses (eg green belts, open space, nature reserves) and to what effect is there a visual impact on adjacent areas?
- Does the decision contribute to or cause fragmentation of open space systems?
- To what extent is there integration of historical landscape continuity?
- Has there been adequate consideration of human health and safety issues, particularly with regard to hazardous environments and physically unstable areas?
- Is the protection of amenities resources, erosion and sediment control and the avoidance of hazardous areas considered?
- Does the decision affect the protection of unique vegetation communities and ecosystems?

Energy Consumption

- Does the decision assist in the reduction of the overall energy consumption?
- Does the decision promote the use of renewable energy sources?
- Does the decision reduce/increase the need to travel?
- Does the decision lead to the use of less energy consuming modes of transport?
- Is the decision based on the best possible technique with respect to energy?

Use of materials and recycling

- Does the decision increase/decrease the use of new raw materials?
- Does the decision increase/decrease the amount of waste?
- Is the decision based on the use of renewable natural resources/ does the decision support their use?
- Does the decision create possibilities for macro-economical recycling?
- Does the decision support sorting and does it make possible the differentiated treatment of various waste fractions?

- Has the possibility of using nature's processes been investigated when choosing the method of waste treatment?
- Has the whole life span of the material been taken into account?

Emissions

- Does the decision create possibilities for the reduction of emissions?
- Does the emissions have cumulative effect?
- Has toxicity of the decomposition products been examined?
- Are the effects of the emissions local, regional, national or international?
- Have all methods by which it is possible to have an effect on the quality of the emissions been investigated?
- Does the decision rise the environmental stresses over the critical load limit?

Institutional

- The interdisciplinary nature of the planning team in the design analysis?
- The level of consultation of local environmental expertise?
- Is there active participation by local communities and private sector companies in managing the local environment?
- The extent of involvement of NGO's as the link between communities and government providing funding, organisational skills and management of projects?

Source: Directorate Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province (2001/2002). **Integrating Environmental Issues Into Integrated Development Plans (IDPs): Guidelines.**

