

Introduction

Nature and People

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This issue of *Alternation* is the second of two, guest-edited by Catherine Addison and me that focuses on 'Nature and Power'. The articles (fifteen contributions) in this issue represent a range of thematic concerns that relate specifically to the sub-theme of Nature and People. It draws from the broader fields of environmental studies and the discipline of geography. The first issue, edited by Catherine Addison, were derived from papers delivered at a 'Literature and Ecology' colloquium held in Mtunzini in October, 2007. The sub-theme of this issue was 'Forests'. This issue's sub-theme is 'Nature and People'. It also includes two articles that are more closely linked to the sub-theme of Forests.

The association between nature and people are varied and complex, as illustrated in the array of articles presented in this issue. The focus on nature and power as an overarching theme of the two issues allude to the myriad of influences that human-beings exert over the earth's natural resource base. It also suggests the increasing control we have in influencing how we relate to and use the natural resource base in the future. Some of the articles also underscore a clear warning: that nature has the power to fight back! This is most noticeable in the increasing concern over global warming and problems associated with invasive/ alien species. The need for understanding how ecosystems function and respond to changes is advocated by Ashton et al. (2005:449) who also state that 'ecological processes are important from a human-needs perspective, for the goods and services they provide'. They further assert that an increasing body of literature shows a growing international acceptance of a philosophy which acknowledges and

centralises the importance of recognising that the separation between the ecological system and the governance systems (decisions people make on how to manage and use the environment) is artificial, and that ‘humans should be considered as an integral and interdependent part of the global ecological system’ (Ashton et al. 2005:450). This perspective brings to the fore, the importance of focusing on nature and people.

Underpinning several articles in this issue is the importance of understanding and promoting sustainability. Maila (2007:78) indicates that the concept of sustainable development is complex and often ambiguous in its clarification. This is reflected in some of the articles. Furthermore, issues of contestation and the challenge of balancing a diversity of demands on the natural resource base, namely social, economic and environmental aspects, are examined. In terms of the latter, retaining the integrity and ecological diversity of the natural resource base becomes paramount. Amongst others, these are the main aspects examined in detail in the articles in this issue. The focal points of each of the articles are summarised below.

The first article by Bob, Swart, Maharaj and Louw, ‘Nature, People and Environment: Overview of Selected Issues’ examines the main thematic concerns linked to the complex relationships between people and nature in specific contexts/ environments. Given the range of aspects and concerns discernable in the literature and increasingly in the media and political debates, this article selects and discusses key considerations, especially those that provide more clarity pertaining to concerns and aspects that are relevant to the contributions in this issue. The article highlights the intricate relationships between people and nature, particularly the importance of human-beings as the stewards and users of nature. Nature’s ability throughout the ages to provide people, either directly or indirectly, with the resources to address basic needs is examined. The implications of the increasing understanding and general acceptance that the earth’s resources are finite and that it operates in the context of a single yet complex system are considered. Specifically, the undermining, exploitation and degradation of the nature resource base raises questions related to whether nature’s ability to provide resources (often for free) for human inhabitants at the rate and extent it has in the past can be sustained.

Environmental crises and problems throughout the world are rife and increasing rapidly. In relation to these concerns, the article discusses the

following aspects: nature, culture and politics; human population pressures and environmental impacts; resources, natural capital and sustainable livelihoods, together with a summary of key ecosystem services; access and control of natural resources, including globalisation impacts; recreation, conservation and ecotourism; and global climate change.

In terms of nature and culture, the discussion focuses mainly on the connection between nature and the aesthetic, in particular the literary tradition and within the theoretical framework of ecocriticism. Specifically, the dichotomy between people (the agents of cultural production) and nature (the raw materials used for cultural production) is examined. The section on human population pressures and environmental impacts looks at how the exponential human population growth together with an increasing and widespread consumerist lifestyle place enormous pressure on the natural resource base that remains the key provider of life sustaining services. The section on resources, natural capital and sustainable livelihoods examines the importance of natural resources and underscores the services that the natural resource base provides as well as the challenges of attaining sustainable livelihoods. Critical aspects of natural resource use relating to issues of access and control, including globalisation impacts, are then discussed. The section on recreation and conservation examines the increasing commodification of nature, especially in relation to ecotourism. While ecotourism provides an opportunity to conserve and protect natural resources, there are a range of challenges and concerns that need to be addressed which include the rights of and distribution of benefits to indigenous peoples. The last section examines global climate change. The article reveals that environmental problems, including inequitable access and control of natural resources, impact most acutely on the lives of the poor, whose livelihoods are more inextricably and directly linked to the use of and access to a wide range of natural resources in their local environments.

In the next article by Ahmed, 'Development Pressures and Management Constraints in the Coastal Zone – the Case of KwaZulu-Natal North Coast', the focus is on examining impacts of increasing development on coastal zones worldwide which are becoming attractive locations for economic, tourist and residential development. This contribution undertakes an assessment of the coastal environment in the context of current development pressures and concurrent management constraints in the north

coast of KwaZulu-Natal. By adopting a case study approach, the article provides a detailed, locality specific examination of development pressures and related environmental impacts on coastal natural resources. Key informant interviews were undertaken with five categories of stakeholders in the area: environmental groups, developers, community-based organisations, managers and tourist organisations. Particularly, the tensions between commercial, industrial and residential development pressures and maintaining the ecological integrity of the area (as a main driver for ecotourism) are examined. The impacts of infra-structural demands of ecotourism itself in relation to roads, accommodation, recreational facilities, etc. on the natural resource base are also included in the discussion. The first section of the article briefly summarises coastal management efforts in South Africa. This is followed by a discussion dealing with the current policy context of Integrated Coastal Zone Management (ICZM) in South Africa. The article underscores Paterson's (2007:4) assertion that while planning is a prerequisite for effective management and implementation in any context, in relation to South Africa's conservation legislation environment it remains an ideal rather than a reality. The next section presents the methodological approach adopted. The final section presents the results and analysis in relation to the following aspects: developmental pressures, perceptions of environmental management tools and management constraints regarding developmental pressures. The article reveals that although coastal environmental concerns and agendas are increasing and ICZM is being advocated by governments worldwide, current management approaches on the KwaZulu-Natal north coast remain sectoral and unsustainable. Furthermore, improper land use planning and ineffective implementation of policies is exacerbating the situation and contributing to *ad hoc* development. This has devastating impacts on the biophysical environment and the long-term sustainability of biodiversity in coastal zones. Ahmed also highlights that there exists a lack of transparency, accountability and genuine public participation in the development process of the KwaZulu-Natal north coast area. This article calls for the implementation of a Strategic Environmental Assessment (SEA) to achieve sustainability in this coastal zone.

In 'Nature-based Sport Events and the Physical Environment: A Case Study of the Halfway - Telkom Midmar Mile', Sookrajh examines the

impacts of sport events on the natural environment. The article illustrates that numerous localities, including Durban, are aggressively utilising nature-based recreation and sport events as part of a broader tourism strategy to enhance their image and stimulate economic development. The focus of this study is specifically on events that are closely linked to the use of natural resources, therefore the use of the Midmar Mile as a case study. The article is based on the premise that numerous sport events are linked to the natural environment and are therefore likely to have impacts on the environment as well. This study critically examines research findings relating to the Midmar Mile event and demonstrates the socio-economic and environmental impacts of nature-based tourism events in relation to broader sustainability imperatives. The first section provides a brief overview of relevant literature in relation to sport events. This is followed by a more detailed discussion of events and environmental impacts, including the increased focus on the greening of events. The history of the Midmar Mile is presented together with the methodology adopted. Finally, the primary data collected is examined in terms of the following: demographic profile of respondents, economic evaluation, perceptions of event location, levels of environmental awareness among people attending the events, strategies adopted by organisers to minimise environmental impacts and types of negative environmental impacts associated with the event. The research shows that nature provides an ideal location for nature-based sport tourism events such as the Midmar Mile. Additionally, these events provide an opportunity for environmental education to significant numbers of both participants and spectators. The author argues that based on the above, mutually beneficial relationships can and must be established. An examination of nature-based sport event practices and management in relation to environmental aspects offers opportunities to reflect on the importance of sustainability as well as the implementation of event strategies that promote sustainability imperatives.

The next article, by Moodley entitled ‘Socio-cultural and Spatial Approaches to Environmental Health in Urban Contexts’, adopts a more theoretical stance to examine the complex and multifaceted relationships between human health and the environment. The article utilises a geographical perspective to understand the socio-cultural, spatial and environmental influences on people’s health. Within the geographical

perspective, the focus is mainly on the sub-discipline Medical Geography which has grown in recent years and addresses concerns related to the geographical aspects of disease, nutrition and health care systems. There has also been an introduction of competing concepts and definitions to Medical Geography that has led to an epistemological debate. Conceptual and theoretical approaches are presented and assessed in relation to spatial, social and the natural environment contexts. The author asserts that the most important context is spatial, specifically where people are located and how they interact with the environment. The social context focuses on health and health care in relation to the nature of society. The natural environmental context is discussed in relation to nature's healing powers and properties. The article reveals that these different contexts assist in describing and explaining health and health care in contemporary society. The first section of the article traces the evolution of Medical Geography, highlighting key debates and trends. Key health concepts such as health, public health and environmental health are then examined. A conceptual model of environment and health is then forwarded that integrates environmental considerations. Moodley asserts that there is an increasing need to be more connected to nature. Additionally, because the determinants of health are multi-factorial (because health problems have political, social, cultural and economic as well as biophysical dimensions), more integrated, holistic and interdisciplinary approaches to the provision of health care and promoting overall health and wellbeing among the populace are advocated.

My article, 'Rural Women's Relations to Land Resources in KwaZulu-Natal: Issues of Access and Control', provides a gender analysis of who gets access to and who controls land resources, including natural resources, in rural areas in South Africa. The research presented in the article draws from fieldwork conducted in rural communities in KwaZulu-Natal (Ekuthuleni, Baynesfield and Boiling Fountain), South Africa. The primary concern is on land resources that are potentially useful to rural households and communities such as water, place for shelter, land quality, wood, wild foods, gardens and medicinal plants. The first section provides some conceptual clarifications pertaining to women and land relations. The next section critically assesses African women's multiple relations to land resources. This is followed by a discussion on women's control of and access to environmental resources, especially land, in rural areas in South

Africa. The next section highlights the importance of land and environmental resources for rural women. Finally, aspects pertaining to African rural women and access to communal resources are examined. The article underscores the gendered use of land resources by illustrating that males and females use land for diverse purposes and place different values on specific natural resources. Furthermore, women generally have limited and restricted access to land, including natural resources. This is a result primarily of persistent patriarchy and the inequitable distribution of land and related natural resources. Additionally, environmental degradation which is an increasing problem in rural areas has differential and debilitating impacts on women's lives. Women's responses to the above problems are highlighted. On a more general level, the article also examines whether development initiatives in South Africa consider and are able to positively impact on the multiple facets of rural women's relationship to the land, and whether existing policies and practices in South Africa challenge social, political and economic disparities that tend to reinforce women's inability to own, access and control resources.

In 'Review of Policies Impacting on the Sustainability of Natural Woodlands in Southern Africa' the authors (Ismail and Jaggernath) undertake a critical review of the range of policies that impact on natural woodlands in Southern Africa. Woodlands are deemed to be one of the world's major renewable and sustainable natural resources that are heavily used by local communities. This is particularly prevalent in developing countries (as is the case in southern Africa) where woodland resources are critically important to rural livelihoods and contribute significantly to the national economy. This article summarises the key policy issues and concerns related to the sustainability of savannah woodlands in southern Africa by using a policy review methodological approach. The current policies and strategic frameworks (both international and national) that are promoting the sustainability of woodlands in southern Africa are examined. The first two sections discuss the policy context in general and policy review as a methodological approach specifically. The main international policy initiatives relevant to this study are then critically discussed which include the Tropical Forestry Action Programme and related National Forestry Action Plans, the International Tropical Timber Agreement and United Nations Conference on Environment and Development. This is followed by

a discussion on the implications of specific southern African policies. The focus is on policy statements and strategies that are relevant to South Africa, Zimbabwe, Mozambique and Botswana. The authors highlight key concerns/gaps and conflicts in policies affecting woodlands in southern Africa emanating from the policy review and analysis which include common conceptual understanding of the resource; lack of institutional capacity; clarity in terms of responsibilities for management; coordination issues; aspects relating to assessment, monitoring and evaluation; and policy making processes. The findings are similar to Paterson's (2007:1) assertion regarding challenges that were identified in relation to the legal framework that is aimed at managing protected areas. The challenges identified were 'divided administrative responsibilities, a profusion of laws, lack of coordination, outdated regulatory approaches, inadequate planning, insufficient resource allocation and a failure to link conservation efforts to the needs of people' (Paterson 2007:1).

Poona's article, 'Invasive Alien Plant Species in South Africa: Impacts and Management Options', focuses on Invasive Alien Plant (IAP) species (commonly referred to as weeds) which is a persistent problem in South Africa. This concern is also highlighted by Doren et al. (2008) who stress the importance of examining the impacts of invasive species that are threatening conservation and restoration efforts worldwide. This study examines the impacts of IAP species in South Africa and the related impacts on biological diversity, ecosystems, and human populations. Specifically, it critically examines how human activities and choices have exacerbated the proliferation of IAP species in specific contexts. The most significant threats presented by invasive aliens on the natural and human environments are highlighted. The author also draws attention to human intervention and technology in the overall management of the risk. Specific approaches to effectively address the problem of IAP species are forwarded which include environmental education programmes, environmental legislation/ policy interventions, and the use of remote sensing and GIS technologies. In terms of the latter, the author asserts that remote sensing and GIS present a coherent set of tools for the identification, characterisation, mapping, and modelling of species' spread and prediction of areas of potential future invasion. The article illustrates that these technologies show promise in assisting land resource managers and natural scientists in better planning and

decision-making to manage IAPs in South Africa. Furthermore, as indicated by Andrew and Ustin (2008), remote sensing technologies in particular offer the capability to rapidly and synoptically monitor large areas. This article also contributes to a more comprehensive understanding of invasive alien plants by examining some of the social and management dimensions evident in the literature. The findings are similar to those of Mgidi et al. (2007) who view alien plant invasions as a serious threat to natural and semi-natural ecosystems. They also call for a pragmatic and multi-pronged approach to address this problem in southern Africa.

The next article, 'What'll We Do With Wattle? The Dualistic Nature of *Acacia mearnsii* as Both a Resource and an Alien Invasive Species, Swaziland' by Traynor, Hill, Ndela and Tshabalala, examines *Acacia mearnsii* (Black wattle) as both a resource and invasive alien plant species in Swaziland. Through interaction with the various stakeholders with an interest in Black wattle in Swaziland, it is clear that the resource is perceived as both a pest and an important commodity. Specifically, some perceive it as an alien invasive plant that should be eradicated and others as a resource that should be managed. This, according to the authors, creates a serious environmental dichotomy and therefore poses several challenges in relation to how Black wattle should be managed. Through semi-structured interviews with stakeholders (officials from the Swaziland Government, a consultant, the Wattle Growers Co-operatives, and three private forestry companies) the authors trace the development of Black wattle as a resource and its social and economic impacts on rural communities within Swaziland. The study reveals that while Black Wattle growers' co-operatives facilitate trading and enable individuals to benefit from the economies of scale, the co-operatives have not been successful due to internal problems. This has resulted in private companies taking advantage of this and co-operative members sell direct to the private companies. The buyers and the Swazi government are aware of the problems faced by the small-scale Black wattle growers and have recently established some initiatives to increase access to secure land for wattle plantations that aim to convert the wattle jungles into managed areas. Thus, the authors consider how a single resource is perceived as both an undesirable alien and as a commodity of value depending on one's perception of the resource. While acknowledging the environmental impact that invasive alien species have upon our natural ecosystems and recognising

the necessity for the control of Black wattle in Swaziland, the authors call for environmental management policies to consider the usefulness of the invasive alien species to local communities.

Rugege and Maleka's article, 'Participatory Mobile Geographic Information Systems (GIS) for the Regularisation of Customary Land Administration into Statutory Law: A Case of South Africa', provides evidence-based justification for employing Participatory Mobile GIS in efforts aimed at modernising and regularising customary land administration in South Africa. This is in keeping for the need to support, modernise and regularise customary land administration in Africa since a significant proportion of African populations still live on unregistered communal lands administered under customary land law. The authors present and discuss the significance of results obtained from an area measurement exercise of a moderate size farm in South Africa. The primary research undertaken is examined in relation to similar studies undertaken elsewhere in the developing world using Participatory Mobile GIS methods in comparison with conventional mapping methods. An assessment of time efficiency, affordability and appropriateness of the technology is discussed in relation to prevailing socio-economic and legislative circumstances that need to be considered when modernising customary land administration. The first section discusses Participatory Mobile GIS alternatives to conventional surveying. This is followed by an examination of the realistic accuracy of GPS surveys. The rest of the article presents the methodological approach adopted and the research findings. The results of this study indicate that Participatory Mobile GIS is time and cost efficient and appropriate and can meet legislated standards of quality in South Africa.

Like Rugege and Maleka, Mutanga and Adjorlolo's 'Assessing the Spatial Patterns of Crop Damage by Wildlife using GIS' examines the spatial analytical capabilities, data manipulation and data storage characteristics of GIS to understand spatial patterns of wildlife damage and thereby contribute to effective management programmes. This article is similar to Waldner's (2008:399) study that illustrates that wildlife species (she focuses on invasive species) have wreaked environmental and economic havoc by modifying ecosystems, damaging crops, threatening native species, and serving as hosts to pests and viruses. Mutanga and Adjorlolo specifically provides a brief history of the human - wildlife conflicts as a result of crop

raiding by wildlife in communities located in close proximity to nature conservation areas. They also underscore the importance of GIS in assessing spatial patterns of crop damage. The discussion is reinforced by an illustration of the application of GIS in combination with participatory mapping (a tool that incorporates local expertise and knowledge with technical expertise) on eland damage in selected commercial agricultural farms adjacent to Kamberg Nature Reserve (KNR) in KwaZulu-Natal Province of South Africa. In particular, the findings reveal that the involvement of communities through participatory GIS enhances a better understanding of the nature of conflicts as well as improving mapping accuracies. This study also shows the potential of participatory GIS in unpacking the spatial distribution and configuration of damaged crop fields by elands in KwaZulu-Natal Province. The authors conclude that several environmental variables in explaining the distribution and configuration of damage are important to facilitate adaptive management strategies.

Perry, Moodley and Bob's article 'Open Spaces, Nature and Perceptions of Safety in South Africa: A Case Study of Reservoir Hills' follows. Crime in South Africa is deemed to be one of the most prominent challenges and persistent problems. This study examines how, within the context of heightened safety and security concerns in South Africa, residential communities perceive open public spaces. A case study approach focused on Reservoir Hills in Durban, is followed. The first section examines security and safety considerations, including current attempts to deal with crime, in residential areas in South Africa. A discussion on place/location and safety follows which includes a focus on the fear of crime and public spaces as well as spatial and environmental patterns of violence. The next section presents background information on the case study, the methodology adopted as well as a discussion on key results derived from the primary research undertaken. The article demonstrates that from an environmental perspective, open spaces in urban areas are critically important in terms of ensuring the continued presence of nature and related natural resources in built environments. However, the authors reveal that residents tend to perceive these areas as crime hotspots as well as refuge areas for potential criminals. Furthermore, these perceptions are reflective of increased resistance to open spaces in residential areas. The discussion and analysis of primary findings is integrated into a more general examination of

environmental perceptions of crime and violence, especially in relation to spatial and environmental dimensions. The study indicates that several factors have been associated with fear of crime and natural, open spaces that contribute to feeling unsafe in public places.

Chellan and Khan's article, 'Contesting Ecotourism Development in the iSimangaliso Wetland Park in KwaZulu-Natal', provides an examination into the different social, political and economic dynamics in the formerly known Greater St. Lucia Wetland Park (a World Heritage site) which is now called the iSimangaliso Wetland Park (iSWP) and the impacts of contestations over natural resources and natural resource spaces amongst different stakeholders in the region. This article draws from a number of data sources including a social survey involving 100 respondents selected by utilising purposive sampling techniques in two communities residing in close proximity to the iSWP; focus group discussions in one of the communities; in-depth interviews with one Non-Governmental Organisation (NGOs) known as the Wildlife and Environmental Society of South Africa (WESSA) and the Ezemvelo KZN Wildlife, an environmental and ecotourism parastatal; as well as a media analysis of selected newspaper reports pertaining to contestations related to the iSWP.

Similar to Chellan and Khan's contribution, Chellan and Bob's article, 'Sustainable Ecotourism in the uKhahlamba Drakensberg Park: A Stakeholder Analysis', also focuses on ecotourism. The stakeholder approach is used to examine the social, economic and environmental impacts of ecotourism with regard to biodiversity and sustainable development at the uKhahlamba Drakensberg Park World Heritage Site. This article, together with Chellan and Khan's contribution in this issue, provides a critical examination of protected areas (specifically World Heritage ecotourism sites in both the studies) that, according to the ICUN Guidelines for Protected Areas Management Categories (1994:7), are valuable conservation tools that have been used in South Africa to protect the nation's natural and cultural heritage. The introduction includes an examination of sustainability as a concept. The first section presents the conceptual framework (stakeholder approach to ecotourism) used in the study. The stakeholder perspective is useful in identifying the needs and concerns of key role players. Additionally, methodologically it permits an examination of competing interests and perceptions through comparative analysis. The next section

provides a brief overview of ecotourism in South Africa. The importance of ecotourism in relation to promoting sustainable conservation practices and environmentally responsible behaviour among visitors to Parks is underscored. Additionally, the challenges associated with encouraging and ensuring local economic and social development linked to ecotourism are discussed. Background information to the uKhahlamba Drakensberg Park and the methodological approach adopted in this study are provided in section three. In terms of the latter, survey questionnaires were used at the uKhahlamba Drakensberg Park involving key stakeholder groups (tourists, tour operators, local communities and accommodation personnel). The data analysis of primary data collected is finally undertaken. The key finding is that generally all stakeholders felt that the ecotourism industry could contribute to the social upliftment of the community by assisting with various projects and programmes. However, stakeholder perceptions also indicate that incremental increase in economic development may occur at the expense of the natural environment and undermine the very asset that ecotourism depends on. The differing interests and concerns of the stakeholders interviewed also emerge.

Hooper's 'The "Grove of Death" in Pauline Smith's "The Miller"' examines Smith's use of space and spatialisation, a geographical landscape or 'world' she created or constructed by writing. The manner in which Smith uses spatial demarcation and distance in particular are explored. How the 'world' she presents is interpreted or read is also a key focus of the article. In addition to the spatial dimensions, social and power relations are critical to Smith's work. The aspects above are critically examined in relation to 'The Miller', with a specific focus on 'groves' or forests. A comparative analysis of Conrad and Smith's 'grove of death' is also undertaken. Hooper concludes that Smith's ability to accommodate and examine the complexity of individual experience in tension with the cultural life results in the generation of a geographic landscape in 'The Miller' which integrates an ecological ethos that speaks to the encounter between human and natural.

The final article in this issue, Wood's 'The Occult, the Erotic and Entrepreneurship: An Analysis of Oral Accounts of *ukuthwla* Wealth-giving Magic, Sold by the Medicine Man Khotso Sethuntsa', is part of the first issue's sub-theme on nature and power in relation to forests. Wood examines the way in which the economic, the erotic and the supernatural are

brought together in the practice of *ukuthwala* (the Xhosa term for a dangerous, powerful procedure for long-term wealth, widely believed to involve the ownership of a wealth-giving being) with specific reference to oral accounts concerning the leading *ukuthwala* practitioner in southern Africa, the medicine man Khotso Sethunsa. This study draws on years of research undertaken by Wood into Khotso's life. The research is an examination of oral accounts (derived from interviews conducted between 1997 and 2008 in the Eastern Cape, KwaZulu-Natal and Lesotho). The principal informants interviewed were Khotso's close friends, wives, family members, business associates, people who knew Khotso personally or had information concerning him and resided in the areas where Khotso had lived and worked, and a range of traditional practitioners, including herbalists, spiritual healers and diviners.

The fifteen articles demonstrate that aspects pertaining to nature and people are multifaceted, wide-ranging and diverse. They also reflect the multi disciplinary/ interdisciplinary characteristic of several studies that focus on nature and people. The articles reveal that nature permeates almost every aspect of our lives, including cultural, social, economic and political facets. Additionally, as Maila (2007:79) states, 'People are embedded in their cultural, social, economic and bio-physical environment'. These dynamics and dimensions necessitate interdisciplinary scholarship which presents several conceptual and methodological challenges.

The suite of articles in this issue reflect the components of good governance, which are critical to the effective management of environmental resources, identified by MacKay et al. (cited in Ashton et al. 2005:452). These include:

- Principles: statements of society's values which may be universal (for example, international agreements), national (for example, the Constitution) or sectoral (for example, Land Reform principles)
- Policies: statements of intent by government aimed at defining what will be done to achieve principles agreed upon.

- Legislation: the primary tool used by government for implementing policy. It also sets out how policy objectives will be implemented and enforced.
- Regulation: it provides the quantitative or rigorous detail relating to the relevant legislation, and governs everyday activities of all sectors of society.
- Practice: a general term that covers a wide range of activities, which may be regulatory, but which nevertheless reflect the principles and support implementation of policy.

Several of the articles examine the above aspects and assess the challenges faced on the ground in terms of policy development and praxis.

Our reliance on the natural resource base, exploitation (and in many cases over-exploitation) of natural resources as well as the increasing environmental problems we are faced with demand a greater understanding of the relationships between nature and people. More specifically, there is a need to move away from relationships of exploitation and overuse to those of respect and sustainability. Several articles in this issue call for more responsible and sustainable environmental practices and management strategies. Others highlight the need for legislative and policy reform. Additionally, the importance of integrating local communities' needs and concerns are highlighted. The power dynamics among people in relation to social and economic factors (including class, gender and culture) need to be further unpacked since they influence who wields the most control over natural resources in specific contexts and how nature is used. This occurs across a range of geographical scales from the local to the global. It is critical to emphasise that legislative and policy reform should be underpinned by a broader array of factors including political will, budget allocation and public support (Paterson's 2007:33).

The articles in this issue highlight our reliance on the natural resource base and the power we wield over it. In terms of the latter, the power can include making better choices on how we use and manage nature. Therefore, as human beings we are capable of dramatically changing the patterns of exploitation and degradation that have generally characterised

our relationships to nature in the past. There is overwhelming consensus in the academic literature that human beings are primarily responsible for the environmental and related social and economic problems we see today. It is therefore human beings who have the power to address these problems in ways that are sustainable and underscore respect for nature.

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