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**IDEAL INTEGRATED NATIONAL ENVIRONMENTAL
MANAGEMENT SYSTEM FOR SOUTH AFRICA**

A thesis submitted in partial fulfilment of the requirements for the
Degree of Master of Philosophy in Development Studies at
Massey University

by

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1995



Source: The Economist, (1994).

The great red hills stand desolate, and the earth has torn away like flesh. The lightning flashes over them, the clouds pour down upon them, the dead streams come to life, full of red blood of the earth. Down in the valleys women scratch the soil that is left, and the maize hardly reaches the height of a man. They are valleys of old men and old women, of mothers and children. The men are away, the young men and the girls are away. The soil cannot keep them any more.

Alan Paton

Abstract

The South African environmental management system has been characterised by fragmentation and the lack of effective legislation. The number of statutes concerned with conservation issues is an associated problem. The implementation of the Environmental Conservation Act 1989 has been viewed as inefficient because of the lack of enforcement and control of environmental management issues. The Act has not provided opportunities for public participation, particularly from black communities, in decision-making about environmental matters.

The South African environmental management system has not recognised and integrated indigenous peoples resource management systems into the country's legal framework. This is illustrated by the impacts of conservation programmes which have resulted in black communities being uprooted from their lands for the establishment of national parks and tourism facilities, without compensation to traditional owners.

Research has identified the need for a revision of environmental impact assessment (EIA) practices in South Africa. There is also an associated need to integrate environmental impact assessment (EIA) into the planning process to achieve sustainability. Studies carried out in South Africa have identified the lack of effective regulations for enforcing the provisions with regard to the status of the coastal zone.

The criticisms of the White Paper delivered by participants at the Conference held at Megawatt Park, Sandton, 10 June, 1993, highlight the need for a comprehensive environmental management system to ensure the sustainable management of natural and physical resources. An ideal system would improve the quality of life in the South African community, while maintaining the integrity of the natural resource base. Even though the criticisms have been valid, they fall short of suggesting ideas for the formulation of a new integrated environmental management system for South Africa.

Research carried out in South Africa has also identified the inadequacies of the proposed Integrated Environmental Management procedure referred to in the White Paper. This procedure has been perceived as inadequate to achieve the universal principles of sustainable development.

This project evaluates the White Paper, the submissions criticising the White Paper and the proposed Integrated Environmental Management system in South Africa. A matrix is used as a method to examine both the New Zealand Resource Management Act 1991 and the South African environmental management provisions against the recommended national actions in the IUCN/UNEP/WWF (1991) and Agenda 21. Research from a number of disciplines concerned with integrated environmental management, are used

to recommend changes to the South African environmental management system. Criteria derived from the IUCN/UNEP/WWF (1991) strategy and Agenda 21 are used in the thesis to evaluate the White Paper, submissions criticising the White Paper, and the proposed Integrated Environmental Management system. Finally, An ideal National Integrated Environmental Management System for South Africa is proposed.

Acknowledgments

Critical to the preparation and completion of this thesis is my supervisor Dr Johanna Rosier whom I would like to extend my heartfelt gratitude for her unflagging support and assistance.

Furthermore, I am grateful to Dr Brian Ponter at the Institute of Development Studies for the approval of this thesis. I would also like to thank Mrs Dianna Tenana for her support. I am grateful to Ms Karen Puklowski especially for her patience, with the laborious task of producing the matrix and diagrams which appear in this thesis.

I am grateful to financial assistance and support granted to me by the New Zealand Ministry of Foreign Affairs and Trade in 1993. In addition, I would also like to thank the following institutions for providing me with information important to this thesis. The Department of Environmental Affairs; University of Potchefstroom; Institute of Natural Resources at the University of Natal; Development Bank of Southern Africa; Institute for African Alternatives; Southern African Nature Foundation, and the Association for Rural Advancement.

To my friends thank you for your support and encouragement. Finally, to my family: my late Mum, Mamokgothu, Dad, Ralefela, brothers and sisters, Tau, Tsietsi, Tupa, Dieketseng, Mamoleko, Maditaba, Tsebo, Tshepo, Matsie and the Tladi family for their support throughout the years in my search for the frontiers of knowledge. May the Almighty continue to bless.

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Glossary

Biological diversity: The variety and variability among living organisms and the ecological complexes in which they occur.

Biological Resource: Living natural resources, including plants, animals, and microorganisms, plus the environmental resources to which species contribute.

Carrying capacity: The maximum number of organisms, that can use a given area of habitat without degrading the habitat and without causing social stress that may result in the population being reduced.

Coastal marine area: Is the foreshore, seabed, and coastal water, and the air space above the water, between the outer limits of the territorial sea and the line of mean high water springs (MHWS).

Conservation: The management of the human use of the biosphere so that it may yield the greatest sustainable benefits to present generations, while maintaining its potential to meet the needs and aspirations of future generations.

Ecosystem: The totality of factors of all kinds that make up a particular environment; the complex of biotic community and its abiotic, physical environment functioning as an ecological unit in nature.

Environmental: All physical, chemical, and biological factor impinging on a living organism.

Environmental Resources: Resource such as clean air, clean water, and scenic values that are not considered assets; as a result, most interest is on activities involved in using these resources and to the ways in which the actions of some users affect the well-being of others.

Externality: A economic concept covering those costs and benefits attributable to an economic activity that are not reflected in the price of the goods or services produced. Thus damage to the environment may not be counted as a cost or benefit in production. It is an aim of the 'polluter pays' principle to require polluters to meet the cost of avoiding pollution or remedying its effects, so internalizing the externalities.

Homeland: The term used by the previous South African government, after 1948, to describe the reserves established under the native Land Act of 1913 and 1936.

Fauna: The total animal life of an area; usually the total number of the species; the natural failure to adapt to environmental change.

Flora: The total plant of life of an area; usually the total number of plant species in a specified period, geological stream, geographical region, ecosystem, habitat, or community.

Genetic Resources: A genetic resource is inheritable characteristics of a plant or animal of real or potential benefit to people.

Incentive: An incentive is that which incites or motivates desired behaviour;

in this context; an incentive is that which incites or motivates government, local people, and international organisations to conserve biological diversity.

Influx control: South African administrative system abolished in 1986, which prevented those living in the "homelands" from settling in White urban areas, and under which all adult blacks were required to carry passes.

Indigenous: Having originated in and being produced, growing, or living naturally in a particular region or environment, native. Life-support system: A ecological process that sustains the productivity, adaptability and capacity for renewal of lands, waters, and /or the biosphere as a whole.

Natural Resource: Includes renewable (forests, water, wildlife, soils, etc.) and non-renewable (oil, coal, iron, ore, etc.) resources that are natural assets.

Res nullius: open access for resource use.

Res publica: state property.

Res commune: common property.

Sustainability: A characteristic of a process or state that can be maintained indefinitely.

Species: A group of actually or potentially inter breeding living organisms more or less isolated from other such groups; in simple terms, a "kind" of plant or animal.

Sustainable use: Use of an organism, ecosystem or other renewable resources at a rate within its capacity for renewal. Sustainable development: A pattern of social and structural economic transformations (i.e., "development") that optimizes the economic and other societal benefits available in the present without jeopardizing the likely potential for similar benefits in the future.

Ultra vires: Beyond one's (legal) power or authority.

Vleiland: The term used in South Africa to describe a swamp.

Wetland: Temporarily or permanently inundated territorial system bordering an aquatic systems and including shallow systems such as estuaries, salt marshes, bogs, sponges, mires, swamp, floodplain, and many coastal lakes and lagoons, systems that essentially are driven by littoral processes.

List of Acronyms

ANC: African National Congress

CORD: Centre for Community Organisation and Research

CWIU: Chemical Workers Industrial Union

DEA: Department of Environment Affairs

DMEA: Department of Mineral and Energy Affairs

DMEA: Department of Mining and Energy Affairs

EA: Environmental Assessment

SEA: Strategic environmental Assessment

SIA: Social Impact Assessment

TEM: Total Environmental Management

UNEP: United Nations Environmental Programme

WP: White Paper

WWF: World Wide Fund

EIA: Environmental Impact Assessment

ETH: Eastern Transvaal Highveld

ETL: Eastern Transvaal Lowveld

EMPR: Environmental Management Programme Report

IUCN: International Union for the Conservation of Nature and Natural
Resources

IEM: Integrated Environmental Management (EIA framework in South Africa)

KBNR: KwaZulu Bureau of Natural Resources

NEPA: National Environmental Policy Act

PPP: Plans, Policies and Programmes

RMA: Resource Management Act 1991

SANF: South African Nature Foundation