

**THE IMPLEMENTATION OF ENVIRONMENTAL EDUCATION POLICY IN  
NAMIBIA: PERCEPTIONS OF A RANGE OF DECISION-MAKERS**

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### Abbreviations used:

MEC: Ministry of Education and Culture

MET: Ministry of Environment and Tourism

NDP1: First Namibia Development Plan

NEEN: Namibia Environmental Education Network

NGOs: Non Governmental Organisations

SADC: Southern Africa Development Community

WIS: Windhoek International School

## **ABSTRACT**

This study is the first cycle of an action research project that focuses on the implementation of the Environmental Education Policy in Namibia. Perceptions of Namibian decision-makers were sought with regard to their understanding of the concepts ‘environment’ and ‘environmental education’, as well as to identify environmental problems and obstacles to the implementation of the Environmental Education Policy. The approach of coming up with options to address the identified problems/obstacles/constraints, was employed in this study.

To this effect, interviews, a workshop, observations and reflections on the process of implementation resulted in a wealth of data. The findings shed light on possible solutions to address the identified problems and obstacles. The results revealed that community participation, skills development and the proper co-ordination of environmental education activities are imperative in addressing the obvious policy-practice gap.

Decision-makers uncovered the fact that the socio-economic situation of our people necessitated pulling our resources together and working as a team. The overall perceptions are that the environment is everyone’s business and that we should zealously use it and carefully guard it, not only for ourselves but also, for the benefit of coming generations.

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## CHAPTER ONE

### INTRODUCTION - THE GENERAL CONTEXT TO THE STUDY

*We cannot live for ourselves alone. Our lives are connected by a thousand invisible threads, and along these sympathetic fibres, our actions run as causes and return to us as results (Herman Melville cited in Clinton 1996:7)*

#### **1.0. Introduction**

#### **1.1. Namibia as an environmental system**

In thinking about Namibia one may focus on particular issues for example, the desert, its small population, its diamonds, Etosha National Park, the cheetah population. But it is important to remember that these issues are linked. For example the way of life of people is dependent upon the natural resources and climatic conditions of an area, and these in turn are linked to the way people use them. These linkages work together to form an environmental system in which everything is related to everything else in some way.

Clacherty (1995) described the concept “environment” as not only referring to “nature” or to “nature conservation” even though these are very important, but that economic, political and social decisions have direct impacts on the environment and the quality of peoples’ lives. Society is dependent on natural resources, such as clean air, safe drinking water, food and minerals. So the environment is as much a matter of political and economic policies and social processes as it is a matter of natural systems and resources.

#### **1.2. Geographical location of Namibia**

Namibia is situated in the south-west corner of Africa. It covers an area of approximately 825,000 square kilometres (Namibia Figures, 1998). The country is spread across two major deserts, the Namib on the west coast and the Kalahari on the eastern side. The only perennial rivers and natural boundaries are located on the country’s borders; the Orange River on the southern border with South Africa, and the Kunene, Okavango, Kwando and

Zambezi Rivers on the northern borders with Angola, Zambia, Zimbabwe and Botswana (NDP1, 1995, Moleah, 1983). The Kunene river in the north-west of the country bordering Angola has potential for hydro-electric power generation which is already being exploited (NDP1:1995). Map 1.1 shows the main features of Namibia's geography.

### **1.3. People and land of Namibia**

According to the 1991 Population and Housing Census, Namibia's population was approximately 1.4 million. At present the annual population growth rate is about 3.1% and the population is estimated at 1.6 million (Namibia in Figures, 1998). More than 800 000 people live in the northern part of Namibia while the remainder inhabit the central, eastern, western and southern part of the country. Geographical features illustrate that Namibia is a land of contrasts and has a diversity of cultures. The dominant ethnic groups identified by the colonial South African Administration are: Ovambo, Herero, Damara, Nama, Kavango, Caprivian, San, Tswana, Afrikaner, German, English and Coloured (Demographic and Health Survey, 1992, Moleah, 1983).

### **1.4. Political background**

#### ***1.4.1 Namibia's colonial history at a glance***

Before the coming of Europeans to this country the indigenous groups were mainly nomadic livestock herders who kept mostly cattle, goats and sheep. There were periodic conflicts among these indigenous groups over pastoral land and sources of water. Most people of the northern parts of the country cultivated mainly grain crops and also kept some livestock.

Namibia was colonised by Britain during ... then Germany during the period 1884 to 1915, thereafter by South Africa up to 1990 when Namibia gained her independence (Moleah, 1983, NDP1, 1995).

Between the First and Second World Wars there was an influx of Europeans into Namibia, then known as South West Africa. The rapid increase in the white population may be attributed to the discovery of mineral deposits in the territory and to the migration

of farmers from South Africa who came to take advantage of the settlement policy (Central Statistic Office, 1995:25).

The Apartheid regime of South Africa resulted in Namibia being divided into the so-called “homeland” system for blacks. Ethnic homelands made up 40% of the land while 44% was reserved for whites, with the remaining 16% consisting of game reserves and mining areas (Central Statistics Office, 1995:25).

#### ***1.4.2. Namibia’s Independence***

In the 1960s while SWAPO, as a Liberation Movement was in exile, the aim was “to free Namibia from the colonial yoke of racism, oppression and exploitation” (Moleah, 1983:2). SWAPO received national and international support. Various Protocols were signed together with the implementation of the United Nations - Resolutions 435 which culminated in Namibia’s first free and fair elections held in November 1989. SWAPO won a landslide victory in these United Nations supervised elections. These elections provided representatives to the Constituent Assembly, which, in the spirit of tolerance and reconciliation, drafted Namibia’s Constitution. Dr Sam Nujoma the leader of SWAPO, the majority party, was elected and sworn in as the first President of the Republic of Namibia on 21 March 1990.

At independence in 1990, Walvis Bay and its offshore islands remained in the hands of South Africa (NDP1, 1995:4). These were reintegrated into Namibia on 1 March 1994 and marked the completion of Namibia’s independence process.

#### **1.5. The First National Development Plan (NDP 1)**

The National Development Plan (NDP1) is Namibia’s first medium-term development strategy intended to cement the foundation for building a truly democratic, transparent and vibrant economy in which all Namibians will be both participants and beneficiaries. At Independence, Namibia inherited a small economy highly integrated with that of South Africa’s. The World Bank’s 1991 report confirmed the existence of two “Namibia’s” within Namibia. The white-dominated economic sector comprising only 5%

of the population accounted for US\$16,500 per capita added income compared with only US\$85 per capita income per year for the 70% of the population in the subsistence sector.

Namibia's economic performance since Independence has been poor due to devastating droughts during the 1991/1992 season and years thereafter, and a marked down-turn in diamond exports in 1993 and the copper and uranium prices in the world. The consequence of the above situation is that Namibia is one of the most inequitable societies in the world, a society where extreme wealth and extreme poverty exist side by side. President Nujoma argues that, "the colonial structure of the country's economy requires fundamental change, not a mere adjustment. The under-development and dual nature of the economy must be overhauled completely and not just reformed" (NDP1, 1995). The process "must enhance diversification of economy so that economic growth ensures creation of gainful and sustainable employment opportunities and reduces income inequalities." The President strongly believes that economic development is the only guarantee for peace and prosperity, elimination of unemployment, poverty, hunger, disease and ignorance and can improve the living standards of all Namibians.

Economic activities play a crucial role in sustainable development in Namibia. Our country's vision is that of a growing economy that provides jobs and wealth. The wealth generated can enhance the quality of peoples' lives by funding the provision of goods and services such as housing, electricity, water supply, education and health. But economic activity can often have a negative effect on the natural environment. For example by destroying valuable land resources, using up non-renewable energy sources and creating pollution. All these can ultimately have a negative effect on human health as well.

## **1.6. Overview of the education system in Namibia**

In order to understand the peoples' perceptions of and the context in which the current education system in Namibia, the following brief historical background is provided.

### **1.6.1. *Traditional African Education***

An old African proverb states that: “It takes a village to raise a child”. This proverb clearly indicates that education in Africa was part and parcel of the lives and work of her people long before colonisation. The proverb also responds to the question: Whose responsibility is it to educate a child? Mbamba (1981) cited in Auala (1989) has argued in the similar vein that traditional African communities educated their young about their culture and skills and that there were variations between indigenous communities. The learning process was directly related to the patterns of work in a particular community (Amukugo, 1993:36).

Like in any African tradition, Auala (1989:63) described the aim of traditional education in Namibia as: “...to conceive and transmit the people’s cultural heritage, beliefs, behaviour, patterns, attitudes, values and skills from one generation to another.” Similar views expressed by Amukugo (1993) are, that traditional education was a life-long process where an individual had to pass through different learning stages during his or her life. The content of traditional African education included: hunting, food preparation, organising religious rituals, practicing medicine, learning about cure of various diseases, making pottery, making leather and iron forging (Amukugo, 1993).

Although transfer of knowledge and skills in traditional African education was made mainly orally, learning took place by doing, as well as observation. However, oral education was by no means the only educational activity in traditional African education, but that drawing and paintings were particularly common among the San people. The famous rock paintings and arts work in Namibia are examples of these activities.

### **1.6.2. *Missionary Education***

The arrival of missionaries to Namibia as the first agents of Western Education, marked an era of a new culture that is well documented. Schools were established to strengthen the work of Christianity, and to change the cultural and traditional patterns that were considered to be “pagan.” Lindstrom (1995) cited in Lehtonen (1998:98) stated that, “a school in Africa is a child of the missionary.” Even though the missionaries laid a firm

foundation for future education development (Auala, 1989), there are some people who have mixed feelings about the activities of missionaries in Africa. This is due to the fact that missionaries tried to change the indigenous peoples' culture and this resulted in different reactions, ranging from acceptance to suspicion and hostility.

In addition to teaching converts literacy, in order to read the catechism and the Bible, the content of the curriculum was based on practical needs as deemed necessary by missionaries themselves. The aim of missionary education as described by Lehtonen (1998), was to educate the person as a whole, that is, spiritual, physical and psychological development.

### ***1.6.3. Colonial Education***

Education under German rule expanded certain aspects of the content of missionary education and introduced new ones. Literacy training was not encouraged due to reasons stated by a German colonial administrator Bley (1971:228) as:

*White settlers require native servants, they can only ensure a continuous supply by seeing to it that the servants are kept in a state of educational inferiority. To educate them... inculcate such mischievous and intolerable ideas as democracy, the brotherhood of man,... human freedom and the like.*

Although missionaries and colonial government's educational activities complemented each other, African education was kept inferior while providing the best education to the white population.

Colonial education under the South African regime was administered through the Bantu Education Act No. 47 of 1953 and the Odendaal Report of 1962. These legislations stated that:

*Bantu Education should be an integral part of a carefully planned policy of socio- economic development for the Bantu peoples. Furthermore, education must train and teach people in accordance with their opportunities in life, according to the sphere in which they live...(Green, et al, 1981:106)*

Ellis (1984 cited in Auala (1989:23) quoted Dr Verwoerd articulated the Nationalist Party Government's intentions with Bantu education as:

*There is no place for the native in the European community above the level of certain forms of labour. When I have control of native education, I will reform it so that the natives will be taught from childhood to realise that equality with Europeans is not for them. People who believe in equality are not desirable teachers for natives.*

Due to the above apartheid policy, schools under Bantu education created strong racial, ethnic and tribal identities.

Prior to Namibia's independence in 1990, schools were separated on the basis of race. Within each group there was further selection of the few who would reach the higher levels of the separate education system. The uneven allocation of resources ensured that a small percentage would be selected for further education. Education for whites became compulsory but not for Coloureds and Blacks (Auala, 1989; MEC 1993). The policy of segregation ensured that with very few exceptions, the Black elite remained inferior to the White elite in terms of its education, jobs, authority, influence, and incomes (MEC, 1993:5). Colonial education was therefore perceived as an education for the "elite".

#### ***1.6.4. Post independence educational reform***

After independence a national Ministry of education was forged from eleven ethnically based education administrations. Education after independence was marked by a transitional phase from elite education to education for all; from education of the privileged few to education as a right of every Namibian. This is enshrined in Article 20 of our Constitution that states that:

*All persons shall have the right to education. Primary education shall be compulsory and the state shall provide reasonable facilities to render effective this right for every resident within Namibia, by establishing and maintaining State schools at which primary education will be provided free of charge (The Constitution of the Republic of Namibia; 1990:12).*

According to the NDPI (1995:329), at Independence in 1990, Namibia's education system was best characterised by five key features:

- Fragmentation along racial and ethnic lines.
- Unequal access to education and training at all level of the system.
- Inefficiency in terms of low progression and achievement rates and high wastage rates.
- Irrelevance of the curriculum and teachers education programmes to the needs and aspirations of individuals and nation.
- Lack of democratic participation within the education and training system. Teachers, parents, administrators and workers were largely excluded from decision - making processes.

The five key features which characterised our education system are complex challenges in the process, but, "we have a positive vision of possibility and a belief that our potential is vast and largely untapped" (Snyder and Voigts, 1998).

Our vision, "Education For All" marked our educational reform that is based upon five broad principles of access, equality, quality, lifelong learning and democratic participation. Achieving this, will require hard work, effective communication, co-operation and compromises (MEC, 1993:2). Education for all, requires a new way of thinking about our education system and training and thus changes our philosophy of education.

### **1.7. Context of the research**

Article 95 (l) of the Namibian Constitution states that:

*The State shall actively promote and maintain the welfare of the people by adopting policies aimed at the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future ... (The Constitution of the Republic of Namibia, 1990:52).*

This commitment has been further described in *Namibia's Green Plan* (Brown, 1992), a document for sustainable development which was presented at the Earth Summit in 1992, and several government ministries have honoured it at policy level. One such ministry to take up this constitutional task and responsibility is the Ministry of Environment and Tourism (MET) which has, in collaboration with the Ministry of Education and Culture (MEC), drafted an environmental education policy. *Namibia's Green Plan* indicates that the government is committed to providing all Namibians with access to environmental education at formal and non-formal levels (Brown, 1992:165). Importantly, in keeping with international trends the concept environment is interpreted in the government policies as embracing biophysical, social, economic, cultural, historical and political aspects (Tarr, 1994:3). The MET (1993:62) define environmental education as “*the process by which the ministries aim to ensure an environmentally literate population which can evaluate and make appropriate decisions to help solve environmental problems.*”

Whereas policy might look good on paper, the reality often reflects less than effective implementation. This seems to be the case in Namibia, where, in my observation, there is a gap between the Environmental Education Policy and its actual implementation.

Factors limiting the implementation of policy in Namibia, might be related to the implementation of three national policies. The first is the Policy of National Reconciliation that has resulted in some officials from the previous government and in opposition to the new government, being kept on in their positions. In various instances the local media, for example the Namibia Broadcasting Corporation and The Namibian newspaper, have alleged that officials who do not support the government of the day may intentionally delay the implementation of new government policies. Secondly, the Affirmative Action Policy is aimed at bringing about equity and making the Public Service more representative by promoting previously disadvantaged people to higher positions (Konrad-Adenauer-Stiftung, 1992:7). The implication is that some of those promoted may not necessarily have the background, competence and skills required for the work that they are doing. To support them, the government employed international consultants to assist different ministries in policy formulation. The work of these consultants may be constrained by their limited knowledge of the country with its diverse

cultures and contrasting landscapes. If government officials do not have the necessary depth of insights, they may be unable to detect and overcome these constraints.

Finally, the Rationalisation Policy, aimed at restructuring the civil service, was expected to be implemented in 1992, but only came into effect in July 1994. The long-awaited implementation of this policy has caused much uncertainty among officials who were not sure whether they would be affected or not, thus in all probability delaying the implementation of policy and the follow-up of issues.

I consider the perceived policy-practice gap in environmental education as a problem worth addressing, due to increasing environmental degradation in Namibia as expressed by Marsh (1991) and Seely & Jacobson (1994).

It appears that ministerial decision-makers are, with time, becoming increasingly conscious of the importance of environmental education as indicated in their various declarations of intent (SADC, 1994), which include references to international guiding principles for environmental education (UNESCO-UNEP, 1978). Given this level of commitment on paper, that is, their current opinions, views, beliefs and understanding of concepts such as environment, environmental issues and problems, and environmental education and its implementation, will have a potentially significant influence on what policies they formulate and how they act upon them, if they do.

### ***1.8. The goals of the research***

1.8.1. To investigate the perceptions of decision-makers within the Ministries of Environment and Tourism and Education and Culture, as well as Regional Councillors, with regard to the implementation of Environmental Education Policy.

To this effect, the study examined decision-makers' interpretation of:

- (a) The concept environment with specific reference to its biophysical, socio-cultural, economic, historical and political dimensions;
- (b) Environmental issues and problems;
- (c) Possible solutions to these problems;
- (d) Environmental education;
- (e) Environmental Education Policy;

(f) The process of policy implementation.

1.8.2. The study also explored ways in which obstacles to the implementation of Environmental Education Policy can be addressed.

## **1.9. ORGANISATION OF THE STUDY**

The study consists of the Abstract, Acknowledgements, Table of Contents, Map of Namibia, Chapters One to Six and the References.

**CHAPTER ONE:** Provides an introduction with background information to the study: Namibia as an environmental system. The general context of the study is provided through information on our National Development Plan One (NDP1). An overview of our education system and the context of the research are provided.

**CHAPTER TWO:** Presents a review of the Literature on environmental education policies internationally, regionally and nationally. The chapter also answers the question why environmental education policies are being implemented.

**CHAPTER THREE:** Outlines the methodological approach used: The rationale for an interpretative-constructivist and critical perspective, an action research method, sampling, research techniques and data analysis.

**CHAPTER FOUR:** Presents and interprets data. These interpretations are based on the perceptions obtained from participants in the interviews and in the workshop.

**CHAPTER FIVE:** Discusses the findings of the study.

**CHAPTER SIX:** Provides a reflection of and limitations of the study, recommendations and points to note and conclusion.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0. Introduction

Much has been written about what “environmental education” should be. But what happens when some of these dictums are put into practice? What limitations may be encountered? This chapter briefly reviews environmental education plans and strategies, their implementations internationally, regionally and nationally. Where Environmental Education Policy is in place, a critical look at its implementation process is crucial to this study. Such experiences are worth sharing with those countries and individuals attempting to improve their policy-implementation process.

#### 2.1. Environment crisis - a global concern

The concept environment is viewed and used internationally as a human idea that refers to the biophysical, economical, political, and other social dimensions of our life worlds (Caring for the Earth, 1991). Environmental issues affecting the world are discussed in this study under the phenomenon, global change.

Although there is some controversy about the entire spectrum of environmental issues involved in global change, there is a broad agreement on the key ones such as; global warming, increased human population, deforestation, loss of biodiversity, land degradation, ozone depletion, pollution, energy consumption, soil erosion, emissions of toxic gases (Caring for the Earth 1991; UNESCO/UNEP, 1993). The interactions and interrelationships among issues listed and those not listed are numerous and complex. An example is the socio-economic repercussions, due to increase in human population.

Irwin's (1990) view of the environment crisis is that the real issues are those causing day-to-day hardship and death of people all over the world. These reside in the structure of economic, industrial, political and military power designed to serve the interests, of profit

and the unlimited accumulation of wealth. These views are supported in the document *Caring for the Earth - A Strategy for Sustainable Living* (1991). The diagram adapted from Ekins (1993) Appendix D depicts the environment crisis as a wheel of interacting global concerns. Some consequences of the environment crisis are conflicts, famine and strife that persist in an over-stressed world.

## **2.2. Environmental education - A response to the environmental crisis**

The first working definition of environmental education was proposed in 1970 at a conference organised by the IUCN (the World Conservation Union). Environmental education's objective is; "to develop a world population that is aware of, and concerned about, environment and development and associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones". (UNESCO/UNEP,1993:2). Since its formal inception, environmental education has been gaining respect among governmental and NGO institutions worldwide.

The concept sustainable development is defined in *Our Common Future* (1987: ) as ;

*a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhances both current and future potential to meet human needs and aspirations.*

Leal Filho (1993) has indicated that there is consensus among specialists that environmental education is closely associated with the promotion of sustainable development where the latter cannot be reached without the former.

Various key international conferences and global forums have shown how the environment has become an issue on the political agenda. Governments are developing environmental policies to reduce tensions as a result of environment crises and to stimulate the design and production of more sustainable products and to conserve biodiversity (Goldstein, 1995).

### **2.3. Environment crisis - A Southern African Regional concern**

The southern African region is not an island. It is influenced by trends and decisions in other parts of the world that have a bearing on whether the region will be able to achieve sustainable development or not. In responding to the challenges of sustainable use of resources an inter-governmental organisation called Southern African Development Community (SADC) was established in 1990. To date SADC consists of fourteen countries namely Namibia, South Africa, Angola, Botswana, Zambia, Zimbabwe, Mozambique, Malawi, Tanzania, Lesotho, Swaziland, Mauritius the Democratic Republic of the Congo and Seychelles. The Lesotho government is responsible for coordinating the Environment and Land Management Sector (ELMS).

In the past century, boundaries of individual countries were established for political and not for environmental reasons. Although SADC, as a political entity is ecologically fragile, it is also exceptionally rich in biodiversity and provides a home to all basic life forms and their inhabitants (SADC, 1994).

Environmental issues in southern Africa are similar, due to both shared historical developments and biophysical environments. The latter include the Zambezi River, the Kalahari Basin, the marine resources of the southern Atlantic and the western Indian oceans. Historical developments include colonialism, the setting up of educational systems, migrations due to cross-border issues resulting in shared language and cultures. A host of common environmental problems were created in the name of development during the colonial past. These were carried forward after independence in the name of modernisation.

It is important to note that a large proportion of people in the region are rural subsistence farmers. They generally support themselves through their own production. Both formal and informal sectors in the region draw heavily on the local environment. An over-exploitation of land use results in land degradation as one of the major environmental problems. There is, however, a link between environmental issues and poverty of people struggling for food, shelter, warmth and water. The values of the poor are tied to immediate use of the land and its resources to meet their pressing needs (SADC 1994).

The critical question is how best the region can use its resources, that is soil, water, air and all life forms on the earth's outer crust to develop the lives of its people while ensuring that future generations will also have access to these resources for their own development needs. Such a challenge calls for both national and collective regional action.

#### **2.4. Environmental Education in Southern African**

The role of environmental education is raising awareness through improving understanding of issues and encouraging positive action. School curricula such as in South Africa, Namibia have included the environment as a theme. Environmental magazines and other publications are produced for children and adults. Some Non-Governmental Organisations are directing their energy in this area. Some have been formed specifically to implement environmental education, for example the Environmental Education Association for Southern Africa (EEASA) and Namibia Environmental Education Network (NEEN). The media are becoming better informed, and more stories and programmes on environmental issues are appearing in print, on radio and TV (SADC, 1994).

SADC countries with known environmental education policies are Namibia and South Africa. Most policies in southern Africa are implemented through legislation or through programmes enforced by established institutions. Implementing policy initiatives is difficult due to a combination of factors including lack of resources, inadequate skills or lack of political or popular support (SADC /ELMS, 1994). The SADC (1994: 43) maintains that, "effective implementation of policies at national level largely depends on effective institutional mechanisms".

#### **2.5. Environmental concerns in Namibia**

"Namibia's environment is one of great beauty and potential, but is also alarmingly fragile" (Brown, 1992: 100). The following brief description of issues illustrates the above quotation:

### **2.5.1. Water**

Namibia is one of the driest countries in the world. It is for the most part a natural desert. Dry conditions are normal. Namibians can *expect* seven years out of every ten to be classified as 'drought' and nine years out of ten to be dry (Du Toit and Squazzin, 1995). Our survival is ultimately linked to the availability of water. Water is vital for the development of our economy and for an improved standard of living. The question is how are we going to balance or partition our limited water resources to cope with increasing demands?

### **2.5.2. Soils**

Namibian soils are poor, infertile and sandy. Poor soils affect our ability to produce crops and to provide ourselves with food. The dry climate means that there is a lack of organic matter in the soil and consequently a lack of essential nutrients necessary for healthy plant growth (Brown, 1996; Du Toit and Squazzin, 1995; Geckler & Nott, 1993).

Namibian soils are very vulnerable especially since there is a lack of vegetation to anchor the soil and rainfall is characteristically in the form of thunderstorms. Human activities are making the situation worse. Some of the activities that increase soil erosion include: inappropriate cultivation methods, removal of vegetation, overgrazing, fires, and trampling of the soil.

### **2.5.3. Deforestation**

Namibia has no real forest because of its arid to semi-arid nature. About 80% of the country supports scattered trees and shrubs. Twenty percent of this is covered with dry woodlands, 29% by sparse savannas with scattered trees and shrubs and another 29% by savannas with thorn and mopane. The remaining 22% is desert. Wood is the most important source of fuel for more than 98% of the rural population and a fairly large proportion of the urban population too. Studies indicate that about 1,8 million m<sup>3</sup> of wood are consumed each year in Namibia. About 93% of this is used as fuel and only 7% is used in construction and industry (Du Toit & Squazzinn, 1995; Geckler & Nott, 1993). Namibia has a rural per capita wood consumption of about 1,3m<sup>3</sup> per annum. Wood conservation techniques or use of fuel efficient stoves can reduce this figure. The fact that trees are also cleared to make

way for crops or to provide grazing, may indicate that the exact rate of deforestation is much higher than the 1,8 million m<sup>3</sup> per annum (Du Toit and Squazzin, 1995; Seely, 1991).

The challenge is: Where in the future will we get our wood from if the trees that provide the wood are being chopped down at a faster rate than they can grow?

#### **2.5.4. Bush encroachment**

Bush encroachment is a symptom of the loss of productive land due to inappropriate land management practices. Changes in vegetation occur leaving the land less useful than before. It normally happens through the loss of valuable grass plants and the expansion of less palatable woody species (Du Toit and Squazzin, 1995).

Human activities, specifically livestock farming, are the biggest contributors to the bush encroachment problem. Heavy grazing pressure, especially on commercial farmlands, has led to a drastic decrease in the productivity of the land. Estimates indicate that the annual loss suffered by the agricultural sector as a result of bush encroachment is as much as N\$100 million. The production capacity of the land had decreased drastically, as high as 60% in the Tsumeb area. The threat of bush encroachment seriously hampers the output of the agricultural sector and threatens one of the largest employers and the gross domestic product (Bester, 1996; Du Toit & Squazzin, 1995).

#### **2.5.5. The marine environment**

Namibia has a coastline of about 1 500 km that borders on some of the most productive waters in the world. Each year millions of dollars of fish are caught and sold on the local and international market. Indeed, fishing is one of the most important forms of income for Namibia and provides thousands of people with employment. Poor control before independence and over-fishing have led to a decline in fish stocks. Some of the fish stocks are so low that they cannot be harvested without threatening future harvesting potential. Pilchards, anchovy and crayfish are some of the threatened marine reserves.

### **2.5.6. Pollution**

Pollution is a serious threat to health and the environment. Namibia has always believed that it has a good track record in this regard. But as the population grows and people improve their standards of living, it is likely that pollution will escalate. Some of Namibia's biggest pollution problems include: littering, industrial pollution, pesticide use and toxic waste disposal.

### **2.5.7. Population**

The population issue is one that is central to environmental degradation. The harsh reality is that there are more people placing heavy demands on limited resources. In some cases the resources are being used unsustainably leading to reduced potential for the resource to support people in the future. Issues mentioned previously are problems caused by human activities. Without a population that can take heed of environmental issues and act appropriately on them, the future looks bleak.

Namibia is facing challenges that many other countries are also experiencing, yet there are issues that are particularly unique. The implications of this are that we can learn from other countries but at the same time we need to be sure that the recommendations, guidelines and advice are appropriate for the unique conditions that prevail. There are not many countries in the world that comprise of 97% arid and semi-arid land. We need to make sure that the things we do are suited to this arid land in which we live.

Although this sketches a fairly depressing picture of the Namibian situation, it is not all bad. There are many people and organisations working in some of the areas mentioned, through agricultural extension work, community development and formal education. Much has already been done to encourage the sustainable use of resources and to develop policies and guidelines that will ensure a better future for all Namibians.

The environmental issues illustrated above call for environmental action. The following government policy documents in Namibia support the need for an environmental policy:

## **2.6. Environmental policies in Namibia**

Namibia is one of the few countries in the world that has environmental clauses entrenched in its Constitution.

### **2.6.1. The Constitution of the Republic of Namibia**

Clauses 91 and 95 provide the overall guidelines for environmental policies in Namibia.

### **2.6.2. Namibia's Green Plan**

As discussed in chapter one, the 'Green Plan', as it is commonly known, is a document for sustainable development. It sets out policies and strategies for securing resources for the present and future generations.

### **2.6.3. Towards Education for All**

This education policy document states that basic education will promote the development of environmental awareness through the development of a holistic understanding of the dynamic interdependence of all living things and their environment (MEC, 1993:5)

### **2.6.4. Environmental Education Policy in Namibia**

The Ministry of Environment and Tourism, in close collaboration with the Ministry of Education and Culture and a number of NGOs in Namibia, drew up the environmental education policy in 1993. The Environmental Education Policy states: "environmental education is the process by which we aim to ensure an environmentally literate population which can evaluate and make appropriate decisions to help solve environmental problems." (MET, 1993:62)

## **2.7. The status of Environmental Education Policy implementation in Namibia**

### **2.7.1. The Ministry of Environment and Tourism (MET)**

Environmental education is being implemented at the environmental education centres at Namutoni and Waterberg (Okatjikona) and the MET Information Unit, through the media.

Environmental education centres are also community centres established to:

- Support the environmental education initiatives of MEC
- Be utilised by all individuals and organisations with interests in environmental education
- Serve as environmental forums within their communities
- Support environmental education activities through the extension unit.

### **2.7.2 The Ministry of Education and Culture (MEC)**

The various MEC curricula are evidence of the intention of the Ministry to include themes on environment in all phases of the new education system. The theoretical implications for environmental education are summarised below:

Subjects at primary education level are: year 1-3 Environment Studies; year 4-7 Social Studies, Natural Science and Health Education;

Subjects at secondary education level are: year 8-10 Agricultural Production and Farming Technology, Geography, Life Science, Physical Science, History; year 11-12 Natural Economy, Biology, Physical Science, Geography, History and Development Studies.

Tertiary education programmes have adopted cross-curricula approaches that introduce the principles of environmental responsibility that can become part of the learning process of every student (Brown, 1992). In the Teacher Education programmes, the Basic Education Teacher's Diploma course has integrated environmental education themes into its curriculum. The Nature Conservation course includes environmental education and extension policies (SADC Report, 1994). Namibia College of Open Learning (NAMCOL), a distance education programme for adults follows the curricula used in formal education.

The Directorates Adult Education, Arts and Culture have broad goals of developing literacy, numeracy and understanding of the natural and social environment; to lay a foundation for

the development of human resources and economic growth of the nation (SIDA Report, 1994).

### **2.7.3. Inter- Ministerial Committee for Environmental Education in Namibia**

The committee was formed on the 10th April 1994 and comprised of three Ministries - Environment and Tourism, Education and Culture, and Youth and Sport. The aim is to facilitate the development of a ministerial infrastructure for environmental education in Namibia and to promote environmental education in Namibia.

### **2.7.4. Non-formal sector in Namibia**

SADC Report (1994) outlines environmental education activities by the business sector. As an example, Gold Fields Namibia is sponsored the Environmental Education Centres and Natural Economy textbook through the Namibia Nature Foundation. Some Non - Governmental Organisations (NGOs) that are actively implementing the Environmental Education Policy and involved in co-ordinating environmental education network are the Rossing Foundation, the Desert Research Foundation of Namibia, the Cheetah Conservation Fund. In 1994 an Environmental Education and Communication Inventory for Namibia was compiled (Monroe, 1994).

## **2.8. Policy-Practice relationship of Environmental Education Policy in Namibia**

The SADC Report (1994:6) outlines some problems impeding the practical implementation of environmental education as:

- *Environmental education is not regarded in formal education (schools) as being of immediate importance due to a shortage of schools, a lack of basic facilities in schools such as water and electricity, as well as a problem of under-qualified and unqualified teachers. Available resources are channelled in these directions*
- *Environmental education is a new concept and teachers are not adequately trained to take full advantage of their surroundings and integrate them into their daily teaching strategies*

- *Lack of funds to pay for full time environmental education co-ordinators in MET and MEC*
- *Lack of appropriate facilities and relevant materials is a serious constraint to the rapid integration of environmental education into the core curriculum*
- *Lack of clarity between what constitutes curricular intentions and what are curricular reality*

## **2.9. Conclusion**

Although the literature contains much concerning the best ways to integrate environmental education into formal education, very little research has been done to explore how environmental education in general and Environmental Education Policy in particular have actually been implemented. This, in my opinion, may be attributed to lack or absence of a component of monitoring and evaluation built into international, regional and national plans and strategies. No-one seems to be accountable for reporting on progress made, strengths and weaknesses of country plans on environmental education.

The methodological approach followed in this study is discussed in the next chapter.

## CHAPTER THREE

### RESEARCH METHODOLOGY

This study was conducted in 1995 and it was only the writing which was completed in 1998. The literature quoted, contextual comments made and the data interpretation should be seen in this historical context.

#### **3.0. Introduction**

The purpose of this chapter is:

To present the aims of the study; to explain the rationale for the research approach used and the procedure followed in conducting the research.

The decision-makers as key-informants in this study and I, (the researcher), are all in the Public Service of Namibia. Unless otherwise explained, references to, “we” in the study are used to refer to participants and I.

#### **3.1. Aims of the study**

##### **3.1.1. To investigate Namibian decision-makers’ perceptions of Environmental Education Policy implementation with regard to the following:**

- The concept “environment”
- Environmental issues and problems
- Possible solutions
- Environmental Education Policy
- The process of its implementation

##### **3.1.2. To explore ways in which possible solutions to the implementation of Environmental Education Policy could be addressed.**

### **3.2. Research Approach**

The approach used in this study is qualitative in nature. The conceptual issues being studied are better addressed by a synthesis from several research traditions rather than from one. This view is strengthened by Robertson (1994:2) when he stated that “knowledge claims may be generated through more than one epistemological framework”. I have therefore drawn the research approach from an interpretative-constructivist and critical perspective (Cantrell, 1993; Guba 1990) within a post-positivist epistemology (Goodman, 1992).

#### **3.2.1. Rationale for Interpretative-Constructivist Perspective**

I have chosen this perspective based on the realities that human perception are unavoidably biased and that research being a result of human intentions, is unavoidably interpretative (Garrison, 1986; Robertson, 1994).

Interpretative research is further outlined by Robertson (1994:22) as an example of a non-experimental approach to research contingent with constructivist epistemology. The interpretative researcher looks to understand a situation as it is constructed in his or her social setting. In this study, I have attempted to capture what people say and do, that is, how people interpret the world. I entered the setting to understand how people view the Environmental Education Policy implementation in their own situation.

Bryman (1988:54) views social life as “an unfolding process in which the individual interprets his/her environment and acts on the basis of that interpretation”. But Goodman (1992:11) argues that;

“people are active agents in the creation of social reality. Individuals do not merely respond to external stimuli, they interpret the world around them and then act on their unique interpretations.”

This quotation is relevant to this study, given that decision-makers’ perceptions are likely to influence the implementation of policy very strongly.

The decision-makers' perceptions of the implementation of the Environmental Education Policy were interpreted on the basis of their environments in which they live and work. This study focused on the subjective views and experiences of these individuals. Subjective views are supported by Cohen and Manion (1994:26) as follows:

*Understanding of individuals' interpretations of the world around them has to come from the inside, not the outside. Subjective understanding is seen as a means of dealing with the direct experience of people in specific contexts.*

Both interpretative-constructivist and critical approaches take into account the fact that our subjective views are not only internally constructed but also influenced by "persuasive social forces" (Fien and Hillcoat 1996:28).

### **3.2.2. Rationale for critical perspective**

My choice for the critical perspective is supported by many authors and researchers, such as Carr and Kemmis (1986:137) who stated that:

*Critical oriented research emerged from the interpretative tradition, with theorists arguing that although interpretative methods provide knowledge that promotes understanding and meaningful dialogue, these alone are insufficient because they exclude questioning the content of such understanding.*

The Environmental Education Policy in Namibia looks good on paper but the reality often reflects less than effective implementation. Therefore this approach provides the means by which I can ask certain questions about the *status quo*.

Gibson cited in Fien and Hillcoat (1996:29) argued that: "A critical perspective is not simply explanatory, but is committed to enabling change toward better relationship."

In this study I intend to influence the decision-makers to bring about change in the policy implementation process through sharing relevant information with interviewees and workshop participants. Recommendations made in the study will be made available

through follow-up activities of the Namibia Environmental Education Network (NEEN) of which I am an active member.

### **3.3. The action research method**

Action research is one of the major research methods employed by critical educational researchers. The aim of action research is for practitioners to improve their understanding of events, situations and problems in order to increase the effectiveness of their practice (Fien & Hillcoat, 1996; McKernan, 1991).

A US Commissioner on Indian Affairs (1933 - 1945) cited in McKernan (1991:3) wrote:

*Since the findings of research must be carried into effect by the administrator and the layman, and must be criticised by them through their experience, the administrator and the layman must themselves participate creatively in the research impelled as it is from their own area of need.*

Action-research functions is best when it values co-operative action. This method “incorporates the ideas and expectations of all persons involved in the situation” (Cohen & Manion 1994: 190). The preceding accounts indicate how new understandings could be translated under current conditions, into actions that might resolve or at least substantially improve, the current problem situation (Robertson, 1994).

Similarly, Robottom (1987) argues that action research aims at personal improvement through praxis in that it promotes rational decision making in the sense that the practitioners are able to choose between alternative courses of professional action, the respective rationales of which have been subject to deliberation by the practitioners themselves.

In the context of the above references, I found it appropriate that a range of decision-makers and interested people actively participate in this study, to improve our understanding of the conceptual issues in our environment and to improve the

implementation of the Environmental Education Policy that is ongoing. An action-research design is therefore appropriate for this study.

This stance of using the action-research method, is supported by authors and researchers such as Lomax (1994:16) who argued that; “action research is value-based rather than neutral.” Taken-for-granted values need to be explored. Cohen and Manion (1994:186) view action-research as;

*a small-scale intervention in the function of the real world and a close examination of the effects of such intervention. It is situational and concerned with diagnosing a problem in a specific context and attempting to solve it in that context, usually through collaborative teams of researchers and practitioners working in a project.*

Although action-research aim to solve the immediate and pressing day-to-day problems of practitioners, the research process consist of a series of decisions also referred to as stages or research cycles by McKernan (1994), Cohen and Manion (1994), Lomax (1994), Bennett *et al* (1994) Fien and Hillcoat (1996). I have chosen a research cycle with key elements of reflection, planning and action.

### **3.3.1. Sampling**

A range of decision-makers were chosen to be included in this study on the basis of their importance to good governance and in particular to the administration and monitoring of environmental education programmes. Two different samples were selected in order to serve different purposes in the action-research process.

#### **3.3.1.1. Sampling for interviews**

Out of 27 Ministries with policies that affect the environment, two have been identified as having particularly close associations with environmental and educational matters, namely the Ministry of Environment and Tourism (MET) and the Ministry of Education and Culture (MEC). I have drawn the research sample from three identified groups of

decision-makers. The first group was of Ministers who are the most senior policy-makers, and members of the National Assembly, a legislative body. The second group consisted of senior civil servants at implementation level. The last group consisted of Regional Councillors who represent their communities in the National Council, a body that reviews legislation. Regional Councillors are accountable to, and informants of the communities they represent. Their participation in this study was important for sharing insights from their own observations of the implementation of the Environmental Education Policy, for example at the Environmental Education Centres.

Participants in this study were not selected as representatives of some population to which findings were to be generalised, nor were they selected in order to satisfy statistical requirements of randomness, but they were rather chosen according to the purposive sampling method as described by Guba and Lincoln (1989) and Cohen and Manion (1994).

#### **3.3.1.2. Sampling for a workshop**

Guba and Lincoln (1985:198) argued that inquiry that is in the end not shareable has little utility. Since the aim of the study was not to prove any hypothesis but to improve the implementation of the Environmental Education Policy, a workshop that was held in 1995 at Okaukuejo in Etosha National Park as part of the first Annual Conference of Namibia Environmental Education Network (NEEN) was included in the study.

I chose to present my research results from the interviews at this platform where I knew that people with an interest in environmental education would attend. Six participants in the interviews were also actively involved in the workshop. There were, in total, 66 Namibian participants interested in environmental education. Using a workshop, as a research technique was useful as the interaction amongst participants stimulated an in-depth discussion of various topics that would be difficult in a more formal interview.

I also selected this audience in order to minimise logistical arrangements and to cut down on expenses for running a separate workshop. The combination of, “convenient and

reputational sampling methods” that I used are supported by Schumacher and Macmillan (1993:382).

### **3.3.2. Data Collection Techniques**

I have used three research techniques namely; interviews, research diary and observations and recordings at the workshop.

#### **3.3.2.1. Interviews**

According to Guba and Lincoln (1985:267), an interview is a conversation with a purpose. It allows gathering descriptive data from participants’ own words. Seidman (1991:3) argued that:

*In some research situations, in-depth interviews, is an appropriate primary method of investigation. The root of in-depth interviewing is an interest in understanding the experience of other people and the meaning they make of that experience.*

The views of Judd *et al* cited in Smith (1995:41) support my choice of interviewing techniques by stating that:

*Interviews are used in an effort to obtain a more intensive study of perception, attitudes and motivations than a standardised questionnaire. This type of interview is useful in scouting a new area of research to find out what the basic issues are, how people conceptualise the topic, what terminology people use, and what the level of understanding is.*

The argument of Seidman cited in Smith (1995) is that the best way a researcher can investigate a process is through listening to the individual and the collective experience of people who live out the process. Such advice was useful to me as a novice researcher.

I have used a semi-structured interview rather than the inflexible structured interview (Guba & Lincoln, 1995). In my selection of this type of interview I considered the aims of the study as well as my personal style.

The interview process was guided by an interview schedule that I drew up. Bogdan *et al* (1982) maintained that an interview guide offers the interviewer considerable latitude to pursue a range of topics that add to the richness of the study. The research purpose governs the questions prepared in the interview schedule (Cohen & Manion, 1994). These questions were in a framework that would enable me to record responses.

I used open-ended questions in the interview guide that have a number of advantages. They are flexible in that I could probe in order to clear up any misunderstandings or develop more depth. I also used open-ended questions to encourage co-operation and help establish rapport with participants. I could assess what participants' beliefs are and get the conversation focused (Schumacher & Macmilan, 1993; Cohen & Manion, 1994).

The interview schedule provided space for observational notes. This practice was supported by Guba and Lincoln (1989:88) when they stated that "human sources are tapped by interviews, observations and by noting non-verbal cues."

### **3.3.2.2. The research diary**

The use of a diary as a research technique is not commonly used. Bell (1987:80) described diaries as;

*an attractive way of gathering information about the way individuals spend their time. Such diaries are not of course records of engagements or personal journals of thoughts and activities, but records or logs of professional activities.... however, diaries can be adopted to suit whatever purpose you have in mind.*

The above quotation in my view, provides flexibility to researchers to decide for what purpose the research diary will serve them.

Burgess cited in Bell (1987) noted that diaries could be used as a preliminary method before interviewing. Bell (1987:81) further quoted Zimmerman and Wieder who in 1977 used diaries for their ethnographic study. They described the purpose of diaries as;

“... an observational log maintained by subjects ... a source of data in its own right ... a question-generating and data-generating devices ... a method of participant observation .

Wickman (1997) listed diaries as one of the sources and methods of data collection when pursuing participatory research. The three key elements of the action research cycle that of reflection, planning and action are, in my view, better documented through the practice of keeping a research diary to record my reflections, observations and research activities.

### **3.3.2.3. Workshop Discussions and Activities**

The terms “focus group discussions” and “workshops” are often used interchangeably to refer to the same research technique that is particularly used in participatory action research.

Focus group as a research technique dates back to the 1920’s. Based on the literature that I reviewed, it seems that focus group discussions in education research is an under-utilised research technique. This observation was supported by Ashwell (1997:1) when she made a comment that:

*Workshops [focus groups] are not usually listed in handbooks of research methods. However, qualitative research employs a rich diversity of methods to construct as full a picture as possible of the research situation.*

Kitzinger (1994:103) defined focus groups as:

*Group discussions organised to explore a set of issues such as people’s views and experiences. The group is ‘focused’ in the sense that it involves some kind of collective activity. Focus group methodology is different from one-to-one interviews, ... group interviews and concentrates on the interaction between research participants ... in the research process.*

The workshop explored diversity rather than representative-ness (Kitzinger, 1997) and it validated data collected. Issues of reliability and validity of a research of that nature are, according to Lomax (1994:162), “best dealt with openly in groups who debate issues and formulate and apply ethical guidelines for themselves.” In this way, critical communities can be created that can work together to help members bring about agreed improvements.

At the same time group discussions are considered by Kitzinger (1997:112) as “invaluable in enabling people to articulate experiences in ways that break away from the clichés of dominant cultural constructions”.

Drawing from my teacher training and work experiences, I believe that adults walk into meetings or workshops with many life experiences and often high expectations. I have therefore used a focus group discussion or workshop to tap from such a wealth of resources, to provide feedback of the research findings at that stage, discuss the results, reach consensus on themes that emerged from both the results and the workshop discussions, and draw up an action plan.

Participants in the workshop that I facilitated were interested individuals in environmental education and hailed from various professions including teaching, community development and civil service.

After preliminary results were presented, workshop participants chose to divide into three groups namely, formal education, adult and continuing education, and community-based organisations. Each group selected their facilitator. The task for each group was as follows:

“Given the obstacles or constraints identified in the process of implementation of the environmental education policy in Namibia, and those which you are aware of, develop an action plan to improve the situation.”

At a short feedback session, the group discussions reports were summarised on flipcharts and were briefly presented by group facilitators at the plenary.

In the context of this study, using an action research method, I used a workshop as a research technique to facilitate change as a direct result of the research. Fien and Hillcoat (1996:36) support the view that this “is one of the educative action elements of critical research”.

### **3.3.3. An action research process**

Several authors described action-research as a process that has an ongoing series of events (McKernan, 1991; Fien and Hillcoat,1994). The key aspects of this action research cycle are described below:

1. In 1994 after reading Namibia's Green Plan, I reflected on the Environmental Education Policy that was adopted by the Namibian Government in 1992. This policy was not implemented in many Government institutions in the manner in which it was articulated in the Plan.
2. I drew up an interview schedule with open-ended questions. In February 1995, I conducted pilot interviews with three participants namely, Managers of a Teacher Resource Centre and Environmental Education Resource Centre and a Regional Councillor. Valuable data and feedback obtained from the pilot interviews did not change the methodological approach.
3. The actual interviews were conducted between March 1995 and June 1995 in Windhoek. A tape-recorder, an interview schedule and a research diary were sources from which I transcribed the data.
4. In July 1995, I facilitated a feedback session at the NEEN conference. I shared the results of the interviews in a focus group/workshop. Participants included some of those who were involved during the interview process.
5. During the second session that was allocated to me at the conference, an action plan intending to improve the environmental education policy was drawn up. Focus group discussions were held in three groups that discussed the emerging areas of concern where environmental education policy should be focused, namely; Formal Education, Adult and Continuing Education, and Community Development.

6. The NEEN conference deliberated extensively on the draft environmental education policy for Namibia. The conference resolutions were in a form of an action plan and are currently being implemented as an ongoing process.

An important feature of this study is that the process outlined has a number of stages or "...cycles with its built-in mechanism for review, change of direction, planning and action" (Lomax, 1994:162). This study has presented a single cycle in a series of cycles that make up an action research design. I took the advice by McKernan (1991:32) when he described an evaluative-reflexive concept by stating that; ... "it is crucial to stand back and reflect particularly at the end of a cycle of action, and to describe, interpret and explain what is going on." At this stage we continue to reflect and improve our implementation of the Environmental Education Policy in areas where we live and work.

#### **3.3.4. Data Analysis**

The method of data analysis used was largely qualitative. However, where appropriate, quantitative methods were used. In such cases the intentions are not to prove fixed correlations between variables, but I utilised them in order to compare and identify emerging themes from the three groups and highlight possible contradictions from the data.

## CHAPTER FOUR

### PRESENTATION AND INTERPRETATION OF RESULTS

*The task of the qualitative researcher is to find patterns within those words and to represent those patterns for others to inspect while at the same time staying as close to the construction of the world as the participants originally experienced it*  
(Mayakut & Richard, 1994:18)

#### **4.0. Introduction**

This chapter deals with the presentation and interpretation of findings collected through interviews, observations during my attendance at an environmental education conference and a workshop and reflections in a research diary. The review of some related studies in the literature has contributed to my interpretation of the findings.

The results are presented topic by topic and are mostly analysed qualitatively. However, quantitative methods are also applicable within a post-positivist epistemology (Robertson, 1994). Simple frequency counts (Cohen and Manion, 1994) are presented for comparison purposes. The chapter is concluded with a summary of recommendations made by participants in both interviews and the workshop.

#### **4.0.0. The interview results**

On the cover sheet of the interview schedule, background information of interviewees collected can be found. As discussed in chapter 3, the sample of interviewees consisted of a range of decision-makers. Of the thirteen interviewees, four were women. Their positions and the number interviewed (in brackets) were:

Ministers (2)

Regional Councillors (2)

Ministry of Education and Culture (MEC) Officials (5)

Ministry of Environment and Tourism (MET) officials (4)

The results on each topic are presented in the sequence of questions as in the interview schedule (Appendix A). These results are analysed and grouped in categories according to thematic connections within and among them, interpreted and emerging issues highlighted.

The results were analysed and grouped in categories having thematic connections within and among them.

#### 4.1.0. Topic 1: Interpretation of the concept environment

##### 4.1.1. Questions and responses

The understandings of the concept “environment” were explored by an open-ended question: *"The word environment is understood in many ways. What is your understanding of the word environment?"* Responses to this question are summarized in table 4.1.

Table 4.1. The interpretation of the concept “environment”

Categories of responses	Frequency N = 13
<b>Environment in its totality</b>	
• Surrounding or everything around us	7
• The totality	7
• It involves biophysical, political, social and economic aspects	7
<b>The natural environment</b>	
• The physical aspects such as soil, trees, grass, plants, animals, valleys, mountains	2
• Space	2
• The nature we enjoy	1

<b>Environment as a life experience</b>	
• It is not only space but our existence,	1
• Our day-to-day living experience,	1
Our survival	2

#### 4.1.2. *Interpretation*

Table 4.1 shows that interviewees responses could be grouped into three categories, namely, 'environment in its totality, 'the natural environment' and 'environment as a life experience'. These categories are interpreted below.

##### 4.1.2.1. *Environment in its totality*

The immediate responses to the question, seeking interviewees, understandings of the word environment was, "it is everything around us" or "surrounding". Such interpretation is reinforced by definitions from the Concise Oxford Dictionary (Mayhew & Penny, 1992) and the Encyclopedic English Dictionary (Hawkins & Allen, 1991), that of "surrounding; physical surrounding and conditions especially affecting peoples' lives".

After probing, participants elaborated their responses by making reference to the environment in its totality, a meaning that includes biophysical, political, social and economic aspects. According to Fuggle and Rabie (1992), when people are involved with the environment, they relate to the totality of objects and their relationship which surrounds and routinely influence the lives of human beings. Chenje and Johnson (1994) explained the concept environment by indicating that the physical processes are directly and indirectly affected by the political, social and economic situations.

Taking a holistic approach, the concept environment is internationally accepted as a broad and in-depth definition. It is also supported by the expression that, the whole is bigger than the sum total of its parts.

#### **4.1.2.2. *The natural environment***

In the second category five participants described the concept 'environment' as the "physical aspects such as soil, grass, plants, animal, valleys, mountains and space". This category of responses is supported by Cornwell (1983) who defined the concept "environment" as the sum total of living (biotic) and non-living (abiotic) systems.

In responding to the question, most interviewees in this category did not include themselves in the understanding of the concept "environment" or indicate that they themselves are part of it. They responded by saying that, "in general, to learners it means the natural environment, while the Ministry of Environment and Tourism put emphasis on physical aspects." "Another participant has however indicated that, "environment means, the nature we enjoy."

Based on these responses, the perceptions of "environment" seems quite superficial as the participants did not elaborate much on conditions affecting their lives, which, in my view, would have reflected a more in-depth understanding of the concept.

#### **4.1.2.3. *Environment as a life experience***

One participant stated that, " environment is not only space but our existence".

This category differs from the previous ones in terms of the emphasis put on life experience. The category points to human beings' total dependence on the environment for survival. The "day-to-day living experiences" as perceived by participants as being part of the environment. To further support the responses in this category, Tarr (1996:17) described the environment as "constituting our life-support systems and that it is a cross-cutting and all embracing subject that affects the lives of all Namibians".

Wals (1993:150) used the word "life-world" to describe:

*Our own individual and socially constructed reality, our orientation towards the world which helps us determine how we define our situation, the way we look at things, what we believe to be true, valuable and real. The environment is the kind of world we create ourselves.*

### 4.1.3. Summary

The understanding of the concept, “environment,” was perceived differently by different participants, but the general understanding is that the concept has both spatial, bio - physical surrounding and human dimensions.

## 4.2.0. Topic 2: Environmental issues and problems

### 4.2.1. Questions and responses

The decision-makers' understanding of environmental issues and problems was explored through the question: "*What do you see as the most important environmental issues and problems in Namibia?*" The summary of the responses is given in Table 4.2.

**Table 4.2. Perceived environmental issues or problems**

Categories of environmental issues/problems	Frequency N = 13
<b>Education issues:</b>	
• Ignorance	1
• Lack of training for indigenous artists	1
• Lack of knowledge to evaluate the Action Magazine	1
• Lack of knowledge on recycling, afforestation and how to do composting	4
• Lack of clarity on the roles and functions played by education, health, municipality and police departments with regard to environmental issues	1
<b>Health issues</b>	
• Lack of basic amenities	1
• Mosquito breeding places	1

<b>Pollution issues</b>	7
• Littering	7
• Pollution	5
• Toxic waste	3
• Burning of waste	1
• Veld fires	1
• Dumping of coal from the railway station in Okahandja	
<b>Social issues</b>	
• Issues around elderly people and their pension money	1
• Overcrowding	4
• Influx of people to cities	4
• Lack of space in Windhoek	1
• Squatting in urban areas	2
• Urban poverty	1
• Unemployment	1
• Killing of people	1
• Violence	1
• Crime	2
• Cutting down of forests and trees	2
• Lack of firewood	1
• Deforestation	1
<b>Bio-physical issues</b>	
• Periodic droughts	2
• Water shortages	3
• Fragile ecology	1
• Disturbing the ecosystem	3
• Desertification	1
• Soil erosion	1
• Loss of bio-diversity	1

<ul style="list-style-type: none"> <li>• Bush encroachment</li> </ul>	3
<b>Sustainability issues</b>	
<ul style="list-style-type: none"> <li>• Decisions taken without considering future consequences</li> </ul>	1
<ul style="list-style-type: none"> <li>• Lack of appreciation of what the environment is offering</li> </ul>	2
<b>Economic issues</b>	
<ul style="list-style-type: none"> <li>• Pressure on land</li> </ul>	1
<ul style="list-style-type: none"> <li>• Lack of industries in the south</li> </ul>	4

#### **4.2.2. Interpretation**

The findings in Table 4.2, demonstrate the difficulties of placing environmental issues/problems into a specific category. Many of these could fit into more than one category as listed. But, for discussion purposes, the perceived environmental issues/problems that are closely related are combined and appear under one frequency group. Distinguishing between environmental issues and problems was not part of the interview question.

The most frequently mentioned environmental issues/problems are pollution and social issues related to education. Many of the environmental issues and problems in Table 4.2 are discussed in Chapter 2 of the literature review.

##### **4.2.2.1. Education issues**

The perceived environmental issues identified the need for training where practical skills are to be provided. The examples of participants' responses were often stated as how to do:

- Composting
- Re-cycling
- Afforestation
- An evaluation of the Action Magazine

One participant indicated that he was confused as to who was responsible for environmental issues/problem in his home town. He stated that; mining in that town was causing serious health hazards. "When one is approaching offices of education, health, municipality and or the police, no one seems to be responsible and one would end up being frustrated".

The perceived "lack of training for indigenous artists" was perhaps an issue of local people not being exposed to opportunities that are of an entrepreneurial nature. Training was perceived as a way for the indigenous artists to get stimulation and guidance that would uncover their potentials.

#### **4.2.2.2. *Health issues***

Participants, who mentioned squatting in urban areas especially in Windhoek, indicated that the lack of basic amenities are causing health problems. The unhygienic conditions of Oshakati and Oneshila squatters were given as examples of great concern. The results mentioned are that during the rainy seasons the area becomes the breeding place for mosquitoes.

#### **4.2.2.3. *Pollution issues***

Pollution, littering, toxic waste and burning of waste were issues most frequently mentioned. One participant claimed that in Okahandja dust caused by dumping of coal used in railway trains may lead to asthma and terrible coughs if nothing is done about it." Interviewees related pollution issues to health issues.

#### **4.2.2.4 *Social issues***

Two participants raised the issues surrounding the elderly people and their pension money. These were topical issues at the time interviews were conducted. Due to alleged corruption and unnecessary delays, pensioners where either not paid at all, or were paid late. This is an example of how issues that receive media exposure can shape peoples' perceptions of environmental issues.

Issues of unemployment, and urban poverty were linked by several to reasons for the influx of people to cities, squatters in urban areas, overcrowding, crime, violence and killing of people. Pressure on land due to urban poverty and overcrowding, was viewed as an environmental issue. These above-mentioned reasons are also connected to economic reasons. Other socio-economic issues in this category are; cutting of down forests and trees, lack of firewood, deforestation and veld-fires.

In a recent study on perceptions in Namibia, Tshikesho (1996) identified consequences of deforestation and desertification as hunger, poverty, drought and economic hardship; and that unemployed communal people were perceived to be more affected than others. His study also revealed that one of economic consequences of deforestation is that of forcing people to buy firewood or poles.

The perceived environmental problems in this category are, in my view, related to peoples' needs or lifestyle. Trees are being harvested for construction of fences, houses and for fuel wood (Tarr, 1991; Marsh & Seely, 1992). Kakujaha-Matundu (1993) identified over-exploitation of limited resources that in turn drastically decreased the grassland productivity.

#### ***4.2.2.5. Sustainability issues***

Two participants perceived sustainability as an environmental issue. This concern is valid because approximately 70% of Namibians depend directly on the natural environment. Examples in this category include comments made by a participant that " people do not appreciate what the environment is offering," and that "some decisions are taken without considering the consequences for the future". These are, in my view, key aspects of sustainability.

#### ***4.2.2.6. Economic issues***

The lack of, "industries" in the south was perceived by one participant, as a developmental problem relating to the development of the southern regions in Namibia.

Water is a scarce commodity in that part of the country compared to other regions. The hostile climate in the south and perhaps political reasons, could contribute to the issue mentioned.

#### ***4.2.2.7. Bio - physical issues***

One of the perceived environmental issues in this category is the loss of bio-diversity, which Elliott (1994:27) described as; “a situation when species become extinct, the cost is borne not only by the countries in which they existed, but also by human kind as a whole both today and in the future.” This, in my view, conveys a message that the perceived environmental problems might not be unique to Namibia, but are being experienced both locally and internationally and such problems could have an impact on future generations.

#### ***4.2.3. Summary***

Despite the media publicity at the time on issues of overgrazing and over-fishing, these issues were not mentioned by decision - makers during the interview.

The categories of environmental issues constructed from interviews with decision-makers are indications of the public and Government's concerns. The issues are reflected in almost every public statement that President Nujoma makes. He stated that; "poverty, hunger, unemployment, crime, ignorance and economic hardships are the worst enemies of Namibia and must be uprooted." The perceived environmental issues and problems as summarised in Table 4.2, reflect a better understanding of the environmental situation in Namibia as I perceived.

What stands out in the result presented are pollution and social issues of education. But the results also indicated that the absence or lack of things that are valued affect peoples' ability to survive.

### 4.3.0 Topic 3: Proposed solutions to environmental issues and problems

#### 4.3.1. Question and responses

In order for participants to consider what actions to take to address the environmental problems mentioned, the question asked, read: What would you consider as possible solutions to the above-mentioned problems/issues?

Proposed solutions to environmental issues and problems were not mentioned in a specific order to match the exact problems listed by each participant. The perceived solutions are grouped in categories in Table 4.3 and are interpreted and discussed.

**Table 4.3: Proposed solutions to environmental issues/problems**

Categories of solutions	Frequency N = 13
<b>Education</b>	
• Education	6
• Intensive campaigns on awareness raising	3
• Environmental education competitions	2
• Develop peoples' skills	2
• Methods of using pictures from other countries for inspiration	3
• Subjects in schools	4
<b>Community approaches</b>	
• Visit communities	1
• Acknowledge peoples' wealth of knowledge	4
• Provide alternatives e.g. substitute firewood with coal	9
• Use videos to show various opportunities and alternatives	3
<b>Organisational arrangements and approaches</b>	
• Environmental education strategic plan	2

• Utilise Environmental Education Centres to teach during weekends and holidays	2
• Respect peoples' values	4
• Religion	1
• Family planning	1
• Change people with colonial mindset	1
<b>Government commitment</b>	
• Invest time and resources	
• Get commitment from everyone	1
• Avoid duplication	1
• Co-operation of Ministries and municipalities	1
• Teamwork	2
	2

### 4.3.2. *Interpretation and discussion*

Categories of solutions are interpreted as follows:

#### 4.3.2.1. *Education*

All participants perceived education as a solution to environmental problems. Each one, however, gave different examples of educational aspects.

The majority of participants mentioned raising peoples' awareness through campaigns and competitions, developing peoples' skills and understanding of the total environment as important. Three participants suggested that socially related problems could be addressed through subjects such as "Life Skills" where consequences of littering are discussed. Exposure of children to competitions, for example, the Environmental Education Shell Art Competition, the Coca-Cola Conservo Competition was viewed as a possible way of creatively addressing environmental problems.

Teachers were perceived as needing encouragement to utilise the Environmental Education Centres. This solution was based on an impression created by teachers that they could only visit the centres with learners as part of a educational tour during school days. Solutions were suggested on very different levels.

Two participants viewed the need to develop a clearly articulated Environmental Education Strategic Plan. In such a plan, as an important guide, important short term and long term solutions are to be differentiated and prioritised.

One participant phrased his response as; "change peoples' mentality on their perceptions of the environment, especially those with the colonial mindset". This response will be explored further in the next discussion chapter.

The following methods of solving issues/problems of community participation and population growth rate were proposed:

- Use pictures from other countries in order to develop a sense of admiring and getting to know what other people can achieve using different methods
- Use family planning methods to address population issues. Namibia's annual population growth rate is estimated at 3.1% and the spread of the HIV/AIDS epidemic is being addressed through family planning programmes and the national project on Population Education (UNFPA/MBEC, 1997; MEC, 1993).

#### **4.3.2.2. Community**

One participant who phrased his response in an emphatic tone said; "admit that each community has a wealth of knowledge and involve them through various community activities." Almost all participants echoed similar sentiments even though they used different phrases. Involvement of communities in intensive campaigns on desertification and deforestation were given as examples.

Similarly, the suggestion of visits to communities that include rural villages by those engaged in environmental-related matters, were made by almost all participants. The

following examples were cited as aims of such visits; "to provide people with alternatives where they can, for example, substitute firewood with coal, use videos to show people how to improve their lot, how to do recycling of litter, how to re-use discarded material."

Four participants viewed respecting peoples' values as being of importance. Examples of suggestions made are; "negotiate and find solutions together with people who are affected by the particular problem."

One interviewee perceived that solutions to environmental problems are through "religion, as cleanliness is next to godliness." This interviewee sees their township as dirty and gave an example of a dumping place in their locality that is said to be filthy. Attempts to address the problem fall on deaf ears. The interviewee therefore felt that changing peoples' behaviours and attitudes in order to get co-operation was possible through "religion".

#### **4.3.2.3. *Government commitment***

Participants proposed that government should get everyone's commitment to environmental education, invest time and resources in environmental education programmes, avoid duplication of efforts by co-operating more within ministries and between different ministries and municipalities. These were perceived as being of importance, as one participant argued that; "with teamwork one can draw together many skills from various people and become more productive".

#### **4.3.3. *Summary***

The proposed solutions range from education, community participation, government commitment, and changing colonial mindset, to religion.

### **4.4.0. Topic 4: Findings on the concept environmental education**

#### **4.4.1. *Questions and responses***

*The question reads "Environmental education is a new concept that is currently being*

*developed in Namibia. The Namibian Government showed its commitment to environmental education internationally when in 1992 it presented a document called Namibia's Green Plan. What is your understanding of the concept environmental education?"*

Responses that I consider irrelevant to the question asked were not recorded in Table 4.4.

**Table 4.4. Perceived categories relating to the concept environmental education**

<b>Categories</b>	<b>Frequency N = 13</b>
Educating a range of people	
• In schools	4
• In communities	4
• Decision-makers	4
• Legislators	4
Becoming environmentally literate	4
Being about values and attitudes	8
Develop peoples' understanding of issues such as sustainable development	7
Changing peoples' present way of life that is wasteful	7
Is a continuous process	4
A broad concept	1
A subject in school	5
A multi-disciplinary approach	5
Being about saving bio-diversity	2

#### **4.4.2. Interpretation**

According to Table 4.4, participants view environmental education as aiming to educate a range of people in schools, communities, legislators, decision - makers. The issue of how

to improve peoples' standard of living while at the same time taking care of the resource base, was viewed by two interviewees as an important aspect of environmental education.

Participants view environmental education as aiming for people to become environmentally literate by being aware of environmental issues, what processes function in the environment, various aspects of the environment, implications of peoples' actions towards the environment.

Two participants viewed environmental education as dealing with peoples' values and about changing peoples' attitudes with regard to environmental issues.

One participant stated that; "in order to live in a sustainable manner, environmental education requires people to change their present way of life, which is wasteful".

Seven participants perceived environmental education as developing peoples' understanding of environmental issues. They further stated that as a self-explanatory concept, it deals with issues of increasing population, shrinking natural resources, protection and care of the environment, its usefulness and how one can improve it, and the relationship between conservation and social related issues. "Saving bio-diversity for future generations," as perceived by two participants, is a perception that has taken issues of sustainability into account.

Environmental education was viewed as a continuous process. It was also viewed as a broad concept that takes a multi-disciplinary approach where people learn from each other.

Five participants viewed environmental education as a subject in schools. Examples of the content of such a subject was seen as concentrating on teaching learners how to take care of the environment without polluting it.

Two participants answered the question by saying that the methods of delivery in environmental education differ from group to group. The response could mean that the perception of environmental education differs from group to group.

#### 4.4.3. *Summary*

Interviewees seem to have a fairly deep understanding that environmental education can improve peoples' lives or their standard of living, only if they understand the environmental issues, the usefulness of the environment and are prepared to change their lifestyles accordingly.

#### 4.5.0. **Topic 5: Environmental education policy in Namibia**

##### 4.5.1. *Questions and responses*

Participants' knowledge of Environmental Education Policy was sought through various sections of question five. Environmental Education Policy was something new to all Regional Councillors. I therefore explained Namibia's Green Plan and gave them a copy of the Environmental Education Policy. Question 5(a) was posed to interviewees from the Ministry of Environment & Tourism (MET) and read: "*What is your Ministry's policy on environmental education?*"

The presentation of findings does not follow a specific pattern.

The responses are summarised as:

- The GRN policy is to enable everybody to revive traditional knowledge and free it for use again.
- The policy enables everybody to be environmentally literate.
- A process that can turn problems into solutions.
- The Environmental Education Policy is linked to the Constitution where it refers to the protection of the environment in its totality.
- The policy is taken from the IUCN definition and combined with the Tbilisi Guiding Principles. The IUCN definition put emphasis on participatory methods, the development of knowledge and problem solving skills.
- A tool for achieving sustainable development

Questions 5 (b) and (c) were posed to interviewees from the Ministry of Education and Culture (MEC). Question 5 (b) reads: “*What is your Ministry's position on environmental education?*”

The responses were:

- Environmental issues are contained in carrier subjects, for example Geography and Biology
- Environmental education is also being implemented in Life Science, Developmental Studies and Natural Economy
- Environmental Education is taught as cross-curricular themes in other school subjects.

Question 5(c) reads: “*Are there any formal statements on this position?*” The responses were:

In the Ministry of Education & Culture the formal statements appear in the following documents:

- The Broad Curriculum Guide For Teacher Education
- The Pilot Curriculum Guide For Basic Education
- Population Education Project documents
- The Ministry of Education & Culture’s policy document titled: Towards Education For All.

#### **4.5.2. Interpretation**

Nine interviewees seemed to have knowledge of Environmental Education Policy in either the Ministries of Environment & Tourism or in Education & Culture or generally in Government.

Four interviewees indicated having no knowledge of an Environmental Education Policy or of any formal statements on environmental education. Of these interviewees some created an impression that they might not be clear as to what constituted policy or did not clearly comprehend the question. My rationale for making this statement is on the basis of the following responses:

"I am not aware of any formal statement on environmental education, but I have heard of

the Ministry of Education & Culture's Enviroteach Project"; or

"I don't know of an Environmental Education Policy but I know about a workshop that was run by the Ministry training teachers how to use the Action Magazine."

Another said that; "I know that formal education has environmental issues in their curriculum but the Directorate of Adult Basic Education only respond to learners' requests to discuss a specific environmental problem during literacy classes." The point demonstrated by the above quotations is that even though participants themselves seem not to have knowledge of what is called an Environmental Education Policy, the outcome is that there is some awareness of what is going on in terms of environmentally related activities.

Almost 90% of the interviewees from the Ministry of Education & Culture thought that I was busy developing an Environmental Education Policy for the Ministry. This, in my opinion, indicated various possibilities:

Firstly, that the policy is not known at all; secondly, that they are expecting the Ministry to have its own policy as suggested in the recommendations in topic 12; lastly, that the consultation process done by the Ministry of Environment & Tourism that resulted in a product in a form of an Environmental Education Policy did not involve these decision-makers or that they might not have received feedback on the outcome, or the two page policy paper was gathering dust in someone's office. The last option, with various possibilities, points to issues of ownership, product versus process, which will be addressed in Chapter Five.

### **4.5.3 Summary**

The Environmental Education Policy was known to interviewees from the Ministry of Environment & Tourism and some interviewees from the Education & Culture Ministry. The next sections shed some light on possible reasons why the Environmental Education Policy is not as widely known as I thought was the case.

### **4.6.0. Topic 6: Environmental Education Policy implementation**

Topic 6 dealt with Environmental Education Policy implementation. Various sections of

question 6 were applicable to interviewees from Ministries of Environment & Tourism, Education & Culture or Regional Councillors as per Appendix A. Most of the responses from the various interviewees are similar. The responses are self-explanatory and no interpretation subheading will be provided. The results are therefore presented according to the following three sub-questions.

#### 4.6.1. *Questions and responses*

4.6.1.1. *Question 6(a) reads: “Where is the Environmental Education Policy being implemented?”*

**Table 4.5. Responses to question 6(a) are:**

Responses	Frequency N = 13
In schools	7
In communities	4
In the Ministry of Health and Social Services	2
Homes	1
Churches	1
MET	1
Environment	1

4.6.1.2. *Question 6(b) reads: “How is the Environmental Education Policy being implemented on the ground?”*

The narrative manner in which the responses in the following sections were provided made the recording of frequency of occurrence inappropriate. However responses provided to this question are in many ways similar to responses in Topic 7 where progress or achievements made in implementing the Environmental Education Policy are presented. These responses are addressed in interpretation and discussions on these issues.

Responses are summarised without indicating the frequency of occurrence.

## **In schools**

The following activities and projects are being implemented:

- Specific subjects designed for implementing Environmental Education Policy are Environmental Studies, Nature Studies & Health Education, Social Study, Life Science, Natural Economy and Development Studies
- Carrier subjects containing environmental education topics are Geography, Biology, Physical Science and History
- Population education is taught across the curriculum
- Enviroteach materials are developed and are being used in schools by teachers and learners
- Environmental Education Conservo Competitions are being conducted annually by Coca-Cola to support the government effort of the policy
- Schools are visiting Environmental Education Centres as outlined in the Ministry of Environment & Tourism objectives of implementing the policy
- Establishment of Enviro Clubs in schools by the Rossing Foundation, a Non-Governmental Organisation in Namibia.

## **In communities**

- Outreach programmes are being conducted by Environmental Education Centre programme officers
- In adult literacy classes
- Through activities of the extension officers from the Ministries of Environment & Tourism, and Agriculture, Water & Rural Development

4.6.1.3. *Question 6(c) reads: “Are there any other areas where Environmental Education Policy needs to be implemented?”*

The following points summarise the participants’ responses:

**Government**

- All ministries, all projects, planning directorates, policy makers, politicians, senior officials,

**Work place**

- Building industries, businesses, any workplace,

**Media**

- TV and radio

*4.6.1.4. The question reads: “In your opinion, what role are Environmental Education Centres such as Namutoni and Waterberg supposed to play in the community?”*

The participants' views are summarised as follows:

- To educate the community on the importance of preserving the environment
- For research
- Centre for dissemination of information
- Should be accessible to communities
- Should benefit communities

**4.6.2. Interpretation**

Table 4.5 lists a number of areas or institutions where environmental education is being implemented. Responses to the follow-up question as to how the Environmental Education Policy is being implemented on the ground are briefly discussed in relation to schools communities. Teachers’ Resource Centres and Environmental Education Centres are discussed further in Topic Seven that deals with progress made.

### **4.6.3. Summary**

The Ministry of Education and Culture work closely with these initiatives in organising participation of schools. These competitions are becoming very popular and the teachers do their very best in preparing learners to participate.

The perceived areas where Environmental Education Policy is being implemented and where it is supposed to be implemented were explored. These range from government institutions (schools & ministries), to private institutions (homes & churches).

### **4.7.0. Topic 7: Achievements or Progress made in implementing the Environmental Education Policy**

*Question 7 reads: "Has any progress or achievement been made in implementing the Environmental Education Policy?"*

What the participants considered as achievements or non-achievements are summarised as follows:

Eleven participants affirmed that definite achievements have been made in implementing the Environmental Education Policy. The perceived progress made was expressed in terms of products or outcomes, environmental education activities and projects in schools, communities, at the Environmental Education Centres, Teachers Resource Centres and through inter-ministerial coordination. An observation to make here is that of a response made by a participant who did not know about the Environmental Education Policy in Appendix B, when I posed question 6 to him, but responded to this question as follows:

"Yes, progress is seen particularly in regions of northern Namibia, where cutting of trees is common. One can see some changes that the people are now afraid of cutting trees more than they were used to." This observation illustrates my earlier comment in Topic 5 on the impression created that some interviewees do not seem to be clear as to what constitutes policy or an official statement on environmental education. Progress or achievements made in implementing the policy were noted in:

## **Schools**

- Enviroteach materials are developed and are being used in schools and colleges of education. (Enviroteach is a Ministry of Education & Culture's environmental education project in Namibia, sponsored by Sida and aims at developing environmental education materials for teachers and learners based on environmental issues in Namibia).
- Teachers who were trained to use the Enviroteach materials are motivated and their creative skills have improved. They are active and show their interest in working on their own in teams and at Environmental Education and Teachers' Resource Centres.
- Improved co-operation between Ministries and Non-Governmental Organisations
- Establishment of Environmental Clubs in schools which in turn resulted in other similar projects, for example, the Earth Care Clubs
- The use of Action Magazine in schools (Action Magazine is a SADC environmental health magazine)
- Learners are participating in annual Environmental Education Competitions for example, the Coca-Cola Conservo, the Shell Environmental Art Competitions

## **Teachers Resource Centre**

- Teachers Resource Centres are being used for subject meetings where teachers sometimes discuss various ways of implementing cross-curricula themes of environmental education, population education, learner-centred education, sex education, HIV/AIDS education.

## **Environmental Education Centres**

- Two Environmental Education Centres have been established in Etosha National Park at Namutoni and in Waterberg Plateau at Okatjikona and conduct their business successfully. The environmental education programmes include:
  - Exposing children to game parks

- Support for environmental education initiatives such as Enviro Messengers (a drama group of unemployed youths) and the Life Science Project
- Opening the centres to the public even during school holidays
- Designing and implementing environmental education programmes
- Allowing interested schools, farmers and visitors to these centres for raising awareness
- Marketing the Environmental Education Centres at areas like the Tsumeb Outdoor Show
- The Namutoni Environmental Education Centre was opened in 1991 and served six groups a year. Since 1995 it has been receiving, on average, six groups a month
- Accommodation and classrooms facilities are also available. Before these facilities were built, groups visiting the centres used to camp. Administrative structures now include offices equipped with computers and a resource library with reference materials. Despite the fact that each Environmental Education Centre is staffed by only two officers who are overworked, they are there to answer questions, present programmes, produce materials, clean, etc.
- The Centre Coordinators are members of the Northern Namibia Forestry Committee that has 12 organizations. Members are from diverse backgrounds and run various competitions in the regions. Through such membership, the coordinators can reach more people without too many logistical problems
- The Epukiro Farmers Union used the Environmental Education Centre as a conference facility

### **Government**

- Establishment of an inter-Ministerial co-ordination committee of environmental education activities
- Establishment of a multi-purpose Youth Centre where environmental education programmes are conducted.

Contrary to the perceived achievements, one participant stated:

"We have only been in this Ministry for 22 months and it is too early to say how effective the Environmental Education Policy has been. In fact, Cabinet has not yet approved the

policy. In terms of the policy, the Environmental Education Centre has done little on the Guiding Principles". These sentences illustrate a muddled response. Firstly, the interviewee indicated that she could not comment. Secondly, it could imply that without Cabinet approval, the implementation of the Environmental Education Policy is unofficial and that we should not bother. Lastly, that the Environmental Education Policy is not implemented according to the set Guiding Principles.

Except for the opinions expressed above, there were no other perceptions of non-implementation of the Environmental Education Policy.

#### **4.8.0. Topic 8 Obstacles for delaying or preventing the implementation of the Environmental Education Policy**

##### **4.8.1. Questions and responses**

*Question 8 reads: "Are there obstacles in your opinion that delay or prevent the implementation of the Environmental Education Policy?"*

##### **4.8.1.1. Obstacles or constraints as perceived by interviewees from the MET are:**

- Insufficient funding for transport and staffing
- Inaccessibility due to the location of Environmental Education Centres [The Namutoni Environmental Education Centre is located in the Etosha National Park. The nearest town is Tsumeb and is about 98km from Namutoni. The Waterberg Plateau/Okatjikona is about 30km from the nearest town, Okakarara].
- Lack of subsidised trips for schools visiting the Environmental Education Centres.
- Poor communication in English is a limiting factor to, particularly, the rural teachers and learners visiting the Environmental Education Centres. There are no officials at the centre who can translate into national languages when necessary.
- Lack of support structure
- Bureaucracy is sometimes used as a scapegoat for not supporting proposals. For example a proposal to do a Clean-Up Etosha Campaign was not supported by Environmental Education Centre heads who are stationed at head office. Approval

was not granted on grounds of apparent proper channels not having been followed.

- Some officials are protecting the *status-quo* and they do not support progressive ideas. "NGOs such as the Rossing Foundation are seen as threats by some Heads of Directorates or Divisions in the MET."
- The implementation of the Environmental Education Policy in the MET seems not to be supported by the MET officials themselves when compared to the efforts put in by the MYS and the existing good relationship with the MYS officials.
- Staff shortages have resulted in the two officers assigned at each Environmental Education Centre being overworked. They can't cope with the increasing visiting groups to the Centres.
- Untrained personnel; staff members recruited as extension officers or rangers to work with communities are expected to address environmental problems with them but are not trained as trainers or teachers
- Teachers' levels of understanding are also low as they have not received training in environmental education
- Less commitment to work shown by some teachers who usually bring in school trips to Environmental Education Centres. They spend time complaining about salaries and get engaged in arguments about the Nature Conservation Law that has stripped them off their land
- Some de-motivated teachers consider school visits as holiday time for; they get drunk, generate a lot of litter; want centre coordinators to write reports for them; and demand the attendance certificates even if they have done nothing
- Most Nature Conservators are not trained in environmental education. But recently the new ones are studying environmental education courses. The lack of training in environmental education results in a strong emphasis being put on wild animals and plants.
- Lack of proper links and coordination between the MEC and the MET, as there is a lot that the Environmental Education Centres can offer to schools in terms of facilitating curriculum development. For example the grade 6 Social Studies themes can be conducted at the centre and schools need not come for excursions only as facilities such as classrooms and resources libraries are also not fully utilised.
- Policy documents sent to the Environmental Education Centres are not followed up

by supervisors even by way of checking whether the environmental education programmes are properly implemented or not

- No feed - back is provided on routine reports send to the Head Quarters
- Lack of regular visits and absence of regional heads at Environmental Education Centres limit their understanding of environmental education activities at the Centres. The demoralised participants lamented: “We are given a free hand to do what we think is right but with no back-up support! We are doing what we think is correct while they are saying the policy is there and is good.”

#### ***4.8.1.2. Obstacles or constraints as perceived by interviewees from the MEC***

- Shortage of staff trained in the field of environmental education
- Most teachers in service haven't got the required skills needed to implement the Environmental Education Policy
- Teachers find it difficult to do cross curricular work
- Most teachers are not used to emphasising subjects that are not examined or not for promotional purposes. School subjects that are not examined, such as Population Education, are disregarded as being not important and get less attention from both teachers and learners
- Lack of finances to support initiatives
- Busy school programmes as a result of rigid school time tables
- The socio-economic situation of people results in people cutting trees for selling to those who can afford it
- Old habits, values and traditions, influence people to maintain certain ways in which they are used to doing things
- Bureaucracy: An example is when officials from the municipality, health and education ministries were expected to get involved in an environmental project. The fact that a community member discussed the project with one ministry and later informed others to participate resulted in a lack of cooperation from these officials and the project failed.
- Grazing and cutting down trees are prohibited by law and obtaining a permit is cumbersome, these factors are affecting peoples' lives and they are reluctant to

implement the Environmental Education Policy

- Another example is that of a community having raised serious concerns about health issues around a dumping yard. The fact that the concerned citizen did not make it a point to see individual officers in person, despite letters sent to them, resulted in the problem not being addressed and the identified problems continue posing health threats to the community
- Misconceptions created due to lack of proper information. An example cited by one interviewee is the rejection of the idea of recycling and re-using discarded materials. These ideas are considered in some communities as second hand materials that are meant for use by poor people. Such communities maintained that they have spent their lives using recycled building materials and thus “living in "tin houses" which was not an option.
- Peoples’ behaviours and attitudes, particularly those of the "haves" need to change, as "their colonial tendencies" impair the introduction and implementation of progressive changes
- Decision-makers are not putting their full weight behind the implementation of the Environmental Education Policy. What they are doing is, in theory, to impress others that they are doing environmental education.
- Decision-makers do not follow-up on initiatives
- The MET and the MEC are not collaborating closely in order to guarantee the success of the Environmental Education Policy
- If the Environmental Education Policy is also targeting producers, manufacturers and suppliers, the policy may be rejected as these companies will be out of business and will not make more profit. Therefore they would not promote ideas such as recycling or re-use of litter among their customers.

#### **4.8.1.3. Obstacles or constraints as perceived by Regional Councillors**

- The information regarding environmental education does not reach the people it is intended for and therefore no proper guidance is provided
- Lack of cooperation between government officials and people or communities who are affected by the policy

- Ignorance of the Environmental Education Policy
- Absence of funds that could be used for printing information leaflets on environmental education
- Issues of uncontrolled population growth rate
- Lack of proper infrastructure
- Very few motivated and knowledgeable people who know the danger of health hazards posed by mining, especially the emission of toxic gasses
- Too little training offered to Regional Councillors and Community Leaders on environmental education programmes

#### **4.8.2. Interpretation and summary**

Although perceived obstacles highlighted a range of issues that cannot be fully discussed in this study, constraints or obstacles form the heart of the study. Therefore my interpretation of commonalities and differences in responses by decision-makers and emergent issues are discussed in the next chapter.

### **4.9.0. Topic 9: General responses of Namibians to the idea of environmental education**

#### **4.9.1. Questions and responses**

*The question reads: “In your view how do Namibians in general respond to the idea of environmental education?”*

**Table 4.6 of responses**

<b>Responses</b>	<b>Frequency N = 13</b>
Namibians would generally respond positively	5
Half/Half depending on what culture people come from	4
Namibians would respond negatively	4

#### **4.9.2. Interpretation and summary**

The interpretation done in this section also summarises the responses of participants. Fifty percent of Namibians would be for the idea, while the remaining 50% were perceived as not supporting the idea of environmental education. Such responses were perceived as dependent on different cultures that result in different understandings of environmental education. An example given was the Windhoek International School (WIS) that had a clean up exercise of their school and their surrounding residential areas, while many town schools are surrounded by litter and do not consider getting involved in similar activities.

The perceived positive responses were motivated as follows:

The idea of environmental education was perceived as favourable, even though most people might not be vocal about it. These views were expressed, for example, by an interviewee who noted that, in Caprivi region of Namibia, people are being sensitised through the Silozi Radio Service about the dangers of fire, particularly veldt fires. The high demand for school visits to the Environmental Education Centres, such as the Deutsche Hoheren Private Schulle in Windhoek, that makes reservations monthly, was a sign of accepting the idea.

Participants have, however, expressed the views that even though the idea is generally accepted, the field of environmental education is still neglected and people do not see the urgency of the issues that need to be addressed. The problem is that pressing issues of poverty and water shortages in Windhoek and Gobabis are not easily linked to environmental issues.

Some people were perceived as not taking the idea of environmental education on board as part of their lives, and therefore do not consider it as their responsibility. An example cited was that some teachers think it is the parents' responsibility to educate their children in aspects of environmental education, while some parents in turn argue that it is the schools' responsibility. Others opt for the *laissez-faire* life style where people see environmental issues as not being their problem.

The other perceptions are that the idea of environmental education was not new. Some participants argued that Namibians had this type of education all along. The example of the Ovahimba culture was given.

The negative responses were perceived as due to:

- A lack of understanding of what environmental education is aiming at, and this creates less enthusiasm
- The fact that people, in most cases, do not see that the environment is linked to the day-to-day living experience
- The fact that very few people have read Namibia's Green Plan are not informed of what is threatening humanity

The issue of, "culture", was mentioned by interviewees in previous sections of the study. It again emerged from responses in Table 4.6.

#### **4.10.0. Topic 10: Areas to find appropriate information on environmental education**

##### ***4.10.1. Questions and responses***

*The question reads: "Where would you find appropriate information on environmental education?"*

##### **4.10.1.1. Responses as perceived by interviewees from the MET are:**

- MET brochure
- Environmental Education Centres
- Namibia Tourist Guide
- Namibia's Green Plan
- Contact Mr Brian Jones (a previous MET employee) on issues around environmental education activities
- Namibia Nature Foundation (NNF) with Mr Peter Tildsely as a contact person
- The Namibia Environmental Education Network (NEEN)

#### **4.10.1.2. Responses as perceived by interviewees from the MEC are:**

- Libraries, including home or personal libraries. (All National Libraries fall under the MEC even though they are located in different Ministries)
- National Institute for Educational Development (NIED)
- EnviroTeach
- The Broad Curriculum Guide For Teacher Education
- The Pilot Curriculum Guide For Basic Education
- Documents on Population Education
- Towards Education For All
- The “LIFE Project” sponsored by USAID/Namibia

#### **4.10.1.3. Responses by Regional Councillors are:**

- The Rossing Foundation Environmental Education Resource Centre
- The Desert Research Foundation Of Namibia (DRFN)

#### ***4.10.2. Interpretation and Summary***

The perceived responses are presented in summary form and are self-explanatory. Topic 10 was aimed at identifying whether participants know where they could get information on environmental education in Namibia. Most of the information provided by participants correspond to Namibia’s Environmental Education Database compiled by Monroe in 1994. I have shared this information with interviewees and they found it useful.

#### **4.11.0 Topic 11: Recommendations to improve the implementation of the Environmental Education Policy**

##### ***4.11.1. Questions and responses***

*The question reads: “What recommendations would you make, to improve the*

*implementation of Environmental Education Policy in your Ministry or in Namibia?”*

As these responses are recommendations, no interpretations are done. However, the summarised responses below do not follow a specific order in their grouping (3 groups of interviewees).

#### **4.11.1.1. Recommendations made by interviewees from the MET**

- The MET offices and Holiday Resorts should do recycling as they generate a lot of litter such as papers, bottles and cans. They should print papers on one side and thus reduce the amount of paper needed. Each holiday resort/camp/national park should contribute to the recycling containers, by putting all papers, tins, bottles in separate litter-bins as Etosha National Park is dirty, with litter all over.
- There is a need for having environmentally literate leaders who can improve their current situation
- Establish more Environmental Education Centres in communities, at least one in each political region, complemented by mobile units for out-reach programme in order to reduce the cost of travelling to isolated centres
- Environmental education should be included in the Teacher Training, Agricultural and Nature Conservation courses. These should form part of programmes geared toward producing an environmentally literate population
- Environmental Education Centres needs heads of centres who are trainers. They should have strong backgrounds both in education and environmental education and should have close contact with both MEC and MET. An example of qualities favoured are like those of Tim, the Environmental Education Coordinator in Umgeni-Valley Environmental Education Centre in South Africa
- The MET's new training section should have a environmental education component for staff training and upgrading purposes
- Policy makers should give feed-back after attending environmental education meetings / conferences/ seminars/ workshops, as writing reports is not enough
- Staff members who are implementing policies on the ground should be given opportunities to represent the MET in meetings / workshops/conferences/seminars on

environmental education

- Involve Regional Councillors and or Community Leaders in making the Environmental Education Policy known to their constituencies or communities
- Increase staff exchange programmes, where training of staff will be enhanced
- More staff members should be appointed in order to address the back-log caused by staff shortages.
- MEC and MET should budget for subsidising school trips especially transportation to the Environmental Education Centres
- There is a need for proper coordination among MEC, MET and the business sector
- Increase dissemination of information through the mass media in order to inform the public on environmental related issues
- There is a need for MET to appoint a pro-active Public Relations Officer (PRO). The person should give the Ministry's position on certain environmental issues by making public statements on controversial issues such as the proposed Epupa Hydroelectric Project, the culling of seals, ostrich farming and poaching
- One interviewee did not want to make any specific recommendation, as the person did not see any problem with the current Environmental Education Policy. But during the interview the person suggested the need to integrate new ideas into existing indigenous knowledge where peoples' cultural background and their experience are utilised to solve identified environmental problems.

#### ***4.11.1.2. Recommendations made by interviewees from the MEC***

- Sensitise programme developers, planners, senior officials, parents, children, NGOs, women's organisations on the Environmental Education Policy
- People to consider that animal ethics and their rights are of equal importance to those of human beings and they should recognise the fact that locking up animals in cages is putting them in captivity
- MEC should have its own Environmental Education Policy to serve the Ministry's purpose, as MET and MEC have different areas of emphasis. Such an Environmental Education Policy should be in line with the Constitution, should complement the Namibia's Green Plan and the Environmental Education Policy developed by the

## MET

- The way people treat the environment is not conducive to sustainability and warrants changes in their attitudes, behaviours and values
- A well-informed nation needs information translated into their vernaculars such as posters and notices that are meant for placing in public places
- More conservo competitions and more schools should be encouraged to actively participate in these environmental projects
- Launching similar competitions for towns or constituencies such as the annual Coca-Cola Conservo (environmental education) Competitions for schools. Involve the MEC's Advisory Teachers, school inspectors, media, the business sector, municipalities, regional governors/councillors in organising projects such as: The Cleanest and Neatest Town Of The Year Competition
- There is a need to bridge the generation gap that exists and that is causing various misunderstanding on matters concerning the environment
- The involvement of traditional leaders in environmental issues is important, as they could be useful "watch dogs" for government

### **4.11.1.3. Recommendations made by Regional Councillors**

- The Regional Councillors and/or Community Leaders should be involved at all stages of planning, needs assessment and implementation, in order for the Environmental Education Policy to be known and properly implemented by communities.
- Regional Councillors need to be in more contact with environmental groups and should be well-informed of what is happening in the field of environmental education
- Intensive campaigns should be launched, to make people aware of preserving the environment
- When designing projects, people should respect traditional values by involving the Community Leaders through proper consultations and providing proper information and not overlooking them. An example is the situation of the San people and the communities surrounding the proposed Epupa Hydroelectric Project
- Build Namibia's own capacity through training and proper guidance of her leaders
- Communities should benefit from the tourist industry

- Open childrens' or learners' mind through exposure, this would enable schools to address environmental issues

#### **4.12.0. Topic 12: Workshop**

##### **4.12.1. *Introduction to workshop results***

I presented the results of topic 7, 8, 10 and 11 at a workshop. Participants decided to be divided in three groups namely, Formal Education, Adult and Continuing Education, and Community Development. The assignment for group discussion was: Given the identified obstacles or constraints and those ones you are aware of, develop an action plan to improve the implementation of the Environmental Education Policy in Namibia.

The discussions were summarised as follows:

##### **4.12.1.1. *Recommendations/Plan of Action for Formal Education***

- Improving the status of environmental education in the curriculum the MEC should focus on the implementation of environmental education in schools
- Any institution which could be used to promote environmental education should be subsidised by Government
- Top structure and organisations/institutions should be sensitised and should to be more proactive in environmental education
- Namibia Environmental Education Network (NEEN) team to evaluate the environmental friendliness of schools and centres or to check whether formal educators practice what they preach. NEEN should have annual meetings with policy makers.
- More people within the Ministries who are involved in making sure that monitoring is done
- Central Ministries should sensitise the Regions – and should create a sense of competition between regions

### *Hindrances to the implementation of the action plan*

- Top structures of organisations are not sensitised
- Inadequate infrastructure to promote environmental education
- No SADC regional policy exists

#### **4.12.1.2      *Recommendations/Plan of Action for Adult and Continuing Education***

The above recommendations are interpreted as additions to the findings on "obstacles for the implementation of the Environmental Education Policy" already identified.

Resource Centres and Libraries should have updated and more appropriate technology material

- Training that includes public relations at regional level should be of a multi - sector nature
- Using the radio as an education tool
- Community mobilisation for enhancing and bottom-up decisions and solutions
- Environmental Education Centres should expand their focus to reach adults
- Environmental Education Mobile Units for doing out-reach programmes in the regions
- Encourage the use of what is available in the surroundings.
- Staff shortages and lack of finances should be taken care of first
- Link the curriculum to the communities. Do practical work (e.g. agriculture practice) in the community.

#### **4.12.1.3.      *Recommendations/Plan of Action for Community Development***

- Information campaigns for both the grass-roots and the policy makers
- Implementation of the policy by communicating it through workshops
- Simplify the policy in local languages
- We should familiarise ourselves with Namibia's Green Plan
- Communicate Namibia's Green Plan to the grass-roots people through media

- There should be flexibility in the Plan Of Action of Namibia's Green Plan
- Establish links between implementing agencies that involves policy-makers, grass-roots people, community leaders
- Training programmes for community leaders should be provided
- Community Leaders should take ownership of Namibia's Green Plan in order to be implemented successfully.

#### **4.13. *Conclusion of chapter***

In this chapter, I presented the data obtained from semi-structured interviews, observational notes as recorded in the research diary, and from the workshop. I have done interpretation and some discussions of the findings.

Overall, the results indicated a general understanding of environmental issues in Namibia. In-depth knowledge and understanding of the concept environment is, however, lacking in most instances.

However the participants seem to have demonstrated a better understanding of the concept of environmental education when one compares that with the literature review done.

## CHAPTER FIVE

### DISCUSSION OF RESULTS

*“The study of the ways humans experience the world... views that education is the construction and re-construction of personal and social stories.”*

*(Connelly & Clandinin, 1990, cited in Gough 1991:39)*

#### **5.1. Introduction**

In this chapter I will reflect on two main areas: Firstly, I selected from the interview schedule topics that would answer the following research questions: What are the decision-makers' perceptions with regard to the Environmental Education Policy and its implementation?; constraints in the implementation process?; possible solutions that will facilitate the implementation of the Environmental Education Policy?

Secondly, I have analysed participants' responses in terms of the notion of the world - views in which they operate.

Thirdly, the emergent themes are discussed in terms of their value to education.

In the next section, I shall discuss the different topics as outlined in the interview schedule.

#### **5.2.0. Different topics in the interview schedule**

The wisdom obtained from a Namibian rural development specialist cited in the Green Com Report (1996:10) stated that, “one of the easiest mistakes to make is rushing to action before the people are aware that a problem exists.” To avoid the said mistake, I formulated the topics used in the interview guide (Appendix A) and organised a workshop to get decision-makers views rather than drawing my own conclusions on what I think are the policy issues related to the environment.

This quotation implies that I used the research to establish whether decision-makers were aware of the problem. If they were aware of the problem, the interview conducted and the workshop organised was to get decision-makers views on a possible course of action to follow in order to jointly improve the situation. This implies, I wanted to check and expand my existing understanding through the research. The topics drawn up in the interview guide enabled me to build-up the information-base upon which I could answer the research questions.

Topic 1 - 4 looked at how different decision makers perceived the “environment”, “environmental issues and problems” in Namibia, possible “solutions to environmental problems” and the concept “environmental education”. The thrust of my study is contained in Topic 5 -12. In actual fact the research questions are covered in Topics 5, 6, 11 and 12. I have, however, referred to the workshop results as Topic 12.

In a study on leadership Van der Mescht (1990:128) argued as follows:

“I did ask very different questions and I asked them differently, i.e. from a different methodological position. It is also true that they are not necessarily different in substance.”

The above argument echoed why I will concentrate my discussion on Topics, 5, 6, 8, 11, and 12. The reasons being that although different questions generated different answers, their substance are not necessarily different. Also, the scope of a Masters Degree thesis and the page limit cannot accommodate discussions of all questions asked in this study.

### **5.2.1. Topic 5: Environmental education policy in Namibia**

Topic 4 explored participants’ interpretation of the concept ‘environmental education’. The overall perception is that environmental education is everyone’s business.

In Topic 5 decision-makers’ perceptions of Environmental Education Policy were analysed. The Regional Councillors interviewed indicated that the Environmental Education Policy was new to them. I explained the policy to them and provided copies of the policy. My findings in this study revealed that decision-makers perceived the

Environmental Education Policy in different ways based on the contexts in which they operate.

In answering the question: “What is your Ministry’s position on environmental education? Any formal statement on “environmental education?” The following responses were provided.

The responses by MEC participants can be summarised as follows:

- Environmental issues are contained in carrier subjects
- Environmental education is implemented in the subjects Life Science, Development Studies and Natural Economy
- Environmental education is taught as cross-curricula themes in other subjects

The responses to the question: “ What is your Ministry’s policy on environmental education?” were obtained from participants from the MET. Their answers are summarised as:

- An opportunity to become environmentally literate
- Environmental Education Policy is linked to the Constitution in order to protect the environment in its totality
- An enabling framework to revive traditional knowledge and free it for use again
- A process that can turn problems into solutions

Four decision-makers who indicated that the Environmental Education Policy is taken from the IUCN definition and Tbilisi Guiding Principles, indicated that since they viewed the environment in its totality, this is reflected in their five-day programme that covers various skills areas outlined in these Principles.

The MET decision-makers’ perceptions on, “environmental education” are in line with the cited policy. This therefore, clarifies the findings of the study that revealed that the

concept, “environmental education” is known by all participants from the MET and less well-known by other participants.

### **5.2.2. *Topic 6: Environmental Education Policy implementation***

Participants mainly identified schools, communities, Environmental Education Centres and three Government Ministries (Youth & Sport, Education & Culture and Environment & Tourism) as areas or institutions where Environmental Education Policy is being implemented. However, all Government Ministries, work places and media were perceived as areas where the Environmental Education Policy should be implemented.

Participants have also expressed their views on how they perceive the role of Environmental Education Centres. In the context of education reform, the perceived role is that of community centres where research can be conducted and information on environmental education can be disseminated. This seems to be a departure from the conventional idea of Environmental Education Centres as conservation centres. This conventional view locates Environmental Education Centres in National or Game Parks where plants and animals are given prominence while the unimportant day-to-day human activities are treated as being unimportant.

Topics hereafter deal with different perspectives of Environmental Education Policy implementation.

### **5.2.3. *Topic 7: Achievements or progress made in implementing the Environmental Education Policy***

Two assumptions were made in order to answer the research question, “what are the decision-makers’ perceptions of Environmental Education Policy implementation?” First, in order to have some ideas on whether some strides were made or not, the question on “achievements or progress made” was asked. Second, is the reality factor that an Environmental Education Policy process is complex and could not be implemented smoothly. Therefore the issue of possible obstacles in the implementation process was

raised in Topic 8. The second assumption will indicate areas where improvements of the policy practice are necessary.

#### **5.2.4 Topic 8: *Obstacles or constraints to the Environmental Education Policy implementation***

The Environmental Education Policy implementation process as perceived by decision-makers was not all rosy. In contrast to the achievements, obstacles and constraints to the policy implementation process were identified.

In handling this section, I will discuss common obstacles as perceived by the three groups interviewed, namely decision-makers from the MET, the MEC and the Regional Councillors.

##### **5.2.4.1. *Commonalities***

- Shortages or lack of funding
- Cumbersome government procedures with issues of bureaucracy as constraints
- Staff shortages
- Lack of trained people with skills and knowledge of environmental education
- Poor communication and co-ordination
- Policy-practice gap
- Limitation of language used at Environmental Education Centres and in public notices/advertisements

##### **5.2.4.2. *Differences***

The following summary of perceived obstacles were mentioned by either participants of the MET or the MEC or the Regional Councillors:

- Environmental Education Centres are isolated from communities
- Lack of subsidies for school trips to Environmental Education Centres
- Cultural differences
- Conflicts of interest

- Poor socio-economic situations of people, for example, poverty, grazing, cutting down of trees.
- Misconceptions of environmental education that result in incorrect interpretations of what environmental education is all about
- Colonial tendencies/mentalities/mindset
- Non-examinable subject
- Uncontrolled population growth rate.

I have outlined the perceived obstacles in terms of commonalities and differences. There are close links between the perceived obstacles and the recommendations made by participants in the interviews and in the workshop. The above obstacles will be captured during discussions of emerging issues.

#### **5.2.5. Topic 11: *Recommendations made to improve the implementation of the Environmental Education Policy in Namibia***

One decision-maker perceived the Environmental Education Policy as “a process that can turn problems [obstacles] into solutions”. The purpose of this topic is to do just that.

Recommendations made by the three groups interviewed and by the three discussion groups during the workshop were presented in the previous chapter. In the next section I have discussed some key issues that emerged from the recommendations. These are:

##### **5.2.5.1. Training**

Most teachers, extension officers, rangers and nature conservators were perceived as needing training in environmental education. Most of these staff members were perceived as uncommitted and de-motivated as demonstrated by their behaviour and attitudes towards environmental education activities.

Language used at Environmental Education Centres and in public notices/advertisements was observed as a limiting factor in the implementation of the Environmental Education

Policy. English, the official language, is used for communication purposes. This concern was raised particularly in the light of some rural schools visiting the Environmental Education Centres where the communicative English of both teachers and learners has been poor. In an attempt to address the problem, participants proposed skills in at least some National African Languages as necessary. With such skills one could interpret for people with limited English who are visiting the Environmental Education Centres. People who are conversant with some local languages are preferred. For better comprehension of public notices/advertisements such as posters, stickers, bulletin boards, participants suggested that such messages should be translated into local languages in the areas where they are displayed.

Practical, critical thinking and problem solving skills in environmental education were perceived as necessary skills to equip people with. Public Relation Officers were identified as needing particular training in environmental education in order to have appropriate attitudes in presenting positions of institutions with regard to specific and controversial environmental issues.

#### *5.2.5.2. Co-ordination and communication*

Supervisors were perceived as particularly falling short of supporting the work of those they supervise. They are said not to provide proper feedback after they had attended meetings, seminars or conferences on environmental education. They are also perceived as not providing opportunities to those they supervise to attend environmental education seminars or conferences. Participants however stated that reports writing as a way of providing feedback was not viewed as being sufficient. They argued for better mechanisms to be put in place. Responding to letters sent to supervisors offices was also found wanting, as communication was viewed by one participant as “a two way traffic.”

#### *5.2.5.3. Staffing and funding*

Participants perceived shortages of human resources and finances as inhibiting factors to the implementation of the Environmental Education Policy. An Environmental

Education Strategic Plan indicating short, medium and long- term plans was perceived as a necessary planning tool that included the necessary resources.

#### *5.2.5.4. Information dissemination*

Involving Councillors and Community Leaders in the policy implementation process was perceived as a way of making the Environmental Education Policy known. The media and pro-active Public Relation Officer could contribute to information dissemination.

#### *5.2.5.5. Environmental Education*

As a solution to “ignorance” of the Environmental Education Policy, all decision-makers perceived education that included sensitisation of a range of people on the importance of environmental education as important. According to one participant, “leaders need to be environmental literate in order to solve environmental problems.”

The concept “environmental literacy”, which the Environmental Education Policy is aiming at, was used interchangeably with the concept, “ecological literacy” by Orr (1992: 94). He argued that the concept requires a broad familiarity with “the development of ecological consciousness.” An environmentally literate person in Orr’s (1992:80-87) view must have:

- Indoor skills such as reading and enjoyment of reading
- An ability to use numbers
- The capacity to observe nature with insight
- A capacity for aesthetic appreciation
- The ability to see things in wholeness
- Reckon with the roots of our ailments, not just with their symptoms
- A sense of place and sense of belonging
- Broad understanding of how people in a society relate to each other and to natural systems, and how they might do so in a sustainable manner

What seems to be a contradictory proposal made by one participant who did not see environmental education as new and stated that; “in my opinion, what we need in Namibia is environmental re-education.” I personally viewed such an opinion as calling for a reflexive approach to environmental education. This means that individuals and groups should re-examine the way we are doing things.

One participant perceived environmental education as enabling people to “review the traditional knowledge and free it for use again.” Yet, another participant perceived “indigenous knowledge” being neglected and not being accommodated in the western ideas about environmental education. Sharing of indigenous knowledge was perceived as complementary to new ideas from the western world.

Issues of “culture” were perceived by participants as being neglected particularly the “values and cultures of the San people and Ovahimbas”.

Issues of “ethics and rights” of animals were raised whereby one interviewee who stated that “keeping animals in cages is keeping them in “captivity”. Environmental ethics is part and parcel of environmental education. Van Matre (1993:22) stated that:

*Environmental education should provide opportunities for students to become educated about the environment by directing the emotional experience with it and thereby building a sense of relationship through both the feelings and understandings with the natural world.*

Introducing checks and balances in the Environmental Education Policy implementation process was viewed by a participant as “bridging the generation gap by using traditional leaders as watch dogs for Government.” These perceived solutions in Topic 11 and 12 are aimed at environmental action to improve the situation. The next section highlights what I viewed as dominating themes from the study.

### **5.3.0. Themes that have emerged from the study**

In this section I have discussed themes that I viewed emerging from the construction of participants' overall responses. I have used these themes to capture the essence of what decision-makers perceived as Environmental Education Policy implementation issues and the possible actions necessary to improve the implementation process.

#### ***5.3.1. Government as a co-ordinating agent***

The study cited numerous examples of lack of co-operations within government institutions while networking with Non-Governmental Organisations (NGOs) was perceived as instrumental in keeping the environmental education flame burning. Participants perceived that the duplication of environmental legislation which is scattered around different ministries, reflects the un-co-ordinated and un-co-operated nature of ministries.

A suggestion made by the MEC participants to have their own Environmental Education Policy, which reflects their ministry's own emphasise could also be viewed as an indication of poor co-operation among ministries. The question could be asked whether such a proposal would further separate and fragment the efforts of the Environmental Education Policy implementation or complement and unify the efforts towards an environmental literate society.

Networking and co-ordination as a general concern is not necessarily an issue for government alone.

Orkin (1995:504) stated that; "the legacy of apartheid and colonialism cannot be overcome with piecemeal and un-co-ordinated policies." It is with such historical realities in mind that I argued in favour of the proposed policy framework for Namibia.

The fact that there is a ministry responsible for matters related to the environment should gain jurisdiction over all relevant areas and this, in my view, was also meant to avoid duplication and the distribution of meagre resources.

Although the draft Namibia's Green Plan seems to be gathering dust in Government offices, there is some hope among active members of NEEN that the revised Environmental Education National Policy Framework will be steered towards its completion. At the moment NEEN provides cohesion among its members that is, NGOs active in environmental education and members of interested Government institutions. As part of NEEN's action plan to conclude the Environmental Education National Policy Framework, that was part of the workshop recommendation, NEEN continues to challenge the Government for its non-implementation of the Environmental Education Policy in the manner and spirit as articulated in the Namibia's Green Plan.

The identified need for having Namibia's Environmental Education Policy Framework in place is to provide, within government institutions, a framework that could give effect to its environmental responsibilities in terms of the Constitution, Namibia's Green Plan and the draft Environmental Management Policy for Namibia. Within all these documents the exercise of Government's environmental responsibility falls within a broader framework of sustainable development, which implies the integration of social, economic, political and bio - physical considerations. As Orkin's (1995) puts it, a basic aim of sustainable development is enhancement of the quality of life, especially for the poor and marginalized, without destroying the natural resource base which sustains that life.

One of the most exciting features in the Green Plan is Namibia's clear vision and commitment to environmental education. The 1996 State Of The Environment Report of Namibia supports such a commitment. But one of the difficult issues also highlighted in the Green Plan is the importance and need for continuous discussions and debate on environmental issues that now seem not to be spearheaded by Government but by NGOs.

Although the international and national policy contexts show similar trends, Orkin (1995:504) maintained that; "the political process is at the heart of the making of public policy." These views therefore complement the findings of this study that an environmental policy component should be integrated into the policies 'of government institutions, the workplace and media.' To ensure that the policy is being put into practice is fundamental and I proposed that this be obligatory at every workplace, through legislation.

### 5.3.2. Community participation

The following quotation is relevant to issues raised by participants on the role of government and that of communities in the environmental policy process.

NDP1 (1995:215) stipulates that:

*The fundamental principle of all policies is that Namibia's natural resources should be used carefully on a sustainable long-term basis and that all Namibians should have equal access to and control of these natural resources. Government will continue to pursue the rights of communities to administer their own local environment while assessing the impact of their activities.*

Participants proposed that community participation, as one of the key elements in the policy process, was lacking and that it should be part of the process. Attempts to coordinate efforts in the Environmental Education Policy implementation have left communities out of the picture, yet every Namibian should be environmentally literate.

In a newspaper article Prof. McCarthy in 1999 stated that; “management in all aspects of public life today has to involve all stakeholders. We need to draw South African communities into our partnership in the interests of people and it is in the interests of our environment that everyone who uses it is part of managing it”.

To ensure effective community participation both at strategic planning level and in specific decision-making processes, sharing of information was perceived to be vital. To avoid misrepresentation and misinterpretation of messages and information on environmental education, relevant information should be accessible and should be communicated in ways that are appropriate to the communities' expressed need.

Perceptions of decision-makers on the concept “environment,” implied that the concept is always central to everything that people do. It is for this reason that the Green Plan places a strong focus on the active participation of society in decision-making and being educated on environmental issues (Green Plan: 1992). This will empower societies on

how to use their natural environment in a more sustainable manner and help address the problem of environmental degradation.

The Regional Councillors emphasized that communities should not be merely consulted or be involved in the planning stage but should actively participate in all the stages including the implementation stage. Such action will enhance the emancipation benefits of research to the target groups (Moller, 1992 cited in Orkin et al, 1995).

Participants mentioned some NGOs as institutions where one could get information on environmental education. NGOs like the Rossing Foundation and Desert Research Foundation of Namibia are working with disadvantaged communities to address environmental problems such as developing environmental education resource materials, management of natural resources, desertification. Information brochures of these NGO's indicate that institutional development and capacity building are their top priorities. At the cutting edge of environmental education in Namibia are local, community-based environmental action groups of which most of them are members NEEN (Monroe, 1994). The importance of dialogue and sharing of information in the community is expressed by Berger & Luckmann (1991); cited in Nel (1996:85): as the "reality of everyday life is shared with others through social interaction. The most important experience of others takes place in the face to face situation"

If communities have to be environmentally responsible, then in order for them to have a sense of ownership they should actively participate in the decision-making process on matters affecting them (Orr, 1992).

### **5.3.3. Capacity building**

Lack of skills, understanding, and or capacity to implement the Environmental Education Policy has been perceived by participants as one of the major obstacles. To address the lack of expertise in environmental education the focus is perceived to be on skills development and training needs. Locally the Rossing Foundation has designed an Environmental Education Certificate course to address the identified needs in the country; the Desert Research Foundation of Namibia (DRFN) provides tailor-made training in environmental education through their ENVIROTEACH Unit; NEEN activities support

the environmental education initiatives country-wide. In SADC, the Gold Field courses, Rhodes University course, specialised Master of Education (courses), other degrees and Further Diploma courses exist at universities (Schreuder & Taylor, 1995).

The method of sharing environmental knowledge in an appropriate way has been emphasised in the study. This was perceived by one participant, who, stated that:

“Teaching an African child in an abstract way without the direct link to what the child knows from their culture, is an obstacle in the child’s development.”

I believe that through capacity-building programmes in environmental education, such impediments will be counteracted.

### **5.3.4. Culture and indigenous knowledge**

#### **5.3.4.1. Culture**

When participants’ views on how the idea of environmental education is perceived by Namibians, responses indicated that it really depended upon different cultures with different behaviours and different understandings. These views are supported by Adler & Jelineck (1986:73 – 74) who stated that;

*The culture concept emphasizes the shared cognitive approaches to reality that distinguish a given group from others. Cultures vary in their assumptions about the world. Human attitudes and behaviours exist within any society and that each society favours certain behaviours and attitudes over others.*

The above definition high-lights the issues of socialisation, behaviour and an organisational culture of a big company or institution.

In the context of environmental education, a question could be asked whether people have the ability to integrate cultural diverse perspectives within their current environmental education policy framework According to Schein (1992:13):

*A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.*

Through socialisation the accumulated shared knowledge of a given society has occurred as a result of shared experiences and diverse cultural perspectives to embrace the concept of environmental education and implement its policy. My basis for this argument is the fact that I believe that as individuals and groups, we are continuously constructing meaning through interaction; this results in a wealth of different meanings. Sharing such wisdom is to enrich our construction.

The above views point to the fact that our cultural orientations are developed by our societies and so our cultural orientation to environmental education should be constructed by our society. This, in my view, is possible when we recognise and promote unity in diversity.

#### *5.3.4.2. Indigenous knowledge*

In answering the question what recommendations could be made to improve the implementation of environmental education policy, one participant responded by saying; “integrate new ideas into existing indigenous knowledge, where peoples’ cultural background and experience could be utilised”. This recommendation is supported by Gcumisa: (1994:18), when he stated that:

*By looking for both the wisdom of the past and the knowledge of modern science, we can develop better ways of dealing with pests. Just as nature has a balance, so we need to find a balance between old and modern ways*

One participant remarked that “the idea of environmental education is not new, Namibians had this before, for example the Ovahimba culture.” Yet another participant

defined environmental education policy as enabling “everybody to revive, traditional knowledge and free it for use again”. Schreuder & Taylor (1995) made a similar suggestion that participatory processes of resource development should include issues of indigenous knowledge that support adult and continuing education and by so doing one might free indigenous knowledge. Masuku-van Damme’s (1997) comments on the World Commission on Environment and Development in 1987 advised that society at large has a lot to learn from traditional skills and knowledge to manage complex ecological systems.

Participants advocated the need to re-educate ourselves on environmental matters.

Janse van Rensburg (1994) argued for “reflexivity in research” as involving re-searching for meaning and better understanding through critical exploration of existing patterns of thinking. She further argued that such re-thinking might involve the deconstruction or revelation of conventional wisdom.

The Oxford Advanced Learners Dictionary defines the prefix ‘re’ as having an original meaning of ‘again’ or ‘back’ or ‘return to a previous state’. By that definition the interpretation of “environmental re-education” can be seen in the context of re-evaluating our actions be it the increasing population growth rate of 3.1% per annum, exploitation of natural resources or land degradation. What the environmental education programme should target is the identification of problems and maintenance of the environmental practices that will ensure survival of generations of today and tomorrow.

### ***5.3.5. Tensions and conflicts in responses***

#### ***5.3.5.1. Issues of environment and development***

The perceptions of decision-makers on the implementation of the Environmental Education Policy revealed tensions and conflicts between and among environmental and developmental issues.

Examples of conflicts of interests between the environmentalists and developmentalists, are cited by participants as;

- Cutting down of forest/trees for building purposes;

- The idea of recycling might not be supported by manufacturers or producers or shop-owners due to the fear of losing customers
- Potential conflicts between environmental issues of resource exploitation and those affecting environmental management as cited in the study
- One participant expressed concern about the “haves” who seem to think that issues of recycling are for the “have nots.” Yet those who spend all their lives in “tin-houses” reject messages of recycling and re-use of discarded material.

Such conventional approaches are, in my view, an illustration of narrow-minded views from both the ‘haves’ and the ‘have not’. It is a shortcoming if recipients accept whatever information is conveyed to them without critically looking at issues to see whether they make sense or not. In this context the methodological approaches to environmental education need serious scrutiny. The way one conveys the environmental education message could be inappropriate. This could be determined by peoples’ or communities’ responses to environmental issues. To avoid misrepresentation of our environmental education objectives, we should therefore reflect on methods we are using in environmental education. “Change people with colonial mindset” was stated as a recommendation during the study. This recommendation is, in my view, a desire to move from the narrow-minded views of those who want to maintain the status quo to an open minded perspective of “radical transformation” (Janse van Rensburg, 1994).

#### 5.3.5.2. *The status of the Environmental Education Policy and Namibia’s Green Plan*

One participant responded by stating that; “the environmental education policy is not yet approved by Cabinet.” This comment could be interpreted in at least three different ways:

Firstly, the Green Plan is recognised in Namibia’s first National Development Plan (NDP1) as one of the government policies that are being implemented. I am not sure whether the comment was made with this knowledge. But this comment could have been constructed from a positivist tradition that views environmental education as education for others. This is referred to as, “restoring order” by Janse Van Rensburg (1994:5). A group in favour of restoring order, views that society “can and should be ordered

according to laws similar to those perceived in nature.” in this case toward the implementation of the Environmental Education Policy.

Secondly, the Environmental Education Policy is contained in Namibia’s Green Plan and could have political implications if it is not properly handled in terms of getting authorisation for its implementation. One could therefore understand that the participant’s concern is in implementing a policy document without a clear mandate from Cabinet.

Thirdly a possible reason for such a concern could be financial implications in implementing the environmental policies contained in the Green Plan. I am basing this reasoning on constraints listed in the study that absence of funding was mentioned by all participants. This being the case, it is therefore appropriate to have Cabinet endorse the implementation of the Green Plan. Should it be found necessary, Parliament would then be able to debate the funding situation. This is usually approved through the Budget Law. Clarity on financing the implementation process of the Environmental Education Policy could be obtained from Cabinet.

I view the second and third meaning-making options as based on critical reasoning, where pros and cons of an action are being analysed and where environmental education is considered as a collective responsibility involving all levels of decision-making.

#### 5.3.5.3. *Expert-driven views*

Topic 10 attempted to explore possible areas where information on environmental education could be obtained. One participant adamantly responded by referring to one official as “the only person who is an expert on environmental education”.

When I was trying to fix an appointment with the most senior official dealing with Environmental Education Centres, I was referred and authorised to interview Environmental Education Centre coordinators, as “they know everything on environmental education programmes and how the Environmental Education Policy is being implemented at the centre.”

The above examples indicate how some decision-makers view knowledge and how it could possibly be acquired.

One could possibly attribute such perception to what Janse Van Rensburg (1994) termed the “role of authority-in-knowledge”, meaning that some people view “knowledge and power as being derived from experts.”

The expert-driven views are positioned in the assumptions that “it is proper for certain people to show others the error of their ways and urge them to act differently.” (Robottom and Hart, 1993:4). Meaning it is an individual rather than a society or community that is the source of knowledge.

Examples were cited by participants that there is a tendency for some decision-makers in higher positions attending conferences and meetings to write reports only and that officials who are actually policy-implementers are usually not given opportunities to attend seminars and conferences. Such individualistic practices result in some empowered individuals taking it upon themselves by owning all the knowledge (Robottom and Hart, 1993). By not sharing in the knowledge acquired, participants argued that they do not get the necessary support and therefore feel not empowered.

Although some responses seem like complaints and passing the buck namely, “there is no proper guidance and support from supervisors, they sometimes bring visitors to the Environmental Education Centre as a “show case.” Participants seem to know what they consider as obstacles and what they view as desirable for bringing about positive changes.

#### **5.3.5.4.**        *Overworked staff members and lack of support*

In general, shortages of staff members and, in particular, staff members with knowledge and skills (expertise) in “environmental education”, were perceived by all participants as a concern. This has resulted in overworked staff members, for example those assigned to Environmental Education Centres. They claimed not to be able to cope with the increasing numbers of visiting groups to the centres.

The other issue here is the lack of Environmental Education Programme developers/designers or materials developers. For example, at the Environmental Education Centres appointments of key people are not done. These officials were intended to design and develop materials and educational programmes, analyse the evaluation forms completed by visitors and follow-up on recommendations made.

Other responsibilities at Environmental Education Centres include outreach work, gardening and cleaning-up after the visiting groups, and were performed by overworked officials. This raises the question of productivity or issues of efficiency and effectiveness that the government promotes.

Senior officials who are not directly at the implementation level are perceived as not putting on pressure for vacant posts to be filled. Frustrations as a result of these perceptions led to remarks made on the existing gap between policy and its practice. One participant illustrated this point as follows:

*We are given a free hand to do what we think is right with no back-up support. The Environmental Education Policy is up there and we are down here. We are doing what we think is correct and they are saying the policy is there and is good*

This demonstrates issues of policies that are theoretical and their implementation, that is, the practical aspects of policies to be discussed in the next section.

#### 5.3.5.5. *The policy-practice gap*

The findings in this study revealed that although there have been positive strides made in implementing the Environmental Education Policy, the identified obstacles to their successful implementation points to a gap between theory and practice. This was explicitly stated in the following examples of participants' responses:

*The policy is all fine on paper, but you can't run a policy like that without a proper staff component or structure to carry it out!*

*The policy-practice gap is big and there is less vision from senior management to make the policy work*

The cited examples should be viewed in the context of participants' working environment. These reflected the frustrations of staff members at the implementation level where issues of staff shortages, lack of support and shortcomings of senior officials are common.

A Southern African Development Community (SADC, 1994) report has confirmed this policy-implementation gap and attributes it to:

- a) The relative novelty of the concept of environmental education and thus a lack of both trained and experienced personnel, and appropriate teaching materials and resources;*
- b) Ministry officials responsible for environmental education programmes and activities also have other responsibilities in their job descriptions. They are burdened with other priorities and therefore do not accord environmental education the attention it requires*

What is demonstrated above is clearly a gap in having what appears impressive on paper but which is not owned by those involved. The identified policy-practice gap could be reflected upon in the light of a cartoon from Enviro Feature (1997), which read:

“Why do you think over-fishing continues in many places even with government regulations?”

The same question could be asked: Why environmental problems seem to continue unattended despite the government policies geared toward maintaining “ecological processes” (The Constitution of the Republic of Namibia, 1990)

“Lack of commitment to work” was one of the identified constraints in the study. I believe that environmental education is about commitment to take action for purposes of corrective measures. Solutions to environmental problems and recommendations made

emphasized the socio-economic-political factors that resulted in the policy-practice concerns.

In the concluding Chapter Six I shall highlight some of the important reasons why Government should adopt an integrated environmental education policy process along the lines proposed in this study.

#### **5.4.0. Conclusion**

To Goldstein (1995) the success of environmental policies is closely linked with the degree to which groups in society are willing to comply with new standards and criteria for behaviour. She noted that the pace for change is great while the pace of regulation is slow. When policy-makers really want to do something, it is important to build up the will for change. They need more persuasive instruments such as covenants with groups, information, education and communication marketing instruments to stimulate and increase public participation. Government officials have to leave their desks and become involved in community meetings and conferences. As a result of such meetings and connections, opportunities for co-operation are built.

When one is managing an educational programme, it is important to know at which phase people are. Stimulating real participation is another component of environmental education that engages people in policy formulation, planning and implementation. This has implications all over the world in gaining peoples' acceptance of plans as their own (Goldstein, 1995).

Various literatures have listed some of the constraints in implementing environmental education as; translating environmental education objectives into instructional reality is not an easy task; the process leading to responsible behaviours is not direct or straight forward; economic constraints, social pressures, opportunities to choose different courses of action; making learners capable of viewing global change holistically and being able to analyse individual issues at local and regional levels; the variety of interpretations of certain phenomena due to differing political, economic, religious and social values (UNESCO/UNEP, 1993). Leal Filho (1995) summed this up, stating that development in

the field of international environmental education needs to be constantly monitored and an on-going appraisal of progress is necessary if long-term results are to be achieved.

Education for the environment needs to move from the theoretical and largely rhetoric position to a more practically oriented one (Robottom, 1993). A balanced combination of policies, projects and programmes is essential in order to maintain the momentum created by events such as Belgrade and many others who came late.

The constraints or obstacles in the process of the Environmental Education Policy implementation indicated certain concerns of behaviours, attitudes and skills that need to be addressed. They also indicated the practice-based nature that should characterise such environmental education programmes and the need to focus on both personal and professional development. Although all views expressed in this study cannot be summarised as such, the themes discussed are captured in Robottom's (1987:80) five principles that "environmental education programmes should be enquiry-based, participatory and practice-based, critical, community-based and relevant and should be collaborative."

## CHAPTER 6

### SUMMARY, REFLECTIONS, LIMITATIONS OF THE STUDY, RECOMMENDATIONS AND CONCLUSIONS

#### **6.1.0. Introduction**

In this chapter I have evaluated the methodological approach through my reflections and highlighted what I considered the limitations of the study. The themes that have emerged are summarised as points to note. I have also made some recommendations based on the findings and some concluding remarks on the study.

#### **6.2.0. Summary**

The study has identified a gap between policy formulation and policy implementation. The results have, however, indicated that amongst decision-makers there seems to have been a general theoretical knowledge of the environmental issues and problems in the country. Also there seems to be a sense of consciousness or awareness among decision-makers as to the causes of environmental problems and how to address these problems. But what seems to be lacking are the appropriate skills, attitudes, motivations and commitment to working individually and collectively toward solutions of current problems and the prevention of new ones ((UNESCO/UNEP, 1993).

#### **6.3.0. Evaluation of methodology**

##### **6.3.1. *Reflections on the study***

In 1994 I learned from the environmental education contact courses that critical reflection on the research process is important. My willingness to engage in self-critique has not only been personally gratifying but also applicable to issues of national and international interest.

Seven decision-makers, travelled a long distance (over 250 km) to come to interviews. Such actions are rare and demonstrated the interest and preparedness of decision-makers to acquaint themselves with issues surrounding the implementation of the Environmental Education Policy.

It is worth mentioning that my background and experience of research has been in the natural sciences. Striving for objectivity played an important role at the beginning of the interviews, despite the theoretical information on the post positivistic paradigm in which this study is positioned. This means that before starting this research process, I considered myself as a researcher who was neutral and should stand at a distance and observe objectively the subjects explaining the reality of knowledge. I could, at that time, also not understand how it was possible to do research without a hypothesis that had to be proved or nullified. The use of the first person, 'I' instead of a 'researcher' in this study is but one example that demonstrates the risk I took after a long personal battle because I did not feel comfortable with it. The study is a break through and has changed my frame of reference. I now view research as a way of developing critical skills to question the taken-for-granted stances in life.

In the context of this research the common expression that "politicians come and go" has a dual meaning for me. During 1995 and in 1996, changes in the Namibian political scene resulted the bifurcation of the Ministry of Basic Education and Culture, and the Ministry of Higher Education, Vocational Training, Science and Technology. Also the Ministers of Environment & Tourism, Youth & Sport and Education & Culture were moved to other Ministries. These three Ministers spearheaded the Inter-Ministerial Committee on Environmental Education.

It is as a result of these changes that the progress of this Committee has not been reported. The expression could have two implications. Firstly, although these political changes have not influenced the study much, there is, however, a discontinuation of some of the plans the Ministers had in mind. The lack of such political support is felt.

Secondly, the importance of participatory process in policy-formulation will ensure that people themselves will take pride and ownership of the product (in this case, the

Environmental Education Policy). Points highlighted in the study emphasize community participation at all stages of the policy process and this is encouraging proper coordination. In such cases people themselves will be in charge of their affairs as the study has identified “watch dogs” of the policy implementation process. This would mean that whether politicians who spearheaded the policy-formulation are in their positions in Government or not this would not make any difference to the implementation of such a policy. Further reflections are included in the next section on limitations of the study.

### **6.3.2. Limitations of the study**

The findings obtained from semi-structured in-depth interviews with key individuals backed by thematic interpretation during the workshop were eminently suitable in this study. When I reflect on this research, I support the viewpoints of Van der Mescht (1996:188) that he articulated as: “The factors that account for the strengths of this study are precisely those which contributed to its limitations.”

I attributed the strengths and weaknesses to the methodological approach I adopted. It is through the semi-structured interviews and the workshop that subjective interaction and meaning-making exercise resulted in the discussion and conclusions drawn in this study. It is for these same reasons that I shall have to concede; firstly, that my findings are in no way a generalisation and secondly, that my presence as a researcher in decision-making must in some way have affected the research process, which therefore raises the question about validity. Thus “the qualitative researcher will often be caught in a catch-22 situation” (Van der Mescht, 1996:188).

Giorgi (1975) cited in Van der Mescht (1996) argued the case for vigour and the proper adherence to internal validity procedures, such as frequently comparing descriptions with original protocols to ensure that one was remaining true to one’s data.

Shapiro (1986:172) cited in Van der Mescht (1996) argued that being human provides the basis for validation. He further argued that:

*For researchers, who are necessarily involved in the construction of reality, there is “direct access to understanding and a form of verification inherent in the lived relation between themselves and the object of their investigation*

On the question of replication, Giorgi (1975) cited in Van der Mescht explained that it was taken for granted that different researchers could draw different conclusions from the same data. For him the criterion for research was; whether a reader adopting the same viewpoint as articulated by the researcher, can also see what the researcher saw, whether or not he agrees with it. This would constitute validity in qualitative research (Van der Mescht, 1996).

I learned from Lomax (1993) that action research needs continuous validation by educated witnesses from the contexts it serves. In deciding whether the research topic would be a contribution to policy processes in Namibia and whether the questions are relevant to the study, I first piloted my interview schedule. Once I established the importance and relevance of the questions to the research topic, I felt confident in the results generated. I involved others in the validation exercise, that is establishing whether the ideas, expressions and arguments are relevant to the research question. My supervisors' professional knowledge support the relevance of the study. As the study progressed, I involved professional friends and colleagues both within and outside Namibia. A case in point is when I presented my research findings to the NEEN Annual Conference on Environmental Education in Namibia in June 1995 and at Bradford University at an Environmental Education Workshop Reviewing the Belgrade Charter in July 1995. These peer validators' comments emphasised the importance of this research, and the environmental education policy-practice in Governments and they pin-pointed some contradictions in my study. Where I agreed with them I have incorporated their suggestions.

For researchers, like myself, operating within the post-positivist paradigm, generalisability will always be problematic. I assumed that the reality constructed by participants in this research is, to a large extent, unique. To an action researcher, therefore, generalisation is anathema. The fact that my findings are not generalisable is

therefore neither a weakness nor a shortcoming, but I certainly acknowledge it as a limitation (see also Van der Mescht 1996:190).

I need to highlight my subjectivity as a second limitation, also derived from the very feature that has enriched and strengthened this study. In other words, the fact that I have had to be personally and subjectively involved with decision-makers who comprise my sample. I am, however, convinced that there is no way of avoiding this. Van der Mescht, (1996) maintained that any kind of research without personal involvement is a contradiction in terms. But what may have complicated this particular involvement to some extent was the relationship between myself and my participants.

As explained in Chapter Three, participants in this study were Ministers, Directors, Managers, Regional Councillors, Teachers, Community Workers. Being a Permanent Secretary in the Namibian Government, I cannot ignore the possibility that our unequal power relationship may have biased my approach to them, and or their response to me. For most of them there was always the possibility that their answers to my interview questions and their responses to the workshop task may have been designed to please rather than to reveal the truth. And indeed, I recognised the fact that this may have been the case, had my research been of a different kind. As it was, participants had no idea what I was looking for, even though they collaborated with me, largely because I phrased open-ended questions on their perceptions of the implementation of the Environmental Education Policy.

Furthermore, since I conducted the interviews and workshop shortly after my appointment to this position, there was no possibility of their having gained insight into my personal views on the implementation of the Environmental Education Policy. I am convinced that both interviews and the workshop were conducted in an entirely unthreatening, open-minded way and participants spoke from the heart.

The third limitation is the rather obvious fact that this study is only one small attempt at gaining enriched understanding of a rich and multi-faceted issue, the implementation of the Environmental Education Policy in Namibia. At the beginning of the study I was discouraged by the fact that I obtained very few studies or literature on decision-makers

and the implementation process of environmental education policies in other countries. But with the wealth of information obtained and presented in Chapter Four my attitude changed, due to excitement such as responses to Topics 4, 5, 8, 11 and 12 and the fact that the data can be useful for various educational purposes.

As expressed earlier, I do not share the views that research outcomes should be used as a missing piece of a jigsaw puzzle, in this case, providing the only solution to the environmental crisis. I prefer to see each piece of research as an attempt to illuminate yet another way of addressing the environmental crisis.

There is an urgent need to address the question of environmental literacy in this country. A more complete picture can only emerge when a variety of approaches and methodologies are applied in appropriate ways.

The fourth limitation is the semi-structured interviews that resulted in the massive wealth of data collected, of which some data that are relevant to the research questions are used in this study. The findings are useful for further research in environmental education and in the process of decision-making on matters relating to environment and education. The limitation of the semi-structured interviews was that, in some cases, an interview lasted for about three hours, despite the tight schedules of interviewees in decision-making positions. The open-ended nature of questions and probing raised points of such interest and importance that I could not just stop the dialogue, particularly when issues of feelings and emotions were involved.

The fifth limitation is that the participants in the workshop discussed constraints that were perceived as impediments to the implementation of the Environmental Education Policy. During such discussion the decision-makers realized that some of the frustrations they encountered at their work place related to the implementation of the Environmental Education Policy are not only unique to them, but, as the expression goes “to know that others are in the same boat is helpful when the seas are rough.” They encouraged each other not to give up, even though the pace of policy implementation seems slow, they felt that they might succeed with another attempt. The shortcoming of the workshop was that there was not enough time allocated to the feedback session after group discussions.

The sixth limitation is what could be termed no evident change, or no visible improvement in the implementation of the Environmental Education Policy, that is, viewed as a result of this action research. Bearing in mind that this study has only focused on the first cycle of the action research, it is satisfying that positive results are being reported as decision-makers in various institutions are implementing the action plan to improve the implementation of the Environmental Education Policy as adopted at the NEEN conference where I conducted the workshop. The strengths of action research as an approach which works, is that initial setbacks in implementing a plan can be re-considered in successive cycles of action.

The seventh and last limitation I wish to discuss is a lack of a research forum in Namibia that can make critical debate possible. I got useful feedback on my research from my supervisors, from colleagues with interests in environmental education, internationally, in SADC Region and nationally through discussions with some NEEN members.

Among many lessons learned from the research process, I uncovered that collective actions and working collaboratively with colleagues is more productive than individual efforts. This is important for both professional growth and personal satisfaction. The concluding ideas on this study are summarised below.

#### **6.4.0. Points to note and recommendations**

If the content of the Green Plan truly reflects the Government's commitment to sustainable development, then to achieve that, the role of decision-makers as agents of change is vital (Robottom & Hart, 1993). Yet, in order to adopt such a role, there are many barriers to be overcome. In order to fill the policy-practice gap perceived as the overall obstacle to the implementation process, we, the decision-makers, should gather courage and let our actions speak louder than our words. To improve the implementation of the Environmental Education Policy in Namibia, the following suggestions could be considered.

#### **6.4.1. Holistic approach**

The Government should address environmental concerns in a holistic manner at all education levels (primary, secondary and tertiary), in adult and continuing education programmes and through programmes and activities benefiting the society at large. An environmentally literate society is responsible, caring, committed and willing to reduce the scale of problems by reducing its demand on the environment and accepting or even demanding public policies that require sacrifices (Orr, 1992:90). The Government should be pro-active, as it is undesirable to wait until problems arise before action is taken.

#### **6.4.2. Economic necessity**

A commitment to participatory governance brings further benefit that there is greater potential for pulling together resources of different sectors for the implementation of solutions to specific environmental problems. This is necessitated by the fact that environmental degradation is costing money and inefficient use of resources is expensive. The proposed cleaning up of dumping sites or cleaning up campaigns and reduced agricultural productivity resulting in loss of biodiversity and other forms of land degradation are also associated with huge costs.

The development of an Environmental Education Strategic Plan was proposed and is a call to Government to consider the full cost of various Ministries' actions. Such a cost analysis should include environmental costs that have traditionally been ignored. Where donor funded support on projects was received, budgets of such activities usually indicate the lowest initial cost. This will have large ongoing operating and maintenance costs. Full costing means that Government must look beyond its immediate actions to the long-term effects of its decisions. The call for decision-makers with a vision aims for the realization of economic necessity in addressing the socio-economic problems presented and discussed in this study. If Namibia does not act now, the growing global village's growing demand for products and production processes that use energy and other resources more efficiently and are less environmentally damaging, will force us to accede to their demands.

### **6.4.3. Skills development**

Skills development, as recommended, is associated with issues of relevance to the communities in which people live. Community participation in activities and programmes that enhance problem-solving skills would be relevant to individuals' and groups' needs. Programmes for professional development in environmental education need to develop the aspects of the lives of participants, "our survival."

Training and capacity building interventions should move beyond the current plethora of short-term courses. A longer-term view for professional development in the field of environmental education is desired. As recommended in the study, training and staff development to go beyond technical skills to attitudinal, human resources and development areas to expose staff to alternative thinking, approaches and solutions.

### **6.4.4. Co-ordination**

The study places a great deal of emphasis on co-ordination within government. It also encourages participation by communities. The Environmental Education Policy should provide greater clarity on the demarcation between the roles of the various state machineries in issues of the environment. Information should not only be relayed to the communities, but rather there should be active participation in policy debates and influence over the way in which the Government implements policy. The Ministry of Environment and Tourism should be the leading agency in co-ordinating activities with other government institutions and interested NGOs, Private Sector and individuals.

### **6.4.5. The need to conclude the review of Namibia's Green Plan**

Namibia's Green Plan is still in draft form since 1992 when it was presented at an international forum at Rio de Janeiro. As this was a product of a consultative process, emphasising sustainable living, it made a global impression.

The MET which is dedicated to the issues of environment, should review and update the Green Plan. If necessary it should follow the democratic participation process that

complements Article 95 of our Constitution. New ways of empowering communities and enhancing their skills through the MET policies, for example on communal land conservancies and community based tourism initiatives, should be included. These policies which benefit rural communities have an economic stake in preserving the natural features on which tourism depends. Policies included in the Green Plan address the question of the well-being of society as a whole, and the promotion of a healthy environmental future, even for generations not yet born. It is therefore my considered view that the Green Plan should not be left to lie dormant, or else it will make a mockery of our genuine efforts.

I would suggest that the revised version of the Green Plan should make provision for a committee for environmental co-ordination that can request environmental implementation plans from government Ministries, Offices and Agencies. Such plans will ensure that its policies, plans and programmes will meet the objectives of sustainable development and better environmental management. In the case of South Africa, their National Environmental Management Bill empowers the Minister to request departments to submit reasons for non-adherence to objectives and plans (Fakir, 1998:10). Such a follow-up mechanism in place would be one way of bridging the policy-practise gap identified in the study.

In supporting the participants' wishes, the Green Plan should get political approval by Cabinet. We hope the approved environmental policy document will actively build links between the different levels of Government and between the authorities and civil society.

## **6.5. Conclusion**

The perceptions of a range of decision-makers have been greatly influenced by societal values. This perspective has been more visible in the fact that participants in the study include politicians who are elected by the people and other decision-makers who implement government policies and are thus invariably informed by the experiences of our struggle to meet the challenges of post-independence Namibia.

I, who had a benefit of getting the personal views, feelings and emotions of my participants in the study, recognise that we still need to do a great deal to enhance our democratic culture. This could be achieved through improving our co-ordination and communication, involving communities in participating at all levels of decision-making and continuously reflecting on our actions. As expressed in 1994 by the Right Honourable Hage Geingob, Prime Minister of Namibia, “we have made strides in some areas of implementing the Environmental Education Policy, we should continue in our efforts towards breaking the hold of the colonial past in the psyche of our people.”

The contribution of this study to the policy processes is, that the points to note or recommendations made are not the only conclusions that can be drawn from the wealth of information I gathered. There is, therefore, scope for independent critical thinking. Herein perhaps is another strength of my research.

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The Implementation of environmental education policy in Namibia: Perceptions of a range of decision - makers.

COVER SHEET

Background information. Re: Interviewee

Name.....  
Position.....  
Male/Female.....  
Time.....  
Date.....  
Postal Address.....  
.....  
.....  
.....

Things to do before hand:

- \* Introduce myself
- \* Introduce the study
- \* Reasons for study
- \* Confidentiality
- \* Permission to use tape recorder
- \* The purpose is: to ask for advice but not to test their knowledge
- \* RECORDER ON !

Comments:

**Draft interview schedule**

**Topic 1. The interpretation of the concept environment**

**Question 1**

**For all:**

The word environment is understood in many ways.

What is your understanding of the word environment?

---

**Topic: 2 Issues /Problems**

**Question 2**

**For All:**

- 2a) What do you see as the most important environmental issues/ problems in Namibia?

---

**For Regional Councillors only**

- 2b) What kind of problems do community members come to you with?
- 2c) Are environmental issues ever discussed in your constituency?

Probe: Yes ..... explain more which ones?/where/why

No..... Why not?

2d) Are you able to resolve these problems?

If yes:

How ?

If no:

Why not?.....

---

### Topic 3: Solutions

#### Question 3

For All:

What would you consider as possible solutions to the above-mentioned problems/issues?

---

### Topic 4: Interpretation of the concept environmental education

#### Question 4

For All:

Environmental education (EE) is a new concept which is currently being developed in Namibia. The Namibian Government showed internationally its commitment to EE in 1992 in the presentation of a document called Namibia's Green Plan.

What is your understanding of EE?

(If interviewee is unsure:

Probe: What is it? How and why does it take place ?)

---

**Topic 5: EE policy in Namibia**

**Question 5**

**MET:** a) What is your Ministry's policy on EE?

Probe: Do you know the content of the policy?  
Does the policy have any relevance to your work?

**MEC:** b) What is your Ministry's position on EE?

**MEC:** c) Are there any formal statements on this position?

---

**For regional Councillors only:**

c) Do you know of any Government policy on EE ?  
If yes .. then  
What is the policy?

If no ..... then  
(Explain by giving information of what the policy is ) **Note:**  
who of the respondents did you give information.

---

**Topic 6: EE Policy implementation**

**Question 6**

**MET:** a) How is the EE policy being implemented on the ground?

Probe: Elaborate?/Explain/Give examples

**MEC:** b) Does any environmental policy affect you?  
If so, how?

**For All:**

c) Where is EE policy being implemented?

d) Are there any other areas where EE policy needs to be implemented?

**For Regional Councillors**

6e) Are you able to implement government policies in general?  
If yes:  
Please elaborate/give examples

If no:  
Why not?

6f) Do you think you have a responsibility to implement any policy on environmental matters?

Yes:

Please elaborate....

If no: Why?

6g) Do you know of the existence of the Namutoni/Waterberg Environmental Education Centre (EEC)?

If yes: Then...

6i) Have you been to one of these EEC?

6j) In your opinion, what role is EEC such as Namutoni/Waterberg supposed to play in the community?

6k) Have you personally benefitted from EEC?

Probe: If yes:.....In what way?

If no: ....Why not, do you think?

6l) Has the EEC benefitted the community you are serving?

If yes: ....In what way?

If no:.....Why not, do you think?

**Note:**

If no idea of EEC, then briefly explain the function of EEC ) and

Probe:

6m) What is your reaction to that?

-----  
**Question 7**  
**For MET/MEC**

- a) Has any progress been made in implementing EE policy?  
Please elaborate....
  
- b) Since the implementation of EE policy, what has been achieved?  
Please give examples.

**Question 8**  
**For All**

Are there obstacles in your opinion that delay or prevent the implementation of the EE policy?  
Please explain .....

**Question 9**  
**For All:**

In your view, how do Namibians in general respond to the idea of environmental education?

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**Summary**

**Question 10**

Where would you find appropriate information on EE?

(UNAM/ libraries/ NGOs/ TRC/EEC/) please specify.....

**Question 11**

What recommendations would you make, to improve the implementation of EE policy in your Ministry or ( in Namibia for Regional Councillors)

Do you have any questions ?

**THE IMPLEMENTATION OF AN ENVIRONMENTAL EDUCATION POLICY IN NAMIBIA: PERCEPTION OF RANGE OF DECISION MAKERS.**

A summary of the paper presented by Loini Katoma, Permanent Secretary, Ministry of Basic Education and Culture

This paper was based on the research done by the presenter for her Masters Degree in Education. There were two main goals to this research: -

1. To investigate the perceptions of decision makers within the Ministry of Environment and Tourism (MET), the Ministry of Basic Education and Culture (MBEC) and Regional Councillors regarding the implementation of the Environmental Education (EE) policy.
2. To explore ways in which obstacles to the implementation of the EE policy could be addressed.

The findings may be summarised as follow:-

**A. SOME OF THE CONSTRAINTS THAT ARE DELAYING THE IMPLEMENTATION OF NAMIBIA'S EE POLICY.**

- 1) **STAFF:** Teachers find it difficult to do cross-curricular work and are not trained with an EE approach to teaching. This may result in less enthusiasm and commitment. Staff shortages in the MET and MBEC result in overloading available staff with many varying responsibility of which EE has a low priority.

- 2) **LOCATION OF EE CENTRES:** EE centres are located far from Namibia's major towns. This makes them inaccessible to many learners.
  - 3) **LACK OF FINANCE:** Financing, for example, transport for schools interested in visiting EE centres, is often unavailable.
  - 4) **LANGUAGE:** The use of English often results in translations that are not accurate and the vocabulary used in some resource materials is unsuitable for many learners.
  - 5) **LACK OF COMMUNICATION:** Community leaders are not informed about the EE policy and, as a result, are not contributing to its implementation.
  - 6) **SCHOOL PROGRAMME:** Most school schedules are too full to incorporate EE programmes.
  - 7) **LACK OF OFFICIAL SUPPORT:** Lack of support for EE activities from high ranking officials results in a lack of appreciation of the efforts made in this field. This in turn can result in a lack of interest in whether the policy is being monitored or not.
  - 8) **LACK OF FOLLOW UP:** Decision makers do not follow up on initiatives such as the Green Plan. Such documents seem to be used for public relations purposes only.
  - 9) **RECYCLING:** The recycling ethic is often abandoned by communities as an issue that revolves around "rejects from the haves given to the have-nots".
- B. SOME RECOMMENDATIONS TO IMPROVE THE**

## IMPLEMENTATION OF EE IN NAMIBIA.

- 1) EE should be part of the school curriculum, teacher training, graduate courses and in adult and continuing education programmes.
- 2) All educational institutions should include environmental activities in their programmes.
- 3) More schools should be encouraged to participate in EE competitions e.g. COCA COLA's Coservo and SHELL's annual art competition.
- 4) Communities should be involved through their leaders in the planning, needs assessment and implementation stages of the EE policy.
- 5) In order to prevent controversies, community leaders should be consulted and traditional values should be acknowledged when making decisions.
- 6) Information should be disseminated in local languages, through posters and pamphlets and the media.
- 7) MET and MBEC should subsidise trips to EE centres and should consider the development of mobile EE units to do outreach work. EE centres should be established throughout all the regions.
- 8) Top Government officials need to be sensitised to the importance of training mid and lower level officials to take up specific responsibilities in EE.
- 9) All attempts should be made to increase people's awareness and to change attitudes through the media, municipalities etc.

- 10) The MET should employ an environmental public relations officer and launch a nationwide environmental education awareness campaign through cabinet.

## C. DEVELOPMENT OF AN ACTION PLAN TO IMPROVE THE IMPLEMENTATION OF NAMIBIA'S EE POLICY.

Ms Katoma asked the delegates to form the following interest groups: Adult and continuous education; formal education; community development.

The groups were asked to brainstorm ideas for an action plan to improve the implementation of Namibia's EE policy.

## GROUP RECOMMENDATIONS

1. Adult and continuous education
  - o Adequate staffing and financing should be given top priority.
  - o More appropriate technology information and relevant EE materials in resource centres and libraries.
  - o More P.R.A. and multi-sectoral training.
  - o More effective use of the radio as an educational medium.
  - o Community mobilisation via "bottom-up" decision making.
  - o EE centres should broaden their base to reach adults.
  - o Establishment of EE mobile units in order to reach all regions.
2. Formal education
  - o Improve the status of EE in the curriculum.
  - o The MBEC should focus on the implementation of EE in schools.

- Subsidise any government institutions that can help to promote EE.
  - Decision makers need to be sensitised to EE and become more proactive.
  - More people are needed within ministries who are involved in EE and who can ensure that monitoring is done.
  - The MBEC could encourage competition among the regions, thus helping to sensitise them to environmental matters.
  - The NEEN committee could hold an annual meeting with policy makers.
3. Community development
- Information campaigns aimed at the grass roots level and at policy makers should be launched.
  - Implementation of the EE policy could be enhanced by means of several communication workshops.
  - Simplify the language of the policy and translate it into local languages.
  - Familiarise the general public with the Green Plan.
- 
- Inform people about the EE policy through the mass media.
  - Establish a link between NEEN and policy makers.
  - Invest in training programmes for community leaders.
  - NEEN newsletters should be distributed to community leaders and should be translated into local languages.

Ministry of Environment and Tourism

Policies on Extension and Environmental Education.  
Relations, and Information to the Public and Media Liaison

## EXTENSION AND ENVIRONMENTAL EDUCATION

### 1. PREAMBLE

- 1.1. The Ministry recognises that extension and environmental education are important and necessary tools to be used for the achievement of its mission. The Ministry cannot rely solely on legislation and the enforcement of legislation.
- 1.2. The Ministry recognises that both extension work and environmental education must become vital components integrated into all facets of its overall programme to encourage the adoption of conservation practices within all components of Namibian society.

### 2. POLICY

In view of the above, it is the policy of this Ministry to encourage and promote the implementation and environmental education by Ministry officials and other organisations and individuals, as a means of achieving the Ministry's objectives and fulfilling its mission statement.

### 3. EXTENSION

#### 3.1. Definition

The extension of conservation practice to the general public, i.e. involving individuals, and local communities (as well as particular interest or target groups, e.g. farmers), in conservation activities and practices.

#### 3.2. Guiding principles

- a) Extension activities of the Ministry should be designed to promote and encourage the development of mutual trust between all members of the community and Ministry personnel.
- b) Extension activities should be designed to encourage and facilitate shared responsibility between the community and the Ministry for the conservation and wise use of Namibia's natural resources.
- c) Extension activities of the Ministry should address conservation problems identified from both the perspective of the community as well as from the perspective of the Ministry.

- d) Extension activities should foster and develop the necessary participatory structures (institution building) to enable local individuals and communities to become involved in the conservation of Namibia's natural resources.
- f) Extension activities should encourage and facilitate joint conservation action involving communities, industry, non-government organisations and other Ministries.
- g) To ensure effective management through and adaptive process extension programmes must be regularly monitored and evaluated.
- h) Community liaison officers and extension officers should be established and expanded to develop closed links between the Ministry and local communities for the joint management of natural resources.

#### **4. ENVIRONMENTAL EDUCATION**

##### **4.1. Definition**

Environmental education is the process by which we aim to ensure an environmentally literate population which can evaluate and make appropriate decisions to help solve environmental problems.

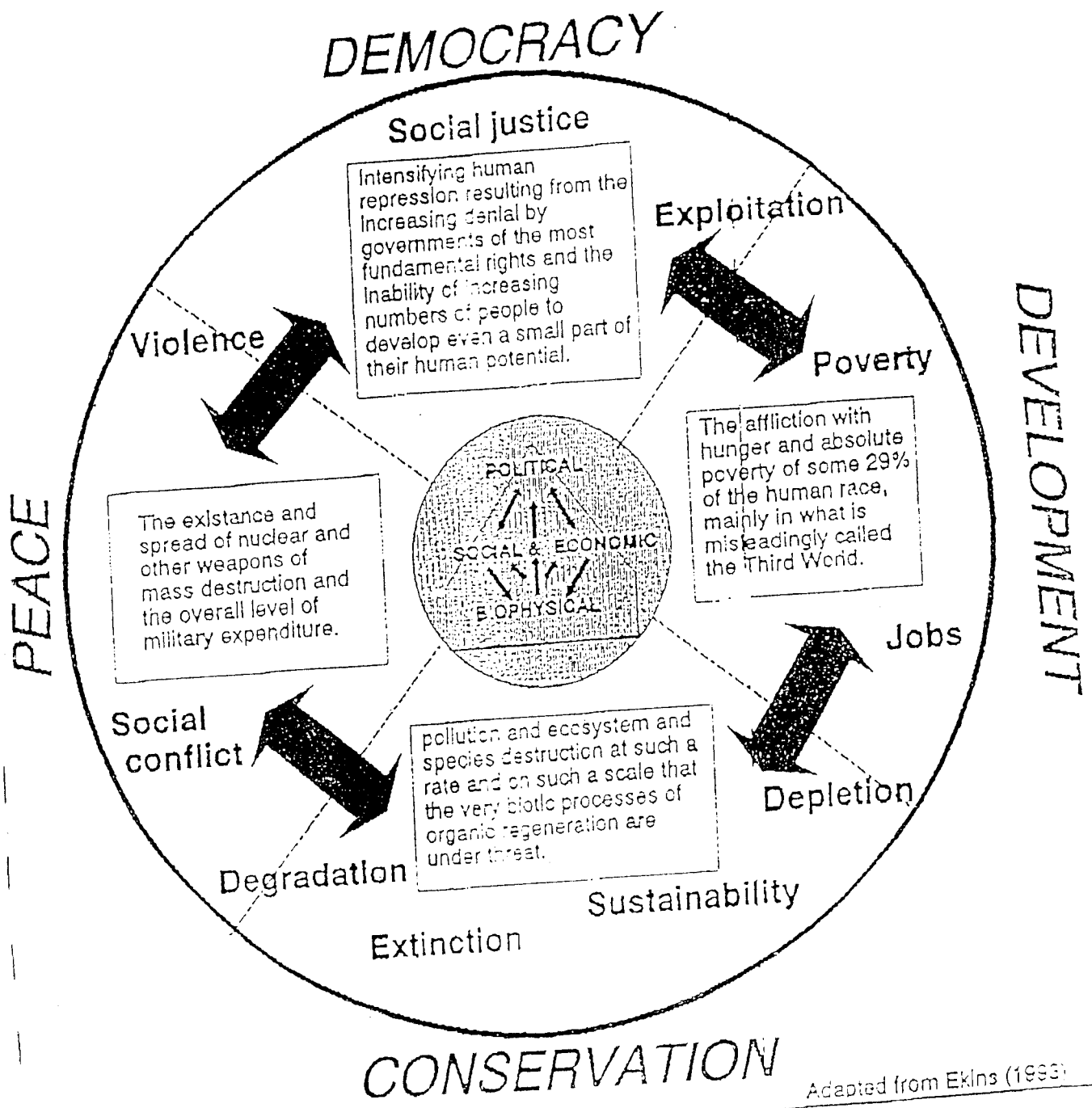
##### **4.2. Guiding principles**

- a) In accordance with the objectives identified by the UNESCO/UNEP conference on Environmental Education held in Belgrade, Yugoslavia in 1975, the Ministry will foster:
  - i) Awareness - by helping individuals and social groups to acquire a basic understanding of and sensitivity to the total environment and its allied problems.
  - ii) Knowledge - by helping individuals and social groups to acquire a basic understanding of the total environment, its associated problems and man's critically responsible presence and role in it.
  - iii) A positive attitude - by helping individuals and social groups to acquire social values, strong feelings of concern for the environment and the motivation for active participation in its protection and improvement.
  - iv) Skills - by helping individuals and social groups to acquire the skills for solving environmental problems.

- v) Evaluation abilities - helping individuals and society groups to evaluate environmental measures, conditions and educational programmes in terms of ecological, political, economic, social-aesthetic and educational criteria.
- vi) Participation - to help individuals and social groups to develop a sense of responsibility and urgency regarding environmental problems in order to ensure appropriate action in finding solutions.
- b) In order to achieve the above, the Ministry should establish an environmental education programme that promotes environmental education as a continuous process occurring in and out of school, considers the environment in its totality, and emphasizes the compatibility of conservation and sustainable development. The Ministry should encourage and facilitate activities of other Ministries, organisations and individuals contributing to this process.
- c) The Ministry's environmental education programme should include:
  - (i) The provision of information and resource material for teachers, environmental education centres, school and individuals involved in environmental education.
  - (ii) The establishment of environmental education centres satellite facilities throughout Namibia.
  - (iii) Co-operation and mutual support with the Ministry of Education, non-governmental organisations and individuals involved in environmental education.
  - (iv) Co-operation in establishing a national environmental education strategy in Namibia.
  - (v) Promotion of ongoing environmental education and research.

# THE ENVIRONMENT CRISIS:

A wheel of interacting global concerns



Adapted from Eklns (1993)

