# ENVIRONMENTAL MIGRATION IN SOUTHERN AFRICA: TOWARDS A PROPOSED STRATEGY FOR ACTION<sup>1</sup>

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#### 1. INTRODUCTION

In the past thirty years environmental problems, and inevitably environmental degradation, have gained considerable momentum. One of the net results of such degradation is manifested in growing numbers of people across the world who are forced to leave degraded and uninhabitable lands. These people are commonly referred to as environmental refugees, and encompass a very diverse category of migrants. It includes people fleeing prolonged droughts, floods, desertification and land degradation, but also those who are threatened by industrial disasters, rising sea levels and development projects such as the construction of large dams. These people are often internally displaced - forced to migrate within their country of origin, or, just as regularly, become international migrants - forced to migrate to a place outside their national borders. Although both these groups are of concern, this article aims explicitly at the issue of environmentally forced international migration due to the potential that this has for impacting on regional political security, economic stability and social dynamics.

Environmental refugees are forced to migrate due to specific environmental conditions, like those outlined above, but these environmental problems are undoubtedly brought about by an interplay between a complex range of social, political and economic factors. Environmental degradation seldom, if ever, develops outside of a specific socio-economic and socio-political context. Deforestation, for example, often takes place because social pressure (overpopulation), in conjunction with economic pressure (poverty), fuel a growing demand for wood and agricultural land. Environmental refugees, likewise, is a phenomenon that develops and manifests itself within a specific socio-political and socio-economic landscape

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characterised by amongst others, population pressure, poverty, low socio-economic development, corruption and political instability.

This phenomenon affects almost every nation and is becoming a pervasive and increasingly troublesome global phenomenon. People displaced by the Chemobyl nuclear disaster in the former USSR, those displaced by the building of the Three Gorges Dam in China, those fleeing droughts and hunger in the Sahel, and the people who are going to be displaced by rising sea levels in the Maldives, among countless other examples, serve to illustrate the extent and pervasiveness of this issue on a global scale. It is, however, believed that the bulk of the current estimated 25 million people who are forced to flee environmental degradation are found in sub-Saharan Africa, with this region in future continuing to contribute the most to the rising numbers of environmental refugees world-wide (Myers 1997:167; Redelinghuys & Pelser 2000:1).

Southern Africa is a region that is particularly at risk of generating large numbers of environmental refugees due to specific socio-economic and socio-political factors at work in the region. The floods that ravaged the southern parts of this region during the summer of 2000, is just one case in point. While most of the people were able to return home within a month or two after the floods, the ability of countries such as Mozambique to supply food by means of agriculture was severely affected after the flood. It was, in fact, the expected long-term food shortages that led to concern from Mozambique's neighbours - particularly South Africa - over a possible influx of migrants in the aftermath of the floods (BBC News 2000). In Zimbabwe, the droughts of the early 1990s forced numerous subsistence farmers across South Africa's borders. The impact of the drought on migration patterns was noticed in the sharp increase in the number of illegal migrants being repatriated to Zimbabwe at the height of the drought (Minnaar & Hough 1996:121). In the light of these and many similar incidences, it has thus become a matter of necessity to explore the issue of environmental migration in the region.

The potential of the region to generate environmental refugees ultimately impacts on the region's socio-political and socio-economic stability and places great demands on the nations of Southern Africa to devise effective measures to deal with this growing problem. Therefore, this article explores some strategies that will pave the way to deal effectively with the problem of environmental refugees in Southern Africa. To come to any meaningful conclusion as far as the formulation of strategies is concerned, the driving forces behind environmental degradation in the region are discussed to highlight that the state of Southern Africa's socio-economic and socio-political environment provides the ideal breeding ground for serious

environmental degradation and the fostering of environmental refugee movements. The fact that the region is particularly at risk from environmental refugee movements necessitates that the *impact* of environmental refugees on the region as a whole, and on specific host countries within the region, be explored. Here, much emphasis is placed on South Africa as the favoured host country, although it is acknowledged that other countries in the region, notably Namibia and Botswana, are also favourite migration destinations.

As a point of departure, however, it is necessary to reflect briefly on the issue of making a distinction between environmental refugees and other categories of migrants, since this is central to any meaningful exploration of the phenomenon.

#### 2. TOWARDS A CLARIFICATION OF TERMS AND CONCEPTS

In the current international migration context, at least as far as policy and legislation are concerned, environmental refugees are virtually a non-entity. At present the yardsticks used by individual countries in determining legitimate refugee status are the definitions in the 1951 Geneva Convention relating to the status of refugees and the 1967 Protocol relating to the status of refugees. According to these instruments a refugee is someone fleeing various degrees of political persecution, and thus people fleeing environmental degradation are not acknowledged as legitimate refugees.

Forced environmental migrants, in view of the fact that they are not considered legitimate refugees, are treated and categorised by host countries as undocumented migrants. Undocumented migrants present that large group of people who are not entered into the records of individual countries as either legal immigrants, migrant labourers, tourists, students or any other person that is entitled to be in a country. They are people who enter countries either clandestinely or remain in the country after their legal period of stay has elapsed - clearly not an appropriate categorisation for people that justifiably have to migrate from degraded and unsustainable lands.

In view of this, a conceptualisation of environmental refugees or forced environmental migrants needs firstly to acknowledge that these migrants did not have any choice in migrating, but were compelled by external circumstances beyond their control - as in the case of people fleeing rising sea levels. Secondly, the extent of environmental damage must be of such a nature that if the persons do not migrate, they will imminently face death. Their migration must therefore be a last resort, since people may be willing to tolerate a wide range of threats to their health and well-being before leaving their homes for good (Jacobsen 1996:30). A third condition is that such people must have no hope of returning home in the

foreseeable future (Myers 1994:7). To summarise, environmental refugees are classified as people who, in the face of imminent death, have no other choice but to leave their homelands, the primary cause of which is severe and life-threatening environmental degradation, whether man-made or natural, which renders the area uninhabitable for an extended period of time (Redelinghuys & Pelser 2000:5).

# 3. SOCIO-POLITICAL AND SOCIO-ECONOMIC FORCES DRIVING ENVIRONMENTAL REFUGEE MOVEMENTS

In practice, it is impossible to wholly isolate specific factors involved in creating degraded environments, since many forces are in operation that eventually bring about a degraded environment. It is, in most instances, the complex interplay between those political, social, economic and cultural factors that sets the stage for deteriorating environmental conditions to develop into an environment that cannot sustain life any longer. In Somalia, it was not only the ongoing political conflicts that contributed to forced migration during the early 1990s, but also poor economic circumstances and famine aggravated by a severe drought (Shields 1992:28). Likewise, the increasing impact of drought on food supplies, sustainability and economic ability in Zimbabwe has also led to an increase in the number of Zimbabweans that were repatriated from South Africa during the early 1990s. During the height of the drought between 1991 and 1992, monthly repatriations rose from 600 to 1000 (Minnaar & Hough 1996:121). However, to fully explore the driving forces behind environmental degradation, it is necessary to isolate the various forces involved.

## 3.1 Population pressure

Most Southern African countries are sparsely populated in terms of the number of people per square kilometer, but since large parts of the region are semi-arid to arid, prone to seasonal droughts and floods, with little suitable agricultural land and very limited fresh water sources, the number of people impacts greatly on the environment.

Current population growth rates in the region will mean that an even greater demand is placed on the natural environment in terms of food supply than already is the case. One in every three persons on the continent is at present malnourished (Pelser & Kherehloa 2000:28). In table 1, an outline of the current and projected population figures is provided.

In 1995 the population in the Southern African region increased at an average rate of 2.6% per year with countries such as Angola and Swaziland displaying growth rates of more than 3% per year. However, as indicated in table 1, most countries now have slower growth rates (between 1% and 2,4%), mainly due to the demographic impact of HIV/AIDS. In spite of the lower growth rates, the populations of many countries in the region are still expected to increase, as the projections for 2025 and 2050 show. Angola and Zambia are expected to more than double their populations in the next fifty years, while Namibia, Lesotho and Swaziland will also increase their populations over the same period. According to the United Nation's long-term projections, population will continue to grow for several decades, in spite of the impact of AIDS, before beginning to decrease slightly. Especially in developing parts of the world, where between one third and one half of the population are under fifteen years of age, populations could still grow noticeably in the next thirty to fifty years, despite increased death rates from AIDS. The UN expects significant increases in population even in those African countries hardest hit by AIDS (Population Action International, 1999; Smith and Niedermeier, 1996:504).

TABLE 1: POPULATION PROJECTIONS AND GROWTH RATES FOR SOUTHERN AFRICA

SOUTHERN AFRICA					
	Population (millions) mid 2001	Rate of na- tural increase	Population projections 2025	Population projections 2050	
Angola	12,3	2,4	20,5	29,6	
Botswana	1,6	1,0	1,2	1,2	
Lesotho	2,2	2,0	2,4	2,8	
Namibia	1,8	1,9	2,0	2,5	
Mozambique	19,4	2,1	21,6	22,9	
South Africa	43,6	1,2	35,1	32,5	
Swaziland	1,1	2,0	1,4	2,0	
Zambia	9,8	2,3	14,3	20,3	
Zimbabwe	11,4	0,9	9,5	9,3	

Source: Population Reference Bureau, 2001.

Agricultural land in the region is already stretched to the maximum and further pressure will result in soil erosion, deforestation, desertification and increased vulnerability to natural disasters such as droughts. The impact of increased population pressure on agricultural land is felt primarily by subsistence farmers who are, as a result of population pressure, not able to yield enough crops to sustain themselves and their families. The lack of arable land has forced subsistence

farmers to expand farming activities into marginal land in many parts of Southern Africa to support growing families. Lands are marginal due to the poor soil quality, low rainfall and terrain slope of these areas and farming in these areas places people at risk of eventually being forced to migrate, since these areas quickly become unsustainable (Pelser and Kerehloa 2000:26). Benton and Clay (2000:300), commenting on people's vulnerability to the effects of drought, conclude that population pressure has resulted in the intensified use of more marginal lands in many African countries such as Burkina Faso, Ethiopia, Kenya, Senegal and Zimbabwe.

Increased population pressure also aggravates problems associated with access to fresh water resources in the region. In Africa, two thirds of the continent's projected population in 2025 could be at risk from serious water scarcities (Myers and Kent 1995:42; Smith and Niedermeier 1996:508). In approximately two decades from now, all countries in Southern Africa - including South Africa - will experience either water stress or absolute water scarcity (Pelser 2001:57). This situation is set to trigger an environmental migration of unprecedented magnitudes - a potential demographic exodus that no doubt holds serious implications for socio-political stability in the region.

Population pressure and environmental degradation are closely linked to another social factor influencing forced environmental migration, namely urbanisation.

#### 3.2 Urbanisation

For many environmental migrants, urbanisation marks the first step in a series of migration decisions to escape life-threatening environmental decline. Most of the urban growth occurring in the world today is taking place in the developing world. In Southern Africa this trend is very evident. Most of the countries in the region had urban growth rates of between 5% and 8% during the period 1980-95 (World Development Report 1997). Urbanisation, to the extent that it is experienced in the developing world, holds a serious threat for the sustainability of urban regions. Increases in urban populations challenge urban planners in terms of providing necessary infrastructure and services. In most of the large urban centres in Southern Africa, pressure is placed on infrastructure and public services. As a result, the urban situation in most developing regions has a serious and devastating impact on the natural environment.

More than 8 million South Africans are living in informal settlement areas and despite the fact that the government succeeded in building close to 1 million houses between 1994 and 2000, there is still a housing deficit of 6,2 million houses in

South Africa. The current housing shortage could grow worse if the government does not continue to supply at least 200 000 houses a year (Botes 1999:92).

Furthermore, more people require more land for settlement, and often agricultural land on the fringes of urban areas is forced into marginal areas due to the expanse of urban areas outward into the countryside.

### 3.3 Economic driving forces

Economic factors at the macro as well as the ground level fuel environmental degradation. At a macro level, factors such as debt servicing, corruption and mismanagement of funds need to be taken into consideration, while at the ground level it is especially poverty that forces people into degrading their environments.

Debt servicing in comparison to social expenditure takes up a disproportionate amount of the national budget in South Africa. South Africa allocated 39,6 million rand for debt servicing in the 1997/98 budget and this comprised 20,8% of the total government expenditure. Social services - housing, education, health and social security - were allocated 88,6 million rand. All these elements together only comprised 46% of the total budget (South Africa Survey 1998/1999:431). While the purpose of loans to developing countries is to aid much needed development, most countries get trapped in a debt cycle that does not benefit development in the long run.

In many developing countries, funds are mismanaged or disappear into the pockets of corrupt officials. War-torn countries such as Angola and Mozambique spent large sums of money on military expenditure, to the detriment of the countries' people and the natural environment. The Angolan government attempted to hide the actual amount of money spent on military equipment by classifying their budget allocations differently. From 1992 to 1996 Angola's social services budget fell from 31% to 12%, while the allocations for defence and public order reached a high of 48% in 1993. However, in 1996 the government reduced the defence budget to 19%, but hid their actual military expenses by increasing their budget allocation for not classified expenses from 1% in 1995 to 32% in 1996 (Munslow 1999:554).

Poverty is another crucial factor in creating and exacerbating environmental degradation, but environmental degradation in turn also enforces poverty. Subsistence farmers in many rural areas are guilty of degrading their environments, but often they do not have much choice. Often these farmers are forced through poverty to move their farming practices into marginal lands where there is a greater danger of environmental degradation and where the agricultural yields are low. The use of

unsustainable agricultural practices that many subsistence farmers resort to because of poverty is one of the prime causes of land degradation. Soil erosion, for example, occurs mostly because farmers remove vegetation in fragile areas and farm on marginal land. These farmers are often compelled to do so due to poverty and population pressure that force them to use the land in an unsustainable way (Kagonge & Imvbore 1994:3; Pelser & Kerehloa 2000:26).

In Zimbabwe, large areas of communal farmland are prone to severe soil erosion since farmers continuously have to move their farming activities into marginal land in an attempt to increase their yields. Land degradation in this country is further worsened by the inability of most subsistence farmers to buy fertilizers and manage the land sustainably (Zinyama 1995:219). Land degradation, shortages of cultivable land and population pressure may have played a contributing role in the recent farm occupations in this country.

Poor people tend to take more from the immediate environment in order to provide shelter, energy and food than would otherwise be the case. Poverty is an important factor in deforestation, since poor people are highly dependent on firewood as their source of energy and heating (Pelser & Kherehloa 2000:27). In Zimbabwe, poverty moves people to take wood for their own energy needs, but also to sell to tourists as firewood and wood crafts (Zinyama 1995:220). In Lesotho, large areas of the country are totally bare of trees since they are used for firewood and people are making a pitiful existence from farming on marginal lands. Poverty in this country is one of the main factors driving people to degrade their environment (Harrison 1993:133).

## 3.4 Political driving forces

The political conditions in Southern Africa have played a significant role in the past in bringing about environmental degradation. Political conflicts such as those that took place in Angola and Mozambique and the unequal distribution of resources among the people of the region contribute greatly to environmental destruction, and thus implicitly to the increase of environmental migration in Southern Africa.

#### 3.4.1 Political conflicts

During conflict situations opposing forces commonly employ environmentally destructive practices to destabilise the region and to further their own military advancement. Environmental destruction caused during conflict situations is seldom limited to the duration of these conflicts. Years after the initial destruction, the impact on the environment is still present. Landmines used during the Angolan

and the Mozambican civil wars still impact the sustainability of these environments, and will continue to do so in future. In Mozambique, the opposing forces - Frelimo and Renamo - planted landmines across the country and on Mozambique's borders with Malawi, South Africa and Zimbabwe. Today the presence of landmines is still a major deterrent for people to cultivate crops in Mozambique (Meldrum 1994:56). In Angola, it was estimated that in 1994 at least seven towns were completely surrounded by landmines. This effectively stops people from these towns from going out to look for food or from cultivating their own crops (Baynham 1994:264)

### 3.4.2 The politics of resource distribution

Some environmental degradation is the result of an initial unequal distribution of natural resources. Inequalities exist between different countries, but also between different groups within a specific country.

In few other countries the effects of inequalities between groups are more visible than in South Africa. As a result of its past policy of Apartheid its population is currently divided into a developed and a developing sector that mirrors the racial division between black and white. The developed component is characterised by industrialisation, apparent wealth and overconsumption of resources. The developing sector is characterised by poverty, overpopulation and a strong rural subsistence agricultural base. During Apartheid, different ethnic groups were placed in homelands according to their ethnic background. Most of these homeland areas had inadequate water supplies and not enough arable land or grazing in proportion to the number of people who were settled there. As a result these areas became severely overpopulated and consequently the sustainability of the areas was severely compromised (Cock 1991:2; Klugman 1991:72; Yeld 1997:15).

# 4. THE IMPACT OF ENVIRONMENTAL REFUGEES IN SOUTHERN AFRICA

If one wants to explore the impact of environmental refugees some issues need clarification beforehand. Since environmental refugees are not a legitimate category of refugees (as discussed in paragraph 2) - they are at present an uncategorised and largely unrecognised group of migrants - it is difficult to assess the specific impact that they have on host communities. This problem is expounded by the fact that there are, at this stage, no reliable data on the actual number of people fleeing environmental degradation in the region, or in the rest of the world for that matter. However, what can be determined with a degree of certainty is that environmental refugees do exist, but due to their undocumented nature they are categorised and

treated as undocumented migrants by host countries. Due to the fact that environmental refugees cannot enter host countries as legitimate refugees, they use the same methods as other undocumented migrants to gain access to a country. Consequently, they are seen as undocumented migrants as far as host governments and the international community are concerned, and dealt with accordingly. Therefore, since environmental refugees contribute to the problem of undocumented migration in host countries, it will be best to explore their impact within the context of their undocumented nature.

### 4.1 The political impact of environmental refugees

From a political standpoint, undocumented migrants have the potential to generate a range of political problems due to their presence in a host nation. The current and predicted numbers of environmental refugees, when added to the number of conventional undocumented migrants, may become a serious source of conflict between different ethnic groups, between local populations and their governments and between different nation states in Southern Africa. Influxes of people also have political implications in the sense that it raises security concerns for host governments attempting to deal with the inflow of people.

## 4.1.1 Political tension at the ground level

Host populations often display antagonism towards undocumented migrants due to the threat that these migrants pose to natural resources, employment opportunities and the provision of social services. While there is a distinct difference between undocumented economic migrants and undocumented environmental refugees, host populations seldom consider the difference. Minnaar & Hough (1996:18) cite that "[f]or many South Africans, the distinction between refugees and illegal aliens is immaterial, since foreigners are often perceived to be taking away houses and jobs while bringing crime and drugs to the country". In one incident which is by no means an isolated case, in a township near Johannesburg in South Africa, armed groups of residents attempted to forcefully evict people, whom they thought were illegal migrants, from their homes and burn their possessions (Roggerson 1997:226). Existing scarcities of land and water might lead to more pronounced antagonisms against undocumented migrants, since local populations are unlikely to share these resources readily with other groups.

## 4.1.2 Conflicts between local populations and host governments

In countries that are plagued by large influxes of undocumented migrants it is not uncommon for citizens to hold the government responsible for the impact that these migrants have on their lives. In South Africa, many citizens perceive undocumented migrants to be the source of a number of social and economic ills and expect the government to deal more sternly with them. From 1994-95 the number of South Africans who felt that the government should take stronger action against undocumented migrants rose from 56 to 72 per cent (Isserow et al. 1998:9). As a result of this strong feeling against undocumented migrants, the issue is often raised by different political interest groups for their own political gain. Estimates of the number of undocumented migrants in the country range from between 2 million to 8 million people, and different groups either play up or play down these figures for their own political gains (Bernstein et al. 1999:199). The undocumented migrant issue is the ideal weapon used by political interest groups to discredit the government, as was the case in South Africa during the 1994 national elections.

#### 4.1.3 Conflicts between sender and receiver states

Conflict or tension between countries in a region might result because of migration movements. This presents a serious threat to regional political stability. Often, sender states are relieved by the migration of their inhabitants since it relieves pressure on scarce natural and social resources in their country. Therefore, sender states might not always be willing to co-operate in efforts by the receiver state to send the migrants back. The receiver state is, on the other hand, under pressure from their citizens to send these people back. However, sending unwanted migrants back might not be a straightforward decision. Previous alliances between states, or a moral and social responsibility toward the sender state on the part of the receiving nation, might make it difficult or impossible to send unwanted migrants back (Christie 1997:46).

The situation with refugees in South Africa reflects the above dilemma. Many South Africans feel that the government should act more decisively on the undocumented migration problem. However, the current ANC-led government feels a strong moral obligation towards neighbouring states that provided assistance to political activists during the Apartheid struggle. South Africa's neighbours have been known to use this "moral responsibility" as an excuse not to receive their people back when they were identified as undocumented migrants (Vorster, personal interview, 1 February 2000). The decisions that a host country, such as South Africa, make in terms of undocumented migrants are therefore extremely problematic and could give rise to conflict and tension between states if it is not handled carefully.

When environmental refugees are brought into the picture, the conflict potential becomes even more serious. Where political factors are involved it is easy to

determine the onset of and the role players involved in the situation. With environmental factors, determining who was responsible for the eventual environmental destruction and when it originated is more complex. Hugo (1996:109) states in this regard that: "[a] political refugee movement is often an uncomplicated response to fear of persecution, [while] environmental migration is often the result of a complex set of multiple pressures of which an environmental event is only the proximate cause".

## 4.2 The economic impact of environmental refugees

For people at the ground level the threat of undocumented migrants is mostly measured in economic terms. Income, job opportunities and general livelihood are compromised by the presence of undocumented migrants. A common concern among citizens of host countries is that undocumented migrants are employed instead of them and that these migrants push wages down. In some farming regions in South Africa farmers often employ undocumented migrants instead of local people, since they are prepared to work for considerably less than the local people (Hough 1996:195).

Undocumented migrants also place added pressure on host areas in terms of added population pressure. Increases in livestock and farming activities in an area could, over a period of time, lead to a decline in the productivity of the region. In Kangwane, a rural area in South Africa, overcrowding and increased agricultural activities were experienced as a result of the influx of Mozambican refugees into the already impoverished area. The added pressure placed on the environment by the presence of the refugees, resulted in severe environmental degradation and a decline in the agricultural productivity of the area (Solomon 1993:17).

Host countries also have to deal with the problem of undocumented migration at a higher economic level. A heavy financial burden is placed on host countries in terms of the added pressure placed on health and welfare services, housing, infrastructure and security. South Africa arrests and repatriates in the region of 180 000 undocumented migrants each year, at a cost of more than R45 million which highlights the impact of undocumented migration on the economy of host countries (South Africa Survey 2001/2002:142). Table 2 gives an indication of the number of undocumented migrants that were repatriated annually from 1996 to 2000 from South Africa. Most of these repatriations are to neighbouring states, with most coming from Mozambique, Zimbabwe and Lesotho.

TABLE 2: REPATRIATION OF ILLEGAL IMMIGRANTS FROM SOUTH AFRICA (1996-2000)

Year	Number of repatriations
1996	180 714
1997	176 351
1998	181 286
1999	183 861
2000	145 575

Sources: Department of Home Affairs in Bernstein et al., A proposed policy framework for controlling cross-border migration to South Africa, p. 194; South Africa Survey (1998/1999:111); South Africa Survey (2000/2001:24; 2001/2002:141); statistics supplied by the Department of Home Affairs, 1 February 2000.

To add to the burden, more than half of these repatriated migrants will return as soon as they can, since their chances of survival in their own countries are slim. Mozambicans, due to economic instability and environmental degradation caused by the civil war in their own country, are specifically implicated in this regard (Beneke, personal interview, 26 September 2000). The increasing environmental degradation and political instability across the African continent force many people from other African nations across South Africa's borders. For many people from neighbouring states, South Africa is the obvious choice due to its perceived economic stability, but another equally significant reason has its roots in the migrant labour system that was part of South Africa's past. This system brought many people from neighbouring states into the country to work and therefore established a social network of people across the region's borders and perpetuated the idea of unlimited employment opportunities, which makes migration to this country the preferable choice.

South Africa is now faced with the dilemma of being humane on the one hand, but practical and realistic on the other. Vorster, deputy director of the Department of Home Affairs, emphasises South Africa's position as follows: "[O]ur economy must remain as strong as possible, otherwise we cannot make a difference to the rest of Africa... If we do not do something [about the illegal migration problem] we will reduce our country to a [lower] level and then people [migrants] will have nowhere to go" (Personal interview, 1 February 2000). A large number of undocumented migrants should rather be classified as environmental refugees and should be dealt with differently by host countries. By adding these migrants to the already large numbers of undocumented migrants, the financial burden of border protection, policing and repatriation is only increased.

### 4.3 The social impact of environmental refugees

The influx of large numbers of destitute people into a host country impacts the host society at a social level in a number of ways. Most notably the impact is felt in the health and welfare sector, housing, crime and general social decay. In South Africa, some observers maintained that the Reconstruction and Development Plan (RDP) that was implemented in South Africa after the 1994 democratically elected ANC government had come into power, was severely strained by the presence of undocumented migrants. This plan was designed to improve the general quality of life of South Africans by putting infrastructure in place, providing housing and improving the quality of general social services. Since many undocumented migrants also benefited from the advantages of the programme, available funds had to be divided among more recipients than had originally been planned for. This led to a general perception that the presence of undocumented migrants and refugees, specifically Mozambicans, was an important factor that hampered the successful implementation of the RDP (Carim, 1995:221).

#### 4.3.1 Health and welfare services

Undocumented migrants contribute to health and welfare problems in host countries in two ways. Firstly, by bringing diseases into the country and thereby adding to the burden of health care provision and secondly, merely by making use of health and welfare facilities they place an added burden on these facilities.

HIV/AIDS is one of the health issues that highlights the impact of migration on the health of a country's population and the burden placed on health and welfare services. It is estimated that more than 70% of all persons with HIV are living in Sub-Saharan Africa - the most infected region in the world. In several countries in the region the adult HIV prevalence rate is in the order of 20% or higher, compared with the world average of 1,2% (UNAIDS 2002). HIV/ AIDS has a severe socioeconomic impact, since most of the people affected are those in their productive years who should contribute to the economy and who are responsible for child rearing (Myers & Kent 1995:71). Increases in the number of people affected with HIV/AIDS impact on the economy due to a loss of productive manpower and an increased dependency ratio. It is estimated that due to the large number of affected people, many undocumented migrants and refugees entering host countries are also affected. Table 3 outlines the number of people in their reproductive years who are infected with HIV as a percentage of each country's population for selected Southern African countries. This emphasises the likelihood of affected people finding their way into host countries. Increases in the number of HIV/ AIDS cases place a severe impact on already overburdened health care facilities. The increase in the number of people affected with contagious secondary diseases such as tuberculosis also raises concerns in terms of the provision of health care.

TABLE 3: PROPORTION OF PEOPLE WITH HIV IN SELECTED SOUTHERN AFRICAN COUNTRIES

	People with HIV (aged 15-49) as a % of total population (1999)	Population size (million): (2001)
Angola	2,8	12,3
Botswana	35,8	1,6
Lesotho	23,6	2,2
Malawi	16,0	10,5
Mozambique	13,2	19,4
Namibia	19,5	43,6
South Africa	19,9	43,6
Swaziland	25,3	1,1
Zambia	20,0	9,8
Zimbabwe	25,1	11,4

Population Reference Bureau, 2001

Furthermore, welfare services are also affected by HIV/AIDS. Increases in the number of children left orphaned by AIDS, the number of elderly people who were cared for by economically active children and the people who become unable to work and, therefore, dependent on welfare services all add to the problems of overburdened welfare services. This problem is worsened by the numbers of undocumented migrants that also make use of these services.

## 4.3.2 Housing

In South Africa, as many as 80% of undocumented migrants are estimated to live in informal squatter settlements. The government is attempting to upgrade the housing of South Africans in these areas and inevitably, funds designated to better the housing of South Africans, are also distributed to undocumented migrants in these areas. Minnaar and Hough (1996:207) indicate that "the influx of illegal aliens into squatter settlements has [had] a serious negative impact on the RPD in terms of the provisions of additional land and housing". In the inner city of Johannesburg, the economic center of South Africa, the presence of undocumented migrants in some areas has contributed to the demise of inner city housing establishments. This is due to the fact that because of these people's undocumented nature, they do not com-

plain about high rent and the degraded state of their residences, thereby effectively halting any efforts to regenerate urban slum areas.

#### 4.3.3 Crime

Undocumented migrants are often linked to crime. Many people migrating to a host country find themselves in a poor financial state and in order to sustain themselves and their families they get involved in crime. Most undocumented migrants do not, however, enter a country with crime as their main objective, but become involved in it after settling. In South Africa, hawking and informal trading are often associated with undocumented migrants, but although these businesses seem legitimate on the surface, they often serve as a front for illegal trade in, among others, drugs (Swartz, personal interview, 1 February 2000).

In the case of environmental refugees, this problem could be addressed since these people have a legitimate reason for leaving their home countries and finding refuge elsewhere. However, because they are not receiving the assistance that they should be entitled to as refugees, they are forced to fend for themselves and often crime is one of their few options in this regard.

#### 5. SUGGESTED STRATEGIES AND GUIDELINES FOR POLICY

Environmental refugees must be acknowledged as one of the migration phenomena of this century. Action has to be taken in order to deal effectively with this critical issue. The problem requires a comprehensive and multi-dimensional approach. Any attempt to deal with environmental refugees will entail, firstly, that the driving forces behind environmental refugee movements should be addressed and, secondly, that this category of forced migrants should be incorporated into migration policy decisions, both at the international and the national level. Some strategies are proposed here to initiate some action on the part of the global community and local governments. These proposed strategies must not be viewed as isolated items, but must be seen as an integrated policy guideline for dealing with the many facets of the environmental refugee problem. Each strategy will now be briefly discussed.

# 5.1 Suggested strategy 1: Gathering detailed and accurate information on environmental refugees

Before any decisions regarding environmental refugees can be made at a policy level, accurate and detailed information must be obtained. This information must include a detailed analysis of the likely flows of environmental refugee movements - specifically from where they originate, where they are migrating to and which

environmental, socio-political and socio-economic driving forces led to their migration. Gathering accurate, reliable and usable data on forced environmental migration is imperative if the right decisions regarding these refugees are to be made. At the moment, the fact that these refugees are not recognised as a legitimate category of refugees will seriously strain any efforts in obtaining accurate and reliable data. Vlachos states in this regard: "[T]here are obviously great difficulties in obtaining estimates, not only because of the remoteness of many regions and the haphazard data collection techniques, but more because of the difficulty of interpreting the term refugee" (Vlachos 1996:129).

# 5.2 Suggested strategy 2: Gaining international recognition for the problem of environmental refugees

Following from the above strategy, a second area of concern is the disregard shown to environmental refugees in international policy circles. Urgent attention will have to be given to an internationally accepted definition and recognition of environmental refugees. In this regard the 1951 Geneva Convention and the 1967 Protocol's definition of a refugee will have to be expanded in order to include environmental refugees as a legitimate category of refugees. It is imperative that a new categorisation and conceptualisation of what constitutes a legitimate refugee should be implemented at this higher international level, since host countries take these conventions as the point of departure in formulating their refugee policies. As soon as changes are made at the international level, it will filter down to policy decisions of national governments.

## 5.3 Suggested strategy 3: Addressing the driving forces behind environmental degradation

Environmental refugees cannot be dealt with only by focusing on the problem itself without giving sufficient attention to addressing the factors that lead to and exacerbate environmental conditions responsible for environmental refugee movements. Addressing the socio-political and socio-economic driving forces behind environmental destruction becomes central to the issue of environmental refugees. The alleviation of poverty, effective implementation of population development strategies and redressing of inequalities will, among others, greatly reduce the need to degrade the environment in many developing nations. Improving the general quality of life of the population in terms of access to resources such as clean water, and access to sanitation, housing, education employment, land and energy resources will place people in the region in a position to use the environment in a sustainable way.

## 5.4 Suggested strategy 4: Promoting sustainable development

While sustainable development would include that the factors discussed under strategy 3 should be addressed, it is also necessary to address some specific environmental problems that are placing great strain on the natural environment. Kagonge & Imvbore (1994) identify five factors that hamper sustainable development in Africa, namely population growth, poverty, political instability, soil erosion, drought and desertification.

Environmental degradation such as soil erosion increases the risk of creating unsustainable environments, therefore it is necessary to promote sustainable agricultural practices, at the same time attending to existing environmental degradation. Approximately 75% of the population in African countries are rural, the majority of whom are small farmers and produce about 70% of agricultural output in the region (Pelser 2001:63). Amidst realities of growing human populations, a declining food production per capita and increasing food insecurity, rural poverty has remained high and environmental degradation has worsened over the past four decades. Actions to reverse or halt existing environmental degradation would include reforestation, anti-desertification and effective drought and flood action plans.

#### 6. CONCLUSION

Environmental refugees are set to become a pervasive and serious phenomenon of the twenty first century. As the natural environment deteriorates further in the face of socio-political and socio-economic instability, it will become increasingly difficult to ignore these people as a legitimate group of forced migrants, especially when the impact that they have on host communities become more visible. Therefore, it will be to the detriment of host nations and the international community alike to continue to disregard environmental refugees in terms of appropriate strategy and policy decisions within the broader context of forced migration. It is specifically developing regions such as Southern Africa that will have to come to terms with the growing numbers of environmental refugees making it a matter of urgency to act in terms of a comprehensive plan of action that will address all facets of the problem.

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