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Environmental refugees in developing nations: exploring the causes and impact

Summary

The phenomenon of environmental refugees is a little recognised and largely undefined migration trend that is expected to show dramatic acceleration in the near future as environmental degradation renders large areas uninhabitable. This article explores the phenomenon, arguing that current conceptualisations concerning migration are too narrow to deal adequately with this type of forced migration. A re-assessment of current categorisations and policy frameworks — concerning forced migration in general, and forced environmental migration in particular — is therefore necessary. Furthermore, the social factors fueling environmental degradation, which in its turn leads to environmental refugee movements, are discussed. Attention is also paid to the impact that these forced migrants may have on host countries.

Omgewingsvlugteling in ontwikkelende nasies: oorsake en impak

Omgewingsvlugteling is 'n grootliks ongedefinieerde verskynsel wat nie genoegsame erkenning geniet nie, alhoewel hierdie tipe migrasie ongekend sal toeneem soos omgewingsverval in die toekoms groot areas onbewoonbaar maak. Hierdie artikel ondersoek die verskynsel van omgewingsvlugteling. Daar word geredeneer dat huidige konseptualiserings te eng is om hierdie vorm van gedwonge migrasie bevredigend te hanteer. 'n Herevaluering van huidige kategoriserings en beleidsraamwerke — gedwonge migrasie in die algemeen, en gedwonge omgewingsmigrasie in besonder — is derhalwe noodsaaklik. Verder word die sosiale faktore wat omgewingsagteruitgang bevorder, en gevolglike omgewingsvlugtelingbewegings ontken, bespreek. Aandag word ook gegee aan die impak wat hierdie gedwonge migrasie op gasheerlande het.

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In the past thirty years environmental pressures have gained considerable momentum. Before this time, many of the environmental problems now perceived to threaten human survival were not even considered to be problematic. As knowledge of environmental problems grew, concern about the effect of environmental degradation on human life also increased. The occurrence of a number of serious environmental disasters in the 1960s and 1970s greatly contributed towards creating an awareness of the impact that the human race has on the environment (Cock 1994: 16; Laska 1993: 4). Today, the severity and extent of environmental degradation worldwide is leading to widespread concern about the state of the natural environment, especially since it might have a profound impact on human beings themselves.

A phenomenon that highlights the impact that environmental degradation currently has on the human race is the issue of environmental refugees. A growing number of people are being forced by environmental pressures to leave their former habitats, due to the life-threatening and unsustainable environments they create. Environmental degradation has led to the displacement of approximately 25 million people over the past two or three decades, compared with 22 million people displaced by political factors (Myers 1997: 167). This number is expected to increase significantly as the natural environment deteriorates further, especially due to climatic changes brought about by global warming. Most of the current environmental refugees are found in the developing regions of the world such as sub-Saharan Africa and South America. Due to serious environmental degradation in these regions, most of the future environmental refugees are also likely to be generated in these areas. Africa already contributes most to the rising number of refugees in the world, and environmental degradation contributes significantly to the escalation of these numbers (Kagonge & Imbivore 1994: 1).

In spite of the growing number of people being displaced by environmental degradation, little attention has been devoted to this phenomenon until now. The phenomenon of the environmental refugee is therefore a new, largely unrecognised and undefined migration trend.

The lack of recognition of environmental refugees is reflected in the lack of relevant research into and literature on this issue. The current literature focuses mainly on political issues as the cause of forced migration, and the effects that this has on host countries and the international community. Thus there is currently very limited literature dealing with environmental refugees. In turn, and from a political point of view, this has influenced much of the policy decision-making and international treatment of forced migrants, while very little cognisance has been taken of environmental pressures.

Against this background, this article aims to provide some clarity on the relatively new and undefined category of environmental refugees. Specific attention is devoted to placing environmental refugees within the broader context of migration. Furthermore, factors that may influence forced environmental migration, as well as its potential effects on host areas, receive attention, and mainly from the perspective of developing nations. Explicit attention is paid to the situation in Southern Africa, as South Africa is currently a popular destination for migrants from the rest of Africa, due to its relatively stable political situation and its perceived economic prosperity.

1. Environmental refugees: towards a clarification of the concept

One way of explaining migration is to place it on a continuum of volition ranging from people exercising a choice in migrating, at the one extreme to people who have no choice at all in migrating. While extreme cases of forced and voluntary migration do occur, most migration can be placed somewhere along the continuum (Hugo 1996: 107). As a result, drawing simple distinctions between categories of migrants becomes very complicated. However, most migration tends to lean either to one end of the continuum or to the other.

Broadly speaking, two distinct stages of migration can be identified during the course of the twentieth century. Prior to World War II migration tended towards the voluntary end of the

continuum. Until World War II migration was largely viewed as desirable and necessary to the population of sparsely inhabited colonial territories. Migration was mostly voluntary, undertaken by people in search of better economic opportunities (Harper 1996: 163). Since World War II, major political, social and economic changes have altered the nature of migration patterns. These changes, such as the independence of former colonies, rapid industrialisation and increasing environmental degradation, have resulted in a totally different migration trend. Migration has taken place mainly from poorer former colonies to developed and wealthier countries. In contrast to pre-war migration, many people currently migrating are forced to do so by factors that they did not create and cannot control (Jackson 1986: 1; Harper 1996: 163).

Forced migration refers to a movement of people compelled to relocate due to life-threatening circumstances beyond their control. Political, economic, social and environmental factors all create conditions that force people to migrate. These factors and circumstances are complex, diverse and interconnected. Often, an interplay between various factors eventually shapes the circumstances under which people have to migrate. In this regard, Richmond (1994: 53) points out that a refugee movement is only an "extreme case of the constraints that are placed upon the choices available to an individual in particular social circumstances".

In spite of the complexity and diversity of the factors involved, the international community treats forced migration as a relatively simple phenomenon. The concepts of the forced migrant and the refugee are considered synonymous with, and used almost exclusively to refer to people fleeing political persecution. As Richmond (1994: 72) points out, not all forced migrants are recognised as refugees by the international community. Only people who can claim a threat to their survival due to political circumstances are at present recognised and protected as refugees. Determining a person's refugee status on the basis of political factors is relatively easy since the framework provided by both the Geneva Convention of 1951 and the 1967 Protocol adequately define and demarcate this category.

Determining refugee status based on environmental pressures is much more troublesome since it involves a complex set of factors of

which environmental pressure is only the visible effect (Hugo 1996: 109). In many cases, the complex nature and interplay of various factors makes identifying the exact cause of migration difficult, if not impossible. Drawing a clear distinction between those forced to flee environmental degradation and other categories of migrants is thus problematic.

To complicate matters further, it is not only the drawing of a distinction between political and environmental refugees that is problematic. There is no consensus on conceptualising environmental refugees either. Some writers feel that the term environmental refugee is too narrow to deal adequately with the issue of environmental migration. Interchangeable concepts, such as ecological refugees, resource refugees, environmental migrants and eco-migrants, have been proposed instead (Richmond 1994: 75; Wood 1995: 4). However, while environmental factors play a role in many migration movements, not all migration in which such factors play a role can be considered forced.

A conceptualisation of forced migration due to environmental factors has to include three important criteria. These criteria are also present in the United Nations conceptualisation of political refugees. First it must indicate the fact that the migrants did not exercise a choice in migrating, but were forced out by circumstances beyond their control. Arms (1994: 155) refers to environmental refugees as "people driven from their homes by severe environmental damage". Secondly, it must refer to people having to leave their homelands with no hope of returning in the near future (Myers 1994: 7). Lastly, the extent of environmental damage must be shown to be life-threatening, thus that those who do not migrate will face death. In this regard, Jacobsen (1989: 30) points out that for most environmental refugees migration is a last resort, since people will tolerate a wide range of threats to their health and well-being rather than leave their homes.

A definition drawing upon the above criteria may thus be proposed. 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 for their migration is severe environmental degradation — whether caused by anthropogenic or

natural factors — which renders the area uninhabitable for an extended period of time.

Conceptualisation is only the first step in dealing with the issue of environmental refugees. Any application of the concept can be expected to be problematic due to the undocumented nature of this type of refugee.

2. Coming to terms with current classifications

Current classifications of migration distinguish voluntary, forced, internal and international migration. Voluntary migrants can be legal or illegal, while the term forced migrants usually refers to political refugees and asylum-seekers (Wood & Potts 1998: 253). Legal voluntary migrants and traditional political refugees are well defined. It is with the distinction between illegal voluntary migrants and forced migrants other than political refugees that problems arise. Migrants who do not fit the current classifications of legal voluntary migrants or refugees are indiscriminately categorised as illegal migrants, without any attempt being made to determine whether factors such as environmental degradation influenced their decision to migrate. Any form of migration other than 'legally' recognised voluntary or forced migration falls outside the scope of current classifications. The current classification is unfortunately also the basis on which international policy regarding migration is based. This has very serious consequences concerning environmental refugees as a legitimate category of forced migrants.

Since the factors which result in forced migration are multiple and interlinked, it is often difficult to determine the exact cause of migration (Hough 1995: 7). In a certain setting, economic instability, political conflict and environmental degradation may all be present, thus complicating any definite categorisation. In Somalia, for instance, political instability, in conjunction with poor economic circumstances and a severe drought, drove large numbers of people to leave the country in the early 1990s (Shields 1992: 28). Environmental, political and economic circumstances were all involved here and produced political refugees, environmental refugees, and illegal economic migrants. Another indication of the

difficulties involved in this issue is the effect of a prolonged drought in Zimbabwe on migration to South Africa. During the drought of the early 1990s, South Africa experienced an increase in the numbers of illegal Zimbabweans who were being repatriated. Minnaar & Hough (1996: 121) indicate that the figure rose from an average of 600 per month during 1991 to an average of 1000 a month in 1992 as the drought intensified. While some of these illegal migrants entered South Africa due to this country's better economic climate, many were forced to migrate as the drought made their homelands unsustainable.

Many environmental refugees are wrongfully categorised as illegal migrants. One reason for this is that people fleeing environmental degradation will generally use the same means to enter a safe country as illegal migrants. Since environmental refugees know that their claim to refugee status will be disregarded, they enter countries clandestinely in order to avoid detection and repatriation. According to the United Nations High Commissioner for Refugees, people fleeing life-threatening circumstances in their own countries may be uncertain whether their claims will be recognised and will therefore want to avoid the bureaucratic procedures attached to the process of seeking asylum (Hough 1995: 6). In such cases, people forced out of their country of origin by environmental factors are often assimilated into the population. Once such migrants have 'disappeared' into the general population, detection is difficult. If they are caught at a later stage, it is difficult to prove that they were forced to migrate and are not merely voluntary economic migrants.

Many forced migrants excluded from aid due to their unrecognised status are compelled by their situation to become economic migrants. In order to survive, many of those forced out of their countries of origin for reasons as life-threatening as political conflict attempt to earn a living in their host countries. In so doing, however, they are apt to be regarded as economic migrants, and to be deported as illegal immigrants if caught.

Environmental refugees therefore have two options: they can either attempt to be recognised as political refugees, or they can enter a host country illegally and run the risk of being deported as illegal

immigrants. Devising strategies with which to deal with this category of forced migration may represent a far better solution, especially since environmental degradation is expected to generate more refugees in future.

Determining whether a person qualifies as an environmental refugee is, however, very problematic, since social, political and economical factors work together to create severely degraded environments. This process may be better understood by means of a focus on the factors influencing environmental degradation than on the degradation itself.

3. Social, political and economic factors influencing the movement of environmental refugees

Environmental refugees leave their homelands as a result of serious, life-threatening environmental degradation. The causes range from natural disasters such as earthquakes, droughts and floods to man-made problems such as deforestation, industrial disasters and rising sea-levels brought about by global warming. While specific environmental problems induce environmental refugee movement, these problems seldom develop in isolation. Environmental problems are the result of a complex range of social, political and economic factors (Fell 1998: 4). Therefore, the focus of this discussion will fall on providing an insight into the conditions under which environmental problems develop, rather than on the nature of the problems themselves. The conditions fuelling environmental degradation in developing regions will also receive specific attention. In developed countries different factors are involved. These will not be considered in this article. First, attention will be paid to the social issues involved.

3.1 Social factors fostering the movement of environmental refugees

The most important social factors involved in the creation of degraded environments are population pressure, social organisation and urbanisation.

3.1.1 Population pressure

Population growth currently occurs mainly in the developing world. The United Nations estimates that 93% of current population growth takes place in developing regions, with Africa contributing 20% (United Nations 1994: 95). Due to current growth rates and the poor economic conditions in developing countries, these areas are most likely to experience environmental degradation brought about and intensified by population pressure.

Although forced migration is not a direct result of population growth, population pressure contributes to serious environmental degradation, which may in turn lead to population displacement. Where a growing number of people place demands on their environment, depletion of resources and environmental degradation often results. Over time, environmental degradation becomes so severe that the inhabitants' survival is threatened and they are forced to migrate (Raven *et al* 1993: 161). Kagonge & Imbore (1994: 3) state that population pressure has led to serious environmental pressure in a number of African countries such as Somalia, Kenya and Nigeria. In developing regions people seldom consider the implications of population growth for their future survival. This is mainly because large families are, for a number of reasons, seen as necessary and desirable (Seitz 1995: 35).

Uncontrolled population growth in Southern Africa is responsible for some serious shortages in terms of land, water and infrastructure. Simply in terms of supplying food to the growing population, it is estimated that developing countries will have to increase their agricultural land by 50 % in the next thirty years (Smith & Niedermeier 1996: 504). Increases in agriculture will inevitably result in the generation of soil-related environmental degradation which will eventually decrease yields from agriculture. This will plunge already impoverished countries into even greater poverty, which will in turn exacerbate poverty-related environmental problems.

3.1.2 Traditional social structures

Both the traditional family and societal structuring also contribute to environmental degradation. Early subsistence farming

communities consisted of small groups of people living in close proximity to one another. Each family provided for its own needs on a small plot of land. When parents died or became dependent on their children, the plots were divided, generally among male siblings. While population growth was slow, plots remained large enough to sustain the inhabitants. After numerous divisions, however, plots became so small that this became impossible. Where population growth rates are high, families can lose all their land in two generations as a result of this system (Harrison 1993: 130).

The likelihood of serious environmental degradation is increased when farmers, facing poor yields from small, exhausted plots of land, move their farming activities into marginal areas. Steep slopes, semi-arid areas and fragile rainforest areas are then cultivated. This increases land degradation in the form of soil erosion and desertification (Kagonge & Imbvote 1994: 3). Cattle farming also contributes to problems such as desertification, deforestation and soil erosion due to overgrazing. Farmers forced to move their farming activities into marginal areas are seldom viewed as forced migrants. However, Jacobsen (1989: 31) states that this is what they are, since the degraded state of their environment has forced them to move into marginal land.

In the face of starvation, impoverished farmers find it increasingly difficult to sustain families on their degraded lands and they move away — many to settle in sprawling urban areas.

3.1.3 Urbanisation

Apart from the fact that most of the population growth occurs in impoverished developing regions, most urban growth currently also occurs in the developing world. According to Jacobsen (1989: 31) this trend is indicative of rural the impact of land degradation on people's lives and can therefore be linked to increasing environmental degradation in developing regions.

Most cities in the developing world are experiencing such uncontrollable growth rates that it is virtually impossible to provide the necessary infrastructure. Poverty and the inability to deal with the influx of people into urban areas result in the growth of slum settlements. Smith & Niedermeier (1996: 502) estimate that 92 out

of 100 new houses being erected in urban areas in Africa are located in slums or shantytowns.

Cities are environments of high population density. This places a demand on the natural resources of the surrounding area, in particular wood, water and food. The natural environments surrounding cities, especially where poor economic circumstances prevail, are usually degraded by impoverished people (Harrison 1993: 175). Furthermore, cities generate high concentrations of waste to be disposed of and, without adequate infrastructure, pollution can in the long run seriously affect the habitability of urban environments.

Since cities are centres of industrial activity, urban environments are under threat from both industrial pollution and industrial disasters. Rapid urbanisation may increase the likelihood of industrial accidents, which in turn may induce forced population movements (Wood 1995: 6). Cylke (1993: 2) states that severe pollution, causing people to leave their residences permanently, has become a commonplace event in human society. One well-known example of the effects of industrial practices is the Chernobyl disaster which displaced approximately 375 000 people, most of whom will never be able to return (United Nations 1998: 2).

3.2 Political factors influencing environmental degradation

Political factors such as conflicts and wars are responsible for forcefully displacing large numbers of people. In conflict or war situations, fighting forces often employ environmentally destructive methods to achieve victory. Destruction of the environment by opposing forces has long-term effects on the habitability of the areas concerned.

For instance, the pollution of water sources or the use of landmines may make it impossible to inhabit an area even once the conflict has been resolved. This is the case in Mozambique where approximately two million landmines were left after the end of the war and are now making farming a life-threatening activity (Klotz 1997: 43; Meldrum 1994: 55). Africa is considered to be the most

mined region in the world, making the resettlement of political refugees very difficult indeed. In Sudan, the scorched earth policy adopted by all opposing factions involved poisoning wells and burning villages and fields, thereby forcefully displacing large numbers of people from certain areas (Prendergast & Bickel 1994: 38). The impact of these methods on the environment threatens the habitability of such areas for long periods after the actual destruction.

Conflict over the distribution of resources or the existence of an unequal distribution system may also influence forced environmental migration. A diminishing resource base in certain areas compels many people to resettle in areas where resources are more abundant. This brings migrating people into conflict with resident groups over natural resources (Kaplan 1994: 8). In Africa's arid conditions, conflict over water sources generates particular concern.

Obi (1998: 44) states that conflict over water is to be found throughout the African continent. Such conflicts may well become even more pronounced as the already overburdened water sources are depleted. In this regard Smith & Niedermeier (1996: 507) state that water consumption doubled twice in the twentieth century and is likely to double again in the next ten years. Water shortages at present hamper the development prospects of 88 developing countries. In such countries, water shortages may well induce forced population movement, since these countries are less likely to be able to deal effectively with shortages, due to their poor economic conditions. Many people living in semi-arid and arid regions in the developing world may therefore face serious water shortages which will render it impossible to live in these areas.

All over Africa, water resources are often the subject of conflict among groups. Such conflict is generally fuelled by scarcities and may lead to strife over the control of and access to diminishing water resources. For instance, 97% of Egypt's water comes from the Nile, which flows through Ethiopia and the Sudan before reaching Egypt. As the water needs of Ethiopia and the Sudan increase, existing conflicts between these states and Egypt over water could worsen. Conflicts between farmers and pastoralists over aquifers in the Sahel also threaten political stability in Africa (Harrison 1993: 52; Obi 1998: 44). In South Africa, conflicts over access to water arise

between wealthy land owners and poor rural people water. Singh (1998: 118) states that there are only approximately 250 dams in South Africa, many of them severely silted, and that there is only a limited supply of ground water. Wealthy commercial farmers have the financial means to extract the ground water by means of boreholes, while poor rural farmers are denied access to this source of water by financial constraints. Particularly during periods of prolonged droughts poor farmers with no access to groundwater have to rely on the diminishing sources of surface waters for their needs, while wealthy farmers still have access to groundwater.

Since certain groups had unequal access to resources such as land, water and energy, environmental destruction may have been the result of historical inequalities (Raven *et al* 1993: 159). The fact that such groups have limited resources forces them to take more from their environment than is available. While inequalities in resources are undeniably part of society, political factors may have been instrumental in establishing or exacerbating these inequalities. Inequalities in the distribution of and access to land in Brazil and Malaysia are significant in this regard. In Brazil valuable land in the Amazon rain forests is leased to large forestry corporations and cattle ranchers at the expense of the indigenous people, while government-sponsored roads make these areas accessible (Wood 1995: 9). Governments in Brazil and Malaysia have even sponsored resettlement programmes in rain forest areas to relieve the population pressure in urban areas (Harrison 1993: 101). This occurs at the expense of indigenous people who must compete for resources and are forced into marginal areas by these government-approved actions.

Nowhere are the politics of resource distribution more apparent than in South Africa. Here, inequalities between the various race groups have led to degraded environments in homelands where many black people were forced to settle during the Apartheid era. Klugman (1991: 73) cites the former homeland of Qwa Qwa as an example. Since 1950 thousands of people were resettled there, severely affecting the area's ability to provide for its inhabitants. High population density and a lack of infrastructure have led to the

destruction of natural resources, soil erosion, deforestation, water shortages and pollution.

3.3 Economic factors influencing environmental degradation

Two sets of economic factors influence environmental destruction. At the macro-level, economic processes such as foreign debt loads, corruption, the distribution of development funding and the exploitation of developing nations by large corporations in the developed world are significant. At the micro-level, poor economic circumstances induced by traditional social organisation and population growth encourage people to degrade their environments.

Most developing countries have unmanageable foreign debt, which means that a large proportion of their budgets is used to pay interest on these debts. Debt repayments use up more and more of the combined GDP of the Southern African region. In 1974, 30% of the region's GDP was used for debt repayments, while the figure for 1984 is 50% (Gelinas 1998: 41; Klugman 1991: 69). To repay their foreign debt, many developing countries exploit their environments. Export farming and environmentally destructive industrial production are among the practices resorted to in order to repay foreign debt, often leading to severely degraded environments. Since developing countries are already impoverished, measures to prevent or curtail environmental damage cannot be implemented. Such measures further exacerbate the problem.

However, it is not only the repayment of debt that facilitates environmental degradation. Many nations in Africa are experiencing financial difficulties and are thus unable to compete in world markets. These countries need to earn profits from foreign investment and from the exportation of their resources in order to survive. Many African countries have consequently resorted to large agricultural schemes and unsustainable irrigation. In the process they have destroyed vast areas of arable farmland and forced large numbers of people to move from these farmlands into marginal areas (Obi 1998: 44).

The mismanagement of development funding and corruption are other facets of this problem. Government officials have in countless cases sought to enrich themselves rather than to use the funds for much needed developmental practices which would improve the economic position of the people. Often the positive effects of developmental projects have not been noticed at the 'grassroots' level (Kagonge & Imbore 1994: 4). Along with corruption, the mismanagement of funds must also bear some of the blame for creating poor economic circumstances. Many African countries allocate unnecessarily large amounts of their budgets to military expenditure while neglecting environmental protection, health care and education (Kagonge & Imbore 1994: 4; Hansen 1994: 332).

At the 'grassroots' level, poor economic circumstances may force people into degrading their environments. Poor people do not often have a choice in their use of the environment, since they have to use whatever is available to survive. Poverty and low yields from small plots force the inhabitants to sell and move or to take their farming activities into marginal areas. Continuous farming on small plots and in marginal areas leads to soil erosion, desertification and deforestation, which render it impossible to make a living from the land any more (Harrison 1993: 127). Where farmers still manage to provide bare subsistence, any crisis such as a drought, flood, death or illness will force them to exploit their environments to such an extent that these will no longer be able to sustain them.

The above social, political and economical factors, especially in developing regions such as Southern Africa, may also create conditions where environmental destruction becomes unavoidable. It is, however, still the environmental conditions created by these factors that will force people to move. Environmental refugees cause numerous problems for the international community and host countries, which must also be considered.

4. The impact of environmental refugees

The undocumented nature of environmental refugees makes it difficult to determine with certainty the impact that they have on host areas. The problems experienced with environmental refugees

must therefore be explored from their undocumented nature. In this section, attention will be given to the strain placed on host areas by influxes of undocumented, destitute people.

4.1 The political impact of environmental refugees

Influxes of people into an area lead to conflict over resources, ethnic differences between local people and refugees and conflict between sender and receiver states.

Environmental refugees cannot rely on organisations for aid, due to their undocumented nature. In order to survive, they therefore have to rely on the same resources as local inhabitants. This may induce conflict over scarce resources such as water. Particularly in Africa, where severe water problems are experienced, tension over water resources may increase, as has been pointed out. However, not only the scarcity of water but also the availability of land and food sources give rise to concern.

When more people have to rely on an environment for survival, the environment is placed under tremendous strain. People fleeing environmental degradation may also make more demands of their new environment due to their destitute condition, and implement the same environmentally destructive practices that led to their migration in the first place. Influxes of people can therefore be damaging to the survival of the whole area. A contest for resources may lead to open conflict among these groups.

Often contests for scarce resources are fuelled by ethnic antagonism between resident and refugee groups. In future, the scarcity of resources combined with ethnic and historical issues may result in conflict among groups. Many of these conflicts will be environmental in nature but some will also be linked to ethnic and historical issues between groups (Kaplan 1994: 8). Solomon (1993: 20) emphasises that:

[w]herever there is a scarcity of resources, one can expect competition for them. In this context, mobilization along religious, ideological, ethnic or cultural lines is not unique.

Conflict among groups has serious consequences for the stability of regions and nation states. A rise in refugee numbers may induce open conflict between sender and receiver states. Host countries are

often pressurised by their own people to send refugees back, since they are perceived to place pressure on socio-economic structures. Sender states, on the other hand, may be powerless to care for the refugees and may view their migration as a relief. Sending the refugees back, especially in the light of better economic and environmental conditions in the host country, can lead to hostility between the sender and receiver states (Swain 1996: 968).

The situation in South Africa emphasises the dilemma faced by host countries in dealing with strong anti-foreigner sentiments, on the one hand, and an obligation towards neighbouring countries, on the other. Foreigners, whether legally or illegally here, generate strong feelings among South African citizens, many of whom consider that they should be sent back whence they came. However, the South African government does have strong political ties with neighbouring states which provided shelter and aid to political activists during the struggle against Apartheid (Klotz 1997: 38). Rogerson (1997: 265) remarks in this regard that "trans-border migration is a critical policy issue in South Africa today" since South Africa's relationships with its neighbours will be affected by its policy on migration.

4.2 The economic implications of environmental refugees

The economy is the area in which pressure from environmental refugees is probably most palpable. No country can afford an uncontrolled influx of people across its borders, because of the financial strain it may cause. At the local level, the impact of undocumented migrants on employment opportunities and the distribution of resources and services is especially problematic. At a higher governmental level, pressure is felt in terms of resettlement, repatriation and policing.

Many of those currently fleeing environmental degradation are forced to fend for themselves when they arrive in a host country, as they are not entitled to any governmental or international aid. They must therefore be prepared to work for less money than the locals, thereby forcing wages down. Since most of the people fleeing environmental degradation are not recognised as legitimate refugees, they are branded as illegal immigrants and exploited by employers

who take advantage of their undocumented status. Some undocumented migrants, many of them in fact environmental refugees, join the informal trading sector, which brings them into conflict with local business people and trade unions. They are accused of "undermining local incentive and competition" (Reitzes 1994: 7).

Due to this perception, undocumented migrants are often at the receiving end of xenophobic attacks from locals. In one such attack, residents of Alexandra township forcefully evicted migrants from their homes and threatened to burn their possessions. In another incident in August 1997, local hawkers, with the support of a local hawkers' association, attacked foreign traders and destroyed their stalls (Rogerson 1997: 266). While it would be unfair to assume that most of the undocumented migrants are environmental refugees, the strong link between poverty and environmental degradation in Southern Africa suggests that many of them are, in fact, environmental refugees and that they should therefore receive better treatment.

Governments in host countries are placed under continuous pressure to supply health and welfare services to undocumented migrants. Reitzes (1994: 7) indicates that in 1994 some R 210 million must have been spent on providing health care, housing, education and policing for Mozambicans illegally in South Africa. Many of these so-called illegal migrants are people who were forced by their environments to seek refuge in South Africa (Klotz 1997: 43). Government's attempts to supply services such as these to a growing number of people with limited funds, may mean that many local people receive inadequate services while extra strain is placed on the economy.

Protecting borders is another issue that calls for consideration. Due to the political and economic issues involved, it is generally accepted that no country should be forced to open its borders indiscriminately (*The Economist* 1995: 48). This is especially true where, as in the case of South Africa, a relatively prosperous country has poverty-stricken nations across its borders. However, there is a financial implication to excluding people who should in fact qualify for refugee status. Many people who should be able to proceed

through the correct channels, now follow the route of illegal migration to enter countries.

Repatriating illegal migrants who were forced out of their own countries also costs money: it costs South Africa millions of rands every year. During 1997 alone 176 351 illegal migrants were repatriated, 83% having originated from Mozambique (SAIRR 1998: 111). Many, however, return as soon as they can, since their chances of survival in their own countries are slim. This is a hopeless cycle of events which costs the governments of host countries unnecessary money. Naturally, illegal migrants should be sent home. However, large sums of money are at present wasted in indiscriminately repatriating undocumented migrants, many of whom should actually receive the assistance to which they are entitled as refugees.

4.3 The social implications of environmental refugees

Any form of migration is an important agent of change in society. Migration leads to a flow of ideas, languages and cultures across borders (Solomon 1993: 18). In the case of forced migration, a host area is suddenly confronted with people who have their own unique customs and ideas. When these cultural ideas clash with those of the local people, tension between those people — who feel their identity is being threatened — and the migrants may develop. Since forced migrants are mostly destitute and impoverished, problems with health, welfare, poverty and crime are experienced in the host area.

The provision of health and welfare services does not only have an economic impact on host countries. Most people forced to leave their former homelands due to environmental destruction arrive in their host country in a very poor physical condition. Serious illnesses are brought into the new area and local residents do not always have immunity to these foreign diseases. In the case of South Africa, the influx of undocumented migrants from neighbouring states has been linked to the spread of diseases such as yellow fever, cholera and the Ebola virus (Schutte 1993: 8). In particular, the suggested causal link between undocumented migrants and the spread of the HIV virus and/or AIDS in both South Africa and the sub-region has recently become a matter of growing concern.

By late 1996, the World Health Organisation (WHO) estimated that more than 90% of all adult HIV infections were situated in developing countries. Of the roughly 23 million people living with HIV/AIDS around the world, almost two thirds, or approximately 14 million, are in sub-Saharan Africa (Fransen 1998: 1-3). Clearly, sub-Saharan Africa is the region most affected by the epidemic. Of further importance is the fact that, according to the WHO, only one in every four cases of HIV/AIDS is reported in developing countries (Loewenson & Whiteside 1998: 16). The situation is aggravated by the fact that the majority of newly infected adults are under 25 years old — the age group most likely to migrate. Many undocumented immigrants end up in urban areas without their families; sexual services are thus often purchased. Some of these migrants also find themselves in situations where prostitution becomes their only source of income. Given the incubation period between infection and illness and death, the impact of AIDS via undocumented migrants is therefore bound to increase in the years ahead. As Fransen (1998: 8) puts it:

The demographic impact of AIDS will continue to gain momentum into the next century, as the epidemic continues to spread and mature despite all efforts implemented to minimise [its] effect. Important forces in the meantime fuelling the epidemic in several regions are mobility, migration and instability within the populations concerned.

South Africa borders on six other countries and since the government has very little control over illegal influxes, it has virtually no control over the spread of HIV/AIDS within South Africa or the region (Pelser 1998: 11).

Forced environmental migrants arrive without, or with limited funds, and usually settle in informal settlements due to their poverty-stricken state. Projects aiming at improving the state of local residents' housing in these settlements inevitably also benefit these people, although they are not entitled to such assistance (Schutte 1993: 9). In South Africa the presence of illegal Mozambicans was seen as an important factor hampering the successful implementation of the Reconstruction and Development Programme.

Poor economic circumstances influence the general welfare of the people involved. More household violence, alcohol abuse and crime are experienced in poorer communities. When these problems are seen in relation to an increase in the number of destitute people in a specific area, it is clear that welfare services cannot cope with the added burden (Reitzes 1994: 8).

Lastly, strong anti-foreigner sentiments may develop among groups, which may lead to serious conflict between foreigners and their hosts. Western Europe has experienced some serious racial attacks against foreigners as a result of rising xenophobia (Nelán 1993: 26). In South Africa strong anti-foreigner feelings are developing, especially in the light of the poor economic climate, high crime rate and concern over the provision of health and welfare (Carim 1995: 221).

5. Conclusion: the need for policy

South Africa, as a relatively prosperous and developed nation in Southern Africa, is a very attractive prospect for people fleeing environmental degradation in their home countries. Many of the Mozambicans streaming across the border almost certainly fall into the category of environmental refugees. Prolonged war and internal conflict have left the environment in Mozambique in an utterly degraded state, making it impossible for inhabitants to survive. In many instances their only hope of survival is to migrate to South Africa. However, it is not only Mozambicans who flee to South Africa. People from Zimbabwe, Angola and countries as distant as Ethiopia and Nigeria come to South Africa in an attempt to escape environmental degradation, among other problems.

South Africa and the rest of the world will not be able to ignore this current migration trend for too long. The indiscriminate repatriation of undocumented migrants without determining the cause of migration is not the best way of dealing with the problem. Decisive action will have to be taken in order to deal with this issue before it gets out of control.

The first issue that has to receive attention is agreement on an acceptable definition of environmental refugees, or a definition of

refugees that encompasses the complexity of factors forcing people to migrate. A more inclusive conceptualisation of forced migration has already been advocated in recent literature (Hugo 1996; Richmond 1994; Wood 1995). This is essential in terms of developing policy and strategies dealing with new forms of forced migration such as environmental refugees. Myers (1997: 177) emphasises that "we need to expand our approach to refugees in general in order to encompass environmental refugees in particular".

Secondly, it is imperative that an international protocol as well as national policy regarding environmental refugees be developed. The current international statutes dealing with refugees are far too narrow, as has been pointed out. A comprehensive international policy including environmental factors in the determination of refugee status will prevent people from being classed as illegal immigrants and will ensure that they are treated in a humane manner by host countries and by international aid organisations. Wood & Potts (1998: 254) point out in this regard that the United Nations have the task of providing for the basic needs of people uprooted from their home countries, thereby easing the burden of host countries. It is also their task to ensure that individual countries treat people seeking refuge in accordance with basic human rights. As more and more people are displaced by environmental degradation, these international structures will play a key role in laying down ground rules for the treatment of such people. This, however, is currently impossible, given the lack of appropriate categorisation.

Lastly, it is impossible to deal only with the symptom of environmental degradation, without attempting to eliminate the cause of the problem. Sustainable development practices, environmental protection and economic upliftment in developing regions are crucial if the current flow of refugee is to be stemmed. It has already been pointed out that most environmental refugee movement takes place from poor, developing regions where a host of social, economic and political factors exacerbate environmental degradation.

The phenomenon of environmental refugees is an unavoidable issue likely to shape migration trends in future. Acknowledging the seriousness of the problem and working towards a viable solution is

essential, since individual countries and international relations will be profoundly affected by the issue in the future. Myers (1997: 181) concludes that

by far the best way to deal with the problem is to preempt it: to recognize it, to comprehend it [...] the key to this difficult prospect is understanding — probably the resource in shortest supply right now.

Bibliography

ARMS K

1994. *Environmental science*.
Orlando: Harcourt Brace.

CARIM X

1995. Illegal migration to South
Africa. *Africa Insights* 25(4): 221-3.

COCK J

1994. Sociology as if survival
mattered. *South African Sociological
Review* 6(2): 14-31.

COCK J & E KOCH (eds)

1991. *Going green: people, politics and
the environment in South Africa*. Cape
Town: Oxford University Press.

CYLKE F K

1993. *The environment*. New York:
Harper.

FELL N

1998. Moving people, angry land
— new science? <[http://www.hu.ic.
uk/scicom/envrefs.htm](http://www.hu.ic.uk/scicom/envrefs.htm)>.

FRANSEN L

1998. HIV in developing coun-
tries. Whiteside (ed) 1998: 1-12.

GELINAS J B

1998. *Freedom from debt*. London:
Zed Books.

HANSEN S

1994. Population: its challenge to
economic and social scientists.
International Social Science Journal
141: 333-41.

HARPER C L

1996. *Environment and society:
human perspectives on environmental
issues*. Englewood Cliffs, New
Jersey: Prentice-Hall.

HARRISON P

1993. *The third revolution: popula-
tion, environment and a sustainable
world*. London: Penguin.

HOUGH M

1995. Illegal aliens in South Africa: causes and facilitating factors. *Strategies Oorsig vir Suider Afrika* 17(1): 1-25.

HUGO G

1996. Environmental concerns and international migration. *International Migration Review* 30(1): 105-31.

JACKSON J A

1986. *Migration*. New York: Longman.

JACONSON J L

1989. Environmental refugees: nature's warning system. *Populi* 16(1): 29-41.

KAGONGE J O & A M IMBVORE

1994. Achieving sustainable development in Africa. *Lesotbo Social Science Review* 1(1): 1-11.

KAPLAN R D

1994. The coming anarchy. *The Atlantic Monthly* 237(2) 1994: 44-76. <<http://www.TheAtlantic.com/atlantic/election/connection/foreign/anarcf.htm>>.

KLOTZ A

1997. International relations and migration in Southern Africa. *African Security Review* 6(3): 38-45.

KLUGMAN B

1991. Overpopulation and environmental degradation. Cock & Koch (eds) 1991: 66-77.

LASKA S

1993. Environmental sociology and the state of the discipline. *Social Forces* 72(1): 1-17.

LOEWENSON R & A WHITESIDE

1998. HIV and AIDS in Southern Africa. Whiteside (ed) 1998: 13-26.

MELDRUM A

1994. On deadly ground. *Africa Report* 39(4): 55-9.

MINNAAR A & M HOUGH

1996. *Who goes there?* Pretoria: HSRC.

MYERS N

1994. Environmental refugees: a crisis in the making. *People and the Planet* 3(4): 1-4.

1997. Environmental refugees. *Population and Environment* 19(2): 167-82.

NELAN B W

1993. Europe slams the door. *Time* 142(3): 38.

OBI C

1998. Environmental security in Africa: some theoretical concerns and emerging issues. *Africa Insight* 28(1/2): 41-6.

PELSER A J

1998. Heading for Canaan: a reflection on illegal migration in South Africa. *Journal for Contemporary History* 23(1): 1-14.

PRENDERGAST J & S BICKEL

1994. Scorched-earth war. *Africa Report* 39(3): 37-9.

RAVEN P H, L R BERG &

G B JOHNSON

1993. *Environment*. New York: Harcourt.

Redelinghuys & Pelsler/Environmental refugees

REITZES M

1994. Alien issues. *Indicator SA* 12(1): 7-11.

RICHMOND A H

1994. *Global apartheid: refugees, racism and the New World Order*. Toronto, Ontario: Oxford University Press.

ROGERSON C M

1997. African immigrant entrepreneurs and Johannesburg's changing inner city. *Africa Insight* 27(4): 265-73.

SCHUTTE D P A

1993. Migration: the status quo and prospects for Southern Africa. *Institute for Strategic Studies University of Pretoria (ISSUP) Bulletin* 5: 1-18.

SEITZ J L

1995. *Global issues*. Oxford: Blackwell.

SHIELDS T

1992. The gateway to sanctuary. *Newsweek* 120(130): 28.

SINGH M

1998. Environmental security and displaced people in Southern Africa. Williams (ed) 1998: 114-22.

SMITH J D & E W NIEDERMEIER

1996. High population growth and sustainable development: are the two compatible? A Southern African perspective. Styger *et al* (eds) 1996: 489-518.

SOLOMON H

1993. In search of Canaan: a critical evaluation of the causes and effects of migration within Southern Africa and strategies to cope with them. *Southern Africa Perspectives* 24. Cape Town: University of the Western Cape, Centre for Southern Africa Studies.

SOUTH AFRICAN INSTITUTE OF RACE RELATIONS (SAIRR)

1998. *South Africa Survey 1997/1998*. Johannesburg: South African Institute of Race Relations.

STYGER P, S MEYER & A SAAYMAN (eds)

1996. *Conflicting challenges in development*. Pretoria: Development Society of Southern Africa.

SWAIN A

1996. Environmental migration and conflict dynamics: focus on developing regions. *Third World Quarterly* 17(5): 959-73.

THE ECONOMIST

1995. The miseries of magnetism. 334(7906): 48-9.

UNITED NATIONS

1994. *World social situation in the 1990's*. New York: United Nations.

1998. Displacement in the commonwealth of independent states. *United Nations High Commissioner for Refugees Publications*. <<http://www.unhcr.ch./pub/cis96/cis9607>>, 28/1/98.

WHITESIDE A (ed)

1998. *Implications of AIDS for demography and policy in Southern Africa*. Pietermaritzburg: University of Natal.

WILLIAMS C (ed)

1998. *Environmental victims*. London: Earthscan.

WOOD W B

1995. Ecomigration — linkages between environmental change and migration. Washington, DC: US Dept of State, Office of the Geographer and Global Issues. <<http://www.newschool.edu/icmec/wood.htm>>.

WOOD W B & L G POTTS

1996. The UN and migration: falling behind. *Political Geography* 15(4): 251-60.