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# ENVIRONMENTAL REFUGEES: AN EMERGENT SECURITY ISSUE\*

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## **Introduction**

There is a new phenomenon in the global arena: environmental refugees. These are people who can no longer gain a secure livelihood in their homelands because of drought, soil erosion, desertification, deforestation and other environmental problems, together with associated problems of population pressures and profound poverty. In their desperation, these people feel they have no alternative but to seek sanctuary elsewhere, however hazardous the attempt. Not all of them have fled their countries, many being internally displaced. But all have abandoned their homelands on a semi-permanent if not permanent basis, with little hope of a foreseeable return.

As far back as 1995 (latest date for a comprehensive assessment), these environmental refugees totalled at least 25 million people, compared with 27 million traditional refugees (people fleeing political oppression, religious persecution and ethnic troubles). The environmental refugees total could well double between 1995 and 2010. Moreover, it could increase steadily for a good while thereafter as growing numbers of impoverished people press ever harder on over-loaded environments. When global warming takes hold, there could be as many as 200 million people overtaken by disruptions of monsoon systems and other rainfall regimes, by droughts of unprecedented severity and duration, and by sea-level rise and coastal flooding.

Of the 25 million environmental refugees in 1995, there were roughly five million in the African Sahel, where a full ten million people had fled from recent droughts, only half returning home. Another four million, out of eleven million refugees of all types, were in the Horn of Africa including Sudan. In other parts of Sub-Saharan Africa, where 80 million people were considered to be semi-starving due primarily to environmental factors, seven million people had been obliged to migrate in order to obtain relief food. In early 2000 Sudan featured eight million people who were officially considered at risk of starvation, with another six million in Somalia and three million in Kenya, plus several million others in other countries. A sizeable though undocumented proportion of these could be characterized as environmental refugees.

<sup>\*</sup> Based on Myers, N. and Kent, J. (1995) Environmental Exodus: An Emergent Crisis in the Global Arena, The Climate Institute, Washington DC; and Myers, N. (2001), Environmental Refugees: Our Latest Understanding, Philosophical Transactions of the Royal Society B: 356: 16.1-16.5.

While Sub-Saharan remains the prime locus of environmental refugees, there are sizeable numbers in other regions and countries. In China with its 120 million internal migrants, at least 6 million deserve to be regarded as environmental refugees, having been obliged to abandon their farmlands due to shortages of agricultural plots in the wake of decades of population growth. In Mexico there are 1 million new environmental refugees each year; some become assimilated in cities, and a few return home, leaving a cumulative total, as a bare minimum in 1995, of 2 million. Finally there are those people displaced involuntarily by public works projects, notably large dams, and increasing by 10 million every year (with a cumulative total of 50 million in just China and India). Most of them resettle elsewhere, but the number remaining in a refugee-like situation totals at least 1 million.

The 1995 estimate of 25 million environmental refugees was cautious and conservative. Scattered throughout the developing world were 135 million people threatened by severe desertification, and 550 million people subject to chronic water shortages. While certain of these people would have been included in the 25 million figure, many could well have been driven to migrate without being counted as environmental refugees.

Of the nearly one billion additional people added to the global population during the 1990s, a good proportion would have been among communities with a cash income of \$1 per day or less. They include the people most likely to be subsisting, or rather struggling to survive, in environments too wet, too dry or too steep for sustainable agriculture. In Sub-Saharan Africa, these environments would have needed to support an extra 150 million people during the 1990s, and a similar total in India.

Poverty serves as an additional "push" factor associated with the environmental problems displacing people. Other factors include population pressures, malnutrition, landlessness, unemployment, over-rapid urbanisation, pandemic diseases and faulty government policies, together with ethnic strife and conventional conflicts. In particular, it is sometimes difficult to differentiate between refugees driven by environmental factors and those impelled by economic problems. In certain instances, people with moderate though tolerable economic circumstances at home feel drawn by opportunity for a better livelihood elsewhere. They are not so much pushed by environmental deprivation as pulled by economic promise. This ostensibly applies to many Hispanics heading for the United States. But those people who migrate because they suffer outright poverty are frequently driven also by root factors of environmental destitution. It is their environmental plight as much as any other factor that makes them economically impoverished. This generally applies to those refugees who migrate to areas where economic conditions are little if any better than back home, as is the case with many people who migrate within Sub-Saharan Africa and the Indian subcontinent. In this instance, with poverty and "life on the environmental limits" as the main motivating force, it matters little to the migrants whether they view themselves primarily as environmental or economic refugees.

On top of all these sub-problems is the lack of official recognition, whether on the part of governments or international agencies, that there is an environmental refugee problem at all. Of course the above is not to overlook parallel problems in OSCE countries; very much on the contrary. Well known is the displacement of tens of thousands of people in the environs of the Aral Sea and as a result of desertification and general land degradation in other parts of Central Asia. Of course "tens of thousands" of these environmental refugees does not compare with the tens of millions of such refugees in Africa and elsewhere in the developing world, but it is specially significant, obviously enough, for the people concerned.

### Concerns for Environmental Security

All in all, the issue of environmental refugees promises to rank as one of the foremost human crises of our times. To date, however, it has been viewed as a peripheral concern, a kind of aberration from the normal order of things--even though it is an outward manifestation of profound deprivation and despair. While it derives primarily from environmental problems, it generates myriad problems of political, social and economic sorts. As such, it could readily become a cause of turmoil and confrontation, leading to conflict and violence. Yet as the problem becomes more pressing, our policy responses fall ever-further short of measuring up to the challenge. To repeat a pivotal point: environmental refugees have still to be officially recognized as a problem at all.

At the same time, there are limits to host countries' capacity, let alone willingness, to take in outsiders. Immigrant aliens present abundant scope for popular resentment, however unjust this reaction. In the wake of perceived threats to social cohesion and national identity, refugees can become an excuse for outbreaks of ethnic tension and civil disorder, even political upheaval. This is already the case in those developed countries where immigrant aliens increasingly prove unwelcome, as witness the experience of Haitians in the United States and North Africans in Europe. Almost one third of developed countries are taking steps to further restrict immigrant flows from developing countries. Yet measures to relieve the plight of refugees of whatever kind have drastically diminished in relation to the growing scale of the problem. Although the annual budget of the United Nations High Commissioner for Refugees was recently boosted somewhat, the agency is increasingly unable to supply food and shelter for refugees of traditional kind alone, much less to invest in rehabilitation or repatriation of these refugees. Meantime the world's refugee burden is borne primarily by the poorest sectors of the global community. In the year 2000 the twenty countries with the highest ratios of official (traditional) refugees had an annual per-capita income of only \$850.

### Linkages to OSCE countries

Insofar as this paper postulates that the most prominent concentrations of environmental refugees are located in developing regions, the OSCE countries might respond that the "over there" problem has little to do with them in practical terms. True, they may sense a humanitarian reaction and supply aid for that reason, but it is likely to remain limited, at best, in relation to "bigger picture" factors, which should be viewed as exceptionally significant. Developed countries cannot isolate themselves from distress and disaster in developing countries: already there are sizeable numbers of environmental refugees who have made their way, usually illegally, into OSCE countries--and today's stream will surely come to be regarded as a trickle when compared with the floods that will ensue in decades ahead.

Consider, for instance, the case of Italy, a country well placed for North Africans who can clandestinely cross from Tunisia to Sicily in a three-hour voyage. They number at least 120,000 per year, and their cumulative total has exceeded 1 million. Spain is an even easier target for North Africans, who readily cross the 15 kilometres of the Straits of Gibraltar; the numbers involved match those of Italy. A still more facile opportunity awaits Hispanics from Mexico and Central America who cross the Rio Grande into the United States with numbers of at least 0.5 million per year, and with a cumulative total of 6 million.

Thus the environmental refugees problem is not a problem confined to countries way beyond the horizon from OSCE countries. Note, moreover, that the problem will surely grow bigger fast. Morocco, Tunisia and Libya are each losing over 1000 square kilometres of productive land a year to desertification. In Egypt, which is uniquely dependent upon irrigation, half of irrigated croplands suffer from salinization--and Egypt already imports a huge share of its food. Turkey has lost 160,000 square kilometres of farmlands to soil erosion. These environmental pressures are aggravated by population pressures. North Africa today features 152 million people, and the eastern Mediterranean 100 million, with a joint total of 252 million. Contrast the European Union 459 million, a good deal larger. But the Mediterranean countries are growing much faster. Projected for 2025: North Africa/eastern Mediterranean 333 million people, for an increase of 32%, whereas the European Union is projected to grow to 470 million, for an increase of 2%. Across the Atlantic, Mexico/Central America/Caribbean today totals 185 million, way behind the United States with 294 million. But a 2025 projection that Mexico/Central America/Caribbean will grow to 235 million, for an increase of 27%, whereas the United States will grow to 349 million for an increase of just 19%.

## Policy options

There is much scope for preventive policies, with the aim of reducing the need to migrate by ensuring an acceptable livelihood in established homelands. First of all, we need to expand our approach to refugees in general in order to include environmental refugees in particular. We cannot continue to ignore environmental refugees simply because there is no institutionalised mode of dealing with them. If official standing were to be accorded to these refugees, this might help to engender a recognised constituency for e.g. those 900 million people who endure desertification, 4 million of whom have become environmental refugees in the Sahel alone. While desertification entrains costs of \$42 billion a year just through the loss of agricultural produce, the United Nations' Anti-Desertification Action Plan would cost no more than \$22 billion a year. Yet the amount subscribed so far falls far short of the target, ostensibly on the grounds that arid-land dwellers have no constituency and hence lack political leverage.

Secondly, we need to widen and deepen our understanding of environmental refugees by establishing the root causes of the problem--not only environmental

causes but associated problems such as security concerns, plus the interplay of the two sets of forces. There are many conceptual grey areas as concerns proximate and ultimate causes, the contributory roles of population pressures and poverty, the linkages to ethnic tensions and conventional conflict, and so lengthily forth.

Consider too the root causes of famine. If a famine has been human-made, it can be human-unmade, whereas natural factors can only be managed and accommodated. Just as the recurrent droughts in Sub-Saharan Africa cannot all be blamed on climate, so the recurrent famines cannot all be blamed on drought--and the same must apply, to some degree at least, to droughts (plus desertification) in Central Asia. Drought has often served to trigger famines by disrupting the social, economic and political processes that would normally ensure sufficient access or entitlement to food.

Probably most important of all is that there can be little progress except within an overall context of what has come to be known as Sustainable Development. This applies notably to reliable access to food, water, energy, health and other basic human needs--lack of which is behind many environmental refugees' need to migrate. In big picture terms, sustainable development represents a sound way to pre-empt the environmental refugee issue in its full scope over the long run. As a prime mode to tackle the issue, then, there would be a handsome payoff on investment to foster Sustainable Development in developing countries through greater policy emphasis on environmental safeguards, together with efforts to stem associated problems such as poverty, population and landlessness.

Let us conclude this paper with an unusually pragmatic mode of promoting Sustainable Development, whether in the Horn of Africa or Central Asia, whether in the Himalayan foothills or the borderlands of the Caucasus mountains. A prime way to tackle desertification, salinization, in fact several sorts of land degradation, is through planting trees for shelter belts, to retain soil moisture, and to resist soil erosion. Certain types of trees offer additional benefits, e.g. leguminous species add nitrogen to infertile soils, or they supply built-in insecticides, or they offer industrial timber. Probably the biggest benefit lies with reforestation in montane areas, in order to rehabilitate hydrological systems and watershed functions, and thus avoiding floods and drying-outs for river systems downstream. All in all, and in whatever part of the world, restoring tree cover almost always presents an exceptional win-win outcome.