CANADA'S PERIODICAL ON REFUGEES

REFUGE

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Development, Refugees Generation, Resettlement and Repatriation: A Conceptual Review

Charles P. Gasarasi

Introduction

Discourse in refugee studies throughout the 1980s and 1990s has increasely focused on "development" as a category inseparable from the refugee phenomenon itself. In earlier studies devoted to determining root causes of refugee flows, the idea that there was a causal link between underdevelopment and the generation of refugees gained currency. Subsequently, literature on durable solutions to the refugee problem (resettlement in host countries and voluntary repatriation) placed "development" at the centre of either solution. Before long, academics, politicians and relief agencies joined hands in an advocacy campaign to make development assistance an integral part of of refugee/returnee aid. The targeted recipients of the "development" gains were the refugees themselves, the host countries bearing the refugee burden, and the local host communities—particularly the poorest and most vulnerable members of those communities. The campaign that ensued enriched the language of refugee studies by additional entries like "Refugee Aid and Development" (RAD). The same acronym could also stand for "Returnee Aid and Development," an idea which informs some of the work being done on repatriation of refugees.

This paper revisits the discourse as it has unfolded over the last several years in order to find out whether there exists a fundamental relationship between development and the various concerns of refugee studies, such as

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refugee movements, resettlement and repatriation. A review of much of the literature, however, does not reveal such a relationship in any fundamental sense. "Development" appears to be as one of those cherished words like "democracy," that every discipline tries to identify with, both because of the unquestionable relevance that "development" has to all fields of study and the desirability of the word's undeniably legitimating signature. Instead matters like refugee generation, the rate of success in resettlement and repatriation, and, indeed, development itself, are correlates of the type of state in whose jurisdiction they take place.

In most of the states which have generated refugees, at least in Africa, the social contract, which is supposed to be the constitutive element of a state, does not seem to have been consummated. As a result, those who found themselves at the helm of the "ship of state" have exercised the normal right of state to the monopoly of the use of violence, without feeling any obligation to protect the citizens. In the area of development, those states have arrogated for themselves the role of main providers of development, without either the will or the capacity to fulfil that function competently. What little development they have been able to realize has benefited the rulers themselves and a tiny clique around them. Using tight controls legitimized by repressive domestic laws, they have often thwarted citizens' own initiatives to pursue their own development strategies. These and other contradictions have degenerated into conflict, refugee movements and chronic underdevelopment. It would seem that the pathological nature of the state needs to be addressed first before one contemplates what development would or would not do in the areas of refugee generation, resettlement and repatriation.

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Précis

Durant les décennies 80–90, les discours sur les réfugiés ont été focalisés sur les liens entre le développement et les mouvements des réfugiés. En d'autres termes, on a associé le sous-développement à la cause du flux de réfugiés. Par conséquent, les solutions durables à ce phénomène devraient placer le développement au centre de cette problématique. Dans cette optique, les politiciens et les chercheurs se sont mis d'accord pour faire de l'assistance au développement leur cheval de bataille. Paradoxalement, l'aide au développement précoce a servi leurs concepteurs plutôt que les réfugiés et encore moins la population locale, et en particulier celle qui est la plus démunie. A partir de la littérature existante, cette étude tente de d'expliquer qu'il n'existe pas de relation de cause à effet entre le développement et les mouvements des réfugiés au sens fondamental du terme.

The Link between Economic Development and Refugee Movements

It can be argued that no scientifically driven study to date has established any correlation between economic underdevelopment and refugee outflows. Such association, to the extent that it has been articulated, has been the product of intellectual intuition at best, or North-South dialogue rhetoric at worst. Academics and bureaucrats-cum-politicians are among those who have expressed the existence of a link between economic underdevelopment and refugee generation. Of the two categories, the latter has been more unequivocal about the assertion that a positive correlation exists. The academics, on the other hand, have been noncommittal on the subject, at one moment suggesting that such a relationship exists, only to be negated later.The categorical expression of an existing relationship by bureaucrats/politicians can be exemplified by the conclusions of two reports prepared under the auspices of the UNHCR in the mid-1980s, both of which identi-

fied "economic underdevelopment as a fundamental cause of contemporary refugee flows" (Zolberg 1989, 258). Another report prepared by a group of experts appointed by the UN General Assembly, also in the mid-1980s,

> ... the group cites underdevelopment "inherited from colonialism" and aggravated by the world economic situation as a major root cause. As a result, the economics of the South suffer balance-of-payments problems, deteriorating terms of trade, indebtedness, and inflation. Environmental related problems of desertification and deforestation aggravate the situation. The result is generalized conditions of insecurity that threaten the basic conditions of survival, compelling large numbers of persons to flee. (*ibid.*, 259)

The general thrust of these views is that the political strife and instability that often cause refugee outflows are only a manifestation of problems of economic underdevelopment. The state is seldom mentioned as the culprit responsible for generation of refugees, except for the unfailing mention of "oppressive, segregationist and racially supremacist regimes," referring to former apartheid South Africa.

From a bureaucratic-political point of view, particularly at the height of the North-South dialogue, associating every social or political problem of the South with underdevelopment was expedient in many ways. It is not surprising therefore, that the United Nations High Commissioner for Refugees prescribed the following as a solution to refugee outflows:

> ... unless you really address the problem of development, you are never going to be able to circumscribe movements of people, whether they are refugees for economic, political, or ecological reasons—and basically the root causes combine ... If we sent proper technical assistance, if there was transfer of appropriate technology, if one focused on the rural areas rather the cities, if the quality of life and life support systems were improved, you would begin to address the problem as it should be addressed. (*ibid.*, 259)

The above reasoning can be easily challenged by enumerating several non-refugee generating countries which are much more economically underdeveloped than those which have generated refugees. Countries like Tanzania, Zambia, Swaziland, etc., which are not on the list of refugee-generating countries, are less economically developed than South Africa, Angola and Zimbabwe, which have in the past been major sources of refugees.

As mentioned earlier, academics have been rather ambivalent on the relationship between development and generation of refugees. They have sometimes commented on the correlation in the affirmative. Gorman (1993, 1) has, for instance, commented that economic underdevelopment and refugee movements "are in a very real sense linked ... and neither can be fully resolved without taking into account the other." He further observes that "some of the most economically at risk nations were also those most responsible for generating refugee flows ..." (*ibid.*, 160). However, clearly realizing the theoretical and methodological questions raised by the above statements, he neutralizes them by making a more cautious, noncommittal conclusion:

> ... the argument was made that the refugee flows in much of the world are closely related to development issues and often precipitated by civil war. Civil war and refugees are clearly not confined to underdeveloped or developing nations, as the ongoing drama in the Balkans clearly attests, but the vast majority of refugee problems do exist in the developing world ... (*ibid.*, 160)

The same problem of uncertainty about the causal link between underdevelopment and refugee generation is found in Adelman's writings. On the affirmative side, he views the refugee problem and economic underdevelopment as being inseparable:

> ... the refugee problem is inseparable from the problem of economic development in Africa, both in preventing situations that create refugee flows and in dealing with either of the permanent solutions available settlement and repatriation. Unless economic development occurs, neither solution is workable in the long run. (Adelman 1994, ix)

Reasoning in the opposite direction, Adelman has previously argued that economics [development] has no positive influence on preventing refugee generation or in facilitating the conventional solutions to the refugee problem:

> .... the belief that capital accumulation, or industrialization—that is, economics—is the cure both to prevent refugee production and to assist in one form of permanent solution (economic integration into the local economy) seems misplaced. A healthy economy is not the basis for a stable political system: a healthy political system is the primary basis for a healthy economy ... The conclusion seems straightforward enough. There will be no cure to the root causes of refugees by directly attacking the fundamental economic problems of the third world. Quite the reverse seems to be indicated. The development of a good political and legal system will be critical to the prevention of the production of refugees and facilitate the repatriation, settlement and resettlement of the refugees-refugees who seem to enhance economic growth. (Adelman 1990, 19–21)

Zolberg (1989, 260), for his part, while not totally discounting some possible relationship between underdevelopment and the refugee question, maintains that, "economic underdevelopment is by itself not a major cause of refugee flows."

> The simple notion that poverty produces refugees is inconsistent with the fact that situations of extreme economic deprivation usually have not generated population outflows claiming refugee status. (e.g., the poor in India or Burkina Faso) (*ibid.*, 260)

Zolberg also raises the issue of the difficulty involved in weighting the importance of underdevelopment in the production of refugees among several other colluding causes. Assess-

ment of the role of economic underdevelopment as a cause of refugees is difficult, because it is not easy to establish the extent to which "the characteristic imbalances of economic underdevelopment contributed to violent political conflicts of the kind that historically has caused large refugee flows" (*ibid.*, 261). Regarding the supposedly beneficial effect of development upon solutions to the refugee problem, such as resettlement and repatriation, he cautions that "when massive internal poverty is related to the structure of political power and production, reforms without fundamental change in the political economy will have marginal results" (*ibid.*) Zolberg's thinking seems to be following a polity primacy trajectory. By "polity primacy" it is understood that an analytical perspective that assigns a pivotal causal role behind various phenomena to state and politics.

On the basis of the foregoing, it would seem that the causal link between development/underdevelopment and generation of refugees remains a mere hypothesis that has yet to be proved. The hypothesis may be appealing to common sense, but this alone, short of a major scientific study corroborating the hypothesis, does not confer a paradigmatic status to the assumed causal link for teaching or even policy purposes.

The "State" as the Hub of Refugee-Related Problems: A Polity Primacy View

The word "state" is written in quotation marks to indicate that there is doubt that most refugee-generating countries, particularly in Africa, qualify to be called as states, at least in the modern liberal sense. The state in most refugee-producing African countries deviates in many ways from the type of sociopolitical organization described in the social contract theories of the state. According to the latter theories, the state comes into being when individuals

> leave the state of nature to better themselves through a state system ... Individuals trade their right to protect themselves and their goods and surrender the right to self-protection to the state in return for the obligation and responsibility of the state to provide that protection (Adelman 1990, 22)

"The elemental justification for the modern state, at least since Hobbes, is its ability to provide reasonable security for its citizens" (Zolberg 1989, 264). The state's monopoly of the legitimate use of violence stems from the social contract itself.

In many of the legal formations called "states" in Africa, no process of social contract seems to have ever taken place. Under colonialism, whole population groups found themselves herded within the confines of arbitrarily demarcated territories without consent. The administration that ruled in these territories was the extended arm of the metropolitan state and the parties to the social contract were not the indigenous populations but the citizens of the colonial power. At independence, the neo-colonial states were not created out of any discernible social contract among the indigenous populations, nor were there, in many cases, any mechanisms to at least belatedly forge that social contract. The demarcation of the state's territory remained sacrosanctly colonial; an indigenous administration emerged and the new legal-political formation quickly seized monopoly over the use of violence and taxation. It also proclaimed itself the provider of development.

The self-assigned role of provider of development was designed to serve two twin purposes: to confer legitimacy to the "state" in the absence of a social contract and to clip the wings of other social institutions that had the potential to spread empowerment among the people, thus weakening "state" control over its extractive capacity. This was necessary because the political elites who inherited the colonial state were primarily motivated by access to material rewards through control of the economic means of production. Political power became for these elites the vital resource for self-rehabilitation in economic status, and membership in the "state" power hierarchy was both coveted and jealously guarded. Those who managed to maintain membership in this hierarchy literally constituted the "state."

The dynamics of this false start in state formation, not born out of a social contract, have been described by Zolberg (1989, 43):

> The ruling elite's project has been aptly characterized as "self-aggrandizement combined with enough redistribution to maintain its tenuous and vital hold on the state." The takeover of the colonial state apparatus enabled the organization of clientalist networks through which the state was managed. However, in answer to the demands occasioned by broader mobilization and rising expectations around the time of independence, these resources had to be expanded and these demands met. But because the takeover of the colonial state meant controlling police and military forces, African rulers were able to use coercion to refute these demands and limit costs. They also quickly discovered the full range of authoritarian techniques, from the imposition of legal restrictions on political activity in the name of national security, to the physical elimination of opponents and the replacement of autonomous associations with the state-controlled bodies.

Not only does the above eloquent description demonstrate the total absence of a social contract at the constitutive phase of the "state," but it also shows elimination of any chances to institute any such contract during the subsequent process of systematically tearing apart the social fabric among the citizenry. Zolberg (*ibid.*, 40) further observes that "although the state dominates the social scene, it is itself an extremely weak and fragile organization, with a limited capacity for managing society and directing change"—including development.

What followed was an understandable erosion of the authority of the "state," including its jealously guarded monopoly of the use of violence. In the latter regard, dissenting

citizens took up arms which they turned against the ruling elites and their supporters, but also sometimes against an innocent and defenceless civilian population (RENAMO in Mozambique). A variant of loss of monopoly over the use of violence occurred when the regime in power felt under siege and voluntarily gave a share of the use of violence to its civilian supporters by arming them (Angola in the aftermath of the ill-fated 1992 elections, Rwanda on the eve of the 1994 genocide).

Erosion of state authority was exacerbated by failure in the state's self-imposed development mission occasioned by both internal and external factors. Internal factors include poor economic planning, management, misappropriation of capital funds, the ousting of important domestic economic actors, and in some cases, a poor resource base. External factors include deterioration of international terms of trade, the energy crisis, the mounting burden of debt, and the growing reluctance of investors to face the risks of continued instability when other choices are available (*ibid.*, 44). Under such circumstances, survival dictates that a significant segment of local economic actors exit from the directionless framework of state macro-economic planning into the underworld of the "parallel economy." This act hits hard on the remaining blood vessel of the "state" with respect to authority: the exercise of its monopoly of taxation.

Stripped of presumed authority and legitimacy, the "state" ceases to be the reliable guarantor of the ruling elites' social and economic privileges. Not prepared to give up, the "rulers degenerate into outright tyrants" (*ibid.*, 44). Since refugee testimonies in the archives of the UNHCR, and countless immigration administrations show that in numerous cases refugee flight was caused by state tyranny at home, it should be possible to carry out an empirical scientific study that would demonstrate the existence of a positive correlation between state tyranny and refugee outflows. It may also be possible to demonstrate, at another level of such a study, that there is a correlation between refugee generation and the level of development of the state.

In the absence of such a study so far, the polity primacy approach which associates the refugee question primarily with state and politics is also still more hypothetical than categorical. However, it seems to have more explanatory value than the hypothesis that associates the refugee question primarily with development, even though both hypotheses can be equally criticized on epistemological grounds that "you cannot get prescriptive edicts from a descriptive thesis" (Adelman 1990, 22).

Given those epistemological constraints, it nonetheless seems that of the two hypotheses above, the polity primacy one is more productive in terms of causal logic. Causal link between state behaviour and refugee generation is closer to empirical reality than that between development and refugee generation. This difference arises because the two variables being correlated with refugee generation are different in a fundamental sense. On the one hand, "development" is an abstract category which still eludes definitional consensus among experts. On the other hand, the "state" is not as abstract, even though there are differing views about whose interests it serves. It is almost an animate corporate personality which makes things happen or not happen - including development. As variables being correlated with a single constant variable, i.e. the refugee question, the two stand in a distinct hierarchical order. The "state" is an actor; "development" is a result. The "state" is active, "development" is passive. In their influence on the refugee question, the "active" and the "passive" must produce differential impacts corresponding to the hierarchical order of the hypothesized causal agents. It is this logic that suggests that the polity primacy approach is more appropriate for the study of the refugee question: its root causes as well as its programmatic solutions.

The relative salience of state and politics over that of development in the entire refugee question has been clearly underscored in the literature reviewed. For example, Adelman is of the view that development must "serve other political ends" such as fair distribution of the results of economic growth:

> When relative inequalities grow rather than decline, when one ethnic group is penalized to benefit another, we sew the seeds for social dissension and reversing economic growth. We sow the seeds for the production of refugees. (*ibid.*, 19–20).

Zolberg (1989, 263) also associates refugee outflows primarily with politics:

> As long as refugees in our world are defined with respect to violence in the political sphere, the most proximate causes of such population movements will, in fact, be political.

From a polity primacy view of the refugee question, the diagnosis of the problem points to the pathological features of the state and its government. It follows therefore that the solutions lie in the rehabilitation of the legitimacy of the state through a new social covenant. Adelman (1994, xiii) makes this very point:

> Governments that are legitimate and that rule by consent rather than by force are a prerequisite to ending refugee flows and allowing repatriation ... To facilitate regime change and peace, a number of factors must be present: agreements to secure the interests of local populations, empowerment and self-determination and, the conviction by the warring parties that the benefits of peace outweigh the gains achievable through struggle.

The enterprise of rehabilitating state legitimacy through a new social covenant entails building or rebuilding civil society and creating "an administrative system which is genuinely representative of local interests and from which no section of the population feels excluded" (UNRISD 1993, 12). This simultaneously requires instilling accountability and responsiveness in state institutions.

Refugee and Development and Polity Primacy

The last two decades have been characterized by a heavy "development" agenda in refugee studies. This is not surprising as the same thing was happening to other fields of study throughout the global environment. The prime movers of this trend were the politicians in their innumerable fora: the UN General Assembly, the Non-Aligned Movement, the Group of 77, UNCTAD, and the South-South Commission, to mention a few. In the excitement that built up, a wide range of activities were christened "development." There was one United Nations development decade; human rights activists unveiled "the right to development;" feminists coined the term "women and development," etc. Our own field could not afford missing this bandwagon, so "Refugee Aid and Development" (RAD) hit the conference halls and publishing houses. Indeed, there were good reasons to do that. The first was a legitimate concern about the negative impact refugee flows may have on host countries and local communities. The second, that is not as mundane as it may sound, was the imperative to maintain research fundability in an environment where most traditional donors insisted that a fundable research project must have a development dimension attached to its mainstream disciplinary focus. The mid-1970s gave literature on the developmental implications of massive refugee flows into developing countries, particularly in Africa. Research began in earnest in response to the perceived problem that poor host countries were paying dearly for receiving refugees. Gorman (1993) has summarized that perception:

> There was increasingly a realization that large numbers of refugees, often spontaneously settled in poor countries, could quickly outpace the host country's economic and social infrastructures. Health facilities and schools in the affected regions were often overburdened by additional stress of refugee needs. In some cases, such as Pakistan, the very relief operation itself caused a deterioration in roads, which were subjected to continuous relief convoys of heavy trucks laden with relief supplies. In arid regions, such as Sudan and Somalia, the massive concentration of refugee populations led to widespread deforestation and desertification. Stresses on fuel wood and water supplies in such areas were often acute. Host governments found themselves seconding scarce expertise and personnel to cope with relief logistics, security, range management, and the like, in refugee-affected regions. Under these conditions, the development needs of the host country, the host region of the country, and the local population in the affected regions were in danger of being ignored.

The scenario captured in the above quotation was so powerful and compelling that it tended to be accepted at face value as self-evident. In quarters requiring a rigorous scientific substantiation of such an assertion, it took the expert statements of the late Tristram Betts and Robert Chambers to stamp credibility on the scenario. Tristram Betts was an experienced rural development practitioner with many years of field work in Africa. Robert Chambers is a distinguished settlements expert. The solution suggested by these two authoritative individuals with regard to reducing the burden on host countries was RAD, which according to Callamard (1993, 137–8) responds to two intertwined goals:

1. to ensure that the financial burden of providing asylum to refugees will be shared by the international community, and
2. that additional resources will be granted for development projects that will benefit both the refugee and local populations ... It should ensure that refugee assistance does not further impoverish the poorest inhabitants of the host areas, but rather contributes to a local development process benefiting them as well as the refugees.

Chambers' field research findings on the impact of refugees on the poor in host communities, (published under well chosen titles such as "What the eye does not see" and "Hidden Losers") excited researchers and practitioners alike. Betts' strong faith in integrated rural development impacted on action-oriented bureaucracies with the importance of a pathfinder on the operational side of RAD. The two combined to launch RAD research and RAD advocacy. Soon to witness, everywhere, recasting of institutional mandates: the UNHCR, the UNDP, NGOs, and the like strove to accommodate the great idea. At various research institutions, refugee research adjusted its priorities accordingly.

The initial euphoria notwithstanding, RAD research and practice has remained by and large underdeveloped.In the sphere of research, it was soon realized that it was not easy to establish a positive correlation between hosting refugees and experiencing a net loss in development. Chambers himself (1993, 37–38) admits this:

> The effects of refugee influxes on economic development vary a great deal. At one extreme, they can make things worse, as they appear to have done in Bas Zaire in 1978, straining food supplies and services, and exacerbating the effects of drought ... On the other hand, food aid and cheap labor, together with refugee trading, and artisan and farming activities can entail and stimulate economic development ... Whether refugees depress or stimulate economic development depends heavily on official policies and interventions.

In examining Chambers' "Working hypotheses about which rural hosts gain and which lose" (*ibid.*, 39), what emerges clearly is that some local people gain while others lose. Since the studies do not balance the gains against the losses, it is not possible to interpret the net effect of refugee presence on the host communities. The net index of such impact could be as positive as it could be negative.

Another problem that marks Chambers' field studies is the unconvincing assertion that the worsening economic conditions of the poorest among the

hosts is caused by the presence of refugees. Even if a "prima facie" case of such deteriorating conditions among the poorest of the hosts was accepted, one would still need proof that no other factors were responsible for that deterioration. This is important, particularly since 1973, for a whole host of macro-economic factors have contributed to the increasing misery index among the rural poor: increasing inflation, structural adjustment programs, a fall in international commodity prices, removal of government subsidies and price controls, etc. Chambers does not factor such macro and micro-economic variables into his observed deterioration of the living conditions of the poorest, and this is an omission that weakens his research, and there is no awareness of any RAD research work that has gone beyond these weaknesses in order to support the practical side of the RAD philosophy. Thus, from a purely academic point of view, it would seem that RAD rhetoric has had a life of its own, independent of any solid scientific justification.

In actual practice, RAD has proceeded along a normative trajectory in the sphere of politics and advocacy. This is where our notion of polity primacy becomes functional. First of all, regardless of whether or not the theoretical foundations of RAD are correct, its operational fate lies with the states - both aid donors and recipients. One of the normative demands of RAD is that development assistance takes into account the effects of large numbers of refugees on the economic and social life of the host country. Some of its principles are that:

> The UNHCR and the international community as a whole should orient assistance in a fashion that longer-term implications are anticipated [and that] ... Infrastructural and refugee-related development projects should be additional to [aid] provided for a country's regular development programming (Gorman 1993, 65).

The term "long-term," that distinguishes RAD from ordinary relief aid, is at the centre of the RAD controversy. It raises the question whether providing "additional" long-term development assistance is a reaction which is always proportionate to the loss incurred by the refugee host state, and whether such a loss could not simply be defrayed by an appropriate short-term relief package. In addition, RAD thinking also assumes, often incorrectly, that the beneficiary host state would unconditionally be willing to accept development assistance, regardless of the administrative modalities of such assistance.

For the purpose of discussing the proportionate response issue, we will use the experience of Tanzania in the wake of the recent influx of close to 500,000 Rwandan refugees at the time of the 1994 genocide. Mhina (October 1994) has reported the following negative effects of the above refugee influx in Ngara District, where the huge Benaco camp is located:

(i) The stocks of food were used up: either sold, given for free or stolen by the refugees [at crossing points] before the refugees could enter the relief supply system.
(ii) Farms [of local people] were destroyed, either trampled by people or livestock.
(iii) Water sources were affected either through overuse or human pollution.
(iv) There is great environmental degradation resulting from indiscriminate cutting of trees [several hectares of forest have been wiped out for firewood and other uses].
(v) Some local villagers died from diseases brought by refugees. At Kasange 6 local people died of dysentery together with 21 refugees.
(vi) Some schools were destroyed by refugees who stayed in them.
(vii) Women have been affected because some of their used up crops were a source of their independent income to purchase clothing and other items. Men are refusing to take responsibility and hence the women are forced to work in farms in non-affected villages in return for food for the family.
(viii) There is increasing theft and armed robbery. At Rusumo village 3 people were recently wounded by bullets following an armed robbery. Apparently, the refugees who had sold everything can only steal now. At the same time, there is organized crime operating from Benaco.

To the above we could add:

(ix) The slow destruction of roads caused by heavy convoy trucks carrying relief supplies.

A close examination of the above problems shows that hardly any of them justifies long-term development assistance. Problems (i), (ii), (vi) and (vii) are about losses that can be easily quantified. An administrative machinery could be put in place to process compensation of those affected, debiting the claims against the relief budget made available for that particular emergency. Problem (ix), which is about rehabilitation of roads, can be negotiated with the World Food Programme (WFP) which uses those trucks. WFP could then make a budgetary allocation for that purpose as it has occasionally done with respect to infrastructural rehabilitation elsewhere (e.g. Bujumbura Port). Such assistance to repair existing infrastructure is not "long-term" development assistance.

Problems (iii) and (v) are one-time events of an emergency nature, which require emergency health and sanitation measures that can be funded from short-term relief budgets. Regarding environmental degradation (Problem iv), it is not administratively impossible to introduce a tree planting scheme in the refugee camp, making the refugees replace the trees they cut for firewood and other purposes. This is not improper because just as refugees have rights, they also have obligations. Finally, the security problem expressed in (viii) does not require any international assistance at all. Tanzania has quite a sizable army and a Field Force Unit. During peace time, these forces are available and more than adequate to police a refugee camp, large as the latter may be. Securing the national territory and its citizens is a duty that the state must be able to perform,

and conditioning it upon availability of "long-term" development assistance is irrelevant.

The problems experienced by Tanzania are in many ways standard elsewhere in the third world. Many of the same problems appear on Farr's list (1993, 122) with respect to Afghan refugee influxes in Pakistan. It is such problems that are used to make a case for development assistance, meaning in the long-term. A closer look at the nature of the problems has shown that they can be solved through short term measures, easily accommodated in an improved packaged relief program. This would be done by drawing on the resources of the international community which, incidentally, has lately shown more readiness to provide relief assistance more generously than development assistance. Perhaps the reasons for this are that humanitarian assistance in crisis situations has more visibility, and that administration of such assistance can be placed in the hands of agencies the donors trust, avoiding the host state bureaucracies which the donors distrust. However, it should be noted that long-term development assistance constitutes often a disproportionate response to the burden imposed by refugee influxes, irrespective of donor preferences, which do not, in themselves, always stem from good intentions.

Differing from the development assistance-as-compensation case, RAD makes a good argument that for successful integration of refugees in host communities, long-term development programs should benefit both the refugees and the local populations. This idea is the foundation philosophy of the "Integrated Multisectoral Development Projects" within Burundi, Zaire, Uganda and other countries, thanks to the efforts of the late Tristram Betts and others like him. However, in a world of polity primacy, such highly rational philosophies do not stand a chance of successful realization unless they do not invade the political interests of states and their bureaucracies. Alas, in most cases they do. Development projects are, by their very nature, about allocation of resources. They are about who gets what, when and how. This is what politics is about.

Where RAD-type integrated projects were initiated, they often did not survive. Pitterman (1993, 21) has documented some of the failures:

> Integrated projects in two areas of Uganda were abortive because of "policy changes by the government that, for a variety of political and other reasons, declared against development projects in those regions." ... In 1971, Project BDI-7 failed in Burundi partly as a result of project mismanagement and ill-defined objectives and partly because of the political upheavals there in 1971.

Since going into the details of the failure of each individual RAD-type project is beyond the scope of this paper, we will simply attempt to sketch the contours of the intra and interstate political forces that kill such integrated projects. Very often, the donor states which fund those projects want to see an administration parallel to the local one stationed at the project site, in order to manage the project. Staff for such an administration is preferably to be recruited from the donor state, or at the very least it has to be another agency approved by the donor state. This conditionality may at times stem from a genuine concern to properly account for the taxpayer's money, but it may also be motivated by the donor state's concerns in its human resource development agenda: unemployment reduction, internships for area studies specialists, increasing the salaries and benefits for some members of the work force through expatriation, etc. Quite often, a significant amount of the development assistance is assigned to administrative and logistical overheads.

In the recipient state, the bureaucracies find this approach unacceptable because they feel ousted by the parallel administration, in terms of both jurisdiction and resource allocation. Where the local bureaucracies do not manage to reject the arrangement outright, they accept it very reluctantly, but only when they can at least secure the status of "local counterpart" participation. Most integrated projects are run through the latter kind of arrangement. As a result, struggle often ensues between those two power poles. In some cases the two sides strike some "modus vivendi" which may sometimes crystallize into a mutual "modus" to misappropriate project funds. The latter scenario dictates an opaque "modus operandi" which distances recipients' participation in the project. Either this, or the extreme case of local and foreign managers failing to reach a "modus vivendi," end up killing the project.

This may explain Gorman's observation (1993, 147) that "as a matter of policy, many governments have been reluctant to implement the logic of RAD ..." Those governments of poor countries which accept RAD do so only if implementation does not oust their sovereignty. When sovereignty is not touched, RAD is welcome because after all it helps the "governments to re-establish their legitimacy as the focal point of development planning ..." (Callamard 1993, 142).

The irony about RAD is that it is most vulnerable where its argument is the strongest: integrated development for both refugees and local communities. At the centre of this vulnerability lies the politics of project implementation among competing operational agencies. The host state feels its sovereign jurisdictional status ordains it to be the sole operational agency despite its proven poor record in its development mission; the donor state feels it has the right to place its money under

[I]t should be noted that long-term development assistance constitutes often a disproportionate response to the burden imposed by refugee influxes, irrespective of donor preferences, which do not, in themselves, always stem from good intentions.

the management of its own chosen agents, at the very least in a joint administration with the host state. NGOs, local authorities and targeted communities also vie for control of the projects.

Answering who the appropriate operational agent should be is not easy. Donor states may have suspect motives for sending their own people to the projects. Most host countries have a poor record of development management. Such record does not justify those states' self-imposition on new development initiatives when they are already presiding over many moribund projects. NGOs, recently rediscovered as the missing link in the development mission, have their problems too: narrow mandates that fall short of the vision of an "integrated" approach to development; dubious images and goals for some; the professional quality of their staffers, etc. The remaining credible actors are the local communities themselves, which unfortunately nobody seems ready to empower.

What the foregoing seems to suggest is that even RAD is at the mercy of polity primacy.

Repatriation and Development: What Kind of Development?

The RAD approach has also been prescribed for repatriation. According to Gorman (1993, 154):

> [t]he principles that apply to refugee aid in developing countries equally apply in the case where the country of origin receives repatriated refugees back from asylum. Among these principles is the notion that assistance should be targeted to rehabilitation of regions to which refugees and displaced persons return, rather than providing assistance solely to repatriating refugees or internally displaced populations as separate and distinct groups.

As Gorman explains, the argument in support of returnee aid and development is the same as RAD's:

> Returnees can place just as significant a burden on the economic and social infrastructures of their countries of origin when they return, as they do on their countries of asylum, when they initially flee. Massive poverty and overburdened infrastructures are impediments to successful repatriation and integration of returnees, just as they are to the provision of assistance in refugee affected regions of asylum countries. Moreover, for the local populations that continue to occupy refugee or returnee affected areas, any large or sudden influx of people, whether strangers from across the border or the familiar faces of returning kinsfolk or former neighbours, can be disruptive. (*ibid.*, 5–6)

As a twin to RAD, returnee aid and development is destined to experience the same implementational problems with regard to the question of appropriate operational agencies of development projects and the kind of development envisaged in the areas where returnees settle. In connection with the appropriate development strategy, UNRISD (1993, 25) has suggested an approach that achieves a better balance between humanitarian and development assistance:

> It is important to achieve a better balance between short-term humanitarian assistance and development aid by channelling more resources toward small-scale community-based projects and quick impact assistance designed to rehabilitate agricultural production and essential social services. Long term development assistance should focus less on large-scale capital intensive project and more on human resource development, capacity building within the public administration, infrastructural repair and safety nets for vulnerable groups.

Like RAD, returnee aid and development thinking recognizes that returnees are not necessarily a burden to the areas they return to. It recognizes that they may actually be an asset for development, hence the need to reintegrate them "within the authority structure at local government and cooperative levels" (Koehn 1994, 104).

Following the realization that development projects have long suffered from lack of active participation of local communities and their respective institutions, repatriation-related development assistance has lately placed great emphasis on community-centred development strategies, marginalizing the developmental role of the state. Such strategies are intended to counter the flaws inherent to national development approaches which,

> pursue large scale, macro strategies without considering the needs of ordinary people and directing the benefits of development to the poor, produc[ing] a lopsided pattern of growth that fails to deal with the pressing human problems of underdevelopment. (James Midgley, in Callamard, 1993 145).

This is the "Basic Needs Approach" defined as the satisfaction of

> the minimum requirements essential for decent existence, including items of private consumption (food, shelter and clothing) as well as certain socially-provided services (safe drinking water, sanitation, public transport, health and educational facilities. (Callamard 1993, 136–7)

Empowerment of community grassroots for development has been attempted in several areas. In Tigray, the "baito" (local council) system was conceived and employed "from grassroots up ... [as] part of a two-pronged strategy aimed at self-empowered survival" (Hailu et al. 1994, 37). In 1985, the Eritrean Relief Association developed a one-year agricultural rehabilitation program by empowering the communities to increase food production through distribution of seeds, tools and oxen, fertilizers, pesticides, and workshops for production, maintenance and repair of tools (Sorenson 1994, 79).

In Central America, a Special Program for Displaced Persons, Refugees and Returnees (PRODERE) has "instituted a planning network that permits the participation of local groups, such as mayors' offices, community representatives, NGOs, cultural organizations, and professional associations .... Community members are also involved in the execution of projects" (Mihalkanin 1993, 99). The effectiveness of the program is supposed to be

enhanced by visible results of Quick Impact Projects (QIPs). These projects have the aim of:

> anchoring repatriation, as a durable solution by maximizing returnees' chances of significant reintegration into their communities ... [They are expected to bring about] the economic and social reactivation of communities, towns or even entire regions serving as the basis on which national development plans can be built ... in most repatriation operations, returning refugees are provided with a basic package of rehabilitation assistance including foodstuffs (usually for a three to six month period), shelter materials, seeds, other agricultural inputs and cash grants (approximately $ 50 per person). (UNHCR 1992, 2–4).

PRODERE is a multisectoral program involving road construction and improvement, rehabilitation and construction of schools, rehabilitation of health clinics, provision of credit for local production projects, housing schemes, humanitarian legislation, and job creation (Mihalkanin 1993, 99–106).

Despite such innovations in the area of returnee aid and development, achievements toward sustainable development remain very minimal. UNRISD (1993, 13) has made the same observation:

> It has become almost a cliché to assert that relief work needs to be turned into sustainable development initiatives. The issue has been debated for years, but almost nothing has been done.

The problems of realizing post-repatriation sustainable development are, once again, closely connected to the nature of the state and polity primacy. Since returnee aid and development in developing countries is almost entirely provided by rich donor countries, it is prone to the vagaries of the political interests of such donors. UNRISD (1993, 18–20) has aptly articulated this problem:

> The political problem is that long-term development programmes are not only more expensive than humanitarian assistance, but funding for them is even more dependent on the perceived political self-interest of donors ... The UNHCR and other United Nations agencies are required to adopt a non-political stance in their relations with states and yet their funding is so organized (annual discretionary grants, earmarking of funds, etc.) that they can be used as instruments for advancing the national interests of the major donor countries.

This picture becomes even more bleak when one considers the assistance conditionalities of the Bretton Woods institutions which have become the watchdogs of the interests of the donor countries. This will be illustrated by the case of Rwanda, which has recently sought assistance from the major donors in order to meet, among other things, program needs to resettle an estimated 3 million returning refugees and internally displaced persons.

At a Geneva Round Table Conference of January 18–19, 1995, a US $764 million budget was presented to various potential donors for Rwanda's medium-term reconstruction (US $264 million to support the resettlement of refugees and internally displaced persons, and US $500 million to support the socioeconomic rehabilitation effort). Even assuming that this amount will be made available, the government will be bound to spend it in the context of the Bretton Woods institutions' structural adjustment program straitjacket, with all its well known adverse consequences on social and political stability.

The conditions attached to the above recovery program take away the government's latitude to steer the economy in the direction of an inward-looking dynamic. The assistance package prescribes, among other things, "the adoption of a comprehensive and transparent privatization policy; a private sector freed of unnecessary regulations to enable recovery and growth in the productive sectors; and a liberal trade and exchange rate regime" (World Bank Representative, January 1995).

These principles, in depressed third world economies like Rwanda's, have terrible consequences on peasant subsistence economies, small scale manufacturing, and even petty trade, which sustain the very livelihoods of third world populations. Taking Rwandan peasants as an example, an unregulated liberal trade regime means removing restrictions on the importation of food commodities. This is a sure way of killing per capita food production for nutritional and cash needs, thus undermining the basis for development in a predominantly rural subsistence economy. Such an approach dictated from above does not help "repatriation and development."

But even if the development approach were right, for example, targeting support to strengthen the survival strategies of returnees and the stayees alike, the politics on the ground would still determine program success or failure. Factors identified by Mihalkanin (1993) as hampering reconstruction programmes in Central America help to underscore the pivotal role of politics and state. Some of those factors are: distrust between the government and NGOs; distrust among neighbouring countries; distrust between potential donor states and the government; distrust among political parties; distrust of the technical competency of the governments; and occurrence of human rights violations such as disappearances and extrajudicial executions.

The above problems clearly stem from politics, whose dynamism is shaped by the deficient nature of the state. Yet ironically, it is the same state which is in a unique position to provide solutions to those problems. For example, in the Central American case, Mihalkanin (1993, 106) suggests the

The problems of realizing post-repatriation sustainable development are, once again, closely connected to the nature of the state and polity primacy.

following measures to improve QIP implementation: "legal protection; monitoring of uprooted population movements; ensuring safety and security; overseeing project implementation, and developing democratic institutions." It is the view presented here that no actor, other than the state, is equipped to implement these measures.

The particular problems of RAD and those of "repatriation and development" are part of a larger "ensemble": it is the general development problematique, at the heart of which lies the crucial question of what kind of development is suitable for developing countries. This riddle is still engaging the minds of development analysts and no consensual breakthrough seems to be in sight on the horizon. LLambias-Wolff (1995) has identified a new breed of development models which depart from the dominant "market forces" model. These models are summarized as: "grassroots community development; a Green Alternative; community-oriented economics; radical socialist strategies; the Lisbon Group; ecofeminism; and the fundamental human need approach" (ibid., 14–15). What these approaches seem to have in common is a community-centred view of development, which in many ways implies loosening the state's grip on community control. If this is the case, realization of such development alternatives will require fundamental reforms in the state itself.

Where the state does not represent a social contract, this should happen so that community-centred development finds support in an enabling and responsive macro-economic environment which only the state can create. This is important because outside a sound macro-economic context,

> ... parochial community-based strategies which assume that massive problems facing the developing countries can be solved through local efforts alone, are unlikely to bring about real social and economic improvements. (James Midgley, in Callamard 1993, 145)

Conclusion

On the basis of the literature surveyed, there is no proof that there exists a causal link between refugee generation, durable solutions and development, respectively. In the absence of evidence, placing "development" at the centre stage of refugee studies may detract research efforts from the actual centre of gravity of the whole refugee problematique. It is proposed here that an appropriate centre is the state, and that the refugee question is a function and product of state behaviour, as is development itself. To that extent, a product (the refugee phenomenon) cannot be more causally related to another product (development) than it is to the producer of both (the state). The preference for a polity primacy approach to the study of the refugee question is informed by that logic.

It is therefore suggested that refugee studies would do well to redirect some of its research capability to the pathological condition of the state and the means that would make the latter amenable to rehabilitation. Whereas the pathological condition of the state may be more obvious in developing countries, it also afflicts certain rich industrial states whose excessive self-interest often contributes to refugee-generation and undermines the success of durable solutions. ■

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Economic Growth And Sustainable Development: Sustainability or Sustainable Development?

William Deng Deng

Précis

Depuis les trois dernières décades, le débat sur le développement durable s'est caractérisé par une étroite politique de développement et de l'environnement laissant une large marge aux interprétations. Ces interprétations ne correspondent pas souvent à celles de ceux qui utilisent les forces du marché ainsi que les multinationales pour mieux actualiser le développement. Elles sont plutôt issues des théories qui croient en une réconceptualisation fondamentale de l'économie et de l'environnement pour qu'un réel changement se produise. Dans une approche théorique, cet article tente d'analyser la croissance économique et la complexité de la notion du développement durable.

Introduction

The need for a wider vision in the formulation of trade, environment and development policies—based on a clearer understanding of how these three factors are interrelated—has increasingly been recognized, and today's environmental concerns have potential for affecting development policies and global trade flows. Trade itself can have powerful effects on the environment and development.

The goal of this paper is to define the concept of "sustainable development." It is argued that sustainable development in the Third World cannot be carried out within the context of the present international economic order because of its inherent weaknesses on environmental policy.

The first part of this paper addresses the definition of "sustainable development" in conjunction with ecology. The second part concerns with its implication on the developmental process in the developing countries. It is concluded that the present international economic order cannot promote sustainable development because environmental issues are not part of its agenda. This means that Third World governments will not be able to bring environmental policies to bear on the multinational corporations within their territories.

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The Concept of Sustainable Development

The concept of "sustainable development" has deep roots in twentieth century theories of renewable resource management. This was later advanced as a more fully integrated approach to conservation and development in what became known as the World Conservation Strategy (IUCN 1980). Sustainable development has only recently been popularized by *Our Common Future*, the 1987 report of the World Commission on the Environment and Development, also known as the Brundtland Commission.

The Brundtland Commission defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, 43). This innocuous skeletal definition gave something to everyone, including academics, governments, and non-government organizations, which have been striving ever since to flesh it out. As global ecological trends worsen, any concept that implies we can "eat our developmental cake and have our environment too" naturally inspires enthusiasm on all sides of the debate.

General concurrence on the need for sustainable development obscures equally widespread disagreement over the practical meaning of the concept. Environmentalists of all stripes and groups on the political left emphasize the "sustainable" part. They see a need to put the Earth first, limit material growth, return to community values and devise ways to share the world's wealth more equitably. Economic planners, the political centre and all those to the right, lean more to the "development" component. From their perspective, there are no limits, growth comes first, the capitalist system works, and the global expansion of market economies will create the wealth needed for world ecological and social security.

While proponents of sustainable development occupy the entire political spectrum, the debate is becoming polarized around two distinctive features, each with its own normative assumptions and distinctive vision of humankind's role in the scheme of things. For example, Milbrath (1989) refers to the two as the "dominant social paradigm" and "environmental paradigm." Taylor (1991) calls them the "expansionist worldview" and the "ecological worldview."

The Brundtland Commission was curiously ambiguous in elaborating its definition of sustainable development. *Our Common Future* defines "needs" as the "essential needs of the world's poor, to which over-riding priority should be given." It also acknowledges the "limitations imposed by the state of technology and social organization on the environment's ability to meet those needs" (WCED 1987, 43). To those concerned about ecology and social equity, such words seemed to be a plea for political recognition of global economic injustice and limits to material growth.

But there is another side to *Our Common Future* that guaranteed its message would be as enthusiastically

received in corporate boardrooms around the world. The report reassuringly asserts that "sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the orientation of technological development, and institutional change are made consistent with future as well as present needs" (WCED 1987, 9). Achieving sustainable development is said to depend on broader participation in decision-making; new forms of multilateral cooperation; the extension and sharing of new technologies; international investment; an expanded role for transnational corporations; the removal of "artificial" barriers to commerce; and expanded global trade.

In effect, the Brundtland Commission equated sustainable development with "more rapid economic growth in both industrial and developing countries" on the grounds that "economic growth and diversification will help developing countries mitigate the strains on the rural environment" (WCED 1987, 89). Consistent with this interpretation, the Commission observed that "a five to tenfold increase in world industrial output can be anticipated by the time world population stabilizes some time in the next century" (WCED 1987, 213).[1] In recognition of the additional stress this implies for the environment, the Commission cast sustainable development in terms of more material and energy efficient resource use, new ecologically benign technologies, and "a production system that respects the obligation to preserve the ecological base for development" (WCED 1987, 65). However, there is no analysis of whether the anticipated growth would be biophysically sustainable under any conceivable production system.

Government response to the Brundtland Commission in the industrial democracies is summed up by the Canadian "National Task Force on Environment and Economy" (CCREM 1987). In taking its cue from the Brundtland Commission, the task force defined sustainable development as "development which ensures that the utilization of resources and the environment today does not damage prospects for their use by future generations." Ignoring the obvious difficulty posed by the consumption of non-renewable resources in any generation, the report goes on to suggest that "[a]t the core of the concept ... is the requirement that current practices should not diminish the possibility of maintaining or improving living standards in future." Perhaps most revealing is the assertion that:

> [s]ustainable economic development does not require the preservation of the current stock of natural resources or any particular mix of human, physical and natural assets. Nor does it put artificial limits on economic growth provided such is both economically and environmentally sustainable. (CCREM 1987, 3)

Certainly no one can accuse this task force of confusing sustainable development with any "fixed state of harmony." Both the Brundtland Commission and the Canadian Task Force reflect the prevailing interpretation of sustainable development in the political mainstream and on the right in the industrialized countries. Governments and industry increasingly acknowledge that present development practices do produce significant environmental and socioeconomic stress. However, without examining the systemic roots of either poverty or ecological decay, both reports assert that the solutions to these crises reside within the same socioeconomic structures from which they have sprung.

Even the protagonists of *Our Common Future* who recognize its radical implications acknowledge that its authors "have turned out to be their own enemies, they failed to draw out the implications of their own statements" (Brooks 1990, 24). More virulent critics argue that its analysis is superficial or lacking. Because it fails to identify and analyze the causes of global poverty and ecological decline, it advances solutions that are the direct opposite of those required. By not challenging the assumptions driving an increasingly market-driven global economy; by ignoring the connection between global ecological concerns and profligate lifestyles of industrialized countries; by putting their faith in the "in-discriminate growth and trickle down approach to Third World development;" the Commissioners produced a thoroughly conventional statement. The Brundtland Report "constitutes an enthusiastic and unquestioning re-affirmation of the system, life-styles, and values that are causing the problems under discussion" (Trainer 1990, 72).

Most important, *Our Common Future* advances economic growth as the principal vehicle for sustainability in the apparent trickle-down belief that eventually the poor will benefit and sufficient economic surpluses will be available for ecosystem maintenance. Tenuous assumptions aside, many analysts find this continuing reliance on growth to be the most troubling aspect of the mainstream prescription for sustainable development. The World Commission "reveals no acquaintance with any of the executive literature now supporting {challenges} to the growth conception of development" (Trainer 1990, 79). Indeed, the Commission's work was little influenced by science of any kind, its mandate ensured that the Commission "was most concerned with values" (Timberlake 1989, 117). As a result, for all its pervasive influence, *Our Common Future* is a political document, not a scientific one. "The claim that we can have economic growth without damaging the environment is a sheer statement of opinion" (Timberlake 1989, 122).

Maybe the fixation on growth per se should not come as surprise. Our "largely uncritical worship of ... economic growth is as central to (capitalism's) nature as the similar veneration of ... divine kingship or doctrinal orthodoxy has been for other regimes" (Heilbroner 1989, 102).

Nevertheless, given the "sustainability" theme, it is remarkable that neither the Brundtland Commission nor the Canadian Task Force distinguishes between growth which "should refer to quantitative expan-

sion in the scale ... of the economic system," and development which "should refer to the qualitative change in a physically non-growing economic system in dynamic equilibrium with the environment" (Daly and Cobb 1989, 71). By these definitions, sustainable growth in a finite environment is a logical impossibility but sustainable development contains no self-contradiction. This simple distinction between mere growth and true development is essential to rational debate on developing sustainability, but has scarcely entered the discussion.

There is a historical basis for this reticence. Economic growth has long been the principal instrument of social policy in capitalist societies. "If we can have perpetual growth, those who are relatively well off won't have to share their wealth with others" (Miernyk 1982, 4). Thus, "we refuse to fight poverty by redistribution and sharing, ... leaving 'economic' growth as the only acceptable cure" (Daly 1990, 118). The promise of an ever-increasing economic pie holds out hope that even the poor will eventually get an adequate share. This expectation reduces popular pressure for policies aimed at more equitable distribution of national incomes.

While morally bankrupt, this "solution" to social inequity posed no physical threat to society as long as the economy was small relative to the scale of the ecosphere. This is no longer the case, and in advancing growth as a solution once again, mainstream authors make no attempt to weigh the anticipated future scale of the global economy against the finite productive capacity of the ecosphere.

In fairness, it should be noted that conventional economic analysis cannot even pose the proper question. "Macro-economic theory has nothing to say about the appropriate scale of the economic" (Daly 1989, 1990). The idea of continuous growth is so firmly entrenched that the issue of scale has apparently not been considered relevant. By contrast, from the ecological perspective, it is very much an open question whether it is possible to expand industrial production by a factor of five to tenfold while simultaneously guaranteeing "the sustainability of ecosystems upon which the global economy depends" (WCED 1987, 67).

Ecological Deterioration

> Sustainable development, as a goal, rejects policies and practices that support corrupt living standards by depleting the productive base, including natural resources, and which leave future generations with poorer prospects and greater risks than our own. (Repetto 1986, 15)

There can be little doubt that present reactive responses to global ecological deterioration compromise our own potential and "shift the burden of environmental risks to future generations" (Pearce et al. 1989, 19). Any proactive prescription for sustainable development must acknowledge the primary role of bio-resources in human survival and the inequity inherent in current practice. Maintenance of the functional integrity of the ecosphere is a necessary prerequisite to extending the time horizon for economic policy and to elevating intra-generational equity to a place of prominence in developmental decision-making.

This reasoning would suggest that as an ecological bottom line for sustainable development, humankind must learn to live on the "interest" generated by the remaining stocks of living "natural capital." Any human activity dependent on the consumptive use of ecological resources cannot be sustained indefinitely because it not only consumes annual production, but also cuts into capital stocks (Rees 1990).

The recognition that bio-resources must be treated as unique forms of productive capital is the major contribution of the emerging hybrid discipline of "ecological economics" (Costanza 1991). Its implications for development are currently being explored through various interpretations of a "constant capital stocks" criterion for sustainability (Costanza 1991; Daly 1990, 1989; Pearce and Turner 1990; Pearce et al. 1989, 1990). In essence, adherence to this criterion would require that each generation leave the next generation an undiminished stock of productive assets. There are two possible interpretations of the constant capital stock idea (adapted from Pearce et al. 1989). Both of them assume that existing stocks are adequate. If populations are growing or material standards increasing, the stock of productive capital would have to be increased to satisfy the demand. The first is that each generation should inherit an aggregate stock of manufactured and natural assets, no less than the stock inherited by the previous generations. This corresponds to Daly's (1989) conditions for "weak sustainability." The second interpretation is that each generation should inherit only a stock of natural assets, which are no less than the stock of such assets inherited by the previous generation. This corresponds to a version of "strong sustainability" as defined by Daly (1989). The second interpretation better reflects the ecological principles advanced above. In particular, maintaining natural capital stocks recognizes the multi-functionality of biological resources everywhere, "including their role as life support systems" (Pearce et al. 1990, 7). In this respect, "strong sustainability" recognizes that manufactured and natural capital "are really not substitutes but complements in most production functions" (Daly 1989, 22).

Agriculture provides "a context in which life (can) function in a meaningful manner" (Berry 1988, 123) and profoundly affects how its members act in the world. The internal contradictions of our prevailing economic story can be traced to the 19th century founders of the neoclassical school. Impressed with the successes of Newtonian physics, they set about to create economics as a sister science, "the mechanics of utility and self-interest" (Jevons 1879, cited in Gergescu-Roegen 1975). The shift to a mechanical rather than biological metaphor for the economy was a critical one. While economics is (or should be) a branch of human ecology, the central assumptions of modern

economic theory are uninformed by ecological principles. The resultant theory produces analytical models based on reductionist and deterministic assumptions about resources, people, firms and technology that bear little relationship to their counterparts in the real world (Christensen 1991). Three closely related assumptions of the mechanical model are sufficient to illustrate this historic divergence. First, industrial society perceives the human enterprise as dominant over and essentially independent of nature. This economy-environment separation is actually a social construct reflecting the Cartesian subject-object dualism at the heart of western scientific materialism. Accordingly, the very word "environment" becomes its own pejorative, diffidently declaring itself to be peripheral, unimportant, and not to be taken seriously (Rowe 1989).

Consistent with this perspective, prevailing economic theory lacks any material specification of energy and material inputs to economic production and ignores completely the backward linkages of resources to ecosystem structure or function. The economy may use "the environment" as a source of resources and as a sink for wastes (Herfindahl and Kneese 1974), but beyond that, it is treated as a mere static backdrop to human affairs.

Secondly, economists have adopted the circular flow of exchange values as the starting point for analysis rather than the entropy characterizing energy and matter (Daly 1989,1). The major consequence is an entrenched view of economic process as "a self-sustaining circular flow between production and consumption" By this perception, "everything ... turns out to be just a pendulum movement... If events alter the supply and demand propensities, the economic world returns to its previous position as soon as these events fade out." Most importantly, "[c]omplete reversibility is the general rule, just as in mechanics" (Georgescu-Roegen 1975, 348). Indeed, by inventing a perpetual motion machine, economics seems to have done mechanics one better.

Thirdly, we have come to believe that resources are more the product of human ingenuity than they are of nature (Hall 1990). According to neoclassical theory, rising market prices for scarce materials encourage conservation on the one hand and stimulate technological substitution on the other. It has become part of the conventional wisdom of many economists and planners that technological progress and substitution are more than sufficient to overcome emerging resource scarcities (Victor 1991, 200).

While standard neoclassical texts conclude almost conservatively that "exhaustible resources do not pose a fundamental problem" (Dasgupta and Heal, 1979:205), the most ardent disciples of the sustainability principle are moved to near-extremes. Gilder argues that we "must overcome the materialistic fantasy; the illusion that resources ... are essentially things, which can run out, rather than products of human will and imagination in which freedoms are inexhaustible" (Gilder 1981, 232, cited in Daly and Cobb 1989, 109). Similarly, Simon (1982, 207) remarks: "You see, in the end copper and oil come out of our minds. That is really where they are." So pervasive is this doctrine that they use it to argue for further population growth on the grounds that people "create the wealth they need to maintain themselves and more, thanks to free markets and technological progress" (Block 1991, 304).

Economic theory necessarily contains a model of nature. The key assumptions of the contemporary model range from mechanical dualism on one extreme to metaphysical idealism on the other. Together they describe an economic system which, being functionally independent of physical reality has unlimited potential to expand. Add open access to resource systems (the so-called "common property" problem) and future discounting (particularly in the face of uncertainty) and we have a system in which there are often "no economic forces whatever acting in favour of sustainable development" (Clark 1991).

Determining what mix and just how much of the ecosystems capital to preserve remains a major problem. Neoclassical theory suggests that "development" should proceed only to the point at which the marginal costs of natural capital depletion (diminished ecological services) begin to exceed the marginal benefits produced (additional jobs and income). However, this assumes that we can identify, quantify and price all relevant life support functions and that any change in the properties of ecosystems under stress will be smoothly continuous (i.e., predictable) and reversible. Unfortunately, neither assumption holds.

On the contrary, the reliability of the ecosphere's life support function positively correlates with high levels of species diversity and structural complexity. Maintaining biological diversity is therefore a primary goal of natural capital conservation. Diverse natural systems and dependent economic systems display greater resilience (resistance to shock or stress) than species-improvised managed systems such as agricultural monocultures. More important still, robust ecosystems are essential for autopoiesis. Sustainable development is impossible in a thermodynamically far-from equilibrium world unless the ecosystems upon which humans depend are capable of continuous self-organization and production.

However, they also note that further reductions of natural capital may impose significant risks on society, "even in countries where it might appear we can afford to (reduce stocks)." These risks reside in our imperfect knowledge of ecological functions, in the fact that loss of such functions may be irreversible and in our inability to substitute for those functions once lost. In short, because of the unique essential services provided by ecological capital, "conserving what there is could be a sound risk averse strategy" (Pearce et al. 1990, 7).

Ironically, these conclusions, based on a modification and extension of the

mainstream neoclassical paradigm, actually provide greater support to the once radical ecological world-view. Are we now ready to begin seriously to contemplate the adjustments necessary to industrial economies like those of the US and Canada. Should we come to accept that a tolerable future requires diversion of much current consumption to maintenance or rehabilitation of the planet's declining natural assets?

Links between Poverty and Environmental Degradation in the Third World

The relationship between poverty and the environment on a different continent, and in the Third World in particular, is an inter-linkage that is important for the understanding of environmental issues. This is because poverty and the environment are linked in a close and complex way.

There is a need to understand the impact of colonialism on the natural environment in order to appreciate the causes of this environmental crisis in the Third World. In a wider geographical context, the creation of degraded environments cannot be seen as simply an unfortunate by-product of the development process. It is an inherent part of that process itself and the way in which development projects are planned and executed. In this context, environmental degradation is associated with economic growth, industrial pollution, pesticides and the physical and ecological impacts of water control. In that respect, there was a total disregard of the ecosystems.

Our understanding of ecosystems is still uncertain. They are characterized by thresholds, critical points beyond which all relationships change dramatically, triggered by events such as the extinction of a critical species in a food chain or an overloading of pollutants beyond the point of assimilative capacity. They are often unforgiving of errors in modelling and forecast. Many times, the resulting environmental change cannot be easily reversed, if at all. Conserving irreversible natural resources is the most important programme for the Third World. Pearce et al. (1990), observed that conserving natural capital may seem particularly relevant to developing countries in which socioeconomic stability is immediately and directly threatened by deforestation, desertification, soil erosion, falling water tables, etc. In these circumstances there can be little doubt that existing stocks of natural capital are well below bio-economic optima and must actually be enhanced for survival let alone sustainability.

Equity is another factor which the Third World should always put into consideration. Equity relates to the distribution both within and between generations of physical and natural capital, as well as knowledge and technology. In the transition to sustainability, additional obligations should be assumed by those, primarily in the developed World, who have used resources in the past in a manner which limits the options of present generations, particularly in developing countries. Trade liberalization can contribute to greater equity through the dismantling of trade barriers that harm developing countries.

While domestic equity is a fundamental goal of some governments, policies to achieve it are hard to implement. In seeking to promote greater equity it is impossible to strive for growth to generate additional resources for distribution, or to seek better distribution of existing resources, but the two are not mutually exclusive.

Inequity and poverty contribute significantly to environmental degradation and political instability, particularly in the Third World. When basic needs are not met, the poor have no choice but to live off whatever environmental resources are available. At the same time, past use of natural resources already limits the choices available to present generations, particularly in developing countries. Faced with these limitations and having limited financial, administrative and technical capacity to deal with problems of environment and development, many Third World countries will require enormous transfers of technology and financial resources. Failing such assistance, they may be unable to adequately protect their environmental resources, including many which are of global significance.

The substantial investment needed for sustainable development requires new and additional external resources in Third World countries far in excess of conceivable increases in traditional foreign aid programmes. Increased trade and investment flows, the result of more open borders in both developed and developing countries, together with appropriate domestic policies in developing countries, are the best alternative for increasing incomes in poorer countries by the magnitudes necessary to achieve sustainable development. Other measures to achieve equity and poverty alleviation include strengthening the capacity of developing countries to develop indigenous technologies and to manage environmental resources, and creating mechanisms for the accelerated transfer of existing technologies. Continued progress in resolving the debt crisis is also important, as is an increase in transfers of financial resources. At the same time, developing countries must adopt policies which ensure that the additional resources are used in ways that are efficient, alleviate poverty and foster sustainable practices.

Conclusion

Central to the sustainable development debate are the twin policies of development and caring for the environment concurrently. The concept is a controversial subject.

At the international level, it should be realized that the present crisis is being generated by the unsustainable economic model in the North, inappropriate development patterns in the South, and an inequitable global economic system that links the Northern and Southern models. There must be a change of development patterns in the South—towards models that are environmentally sound, make use of appropriate technology, and satisfy basic needs of all.

But it is even more important and difficult to alter the parent economic model in the North, where 20 percent of the world population consumes 80 percent of world resources. Changes in the world economic order are necessary as mechanisms to bring about greater equity in the Third World. These include better terms of trade for the developing countries. For instance, if the volume of natural raw material production is to be reduced (to slow resource depletion), the North should pay at prices comparable to home market rates for Third World commodities in order to avoid the poor having to bear the costs of adjustment. There must be a democratisation of the Bretton Woods institutions (World Bank, IMF, GATT) and a change in their operational principles from narrow commercial interests to human and sustainable development. The transnational corporations have to be made more accountable through international monitoring and regulatory mechanisms.

Many of environmentally and socially appropriate technologies exist in the South, in the areas of agriculture, water retention and harvesting, industry energy, shelter, medicine and health care, food preparation and nutrition. These technologies and practices continue to be destroyed by "modernization" and commercialisation. They should be recognized, rediscovered, restored and regenerated as part of the process of sustainable development. It is a fallacy to think that all environmentally sound technologies must originate in commercial sectors of the North. If we care about the future generations and the future of the planet, sustainable development is the only way out. ■

Notes

1. This may seem like an extraordinary rate of economic expansion, but it implies an average annual growth rate in the vicinity of only 3.5–4.5 percent over the next fifty years. Growth of this kind has already produced a near fivefold increase in world economic output since the Second World War.

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Implications de la crise de l'environnement et du développement sur la santé et le mouvement migratoire en Afrique

Shally B. Gachuruzi

Abstract

It is well known that environmental and development crises have devastating effects. This article seeks to demonstrate that the implications of those crises have repercussions on health and population migration in Africa. It is concluded that development inappropriate to the environmental conditions results in a series of debilitating conditions for the health of the population. In turn these conditions can trigger further crisis in addition to whatever natural calamities and population increases occurring.

Introduction

Le Sommet de la planète, tenu à Rio en 1992 s'est caractérisé par plusieurs lignes d'orientation. Il s'agit notamment de l'alerte sur les dangers de l'amincissement de la couche d'ozone, de la ménace omniprésente des déchets toxiques, de la pollution, des conséquences de la déforestation, de l'urgent besoin de la protection des écosystèmes rares et fragiles ainsi que de l'insistance sur la relation sinusoïdale entre l'environnement et le développement. Depuis lors, chercheurs, technocrates, politiciens, organismes gouvernementaux et non gouvernementaux, tentent de trouver des voies et moyens susceptibles d'apporter des solutions à ce problème. Le travail abattu jusqu'ici est très remarquable et l'abondance des publications sur la question témoigne éloquemment de l'intérêt qu'on lui porte. Et pourtant, le problème persiste, le monde s'inquiète et s'intérroge. Cet article s'inscrit dans cette perspective de questionnement et vise à démontrer que la crise de l'environnement et du développement a des répercussions sur la santé et le mouvement migratoire des populations africaines.

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La crise de l'environnement en Afrique

Selon les études faites par le Groupe d'Etudes et de Recherches sur les Politiques Environnementales (GERPE) la préoccupation de "l'environnement en l'Afrique n'est plus un problème importé. La prise de conscience est réelle" (GERPE 1990, 2). Dans la même veine Simard et Djénéba Diarra (1993, 22) soulignent que

> les pays africains, collectivement, ne sont pas demeurés en marge du débat sur l'environnement. Depuis les années 60, de nombreuses conférences ont permis une concertation des pays du continent africain sur les questions liées à l'environnement. De manière générale, les préoccupations africaines ont suivi l'évolution du débat à l'échelle mondiale. Dans les années 60–70, on parlait surtout de la conservation de la nature. La décennie suivante a vue se généraliser la réflexion sur l'environnement. On passe alors de la notion de la conservation à une analyse plus globalisante qui déborde d'une conception essentiellement physique de l'environnement pour inclure les aspects économiques et sociaux de la crise environnementale.

Ces deux études laissent penser cependant que l'intérêt pour la protection environnementale en Afrique est récent, parce que ne remontant que de la période post-coloniale. Un survol rapide des principaux problèmes environnementaux peut donc laisser croire que les africains ignoraient les règles élémentaires de la protection de leur environnement et qu'ils devaient tout apprendre des experts dans ce domaine. Et pourtant, l'histoire a démontré qu'à l'instar de peuple d'autres latitudes planétaires, les indigènes africains ont toujours vécu en harmonie avec leur milieu naturel.

Pour les pygmées (peuple primitif) par exemple qui sont restés en marge de la civilisation, la faune et la flore sont sacrées. Le déboisement est quasi interdit et la chasse se fait par nécessité. "The forest is a father and mother to us, (...), like a father or mother, it gives us everything we need, food, clothing, shelter, warmth and affection. Normally everything goes well, because the forest is good with its children, but when things go wrong, there must be a reason" (Thurnbull 1962, 260).

Ce témoignage illustre comment les pygmées et la nature sont dans une relation de dominés et dominants, dont les dominés sont justement les humains. Cette vision primitive et contraire au positivisme scientifique et à la tradition Judéo-Chrétienne qui veulent que les êtres humains dominent la nature et la transforme à leur guise, commence cependant à influencer la pensée écologique des dernières décennies.

Pour ce qui concerne la flore par exemple, l'Afrique a une tradition intéressante sur le culte des forêts sacrées. C'est dans ces dernières où on pratiquait l'initiation aux jeunes garçons, comme la circoncision, les devoirs et les obligations du jeune homme en voie de devenir adulte. C'est dans ces forêts sacrées aussi qu'on implorait les dieux pour apporter la pluie en cas de sécheresse prolongée et une bonne récolte en cas des disettes. C'est enfin dans ces forêts sacrées qu'on jetait les placentas après les accouchements. Il était donc strictement interdit d'exploiter ces forêts sous peine des sanctions sévères et quiconque grugait ces réserves fami-

liales sacrées s'exposait aux grands ennuis. Comme on peut le constater, le bien-être et la santé étaient intimement liés à la protection de l'environnement.

Dans le même ordre d'idée, la commission sur les pays en développement et le changement de l'environnement planétaire (CRDI 1992, 47), affirme que les habitants des forêts détruisent rarement leur environnement. C'est l'abattage ou le déchiffrage à caractère commercial qui dégrade les ressources forestières et appauvrit les collectivités qui en vivent. Ils sont ainsi les victimes et non les auteurs d'une crise environnementale en Afrique qui ne s'est manifestée qu'avec la colonisation et qui a coïncidée avec l'ère de l'industrialisation.

Le débat sur cette crise place le Nord comme le champion pollueur, producteur des déchets toxiques et nucléaires et responsable de la diminution de la couche d'ozone. Le Sud pour sa part serait coupable de la déforestation qui cause des perturbations climatiques en entraînant une baisse pluviométrique, de la sécheresse, de l'accélération de la désertification et du réchauffement de la planète.

Nombreux sont cependant des analystes occidentaux qui font de la surpopulation le cheval de bataille de la crise actuelle en Afrique. Le Sud serait ainsi responsable de l'explosion démographique qui fait que les ressources deviennent insuffisantes obligeant la population à s'attaquer aux réserves naturelles. Cette pauvreté les rendrait incapables de mettre en place des politiques visant la sauvegarde de l'environnement.

En Ouganda par exemple, le revenu par habitant a baissé de 28% entre 1980 et 1990, au Niger de 24% et en Zambie de 20% pour la même période (CRDI 1992, 28). Il nous semble donc utopique de croire que ces gens qui sont aux prises avec la famine puissent inclure la protection de l'environnement dans leurs priorités.

Les agences internationales de développement abondent souvent dans le même sens en indiquant que,

> la plupart des pays en développement n'ont pas les moyens d'adopter des politiques réactives ou d'assumer les coûts de mesures rigoureuses de lutte contre la pollution. Il en est donc résulté une détérioration massive de leur environnement et un épuisement à l'échelle mondiale des ressources renouvellables qui sont à la base de tout développement (ACDI 1987, 5).

La situation est d'autant plus dramatique que certains pays de l'Afrique de l'Ouest ont déjà perdu plus de 80% de leur forêt dense en 50 ans. Cette situation va aller de mal en pire au Sahel où la consommation en bois-énergie va être multipliée par trois alors que la superficie forestière va être réduite de 50% d'ici l'an 2030 (Catinot 1984, 11).

D'autres par contre, telle que la commission sur les pays en développement et les changements de l'environnement planétaire, pensent que les arguments qui lient la dégradation du milieu à l'abondance de populations pauvres ont tendance à oublier que c'est dans bien de cas l'aliénation du sol et de ses ressources, souvent au profit des intérêts commerciaux, qui explique la détérioration de l'environnement des collectivités locales.

On ne devrait pas non plus ignorer que pour la population locale, la forte natalité se justifie car elle a une portée sociale et économique. L'explication qui tente de justifier la pauvreté des pays du Tiers Monde par l'explosion démographique pèche donc par réductionisme. Voilà pourquoi, il est important de considérer les liens entre croissance démographique et environnement dans un contexte social plus large car même si les familles nombreuses croissent les contraintes économiques qui s'exercent sur les pauvres, on doit dire que les familles pauvres préfèrent souvent avoir un plus grand nombre d'enfants pour leur sécurité économique. Ainsi, réduire la pauvreté, ce serait aussi diminuer la taille des familles. Les efforts de limitation des naissances sans solution du problème de pauvreté risquent de demeurer infructueux (CRDI 1992, 49).

Comme on peut le constater, on ne peut que dresser un tableau pessimiste pour l'environnement en Afrique. Il convient de souligner que si des actions immédiates ne sont pas amorcées, les efforts de redressement de la situation deviendront de plus en plus onéreux et le nombre des réfugiés de l'environnement et du développement ne fera que s'amplifier. Comment y parvenir quand on sait que la dégradation des ressources renouvelables s'inscrit dans une conception de développement intrinsèquement liée au paradigme occidental de la modernité qui signifie, productivité, efficacité, maximisation des profits, etc?

La crise du développement

Selon la Commission Brundtland, "le développement durable est un développement qui répond aux besoins du présent sans compromettre la capacité des générations futures de répondre aux leurs" (CMED 1989, 52). Deux notions sont liées à ce type de développement. Celle des besoins "et plus particulièrement, des besoins des plus démunis, à qui il convient d'accorder la plus grande priorité et celle "de limitation que l'état de nos techniques et de notre organisation sociale imposent sur la capacité de l'environnement à répondre aux besoins actuels et à venir" (CMED 1989, 52).

Comme écrit J. Galtung (1977) "la notion des besoins fondamentaux est loin d'être une idée nouvelle. On la retrouve chez Marx, chez Gandhi, au coeur de l'idéologie de la FAO et dans la tradition catholique avec le notre Père et son "donne-nous aujourd'hui notre pain de ce jour". C'est face à la pérsistance et à l'aggravation des problèmes, de la misère et de la faim que Galtung repense l'aide internationale accordée au Tiers Monde en visant tout d'abord les besoins fondamentaux. Il définit ainsi le développement comme étant le développement des êtres humains parce qu'ils sont au centre des priorités de développement.

Derrière ce type de développement dit humain et cette capacité de faire le choix des besoins à satisfaire, on retrace l'importance de l'autonomie et de la pratique de l'auto-développement dite aussi "développement endogène". Ce développement réflète un

nouveau courant de pensée des organismes internationaux et plus particulièrement de l'UNESCO qui est à la recherche d'un autre développement. L'endogénéité de ce type de développement se caractérise par une conception ouverte et pluraliste du développement qui respecte la spécificité de chacun. On demeure ainsi ouvert et confiant en l'être humain et dans ses technologies et stratégies nouvelles qu'il élaborera pour arriver à un développement qui lui est approprié. Nous retrouvons dans la pensée de l'UNESCO, les notions de flexibilité, d'ouverture et de confiance en l'homme et un développement à multiples facettes de Galtung.

Ce modèle de développement endogène ajoute l'auteur, n'est cependant réalisable qu'avec le soutient d'une part, d'un nouvel ordre économique international qui refuse les modèles de développement imposés, extravertis, inadaptés et destructeurs de l'identité culturelle des peuples et d'autre part, d'une politique d'auto-valorisation. En effet, il est important que les sociétés croient en leur valeurs intrinsèques, en leur capacité non seulement de survie et de stabilité, mais aussi en leur propre créativité en vue d'un progrès qui n'est pas seulement matériel et économique, mais globale, authentique, qualitatif et humain.

On sait cependant aujourd'hui que pour la plupart de pays, le bilan de ces tentatives est nul voire désastreux. Les signes les plus visibles de l'échec sont d'une part, l'endettement public qui est de plus en plus contraignant et d'autre part d'une dépendance alimentaire croissante se traduisant par des famines endémiques. Le passé colonial qui a inspiré le modèle de gestion du pouvoir en Afrique a contribué à amplifier la situation. En effet, la période post-colonial a renforcé davantage les structures centralisées justifiant cette position par le souci de revêtir aux jeunes nations des formes unitaires et centralisées. Par conséquent, il était hors de question de cautionner des projets qui tentaient de réduire les différences ethniques, religieuses ou linguistiques.

On comprend alors que la gestion du pouvoir en vue de développement ne pouvait pas profiter à toutes les composantes sociales. En effet, les élites ont vite compris l'intérêt qu'il y avait à maintenir les structures coloniales de la gestion du pouvoir. Celle-ci consistait principalement en la ponction des revenus fiscaux, à l'obligation de la culture de rente au détriment de la culture vivrière ainsi que du monopole de commercialisation par ses offices. Les paysans sont exclus à la participation du pouvoir de décision alors qu'ils sont directement concernés par le processus même du développement.

Cette méconnaissance de la logique paysanne explique en gros leur résistance qui se manifeste par le refus de coopérer et d'exécuter les ordres qui viennent d'en haut. Au contraire, en participant activement au processus de développement, chaque membre fait sa part et contribue ainsi à améliorer son environnement immédiat. En les associant à l'élaboration et à l'exécution de ces programmes, les individus sentent qu'ils oeuvrent réellement pour leur propre bien. Dans un tel contexte, les individus et leur cadre de vie sont dans une sorte de symbiose capable de produire une alchimie envie du développement.

Aujourd'hui, les Africains sont confrontés à un grand défi; celui de rédynamiser les élans de métamorphose sociale. Le problème qui se pose aux peuples Africains est de savoir comment affronteront-ils ce défi et par quel moyen fertiliseront-ils leurs actions pour qu'ils grandissent et portent des fruits. Le développement, l'espoir de vie féconde et d'un avenir présomptueux sont fonction de la manière dont ce défi sera levé.

L'impératif le plus urgent qui s'impose est d'amorcer une lutte contre les différentes formes de pauvreté qui les affaiblissent et les asphyxient. Il va donc sans dire que la recherche de l'équilibre entre l'homme et son milieu naturel est un préalable pour minimiser les implications négatives de la crise de l'environnement sur la santé de la population.

La crise de l'environnement et du développement et ses implications sur la santé de la population

De manière générale, la bonne santé de la population est tributaire à la salubrité de leur environnement immédiat. Selon un spécialiste du développement rural intégré, le risque le plus grave que les familles pauvres courent provient de la pollution de l'eau provoquée non pas par des produits chimiques mais par des matières fécales, non pas par des déchets industriels mais par des déchets humains. C'est pourquoi, ajoute-t-il, le manque d'eau potable et de système d'assainissement sûres est leur problème environnementale le plus aigu, car il les expose aux maladies diarrhéiques, à la bilharziose, à l'ankylostomiase, à la dracunculose, au choléra et à la typhoïde. Les multiples conséquences dues au manque de salubrité sont aggravées par la sous-limentation et la malnutrition qui affectent la santé de la population. Pour cet observateur de la scène africaine, c'est cela la crise silencieuse de l'environnement; celle qui prélève son tribut quotidien sur la vie et la santé de millions de personnes dont la voie mériterait bien d'être entendue dans le débat sur l'environnement. Malheureusement,

> la plus grande de toutes les catastrophes n'est pas transmise sur les écrans de télévision. Il s'agit de la tragédie quotidienne des enfants les plus pauvres du monde qui souffrent de malnutrition et de maladies chroniques. Parce que cela se produit chaque jour, ce n'est pas un événement. Pourtant jamais famine, jamais inondation, jamais guerre n'a tué 250 000 enfants en une semaine (UNICEF 1992).

Si dans quelques pays d'Afrique on ne peut pas se plaindre du côté des protéines végétales en cas de bonnes récoltes, tel n'est pas le cas pour les protéines animales et les produits laitiers. La viande et le poisson se mangent rarement et les vaches ne donnent pas suffisamment du lait. Bien plus, ce n'est pas tout le monde qui a des vaches. Le lait qui pourrait être dispo-

nible est celui des chèvres et des moutons. Or, il n'est pas consommé à cause des tabous qu'entoure ce produit. La production agricole est souvent aussi insuffisante et il n'est pas rare de voir les provisions alimentaires se terminer avant la nouvelle récolte. Comme on le sait, ceci condamne la population à une sous-alimentation qui est déjà doublée de malnutrition.

En se nourrissant rien qu'avec des céréales, comme le sorgho, le mil, riz, maïs et les tubercules, comme le manioc, l'igname, la pomme de terre ainsi que des fruits tel que la banane plantain qui n'apportent presqu'exclusivent que de l'amidon, les gens s'exposent aux maladies carencielles comme le Kuashiorkor que l'on trouve dans plusieurs pays d'Afrique.

Selon Sukhatme (1976, 113–40), les régimes alimentaires actuels, dans les pays en développement, sont très insuffisants. Vingt pour cent au moins y est sous alimenté, une personne sur trois souffre de malnutrition protéique, plus de la moitié est «démunie». Environ 60% des habitants des pays en développement souffrent de la sous-alimentation et de la malnutrition, voire les deux. Ceci signifie que 1 à 1.5 milliards d'hommes périssent de la faim ou de la malnutrition et que, parmi eux, près de 500 millions n'ont même pas à manger.

Soyed Ahmed Marei estime pour sa part que la malnutrition affecte environ 460 millions d'êtres humains dans le Tiers Monde. Elle exerce une influence désastreuse sur la santé, le développement et la capacité qu'ont les gens de s'instruire et de travailler pour simplement survivre.

> Tous les ans, dans le monde en développement, quelques 15 millions d'enfants meurent des suites des infections et de la malnutrition, et donc à un rythme de 40 000 enfants chaque jour. Un demi million de femmes meurent de complications associées à la grossesse. Les nouveaux nés qui survivent doivent résister aux assauts répétés de la maladie. Des millions de personnes souffrent de parasitoses, lésions, cécité et troubles graves de divers ordre (CRDI 1992, 17).

Un récente étude (CRDI 1992) indique qu'au Nigeria par exemple, plus de 14 millions de personnes souffrent de la sous-alimentation chroniques, elles sont 12 millions en Éthiopie et plus de 40% de la population tchadienne. Les effets de mauvais régimes alimentaires sont souvent considérablement accentués par les infections et des contaminations dues au manque des soins et d'hygiène. Beaucoup d'auteurs affirment qu'il y a une relation de cause à effet entre la pauvreté et la désabilité dans les pays du Tiers Monde. Non seulement les victimes sont les pauvres mais aussi la pauvreté elle-même est la cause principale de la désabilité. Selon eux plusieurs personnes dans la plupart des pays du Tiers Monde sont handicapées. Parmi les principales causes, ils citent le manque de moyens pour mettre en place des politiques de la sauvegarde de l'environnement envie de garantir de la nourriture, l'absence d'une politique énergique en matière de santé, les efforts étant concentrés ailleurs. Le problème est beaucoup plus dramatique chez les femmes enceintes. En effet, quand elles ne mangent pas assez, il en résulte une détérioration irréversible de leur santé affectant aussi gravement les foetus qui courent le risque de naître avec un handicap mental ou physique.

Outre l'absence des latrines, le manque critique d'eau potable et les mauvais régimes alimentaires, un autre effet de la crise de l'environnement sur la santé est provoqué par l'absence de réglementation dans l'emplacement des usines tels que les garages, les menuiseries qu'on retrouve au coeur des quartiers résidentiels. Bruits, poussière, huiles et autres matières dangereuses et polluantes font partie du quotidien de la population qui vit dans ces quartiers.

Aussi, dans plusieurs villes africaines, les hommes et les égouts font bon voisinage. Les caniveaux n'ont reçu la visite des pelles qu'à l'époque coloniale. Au sujet des réseaux d'égouts, l'accumulation d'eaux usées sur le sol et dans les rigoles est non seulement incommodant et crée des risques évidents pour la santé, mais elle peut même provoquer des graves épidémies lorsque les collections d'eau sale servent des gîtes aux moustiques". Dans le même ordre d'idée Amadou Ba (1994, 21) indique,

> l'absence de système efficace de canalisation des eaux de surface ou d'enlèvement des ordures ménagères demeurent une des principales caractéristiques de nombre de villes du Tiers Monde. Là, l'approvisionnement en eau potable constitue sans nul doute un des indicateurs les plus révélateurs des inégalités à l'intérieur de l'espace urbain. (...) pour la grande majorité de la population entassée dans les quartiers les plus pauvres de la ville ou les adductions d'eau sont totalement inexistantes, l'approvisionnement en eau potable représente une véritable corvée. En saison d'hivernage, la récupération des eaux de ruissellement à partir des toits en tôles ondulées des maisons représente un type d'approvisionnement en eau, assez courant malgré tous les risques de maladies qu'il comporte (...)

L'auteur s'appuit sur les résultats d'une enquête réalisée au Sénégal et au Mali portant sur les relations entre le mode d'urbanisation et la transmission du choléra pour démontrer que seulement le tiers des maisons des personnes touchées par la maladie vivait dans des conditions hygiéniques déplorables. Au Sénégal par exemple, le réseau d'égout de la ville reste très aléatoire: des canalisations bouchées, des égouts à ciel ouvert, des latrines domestiques le plus souvent dans un état d'hygiène de fonctionnement totalement défectueux. Selon l'auteur, Bamako/Mali, une ville de près de 650 000 habitants déverse annuellement plus de cent milles tonnes d'ordures, pour n'enlever qu'un peu plus du tiers des déchets. Au plan de l'assainissement, la ville ne possède pratiquement aucun système tout à l'égout ni autres équipements collectifs.

Un autre impact négatif de la crise de l'environnement et du développement provient de grands barrages. Selon Chantal Euzéby (1979, 773), l'eau, facteur indispensable à la survie de l'homme et de son environnement

peut aussi être un obstacle au progrès économique et social lorsqu'elle permet la propagation et l'extension de certaines maladies comme la bilharziose, et le paludisme. Elle cite le cas de grands travaux hydrauliques qui sont responsables de l'hébergement des vecteurs des maladies parasitaires en soulignant que les projets d'aménagement pour une utilisation plus rationnelle de l'eau à des fins agricoles, industrielles ou humâmes (usages domestiques, hygiène, ...) ont modifié le fragile équilibre sol-eau-climat des pays en voie de développement et ont souvent conduit à une aggravation de leurs problèmes sanitaires.

> L'eau peut altérer la santé et transmettre des maladies soit parce qu'elle héberge les vecteurs ou hôtes intermédiaires des maladies parasitaires et virales telles que le paludisme, fièvre jaune, bilharziose, soit parce qu' elle contient et transporte des micro-organismes porteurs des maladies contagieuses (choléra ou dysenterie par exemple) soit encore parce qu'elle reçoit et achemine les produits chimiques pouvant occasionner des sérieux troubles sur la santé de l'homme (Idem).

En ce qui concerne la bilharziose, l'auteure a constaté que dans certaines localités proches du lac Volta au Ghana, le taux ou la prévalence de la bilharziose vésicale a beaucoup augmenté à la suite de la mise en eau du lac. Selon elle, en un an chez les garçons d'âge scolaire, il est passé par exemple de 9% à 99% à Amète et de 38% à 99% à Ampen (Ibidem). Toutes les informations épidémiologiques concernant les villages des rives du lac font ressortir une progression d'un ordre de grandeur comparable. La montée de la maladie suit fidèlement l'extension de la surface du lac.

De même à propos du barrage réservoir de Kainji au Nigeria, trois enquêtes réalisées en 1970, 1971, 1972 ont révélé une très forte augmentation de la prévalence de la bilharziose vésicale dans les villages environnants. Les résultats étaient particulièrement graves pour les groupes des jeunes de 15 à 21 ans, chez qui le taux était passé de 37% à 95% (Ibidem 775).

Des exemples du même genre sont rapportés dans des zones où se pratique l'irrigation à grande échelle. Au Zimbabwe, on a observé l'impact de l'irrigation en comparant des taux d'incidences enregistrés dans deux zones, dont l'une se caractérisait par la culture en sec et l'autre par la culture en irriguée. Il ressort que dans les zones où se pratique la culture irriguée le taux de la bilharziose a été deux fois plus élevé que dans celles non irriguées (Ibidem).

Pour cette auteure, les individus atteints sont incapables d'effectuer des travaux pénibles même en l'absence des symptômes caractérisés. En cas de manifestations cliniques (Hématurie, diarrhée hémorragique) et complications graves, les malades peuvent être affectés d'une incapacité totale et la maladie peut même leur être fatale (Ibidem).

Quant au paludisme, on peut constater que les zones marécageuses situées aux alentours des lacs artificiels et des canaux d'irrigation constituaient un milieu favorable à la reproduction des anophèles et partant à la propagation du paludisme. Les manifestations cliniques du paludisme se caractérisent par l'excès des fièvres et la diminution du sang. Cette maladie fait de nombreuses victimes en Afrique.

On peut donc conclure que l'eau stoquée dans les réservoirs des barrages ne présente pas seulement des avantages. Tout en jouant un rôle capital dans la promotion du développement, elle peut aussi constituer un obstacle à celui-ci en créant des conditions défavorables à la santé des hommes qui sont censés travailler pour le même développement.

Les crises sanitaire et hygiénique occasionnent la désertion massive des régions dévastées par des catastrophes physiques ou d'autres facteurs qui entravent l'accès aux ressources économiques. Cette désertion est responsable des mouvements migratoires des régions pauvres vers les régions riches.

La crise de l'environnement & du développement & ses implications sur le mouvement migratoire

Selon Amadou Ba (1994, 6), il existe plusieurs façons par lesquelles la santé de la population influe sur la migration. En retour, la migration elle-même est un facteur dynamique dans le changement de l'état sanitaire. Pour cet auteur, on pourrait à la limite considérer que tout type de migration est de manière directe ou indirecte associée à la santé et réciproquement et affirme également que les conditions de santé des populations affectent directement ou indirectement le schéma de mobilité.

Depuis plus de trois décennies, les victimes de la crise de l'environnement et du développement se comptent par milliers. La dégradation de l'environnement écologique provoquée ou non est grandement responsable du déplacement massif de la population. "Pendant que le HCR estimait qu'ils y avaient plus de 15 millions des réfugiés au sens de la convention de Genève, ils y avaient aussi plus de 10 millions des migrants qui sont considérés comme des réfugiés de l'environnement" (Jacobson 1988, 6).

En effet, quand le terroir familial est surexploité, la terre érodée, les occupants n'ont pas d'autres choix que d'aller chercher une terre fertile ailleurs. C'est par exemple le cas de 1 500 familles éthiopiennes qui ont été déplacées dans la région du Sud en 1984 lors de la grande famine qui a frappé dans ce pays. C'est aussi le cas de milliers de somaliens déplacés du nord du pays pendant la sécheresse de 1973–1974 pour être réinstallées dans les villages de Dujuuma, Sbalaale et Kunturwaarey près des rivières Shabaelle and Juba. Ces populations qui par la suite ont déserté les villages pour une destination incertaine font ainsi partie des victimes de la dégradation écologique.

Outre les problèmes environnementaux, les projets de développement forcent aussi la population à émigrer. C'est le cas des nomades Afar qui évincés de leurs traditionnelles terres par

des irrigations pour la production de la culture de rente se sont vus obligés de se déplacer vers des terres moins fertiles.

Un autre exemple est celui du projet d'irrigation "Awash" qui consista en l'irrigation de terres pour la production du coton et du sucre dans la vallée de la rivière Awash. C'est ainsi que les terres fréquentées particulièrement par des nomades Afar furent transformées en terres pour la production de cultures de rente.

Dans le même ordre d'idée de dépossession des terres par les projets de développement, on peut citer le cas des sinistrés de grands barrages. En effet, les aménagements de grands barrages entraînent souvent le déplacement massif des populations. Ces déplacements s'expliquent notamment par l'implantation d'immenses lacs de retenue. C'est ainsi par exemple, que le barrage d'Assouan en Égypte provoqua le déplacement de 120 000 Nubiens, celui d'Akossombo au Ghana concerna 80 000 personnes de différentes ethnies, tandis que le barrage de Kainji affecta 44 000 personnes. Le barrage de Kossou en Côte d'Ivoire n'échappe pas à la règle. Sa construction a entraîné l'expulsion de 75.000 cultivateurs Baoulés (Lassailly 1980, 48).

Le déguerpissement de la population soudanaise en 1969, évincée par les inondations dues à la construction du grand barrage d'Assouan en Égypte, dont les eaux du lac artificiel baptisé "lac Nasser" s'étendent jusque sur le territoire soudanais est aussi un exemple de projet de développement, parmi tant d'autres, qui illustre bien le phénomène de dépossession et d'appauvrissement des paysans. "Cela commence par l'expropriation forcée des terres jugées nécessaires à l'implantation du projet et par l'expulsion parfois violente de ses occupants qui sont catapultés sur une trajectoire désastreuse" (Schwarz 1989). Plusieurs d'entre eux prennent le chemin des centres urbains et ainsi commence l'exode rural.

De nombreux travaux sur l'exode soulignent que le départ massif vers les villes doit être interprété en fonction du fossé qui se creuse entre les ruraux et les citadins, ainsi que l'insuffisance des revenus paysans. En effet, la paupérisation du monde paysan due à l'affaiblissement des revenus agricoles et la destruction du cadre de vie à la campagne condamne les paysans à l'exode. Celui-ci associé au taux de natalité élevé explique l'explosion démographique et l'urbanisation anarchique que connaissent les villes africaines.

Sur ce dernier aspect, Vehasselt fait remarquer que l'explosion urbaine dans les pays tropicaux a crée des conditions écologiques favorables pour le développement des maladies endémiques, particulièrement celles engendrées par les moustiques. Selon le même auteur, cette situation est particulièrement frappante dans les quartiers périphérique ou s'établissent généralement les migrants d'origine rurale dont la résistance contre les parasites de type urbain est assez faible dans les premières années d'installation.

Enfin, les maladies provoquées par les perturbations écologiques dont les migrants sont en partie responsables ainsi que l'absence des services de santé adéquats constituent des facteurs déterminants dans la prise de décision de migrer.

Conclusion

Au terme de cet article, il nous est difficile d'appuyer sans réserve les études qui laissent croire que la dégradation de l'environnement en Afrique est due uniquement aux calamités naturelles et à l'explosion démographique. La cause principale de la crise de l'environnement est le mauvais développement qui crée un déséquilibre entre l'homme et son milieu naturel et accélère la prolétarisation de la population de la base. Ceci entraîne au fil des ans une pauvreté chronique qui se réflète aujourd'hui sur l'environnement écologique dont l'une des conséquences est la détérioration de la santé. Celle-ci associée à la crise alimentaire sont responsables des mouvements migratoires que connaissent les pays africains. ■

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The Impact of Refugees on the Environment: The Case of Rwandan Refugees in Kivu, Zaïre

Shally B. Gachuruzi

Précis

En Juillet 1994, la région du Kivu, située à l'Est du Zaïre a accueilli plus d'un million des réfugiés rwandais. Cette région est montagneuse et a un écosystème très fragile. A partir de sources secondaires, cet article analyse l'impact environnementale de la crise rwandaise dans cette partie du Zaïre. Il examine successivement le risque d'un désastre écologique à cause d'une déforestation excessive, la possibilité d'un conflit interethnique due d'abord au partage des ressources disponibles, et ensuite, à la compétition entre les réfugiés et la population autochtone.

Introduction

The Kivu region, where the majority of the Rwandan refugees are located is the most overpopulated region in Zaïre. Its population is estimated at eight million and represents one fifth of the Zaïrean population, almost the equivalent of the Rwandan population before the genocide of 1994.

Moreover, Kivu has a fragile ecosystem that is being depleted by Rwandan refugees. Given that this region is already overpopulated, how can the organisations in charge of refugees reconcile their mandate with that of environmental protection? This is very important because a neglect of environmental factors can lead to further population displacement.

This paper attempts to analyse the environmental impact of the Rwandan crisis on Kivu, Zaïre. The following section provides an analysis of the risk of a potential ecological disaster, and its impact on the Kivu region, due to a prolonged presence of refugees in this region. The next section examines the impact of the Rwandan crisis on the local population, and considers the possibility of an interethnic confrontation in Kivu, due to the sharing of natural resources and the competition between refugees and indigenous Zaïreans.

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The Impact on Environment

The impact of refugees on the environment in host countries is well known, even though studies on this issue are few. According to Lonergan (1995, 4):

> refugee movements tend to produce uncontrolled modifications which can lead to serious disruptions of ecological systems, and the ecological impact of mass movements can be very severe. Many nation's refugee influxes in the past decade have destabilised the local ecology and have caused a rapid depletion of scarce vegetation.

The settlement of refugees in rural areas entails deforestation to satisfy the need for wood for domestic purposes such as housing, heating, and cooking food. In 1990, "the UNHCR reported that there were approximately 15 million refugees in the world consuming an estimated 13 million metric tons of fuelwood a year" (Helin 1990, 1).

The following testimony collected by Lassailly (1994, 12) from a Zambian peasant in the Ukwimi locality illustrates well the ecological disaster which refugees can cause in host countries:

> they chop down the trees we worship, they chop down the very old trees along the streams in order to extend their gardens when these trees helped prevent evaporisation with their shade. They collect all bamboo and reeds growing at one place, they light bush fires.

In addition to deforestation, two others types of environmental problems associated with refugees are land degradation and water contamination. Table 1 below summarizes the environmental problems in host countries related to mass movements of people.

The problem is felt most acutely in overpopulated countries with fragile ecosystems. This is presently the case in North Kivu, Zaïre which is contending with the Rwandan refugee flux.

Rwandan Refugees in Kivu

The Kivu region has an international reputation in nature conservation. The Kahuzi Biega national park is located in South Kivu, which is home to mountain gorillas, many others animal species and diverse vegetation. The North Kivu region possesses one of the biggest parks in the world: the national park of Virunga. The reputation of these parks is due to the variety of species that cannot found anywhere else in the world.

In Kivu, deforestation is neither structured nor controlled. All cutting is thought to boost the value of the land, and is thus profitable to all the members of the community. There is an urgent need for studies of appropriate forms of land use and the development of agricultural methods, construction and other land uses.

The refugee camps of Katale and Kibumba are located within one kilometer of Virunga National Park. Even though there are no instances of wood cutting for construction, local journals indicate that the tourist authorities who manage the park complain about other illegal activities such as poaching and excessive collection of wood.

Research done by the UNDP (1994, 24) on the environmental impact of the Rwandan refugees in Kivu concluded that:

> 19,090 personnes en moyenne utilisaient 20 pistes pour collecter chaque jour des produits forestiers. 57.5% de

tout le bois collecté étaient verts, 35.9% du bois mort et 6.7% de la paille. Toutes les observations indiquent que le pourcentage du bois vert augmente sans cesse. 406 tonnes de bois étaient transportés chaque jour au camp par les 20 pistes. Il faut noter que les pertes de forêt observées ne concernent que les principales pistes du seul camp de Kibumba. Les estimation préliminaires de la perte totale de bois de tous les camps situés tout près ou à l'intérieur du Parc National des Virunga sont de 7,000 à 10,000 m par jour. Vu sous tous les angles, ce taux journalier de déboisement est tout simplement ahurissant.

This quotation means that, "19,090 people were using 20 pathways everyday to collect forest products; 57.5% of woods collected were greens, 35.9% were dry and 6.7% were leaves. All observations show that the percentage of green woods is increasing. The preliminary estimates of wood loss are between 7,000.00 m, and 10,000.00 m daily." Unfortunately, this study did not address the consequences of deforestation on wild life.

Excessive deforestation in a mountainous region results in erosion. According to local journals, Bukavu, one of the cities where the Rwandan refugees are located, must contend with extensive erosion due to deforestation. This has caused many deaths and the destruction of many houses. UNDP (1994, 27) research supports this assessment:

> si l'on peut observer l'érosion dans et autour des camps des réfugiés à Goma, le problème est réellement grave, et même critique, dans les camps autour de la ville de Bukavu, lesquels sont souvent situés sur des pentes raides et sur un sol alluvionnaire. L'absence de terrasses et de caniveaux de drainage appropriés ainsi que la destruction presque totale de la végétation sur ces pentes par des réfugiés entraînent érosion sévère et la formation des ravins qui s'approfondissent toujours après chaque forte pluie. Des glissements de terrain graves ont déjà été observés à Bukavu. A titre d'exemple, la route principale qui mène à l'aéroport de Bukavu étaient ferée pour quelques jours suite aux avalanches provenant des camps des réfugiés. L'hebdomadaire le Phare a rapporté dans sa livraison du 28 Octobre 1994 que plus de 100 personnes ont trouvé la mort à Kibange, à Bukavu, à la suite des pluies torrentielles du 21 Octobre. L'article a épinglé que l'absence des arbres sur la colline avait intensifié l'inondation et avait contribué à l'érosion sévère, l'un et l'autre ayant provoqué l'écroulement des douzaines des maisons.

This translates "as we can observe in and around the refugee camps in Goma, the problem is really serious, and even critical in and around the refugee camps in Bukavu city, located in a mountain area. Lack of appropriate terraces and the destruction of almost all vegetation by the Rwandan refugees caused erosions which destroyed many houses."

In many cases, the deforestation led to secondary problems both for the refugees and other aspects of the ecosystem. According to Jacobson (1994, 6), "the loss of browsing area, flora and fodder for domesticated herds and wild fauna leads to disruption of the natural food chain and potential eradication of species and fragile ecosystems in marginal areas. Similarly, faster runoff of rain water leads to a decrease in ground water replenishment, increased rates of silting in rivers and irrigation systems, and greater potential for flooding in catchment zones of formerly forested areas."

Another negative impact of the presence of the Rwandan refugees in Zaïre, is the problem linked to the sharing of natural resources and the competition between refugees and the local population.

Table 1: The Environmental Problems Experienced in Host Countries

Land Use	Natural Resources	Water Systems
Land degradation as a result of overgrazing and inappropriate farming methods	Deforestation from overcutting of trees	Reduction in water quality and quantity from over use of boreholes, oases
In camps, solid waste accumulation	Resource depletion from increased use of forest biomass; Threats to forest reserves from population encroachment	
Long-term Implications		
Reduction in fertile arable land, 'desertification,' soil desertification, soil erosion and pollution	Desertification	Compromised health from water-related diseases
Compromised health from sanitation-related diseases	Loss of biodiversity	Reduced soil fertility
Threats to food security from reduced agricultural productivity.	–	Threat to fish stock

Source: Karen Jacobson(1994, 5), "The Impact of Refugees on the Environment: A Review on the Evidence."

The Sharing of Natural Resources and the Competition between Refugees and Native Population

The relationship between Hutus and Tutsis in Zaïre is very good. In general though, relationships between host governments and refugees tend to be fraught with difficulty.

> La réinsertion de nouvelles entités villageoises dans un tissu social préexistant entraîne des profondes perturbations dans les équilibres existants entre les communautés humaines et entre ces dernières et l'espace. (Gachuruzi 1994, 24)

Translated this means that "the resettlement of the new villagers in a preexisting social fabric results in deep perturbations in the present equilibrium between the human communities, as well as between human communities and the space."

With respect to the Kivu population, it is difficult to create solidarity links between the refugees and the local population in accordance with the traditional model. Indeed, the sharing of available natural resources, such as trees, wild fruits, animals and fish has brought about an antagonistic relationship between the two groups. In addition, the differentiation of income between them has led to bitterness, and even open conflict.

The survival of the population depends on living in equilibrium with its natural surroundings. When natural resources are exploited, they can no longer support the population. Spitteler (1993, 2) writes: "food derived from woodland habitat, particularly important in draught prone areas such as Ukwimi where woodland food is a "buffer" against the famine, is becoming increasingly difficult to find" due to the concentration of refugees.

Spitteler's observation is similar to what is happening in Kivu, Zaïre. The peasants of Kivu draw their income from selling dry wood or charcoal. The selling of charcoal is a flourishing industry in the Great Lake Region. With a scarcity of wood, due to the concentration of refugees in the region, peasant's incomes have declined. They can no longer afford to buy meat, fish, or other commodities which they cannot cultivate.

According to Sullivan (1992, 20), "competition and the resultant shortage of gathered products affect local population incomes through reducing the availability of these products for sale and has generally a negative impact on diet and general wellbeing."

Moreover, basic goods have become increasingly rare and expensive. This is due not only to inflation, but also to the increasing scarcity of provisions. Many of the Rwandans came to Zaïre with substantial funds and bought Zaïrean homes and businesses. The refugees attend local schools and are treated in local hospitals; they even own farmland and parks.

Kengo wa Dondo, the Prime Minister of Zaïre, asserted that the refugees, with aid from the UN and private groups, are now better off than the local Zaïrean population. He warned that unless something is done, Zaïrean frustrations could turn into xenophobia.

Concerning the competition between the indigenous population and the refugees, Lassailly (1994, 16) provides this testimony from Zambia:

> We understand that refugees had nothing when they arrived here and they should be helped and assisted, and we agreed to give them land to feed them. But we see that now many refugees make a lot of profit from our land. They are now growing tobacco, sunflowers and vegetables and they are provided with seeds and fertilizers when we get nothing.

In a similar manner, the competition between Zaïreans and Rwandan refugees may directly and indirectly stir up people's emotions, leading to the collapse of the fragile peace between Zaïrean Banyarwandas and other ethnic groups.

The danger of violent conflict in Kivu, coupled with the prospect of ecological disaster due to the continued presence of the Rwandan refugees, may lead to another cycle of population displacement. All these environmental problems stress the need to generate interest in the search for new forms of intervention and development strategies in order to adequately meet the challenges of the political and environmental impact of the Rwandan crisis.

Conclusion

The long stay of the Rwandan refugees in the Great Lakes Region has political consequences in Burundi and socio-economic and environmental impacts in Zaïre. In both countries, there is the risk of an ensuing regional crisis that could lead to another wave of population displacement with disasterous effect on the people and the environment. It is contented that peace in this region, which is possible only with the will of the political leadership of the region, and the health of its environment depend on the repatriation of the Rwandan refugees. ■

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Roots of Flight: Environmental Refugees in Latin America — A Response to Analysis by Homer-Dixon

Andil Gosine

Précis

Les inégalités entre les pays du Nord et ceux du Sud n'ont cessées de se creuser depuis l'époque coloniale. Les politiques économiques imposées par le Nord en sont les principales causes. Cet article tente de démontrer que la croissance démographique et la diminution des ressources ne sont pas les principaux stimulants des mouvements des réfugiés et des conflits dans les pays du Tiers monde et en particulier ceux de l'Amérique latine. Ceux-ci sont plutôt liés à la politique foncière qui est dictée par les élites locales, les collaborateurs étrangers et la politique économique globale basée essentiellement sur les intérêts occidentaux.

Introduction

Fast becoming a standard term in migration research, "environmental refugees" denotes people who are forced to flee their home states because of environmental disaster and/or violence resulting from environmental degradation. A sharp increase in this type of migration is expected over the next fifty years, as the effects of global warming, ozone depletion, energy overconsumption, deforestation and air and water pollution take their toll on a fragile planet. As with most other environmental phenomena, however, identifying the source of these refugee flows has been a highly politicized and very misleading process.

Social scientist Thomas F. Homer-Dixon, for example, is considered to be a cardinal authority on this emerging field of research, and his arguments are generally touted as "progressive" by fellow academics. He argues that the scarcity of natural resources is chiefly responsible for conflict resulting in the creation of environmental refugees (Homer-Dixon 1994, 5). Furthermore, he identifies three main sources of natural resource scarcities: a limited definition of "environmental change," the "unequal social distribution of resources," and population growth (*ibid.*, 8)

But evidence from case studies in Latin America point to a different explanation. Contrary to Homer-Dixon's main theses, the experiences of indigenous peoples in Central and South America reveal that the manipulation of resources by external forces, not resource scarcity, is responsible for the apparent creation of environmental crisis. Consequences of historical and contemporary local and global power relations, such as colonialism, neocolonial economics and a misguided development process, are the actual stimulators of refugee flight.

While Homer-Dixon's widely-publicized analysis has stimulated much-needed debate on actual causes of refugee flight, some of his work can also be interpreted as merely rehashing misconstrued and misleading explanations of the causes of environmental degradation, poverty and conflict. Instead of questioning some of the basic ideologies which have historically framed international responses to refugee crises, his arguments often work in support of the approaches he claims to criticize. Indeed, the reactions of governments and agencies, such as the United Nations High Commission on Refugees (UNHCR), to refugee situations also expose a global system which fails to acknowledge the most significant, underlying roots of flight for these refugees, and which offers little support for these victims of environmental crisis.

Particularly in the North, some researchers and environmental advocacy groups have accepted the supposedly indisputable fact that people have been forced into poverty, environmentally-induced conflicts, and, ultimately, to take flight for survival because resources are in short supply. The invalidity of this assumption becomes apparent upon consideration of the political context of Latin America's most significant resource: land. An understanding of the social, economic and spiritual relationship between natural land and indigenous peoples—and the impact of the current global economic order on this relationship—is central to understanding the roots of environmental crisis and refugee flight in Latin America. "We think of the earth as the Mother of man," Nobel Peace laureate and indigenous leader Rigoberta Menchu suggests: "our parents tell us: 'Children the earth is the mother of man because she gives him food'" (Menchu 1991, 56). Colonization was a genocidal process which not only confiscated peoples' original environment, but also attempted to diminish their relationship with the natural world, cultural heritage and socioeconomic structures. Since the first European voyages to the Americas, indigenous peoples have been struggling not just to reclaim what was seized by colonisers, but to simply hold on to whatever land remained in their control. Land disputes are at the root of conflict in most Latin American countries today.

An April 1992 march in Quito, Ecuador protested the government's inability to settle land disputes (Macas in Collins 1992, 1). Between 1981 and 1983, a 'pacification' project undertaken by the Guatemalan government had sent a flood of refugees into Mexico, as the repressive regime seized indigenous land and placed it in

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foreign control (Weinberg 1991, 46–47). In Mexico, members of the *Ejercito Zapatista de Liberacion Nacional* (EZLN), the collection of indigenous farmers who organized the January 1, 1994 Chiapas rebellion, chanted, "From the coast to the mountains, the struggle is for the land" (Ross 1994, 3). An Americas Watch report on Brazil noted that the fight for land in rural areas has led to a "spiral of violence" in which those responsible enjoy total impunity (July 9, 1992). As further examination of these cases will reveal, conflict did not stem from the scarcity of this container of natural resources, but from oppressive government action which resulted in the seizure of land from peasant farmers and indigenous communities to service Northern corporate interests.

In Guatemala, Mayan Indians were moved from lands so that the transnational corporation Del Monte could have new cultivation fields, and cattle grazing for hamburger beef production could expand (Weinberg 1991, 43). The military offensive to carry out this removal was financed by Israel and the United States, and the offensive eventually wiped out of tens of thousands of Mayans and produced a refugee population of over one hundred thousand (Hooks 1993, 61). In 1991, 2.1 percent of Guatemala's population still controlled 80 percent of the agricultural land (*ibid.*, 152). Similarly, land is not scarce elsewhere in Latin America, but access to it, and the natural resources it holds, is limited to those with political clout. Meanwhile, disempowered peoples must struggle for rights to access to their land. The resulting conflict often forces these very people to revert to refugee flight for survival.

Environmental Change

Homer-Dixon identified six types of environmental change which he concluded were plausible causes of violent inter-group conflict resulting from resource scarcity and leading to refugee flight: greenhouse-induced climate change, stratospheric ozone depletion, degradation and loss of agricultural land (but not specifically, loss of land rights), deforestation, depletion and pollution of fresh water supplies, and depletion of fisheries (Homer-Dixon 1994, 6). All of these "changes" are primarily attributable to the activities of a capitalist global economy that serves the North (see Susan George, 1976, 1986). While environmental changes are indeed feasible sources of refugee flight, this list does not adequately indicate the underlying causes of environmental degradation and conflict. By concentrating on changes that seem abstract (ozone depletion, greenhouse effect) or locally-induced (deforestation, water pollution), insufficient emphasis is placed on the more influential and obvious sources of inter-group conflict of every kind in Latin America. John Walton suggests

> The state in Latin America was dependent on growth within the norms of dependent capitalism. That meant uneven development, prosperity for comprador classes, agribusiness, industry and services linked to transnational corporations; relative impoverishment for workers, independent producers, peasants and tenants. (Walton 1989, 305–6)

Similarly, environmental destruction which resulted in the displacement of people, conflict and refugee flight has been virtually created by the application of intensive capitalism, not through voluntary initiatives taken by the local population or by some abstract "natural" reaction.

The *Zapatistas* in Mexico, for example, argued that the North American Free Trade Agreement (NAFTA) "was a death certificate for indigenous peoples of Mexico" because the impact of free trade would wipe out the economic, social and cultural base of their communities, following the collapse of prices of the area's major commodities (timber, coffee, corn) (*Americas Watch*, March 1, 1994, 3). Mechanized agricultural processes which are sold as part and parcel of the development process also greatly accelerate land degradation. Environmental accounts on the impact of free trade in Mexico indicate that economic initiatives, such as the setting up of Export Processing Zones (EPZs), are responsible for the very hazardous levels of pollution in areas such as the Maquilladoras; the "environmental changes" result directly from economic constraints.

Liberal economic policies benefit local elites and TNCs at the expense of marginalized peoples. As recently as mid-February, 1995, press reports outlined the "bombing of Mayan villages ... raping of women and killing of children" by the Mexican army, in the government's bid to crush the *Zapatista* resistance movement (*Toronto Star*, February 13, 1995, p. A 13). An Americas Watch report concluded, "conflicts over land tenure and the use of natural resources are a chronic problem in Chiapas" (*ibid.*, 5). As their report indicated, the *lack* of resources wasn't the main issue, but rather, the *use* of the available resources consequently created political strife.

Free trade is by no means the only contributor to conflict in Chiapas. As in other regions of Latin America, the impact of the debt crisis and the subsequent application of Structural Adjustment Programmes (SAPs) by the International Monetary Fund (IMF) have added to the economic woes of the poor, and increased environmental degradation and conflict. Walton describes these skewed strategies, as imposed by Northern-controlled agencies:

> Guided by the potent combination of neoclassical economic orthodoxy and the interests of the advanced nations, the IMF prescribed a clear and remarkably uniform adjustment policy aimed at promoting market economies geared to export production. (Walton 1989, 306)

From India to Mexico, the application of SAPs to enhance agro-export industry has caused deforestation for cattle grazing and overworking of agricultural lands for greater crop harvest (Shiva and Mies 1993, 233–35). SAPs have also promoted the growth of "dirty" industries throughout the Third World, as transnational corporations concurrently pollute the environment and institute abhorrent labour

conditions. SAPs ensure that resources are not geared to sustain the local population but to enhance the economic growth of local elites and, ultimately, their foreign conspirators.

The manipulation of natural resources to serve economic interests of powerful actors are clearly at the root of conflict and environmental crisis in Latin America. The "environmental changes" Homer-Dixon describes play a secondary role. Although these changes are immediate stimulators of conflict and must be rectified, they are by-products of a more effective, underlying cause of conflict and migration: an inequitable global political economic system.

Population Growth

The most frequently distorted explanation of environmental crisis has also been mistakenly applied to the case of environmental refugees. Certainly, the weakest link in Homer-Dixon's analysis is the one he makes between resource scarcity and population growth. Choosing to reflect, rather than offer valid criticism of, a traditional, misleading Northern perspective, Homer-Dixon insists that "bulging populations and the resulting land stress may produce waves of environmental refugees" (Homer-Dixon 1991, 77)

Since Thomas Malthus' *Essay on Population* was first published in 1798, overpopulation propaganda has been used as an effective tool to blame the poor, and excuse the rich, for the former's state of poverty. The United States government led the drive to support population control programmes in the Third World, its contribution to family planning strategies exceeding $3 billion over the last thirty years (USAID 1994, 23). Uruguayan writer Eduardo Galeano noted the main reason behind this disturbing endeavour:

> [The United States'] aim is to justify the very unequal income distribution between countries and social classes, to convince the poor that poverty is the result of the children they don't avoid having, and to dam the rebellious advance of the masses ... in Latin America, it is more hygienic and effective to kill *guerrilleros* in the womb than in the mountains or the streets. (Galeano quoted in Weinberg 1991, 149–50)

Malthus, however, has sprung a number of influential successors who are in firm control of the institutions which establish global political economy. At the 1994 Cairo Conference on Population and Development, feminists did not only have to face demographers, population agencies and the Vatican and its allies, but also environmentalists from the North who promoted the idea that sooner or later resources will be wiped out by population growth (Correa and Petchesky 1994, 10). As Susan George determined in the 1970s, overpopulation itself is a mythical concept, void of hard scientific evidence, but "so much garbage has been printed, so much bad theory circulated" that it is commonly accepted as a scientific principle (George 1976, 59).

Homer-Dixon is one such circulator of "bad theory." He points to the 1970s subsistence crisis in the Southern highlands of Peru, which gave rise to the *Sendero Luminoso* (Shining Path) movement, as evidence of the effects of population growth:

> The department of Ayacucjo saw density increase from 8.1 people per square kilometer in 1940 to 12.1 in 1980. Cropland availability dropped below .2 hectare per capita. These densities exceed sustainable limits, given the inherent fragility of the region's land and prevailing agricultural practices. (Homer-Dixon 1993, 29)

But, as is the case for all of the situations already cited, population growth did not cause poverty or loss of agricultural lands in Peru. The resulting violence, which has produced a significant number of refugees since the original clashes between the Peruvian government and the Shining Path, was rooted in land distribution, or rather, the lack of fair land distribution.

As Cynthia McClintock observed, the southern highlands are poorly suited for agriculture but the valleys below are very fertile lands (McClintock 1989, 55). Instead of redistributing this area to the peasant farmers, however, the government uses it for export-based agricultural industry, to service debt and foreign market needs (*ibid.*). Half of Peru's arable land is located in the coastal region of Montana, but rather than use this area as a source of sustenance for local populations, economic activity is centred on the processing of forestry products and oil for export (*New Giolter Multimedia Encyclopedia* 1994).

The Pan American highway, used as a major route for export-oriented, transnational industry, spans across much agricultural and previously forested land from Chile to Alaska, crossing through Peru (Weinberg 1991, 131). Interestingly, the Darien tropical forest in Panama has been labelled 'the Darien Gap' because it is the only broken link in the transnational highway. Suggestions are that this crucial natural park is on the brink of destruction because of American pressures to "fill the gap." The construction of highways in Central and South America has resulted in the violent displacement of peoples and the synchronous destruction of the natural environment. Land and food are available in Peru: they are resources which have been manipulated by the elite, not which have become scarce because of the growth of the oppressed.

The contradictions in the overpopulation establishment are baffling. Neomalthusian ecologist Paul Ehrlich, for example, has written in horror that "El Salvador, a country about the size of Massachusetts, has 4.5 million people today" (Ehrlich et al. 1979, viii). However, Massachusetts itself has a population of 5.8 million (Hartman in Weinberg 1991, 153)! Similarly, wh le Homer-Dixon determined that a population density of 12.1 per square kilometre in Peru's Southern highlands was "not sustainable," other areas in the world have been able to sustain far more people with very little agricultural land space. New York City, for example, has a population density of 147.1 per square kilometer,

with small areas in it holding densities which surpass thousands/km^2 (1990 census, *New Giolter Multimedia Encyclopedia* 1994). But liberal economics and free trade arrangements have made food produced in Latin America more accessible to people a continent away than where the food itself is grown.

What isn't as confusing as Malthusian ideology or explanations however, is the reason for emphasising the "hazards" of population growth. Ehrlich warns that "too many people" leads to "too little food" and "a dying planet" (Quoted in Sen 1994, 66). Similarly, Homer-Dixon argues that "a bulging population (will produce) environmental refugees that spill across borders with destabilizing effects on the recipient's domestic order and on international stability" (*On the Threshold*, Fall 1991, 77).

The purpose of these xenophobic comments, much like the purpose behind the promotion of overpopulation propaganda, is to reinforce a global system of economics which allows the North to "have its own cake and eat the South's too." The North wants to further industrialize and still use the South as a source for food and environmental sustenance; and while this system results in conditions which force people to leave their home states, the North refuses to open their borders to accept the "by-products" of their own processes. By suggesting that overpopulation results in refugee creation, the North is able to relieve itself of its responsibilities and in turn blame the South for its misery.

To his credit, Homer-Dixon acknowledges that population growth alone does not cause conflict. But by concentrating on population growth as a major contributor to so-called "environmental" conflict, he is effectively advocating a solution for the "problem" of overpopulation. Population control programmes have not only been futile anti-poverty mechanisms, but they have also proven to be a source of violence and human rights abuses. In Latin American countries where over 80% of the women have been sterilized, poverty has been exacerbated not alleviated, and women's reproductive rights have been grossly abused (Shiva and Mies 1989, 289). Brazil's birth rate has declined by over 50% in 20 years—a feat the Northern countries took several centuries to achieve—but there are more poor street children and more criminal violence today than in the 1970s (*ibid.*) Family planning is a damaging solution for the wrong problem.

A newspaper report about the May 27, 1990 occupation of the Santo Domingo Cathedral in Quito, Ecuador effectively contextualizes the mythical population/conflict relationship and the need for new strategies which move beyond population propaganda. Quito's daily paper, *El Comercio*, called the occupation "the sixty uprising," the others having taken place in 1578, 1599, 1615, 1766 and 1892 (Field 1991, 40). Regardless of population growth, the key issue here remained the same over the centuries: inequitable land distribution resulting from colonial policy and continued through capitalist economics dictated by the North.

Resource Distribution

Homer-Dixon accepts that "unequal social distribution of natural resources" is a major contributing source of scarcity-induced violence (Homer-Dixon 1994, 7). Using the familiar pie analogy, he theorizes that:

> reduction in the quantity or quality of a resource shrinks the resource pie, while population growth divides the pie into smaller pieces for each individual and unequal resource distribution means that some groups get disproportionately larger slices. (*ibid.*, 9)

He summarizes all his arguments into one tidy explanation that doesn't appear far-fetched or unreasonable. Yet even the admittance that distribution inequities is an important influence on environmental conflict is also too limited because it neglects to sufficiently explore the reasons for the unequal resource distribution. Certainly, the acknowledgement of resources being unequally divided negates the thesis that "resource scarcity" leads to conflict; "unequal social distribution of resources" implies that there are available natural resources which have been manipulated. A better approach would refrain from over-simplistic illustrations which conceal the complex web of influences on access to resources.

The "cutting" of the resource pie is not exempt from the impact of the colonial tradition of using the South to supply the resources to build the North. E. Bradford Bruns describes the impact of colonialism of Latin America's post-independence economic development:

> similar to the well-established patterns of Latin America's past, the export sector of the economy remained the most active ... More often than not, foreigners, with their own agendas dominated that sector. Following the colonial pattern, the economy in general depended to a large degree on the export sector for its growth and prosperity. (Burns 1990, 137).

This dependency relationship confined Latin American countries to a position of continually supplying Europe and North America with natural resources. Despite the end of official colonial rule, land remained in the hands of colonists in most of Latin America. Prior to land reform in the late 1980s, 2 percent of El Salvador's population controlled 60 percent of the state's territory; before the 1979 revolution in Nicaragua, the Somoza family alone owned 23 percent of the land (Weinberg 1991, 152). The colonial legacy remained intact.

The "pie-sharing" process Homer-Dixon describes is also not exempt from political circumstances of the time period. The East-West/capitalist-communist tensions provided an excuse for the United States' intervention against fairer land reform in Guatemala. In 1953, elected Guatemalan President Jacobo Arbenz seized nearly 500,000 acres from the American corporation United Fruit Company to redistribute to landless peasants (Burns 1990, 267). Since Arbenz feared attack from the country's more conservative

neighbours—Honduras and El Salvador, both closely tied to the U.S.—he accepted defensive military aid from Poland. To the U.S. State Department, "its arrival served as final proof that Guatemala had fallen under Communist control," despite Arbenz having been democratically elected with a large percentage of popular support (*ibid.*, 270). In 1954, the Arbenz government fell to a U.S. coup (*ibid.*) Since then, landless peoples have been forced to seek asylum in countries such as Canada; they are refugees whose rights to live in their natural environment have been grossly infringed.

Not only are natural resources and wealth unequally distributed in Latin America, but so too is the experience of citizenship. Refugees are created by national and international state policies which reject the notion of equal citizenship or equal environmental rights for all people. Through the maintenance of colonial government structure and Eurocentric educational, religious and other socialization methods, indigenous peoples' cultural and social rights have not been respected in Latin America. In Venezuela, the only four remaining ethnic groups of indigenous peoples have suffered from ongoing incursions by petroleum, mineral and mining industries on their lands near the Colombian border (*Latinamerica Press*, February 18, 1993, 5). A colonial system of land division has also projected Eurocentric conceptions of citizenship on Venezuelan Indians. In contrast to the current system, Karina Indian Jose Poyo argues that "rights to the land should be recognized and should be granted as a collective right," and that, "our cultural preservation, unity as a people and the chance for the survival of our identity and traditions depend on this tradition" (*ibid.*).

International Response

As previously mentioned, Homer-Dixon's approach to analysis of environmental conflict and refugee flight is generally more progressive than those taken by Northern governments and international organizations. His models at least identify the relationship between environmental degradation and conflict and, most importantly, acknowledge the legitimacy of environmental refugees and the need to address their situations. Failure to recognize or respond to the root causes of environmental refugee flight is frighteningly evident in the international response to this phenomena.

Though primarily responsible for the creation of environmental degradation and the manipulation of natural resources, Northern countries have refused to open their borders to refugees created from this process or address the underlying, long-term causes of flight. In 1995, for example, the Canadian government abandoned any type of "genuine aid" delivery by moving further to make "aid" transfers a system of Canadian market expansion, adding to, rather than alleviating, problems in the Third World. Tougher Canadian immigration laws will also undoubtedly affect refugees, and measures to remove refugees' access to more social services signal the dawn of the "de facto" refugee system already in place in Europe.

Since the United Nations Charter on Refugees remains essentially a Eurocentric construction, it is not an adequate reference in dealing with the situation of environmental refugees from Latin America. An ideal definition of a refugee would be more similar to the approach taken by the Organization for African Unity. Their Charter definition better reflects the reality faced by refugees today:

> every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality, is compelled to ... seek refuge in another place outside his country of origin or nationality. (Gallagher et al. 1989, 338)

This broader definition is more pertinent to the situations faced by refugees in the South. Latin American environmental refugees have been able to apply under the UN Convention since they are usually also political refugees, but the fluid nature of politics and its interpretation may endanger their claims.

Recognition of "environmental rights" as "political or social rights"—the right to access to and use of one's natural environment—in the U.N. Convention or by governments, is necessary to protect these refugees from the impact of everchanging political preferences in host states.

The individualization of the refugee process globally is also problematic. Whereas the Canadian IRB, for example, has designed a system which places the burden of proof on a single person, an environmental refugee's situation is created by a complex web of several interacting factors which an individualized system may not consider. Furthermore, immigration and economic policies, which are essentially patriarchal, affect women adversely, and must be challenged and changed; in Guatemala, for example, Mayan women have been at the forefront of resistance movements, and have suffered the brunt of environmental degradation.

Certainly, refugee response mechanisms only deal with the immediate implications of crisis. The underlying causes of refugee flight identified in the paper must also be addressed. The North can begin by listening to its own discourse about the perils of ozone depletion, deforestation, and the greenhouse effect. Environmental degradation will radically alter the state of the world, but the North cannot expect the South to limit its numbers so that the latter's resources can continue to act as their supply source.

Inequities between the North and South, stemming from a colonial past, capitalist economic policies and g¹obalization, have to be corrected. Countries in the North are obliged to open their borders as some token compensation for the wrath of colonialism and dependency economics. Although his suggestions are not as far-reaching as they should be, Homer-Dixon agrees that the North bears a responsibility to tackle the roots of refugee flight—even for its own security; he realizes that the

"rebellious" spirit Eduardo Galeano described earlier will not be calmed forever.

Conclusion

What is most frustrating about discussions on root causes of environmental crisis, conflict or refugee flight is that they are the same root causes of poverty, inequity, social conflict and other ills discussed decades ago. In the 1970s, Third World nations called for changes to rectify unequal North-South economic and political relations. In the 1990s, many of them still do. In the 1986 foreword to a revised version of her 1976 book, *How the Other Half Dies*, Susan George admits that the same root causes of crisis she identified at least ten years earlier still persisted: application of foreign technology, agribusiness, corporate greed, overconsumption and so on. I expect her analysis to be as relevant in 1996. But the World Bank, IMF, United Nations and other Northern-controlled institutions have failed to move away from traditional paradigms and continue to apply unsuitable solutions.

In Latin America, population growth and resource scarcity are not the main stimulators of refugee flight or conflict. In Guatemala, El Salvador, Brazil, Mexico, and elsewhere, "the root of conflict lies in access to land" (Weinberg 1991, x). Access to land is dictated by local elites, foreign collaborators, the global political economy and the area's colonial history. Attempts to access land—their environment—has caused the death of hundreds of thousands of indigenous peoples, and created even more refugees. While Mayans in Chiapas, Guatemala and El Salvador continue to rebel against an oppressive system, we in the North must also provide resistance against economic and political oppression of the South by the North, against closed borders to refugees, and end our own complacency with injustice. ■

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Gender and Refugees: The following Working Papers on gender and refugees are now available.

Gottstein, Margit; *Women Refugees and Asylum Policy in the Federal Republic of Germany: An Analysis of Aims and Results;* (26 pages)

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Papers may be ordered separately or as a set. Suggested price is 5¢/p + postage. Please send your requests to: *Gender Unit, Centre for Refugee Studies, York University, North York, Ont. M3J 1P3* (email: wgiles@yorku.ca).

Les Grands Barrages et la crise environnementale en Afrique

Jaime LLambias-Wolff and Shally B. Gachuruzi

Abstract

This article seeks to demonstrate that although large dams are incontestably considered "engines" of development, their success is not always assured. They are nearly always accompanied by negative and harmful effects on the environment, which in turn mortgages the profitability of the sought-after development.

Introduction

Au cours de ces quatre dernières décennies, les principes de développement ont reposé sur la modernisation, l'urbanisation et une rapide industrialisation des pays du Tiers Monde. La mobilisation des ressources tant nationales qu'internationales avait pour objet de doter ces pays d'une infrastructure capable de moderniser l'appareil économique de l'État et de renforcer leur potentiel productif. Dans cette logique, plusieurs pays du Tiers Monde ont mis en place des programmes de modernisation agro-industrielle pour combler le retard accusé par rapport aux pays avancés et assurer les conditions d'un développement rapide et soutenu de leur économie. C'est dans cette perspective de rattrapage que de nombreux pays d'Afrique ont cherché au lendemain de leur indépendance, à construire une autonomie énergétique nécessaire pour le développement des activités productives et modernes. Avec le soutien des agences et capitaux étrangers, ils ont ainsi misé sur des méga-projets. La multiplicité d'importants barrages sur les fleuves africains en est une illustration. Citons à titre d'exemple le barrage d'Inga construit sur le fleuve Zaïre au Zaïre, celui de Kariba construit en 1958 sur le fleuve Zambèze à la frontière entre la Zambie et le Zimbabwe, le barrage d'Akossombo érigé sur la Volta au Ghana en 1964, le barrage de Kainji construit en 1968 sur le Niger au Nigeria, le haut barrage d'Assouan construit en 1969 sur le Nil en Égypte dont la retenue d'eau s'étend jusque dans les terres soudanaises et enfin celui de Kossou construit en 1969 sur le Bandama en Côte d'Ivoire et bien d'autres. Le tableau ci-après présente quelques aménagements hydroélectriques africains.

Tableau 1
Quelques Aménagements Hydroélectriques Africains

Date	Pays	Fleuve
1970	Côte d'Ivoire	Bandama
1969	Égypte	Nil
1968	Nigeria	Niger
1964	Ghana	Volta
1958	Zambie	Zambèze

Source: Lassailly 1983, 48.

Malheureusement, la contribution du secteur moderne à la croissance économique n'a guère répondu aux attentes qu'avait suscitées l'industrialisation accélérée. Cette croissance est restée faible si non stagnante durant plusieurs années et ses effets tant directs qu'indirects sur les revenus n'ont correspondu dans aucun cas aux prévisions.

Cet article vise à démontrer que malgré que les mégaprojets soient incontestablement considérés comme des moteurs de développement économique, leur succès n'est pas toujours évident. Ils s'accompagnent presque toujours des effets pervers qui au lieu de favoriser la population locale, posent un ensemble de problèmes graves d'ordre socio-économique et environnementale.

Impacts négatifs d'ordre environnemental

Les aménagements de grands barrages perturbent gravement l'écosystème de vastes régions. Ils s'accompagnent souvent en amont de la formation de vastes lacs artificiels, véritables mers intérieures qui inondent parfois des régions entières. Citons à titre d'exemple le lac Volta dont la superficie de 9 000 km^2 occupe 3,5% du territoire ghanéen ou encore le lac Nasser en Égypte qui couvre une superficie de 6 500 km^2 et le lac Kariba au Zimbabwe qui couvre 5 300 km^2 . Le lac Kossou quant à lui, couvre une superficie de 1 750 km^2 (Lassailly 1983, 48), soit approximativement la taille du lac St-Jean au Québec. La situation est beaucoup plus alarmante en Inde et en Chine où seuls deux barrages (Narmada et Three Gorges) ont inondé une superficie de 135 348 ha. Généralement dans pareil cas, un écosystème terrestre devient brusquement aquatique avec toutes les transformations que cela suppose.

Parmi les conséquences néfastes d'ordre écologique, la salinisation occupe aussi une place importante. La citation suivante rappelle les effets écologiques dûs au phénomène de la salinisation:

> L'irrigation implantée dans les régions semi-arides dégrade facilement et rapidement les terres cultivables si l'on ne prend pas de précautions pour écouler les sels sodiques généralement répartis sous forme de grandes tâches sur les sols de ces régions et dans les eaux rete nues par les barrages. (Schwarz 1989, 194–95)

Cette façon de voir les choses corrobore ce que Barré et Godet appellent "effet d'Assouan" par référence au barrage d'Assouan en Égypte où

> il apparaît aujourd'hui de multiples problèmes d'une dimension telle que les inconvénients présents et futurs

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(salinisation des terres, moindre fertilisation en aval par le limon des crues, la chute drastique de la pêche dans le delta du Nil) pourraient l'emporter sur les avantages passés du fait de l'irrigation. En effet, la mauvaise exploitation et la surexploitation des terres jointes à l'érosion, la salinisation et la latérisation risquent d'entraîner finalement l'extension de la désertification. (Barré et Godet 1983, 508)

Radheshyam (1990, 27) partage ce point de vue quand il affirme que l'augmentation de la salinité des surfaces des terres cultivables à cause de l'irrigation rend le sol improductif. La nature et la quantité d'argile provenant du drainage souterrain rendent le sol vulnérable au sodium.

Dans le même ordre d'idée, Philippe et Taoufik (1986, 23) font remarquer que "les terres irriguées ne sont pas un oasis de verdure, mais une zone désertique". En effet, quand les labours sont très profonds, les terres se dessèchent très vite et facilitent les remontées salines. La mince couche de terre recouvrant le sol fertile s'appauvrit exigeant ainsi une régénération des matières organiques dont l'épuisement menace l'agriculture.

En rapport avec les effets de la salinité du sol, Larson (1993, 86) rapporte l'exemple de Shanghai où entre 1978–1979, 1 333 ha de récolte du riz ont été détruits à cause du taux très élevé de la salinité due à l'irrigation, soit une perte totale de $4 963 000.

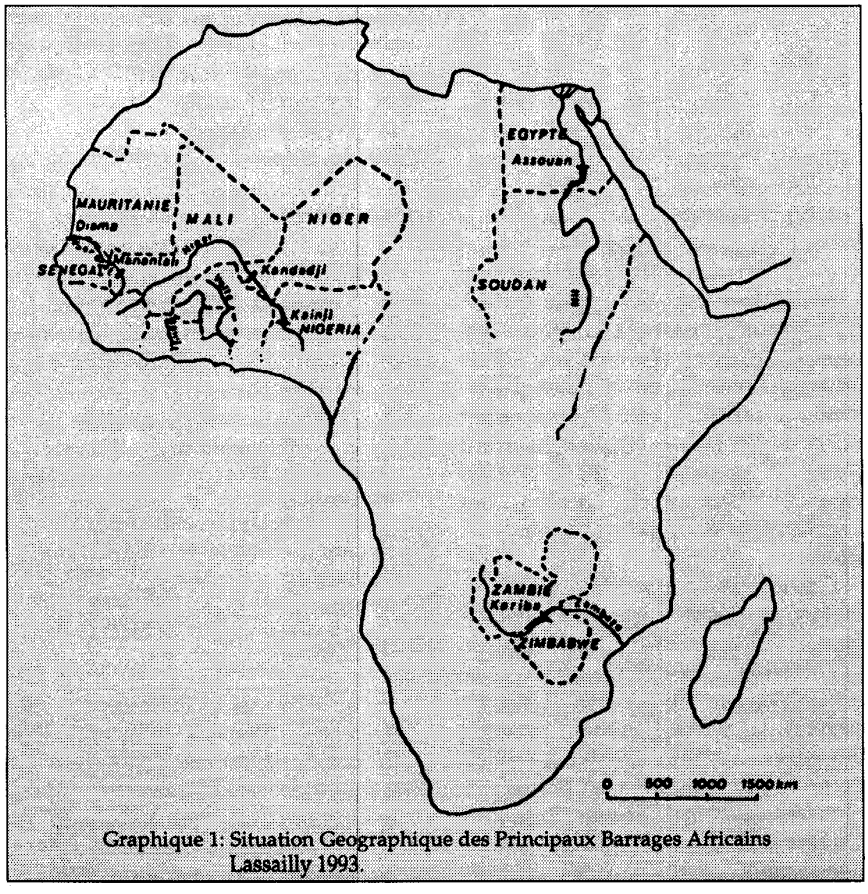
Du reste, ces grands barrages risquent de mettre fin à des habitudes traditionnelles de conservation du milieu. En effet, l'exploitation familiale constitue la meilleure prévention écologique. Comme l'indique Dupriez (1982, 108) qui, en se servant de l'expérience de la culture associée pratiquée chez les Bashis dans la région montagneuse du Kivu au Zaïre et des Sereres au Sénégal, ces peuples réussissent à protéger leur espace écologique. Ils savent par exemple que l'arbre est d'une importance capitale dans la conservation du sol, parce qu'il atténue les effets du climat en créant sous son couvert ou à proximité un microclimat tout en protégeant le sol contre l'érosion.

Par exemple, les collectivités forestières de l'Asie et de bien d'autres communautés locales des pays du Tiers Monde entretiennent des liens complexes avec la forêt. La diversité et la richesse caractérisant la connaissance qu'ont ces collectivités indigènes des ressources naturelles trouvent leur expression dans les technologies et valeurs traditionnelles acquises à travers des siècles. Selon le rapport de la commission sur l'environnement et le développement durable,

> on a acquis ce savoir par tâtonnements au gré de l'interaction avec la nature au fil des siècles, connaissances qui se sont accumulées et qui se sont transmises de générations en génération. Ce qui est surtout en cause, c'est une exploitation diversifiée et durable des ressources naturelles. Une agriculture itinérante a été écologiquement durable sur un grand nombre de générations. Ainsi, l'environnement a façonné les populations. Leur économie, leur mode de vie, bref leur culture, traduisent par dessus tout une adaptation de l'humain au milieu naturel. (CRDI 1992)

Les grands barrages, responsables de la disparition du couvert végétal et forestier soit par inondation, soit par la coupe permettant l'aménagement des routes d'accès aux barrages, risquent de contribuer à l'abaissement de la nappe phréatique et de perturber négativement le milieu naturel.

La coupe du bois affecte aussi sérieusement les agriculteurs; non seulement elle augmente les inondations et les glissements de terrain rendant ainsi la terre infertile, mais aussi elle endommage les ressources forestières indispensables à la survie des habitants qui vivent aux alentours du projet. On sait par exemple que pour la population rurale, la seule source d'énergie dont elle dispose est le bois. Même dans les



Graphique 1: Situation Geographique des Principaux Barrages Africains
Lassailly 1993.

grands centres urbains, l'énergie du bois supplante de loin l'hydroélectricité. A Kinshasa/Zaïre par exemple, plus de 60% de la population sur un total de 4 millions d'habitants, utilise les ressources forestières ou le charbon de bois pour la cuisson des aliments.

La construction des grands barrages ne menace pas seulement la vie humaine, elle met aussi en péril la vie sauvage dont dépend souvent la population en détruisant leur habitat naturel. Comme l'indique Radheshyam (1990, 27), le changement de courant et de température de l'eau dans les turbines affecte la vie aquatique et dérange le libre passage des poissons. Ceci a pour conséquence un ralentissement de l'industrie de la pèche provoquant hélas une baisse de revenus des pêcheurs.

Un autre fait à souligner, parce que bien souvent ignoré à propos de construction des barrages est le risque qu'ils peuvent provoquer en cas d'erreur d'ingénierie. En effet, advenant une rupture, les eaux du barrage pourraient provoquer des pertes humaines importantes, destruire des habitats sauvages et bouleverser l'écosystème du milieu. A titre d'exemple, en 1963 le barrage de Vaient en Italie a causé un glissement de terrain en entraînant des inondations importantantes et la mort de 4 milles personnes.

La plus grande catastrophe dont il faut redouter les conséquences est celle des tremblements de terre causés par les grands barrages. Comme l'indique Williams (1993, 27), "l'un de plus important critère de structure d'un barrage est l'estimation d'une éventuelle accélération de tremblement de terre". Il cite l'exemple du barrage de Koyna en Inde qui, en Décembre 1967 a provoqué un séisme d'approximativement 6.0 degrés à l'échelle de Richter. Ce séisme endommagea sérieusement le barrage, tua 200 personnes, en blessa 1 500 sans compter de milliers des sans-abri. Plus de 80% des maisons de Koyonanagar ont été complètement détruites ou rendues inhabitables.

Comme on peut le constater, les grands barrages ne constituent pas nécessairement un choix technologique gagnant. Il convient de souligner qu'il est impératif de se fier aux études d'impacts environnementaux des grands barrages avant leur mise en chantier.

Conclusion

En guise de conclusion, soulignons que les grands barrages occupent une place de choix dans tout processus de développement industriel. Considérés sous l'angle de leur contribution au modernisme, ces mégaprojets offrent un incontestable intérêt. Mais, bien qu'ils soient indéniablement considérés comme un moteur de développement, ils provoquent souvent des impacts négatifs notamment d'ordre environnemental.

Ainsi, au lieu de promouvoir les économies de la région et d'améliorer les conditions de vie des villageois, ils accélèrent la prolétarisation des paysans qui sont victimes de la dégradation de leurs terroirs les condamnant ainsi à un refuge incertain. ■

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New Director of Centre for Refugee Studies Announced

Anne Bayefsky, a professor in the Faculty of Law at the University of Ottawa, has been named the new director of York's Centre for Refugee Studies for a three-year term, effective July 1. She will succeed David Dewitt, who has been serving as the centre's interim director.

"The Centre for Refugee Studies has a world class reputation, and the opportunity to expand and carry on its work is an honour and a challenge," said Bayefsky.

The author of a number of publications in the fields of international protection of human rights, international law, constitutional law, civil liberties, anti-discrimination law, women's rights, and jurisprudence, Bayefsky will bring her wide knowledge and expertise to York. She will also be joining York's Department of Political Science, (Faculty of Arts).

The range of Bayefsky's involvement in research activities is impressive indeed. She has been distinguished for a number of her works on issues of human rights. Currently, she holds a grant in 1995-96 from the McArthur Foundation's Program on Peace and International Cooperation for projects that make a positive difference in facing the numerous challenges to peace, security and human dignity in the contemporary world. In 1992, she received the Bora Laskin National Fellowship in Human Rights Research, Canada's premier human rights fellowship, which is administered by the Social Sciences and Humanities Research Council of Canada (SSHRC).

She is on advisory boards and committees of a number of prominent international bodies, and has participated in many Canadian delegations to United Nations conferences and commissions on human rights.

"I'm very excited to come to York as director of the Centre of Refugee Studies. It's a dynamic and vibrant research centre—a unique place for the study and examination of refugee issues" said Bayefsky.

Among other activities, Bayefsky's upcoming projects include "exploring and cementing the connections and relationships between refugee and human rights issues."

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