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ECO-TOURISM, CONSERVATION, AND ENVIRONMENTAL SUSTAINABILITY IN AFRICA

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Abstract

The paper examines economic, political and ecological factors that are deemed necessary for successful development in eco-tourism and wildlife/human conservation. It is argued that the current economic crisis, civil wars and political turmoil on the continent have negative implications for eco-tourism.
Introduction

In recent years, global interest in biological diversity (-biodiversity), has grown rapidly. These developments have, in turn, stimulated further interest in environment-related research, giving rise to demands from consumers and political economists of nations alike. What is equally important is the emerging need for effective protection measures over biodiversity and natural eco-systems.

These terms have, in varying degrees, put more emphasis on sustainable utilization of resources on the continent. This emphasis is by no means a recent phenomenon, it being traceable in various works, i.e on a series of African-based conferences in the 1960s (O'riordan, 1988), discussions around the World Environment Conference in Stockholm in 1972 and, not least, the World Conservation Strategy that first brought the concepts into prominence (IUCN, 1980). It was also the "world conservation strategy" that carefully gave a dual emphasis to the relief of poverty and to ecological sustainability (Brookfield, 1991). More recently, attention has been focused on the cogent idea - that of the "second world within the world of nature" (Glacken, 1963), a world with the ability wholly to master its living and non-living environment. The entire notion of the "second world" has, as a result, acquired considerable currency among development researchers.

In light of the foregoing, this study seeks to examine the current developments in eco-tourism and wildlife/human conservation within selected African countries. Economic, political and, of course, ecological factors as analytic correlates are also examined.

The underlying assumption is that these factors suggest that the continent is afflicted by economic, political, as well as ecological crises. Our point of departure is the one dimension expressed and upheld at the 1992 UN Conference on Environment and Development (UNCED) - that of biological diversity as it relates to conservation and utilization (Development and Cooperation, 1994: 16 - 18).

At that conference, three levels of bio-diversity were identified, viz. ecosystems, species, and genes (Development and Co-operation , 1994:16). For purposes of this study, however, focus will primarily be on the first level - that of the eco-system and, within its orbit, the political economy of eco-tourism, conservation, and environmental sustainability. As it has already
been pointed out, the African continent will provide the terrain for the theoretical and empirical analyses. It will be argued that the control and utilization of biological and environmental material within the context of certain Africa states is faced with the challenges of externally-imposed pressures as well as demands emanating largely from the imperatives of the development process.

Eco-tourism, an offshoot of environmental utilization, is a case in point. As a major economic activity, it can be viewed against the background of adverse and deliberate terms of trade for primary commodities and, of course, the recession in Europe where the economic down-turn has contributed to the reduction in tourism activities in some African countries. Similarly, both state-specific environmental resource endowments as well as critical factors in Africa's political economy also play a crucial role as co-determinants. In what follows, we shall draw on some empirical evidence to substantiate these assertions.

West Africa

The first illustrative case study, not necessarily in predetermined order of priority, is the west African state of the Gambia. Its geo-political advantages, viz. proximity to Europe, the absence of political troubles or attacks against tourists, reliance on the rich, natural ecosystem, have been the arguments in favour of the west African state for a long time in times of reduced prices on the international market for its primary commodities, like groundnuts and tobacco. The European Economic Community (EEC), especially British tourists, are the key consumers of the country's eco-tourism as the leading sector in the region. West African tourist attractions rest, of course, on country-specific ecological potentialities. Ghana is a particular case in point. Its rich cultural heritage and variety of colourful ancient festivals celebrated throughout the country all year round, have much international appeal - the calendar for these festivals being the basis for selection of best times to visit the country. But beyond cultural endowments, and also viewed against the background of cocoa's price fluctuations on the world market, the country is well-endowed in unique ecosystems, including tropical rain forests, rich in rare and endangered flora and fauna species, which are beginning to attract visits by eco-tourism enthusiasts, environmentalists, and researchers. The political economy of Ghana which boast over 200,000 visitors annually (African Research Bulletin, 1993), and a fast-growing tourist sector with a
growth rate of 12% per annum (African Research Bulletin, 1993), is beginning to institutionalize measures around eco-tourism. These include:

- official tourism policy aimed at generating foreign exchange and stimulating economic growth in the rural areas with tourism potential;
- protecting, enhancing, and developing national cultural, historical, and ecological heritage;
- medium-term tourism plan to render the industry a priority sector, with incentives for investors in transportation, tourist villages and beaches, and recreational resorts (Ibid).

These state-specific potentials provide broader insights relative to eco-tourism in the regions when viewed in comparative perspective. Thus, whereas the west African states of the Gambia and Ghana can be said to be leaders in unique eco-systems, viz. tropical rain forests, rich flora and fauna species, East Africa in contrast - is the continent's specialized habitat for African wildlife and safaris.

**Eastern/Central Africa**

With Kenya in the forefront, followed by Tanzania and Uganda, the countries make up the leading tourist destination in Africa's eastern and central regions. However, as in the Central African state of Gabon, which has a "quasi-viable" wildlife trade (Africa Research Bulletin, 1994), but an additional environmental endowment - that of sharing one of the world's last major tracts of virgin rain forest home to species such as gorillas and forest elephants, the former East African community of nations, especially Kenya, are confronted with serious ecological problems associated with conservation efforts. In both Kenya and Gabon, creatures are being trapped for illegal export, or killed to meet the demand for ivory, erotic medicines, or fur rugs. For Gabon, an outright ban on the wildlife trade could prove difficult to enforce - given the fact that the country's new programme of wildlife conservation is designed to establish whether wildlife trade could be developed on a sustainable basis. In the case of Kenya, crusading wildlife conservative efforts face an uncertain future, largely as a result of external pressures but also internal demands. Conservation hurdles at the level of endogenous conditions are very linked to the inadequacies of existing conservation strategies, especially law
enforcement, which is a vexing problem facing most countries in the eastern and southern African region, including Lesotho, Zambia, Malawi, Mozambique, Swaziland and South Africa.

In fact, the problem has reached critical proportions. In an attempt to create a regional task force to fight international crime syndicates, Lt. Col. Peter Lategan of the South African police force's Endangered Species Protection Unit had this to say at a law enforcement officer's forum for the African countries in Nairobi:

"We need a highly mobile team of officers with the authority to operate across boarders to penetrate ... increasingly sophisticated smuggling networks"

(Regional Forum on Tourism: 1991).

The idea of regionalization of a wildlife task force and its operation in the hope of effecting an anti-smuggling strategy against syndicates dealing in ivory and rhino horns (as well as diamonds, arms, and drugs), is but one aspect of the regional conservation problem. The other dimension - at the state-specific level - involves what may well be termed "external conditionalities", viz. the pressures of international capital and its allies - environmental lobby groups, foreign donors, and even 'white' directorates and staff of wildlife conservation in the countries concerned.

Emanating from the combined power of such external forces lie the pressures which are at the heart of the assertion made earlier, that Kenya's crusading wildlife conservation efforts face an uncertain future.

Not only is foreign management style riddled with accusations of "arrogance" and "mismanagement" of the country's Wildlife Services (KWS) funds, but its unrepenting critics are said to be "motivated by money", even "by race" (African Research Bulletin; 1990). Campaigns waged under the aegis of the political establishment have led to the resignation of the directorate - a factor which, in turn, triggered widespread dismay within environmental circles and donors' insistence on reinstatement.

Kenya risked losing out on segments of foreign aid, especially those related to the wildlife sector. In what was seen as a related development, the British government withdrew aid form a forestry project and there were doubts on the disbursement of loans which the directorate had negotiated with the World...
Bank, as part of a five-year programme for the improvement and development of the country's wildlife sector (African Research Bulletin: 1990).

The conflicting positions of the external conditionalities and those of Kenya's political establishment reflect only too well the material and ideological interests of the opposing parties. On the one hand, there is the directorate's determination "to stamp out animal poaching" and "environmental degradation", thereby ensuring that the country maintains its position as the leading tourist destination in eastern and central Africa - and, one might add, for western tourists in the main. On the other hand, there is the country's political establishment with its local demands, tasked with the responsibility of providing for the well-being of the Kenyan people - urging that "75% of the money for wildlife should be spent outside the parks run by the Wildlife Services because 75% of the animals lived there" (African Research Bulletin: 1990). Despite the political and social legitimacy of the Kenyan government and given the reality already alluded to - that of the pressure of western capital and its coordinates, it is hardly surprising to see western conditionalities maintain the over-riding stance that "most of the animals outside the parks are of no interest to tourists, who bring in millions of revenue" (African Research Bulletin: 1990). Clearly, at the heart of the conflict of interests is the fundamental issue of how the contradictions between the goals of protection and utilization, and especially over their control and power of definition and availability, is to be disputed and negotiated.

Despite the experience of the "ups and downs" of the tourist industry, Kenya can still pride itself of the sophistication of the economy and the relative strength of the country's infrastructure of hotels, transport and communication - all of which, in varying degrees, provide some measure of "environmental sustainability" and economic development. However, in terms of the future, there are two factors likely to affect eco-tourism. These are internal pressures associated with the infrastructural deficits as well as the socio-cultural implications of eco-tourism on the well-being of the industry itself. The former - restricted safari operations that result from shortages of hotel beds - is primarily an issue of structural bottlenecks that a buoyant building industry can tackle, but the latter - saturation of the popular game parks leading to conservationist fears that parks are already "suffering from overuse" - is a more difficult problem to solve.

In the meantime, Kenya's environmental external conditionalities have influenced the rise of community-based environmental education movement,
albeit with strong opposition from the political establishment. Based on gender-sensitive initiatives and, in particular, the leadership of female professor, Wangari Maathai of the Green Belt Movement (1977), and probably the only environmentalist in the world who has been whipped for campaigning in defence of nature, this popular environmental "revolution" has assumed "a sort of naturalist's guerilla war" against a government which regards as subversive anything remotely critical of its policy. The millions of trees that have been planted by the movement and the efforts at "greening Kenya" as well as the leadership for the sustainable end of hunger indicate the sociological angle from which the movement has tackled "environmental degradation" in the country.

In an African development setting for the poor, provision of women with ecologically friendly and nutritious seedling to plant, distribution and care of trees to help limit soil erosion and loss of firewood, interfaced with health and welfare-related projects, are all critical elements in the empowerment of many, including women. Here the lessons are obvious: that governments may know how to deliver goods, but that the ones who know the substance of how to actually achieve sustainability are grassroots groups, the social movement activists and alternative researchers and technical folk at the local and national level.

At this juncture, we turn to a discussion of the ecological and environmental developments elsewhere on the African continent. In particular, emphasis is on factors that are conducive to, as well as those militating against efforts towards sustainable eco-tourism. In light of the above, it is argued that while there are positive aspects in Africa's ecological utilization there are however, conditions. Zimbabwe in the southern Africa region provides such a case in point. With tourism as the fastest growing industry in the country, it is nonetheless causing concern to conservationists - stakeholders from whom the production flows, that "if left unchecked it (eco-tourism) will destroy the very features that attract tourists" in the first place (Wild life conservation; 1994).

Here, reference is made to recent studies which indicate that along the shores of Lake Kariba, one of the highest concentrations of wildlife in Africa, the many house boats and other vessels along the Matusadona National Park shoreline have adversely affected the welfare of elephants, hippopotamuses, buffaloes, and some birds. Similar concerns have been raised against Zimbabwe's other major tourist attraction, the Victoria Falls - where the unique flora and fauna found in the area (and already endangered species) are
being damaged by the thousands of tourists using the tracks around the site (African Research Bulletin: 1990).

The critical measures facing the Zimbabwean government are not only those of gauging the carrying capacity of the area, but also establishing the maximum number of people such an area can withstand without ecological damage - both measures serving as a guide for the tourist industry. At the level of "endangered species" Zimbabwe faces conservation challenges akin to those elsewhere on the African continent, but, in addition, wildlife "excess" problems (related to elephants) that may disturb the country's ecological balance. In the following discussion, we examine briefly Zimbabwe's innovative conservation strategy whose operationalization, controversial as it may seem, has meant breaking away from international norms of wildlife conservation.

To this end, and despite the recent ruling by the Convention on International Trade in Endangered Species (CITES), banning trading in ivory, Zimbabwe along with Zambia, Botswana, Namibia and Malawi, have formed a southern African centre for ivory marketing - a regional authority which will discuss ways of marketing their ivory with countries outside CITES. Given a generally excess of elephant population, a sympathetic conservationist and wildlife officiodom and a regional authority, wildlife conservation and the commercial handling of trade seemed to be "under the best possible control system" (Africa Research Bulletin, 1992).

The cull to protect elephants in the southern African region has its own justification: some of the reasons are ostensibly ecological ("Zimbabwe has more elephants within its borders than at any time this century ... and they are destroying its ecology"); others are clearly economic and even multifaceted, implying that there is a complex relationship of variables implicated in the rather tenuous balancing of the needs of biodiversity, the political economy, and environmental sustainability of nations.

"Other countries want to reopen the ivory trade to give peasant farmers some incentive to protect, indeed farm, elephants rather than exterminate them to stop them from wrecking crops and trees. The hunting lobby similarly campaigns for the development of big-game shooting as a way of protecting other threatened species, such as the rhinoceros and snow leopard ...
and nothing so enrages the wildlife lobby ... The
culling of elephants is, therefore, not a simple issue.

Like the similar debate about whales, it shows that no part of the globe can
any longer be regarded as a wilderness. It is rather a vast park, requiring the
maintenance of a delicate balance of species and their interest, of economics
and ecology. Within this park, many assumptions are having to be abandoned,
including the belief clung to by so many that killing animals can never be
right. Humans may not need elephants to survive. Elephants, unquestionably
do need humans. Biological choices are becoming as hard to make as political

Northern Africa

Turning to other parts of Africa, those of the northern region, and specifically
the Arab states, it will be observed that the issues of ecological heritage and
eco-tourism take on a radically distinct paradigmatic form, one that is largely
ensconced within the dialectics of political economy and religious
fundamentalism. As far as the former goes, insights that will be discussed are
presented with a penchant for the "political" in the political economy. It will
be argued that in the Arab region of north Africa, ecological reconstruction as
well as eco-tourism face escalating violence that has been matched only by an
Islamic cultural offensive aimed at the Arab's secular society.

Egypt and Algeria, as state-specific cases in point, provide the terrain for our
analytic discussion - for it is these two Arab states, in particular, that have
borne the brand of violence along with the "enlightened" class fragments of
their modernizing societies.

Indeed, while the state, artists, and intellectuals as stakeholders in the
ecological and cultural heritage and its revival are waging their own battles
against "terrorism in the name of Islam", response at the level of intelligentsia
has been target against censorship and largely through publishing banned
material and countering the threat of Muslim militants with anti-productions
(Islamic Cultural Offensive, 1993).

The state, on the other hand, had to confront revolutionary Islam, particularly
the Muslim fundamentalist movement, Gamaa el-Islamiya, and the Islamist,
extremist organization, the Jihad, so called "abiding nightmare of the Egyptian

authorities". Both organizations have unleashed a programmatic anti-tourism action, in effect, a string of violent operations directed at foreign visitors - spreading alarm in the West and, of course, Israel (Islamic Cultural Offensive, 1993).

In the wake of the fundamentalist charge against the secular society, that "they do not abide by God's Law and they are not standing by the side of Muslims (Islamic Cultural Offensive, 1993), has followed the dynamics of the escalating confrontation; the Hebron bloodshed (a popular synonym for the senseless massacre of Palestinians in the occupied territories), a number of ambushes and bombing incidents on Nile cruisers.

The river Nile itself has made Egypt the cradle of civilization and has acted as the desert country's life-line ever since, not least as an eco-tourism attraction. Its rains and banks as well as travel agencies and foreign (especially American) mission stations, which are critical facilities for western tourists, have not been spared the fundamentalist onslaught. Yet, tourism is a vital sector in the Egyptian economy for the tourism revenue is regarded as one of the "four pillars" of the country's fragile economy, along with oil exports, expatriate earnings, and tolls from the suez Canal.

Unlike Algeria, where the head of state is inching towards "a national dialogue" with the outlawed Islamic Salvation Front (FIS), Egypt has ruled out religious participation in a similar but much-delayed "nation dialogue". Rather than a negotiated settlement leading to a cessation of hostilities, the dynamics of confrontation have taken their toll, causing the state to act beyond conventional measures, viz. police escorts, gun battles, secret sentences, bannings, and even hangings, to include measures of social intervention (African Research Bulletin, 1994).

The socio-politically motivated reconstruction of the Egyptian ecological heritage, especially in the field of archaeology, is one of the important measures that are geared towards upholding the rule of interest, that of modernization and eco-tourism. In fact, in the current cultural offensive, the country's ecological reconstruction is a contested zone, a site of struggle, so to speak.

Egypt and Algeria face Islamic fundamentalist violence of unprecedented proportions. It is no happenstance that, for example, the internally-based and most brutal as well as fanatical of the Islamic militants waging an insurgency
against the military-backed government - the Armed Islamic Group (GIAC) - specializes in the murder of foreigners, which it calls "crusaders and Jews" or "spies of the unbelievers" in the land of Islam (African Research Bulletin, 1994). From its fellow-compatriots, the GIA demands total conformity to Koranic law. The "class cleansing" of recent times should be viewed in this light, that following a campaign of assassinations of servants of the state-policemen, soldiers, judges, and mayors - militants have turned to killing doctors, writers, sociologists and journalists in their struggle to turn Algeria into a country ruled by strict Islamic Sharia law. As the radicalist dictum goes, "those who criticize is with the pen will die by the sword" (African Research Bulletin, 1994).

Like in Egypt, where supporters of radical political Islam have been at the forefront under the iron rule of interests: the women in the urban, industrial zones, either by conviction or prudence, go to work with their heads uncovered - refusing to wear the veil; the youth, despite exhortations to refrain from unorthodox haircuts, reflect modern western influences. In light of the fundamentalist pressures, what are the implications for eco-tourism? Clearly the stakeholders in the industry face colossal, if not horrific, consequences. In the case of Algeria, visiting western businessmen, tourists, environmentalists, and archaeologists are branded "Jews, Christians, and foreigners who are part of a colonial plot to commit profanities in our country":

"If they are liquidated, that will destabilize the impious Algerian regime and help return the country to the reign of Islam as defined by prophet Mohammed" (African Research Bulletin, 1994).

It should be clear, thus far, that rather than eco-tourism, radical political Islam demands the immediate implementation, by violence, if necessary, of the Islamic legal and social code, "Sharia" to be specific.

As for Egypt, the consequences are, by and large, similar, but the signs are encouraging. Against the background of the political economy that is characterized by "the fragility of the state in the face of Islamic cultural offensive" as well as a neo-inquisition against eco-tourism, the need to be united against a common danger has become paramount. The pro-Western state of Mubarak took the initiative, which was part of the country's drive to repair the damage inflicted on the tourist industry by Islamic militants.

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The drive itself is essentially a resuscitation of the archaeological heritage that would be environmentally sustainable - with politic-economic as well as ideological interests at stake. This appears to be reflected in the following developments:

- The country's ancient royal mummies are now back on public display for the first time in years. Mummies put in store by Anwar Sadat, the previous president, were unveiled to the public.

- For the beleaguered government of Mubarak, who personally sanctioned the reappearance of the 3,500-year-old relics, the reopening of the redesigned mummies room is a double gesture of defiance. It was in an effort to counter militant Islamic criticism against the public display of the dead that Anwar Sadat first ordered the royal remains to be locked out of sight. He was shortly thereafter gunned down by those whose sensitivities he had tried to appease.

- In addition to ignoring Islamic criticism of the display of the mummies, the present government has made it clear that its return is a central plank in its campaign to defeat the militants, "whose attacks cost the tourist industry dearly" (Islamic Cultural Offensive, 1993).

With this strategy of "total onslaught" at the level of the cultural counter-offensive, after years of indecision, the archaeologists in Egypt under state auspices, were, to ensure, through ambitious rescue projects, the rebuilding of Nubian temples - monuments that were in grave danger from ground water. The threatened temples enjoy a historic uniqueness in that they include elements from four periods of Egyptian history - the Pharaonic, the Persian, the Ptolemaic and the Roman. It is such cultural and social interventions that aptly provide the enabling environment for "Pharaohs return as tourist bait" (Islamic Cultural Offensive, 1993). In light of this, it remains to be seen to what extent religious fundamentalist movements will be able to influence eco-tourism, modernization, and government policies decisively.

**Toxic Waste**

The issue of "waste contract", alternatively toxic dumping, winds up the topical thrust of this study. Deadly at it is, toxic dumping constitutes one of
the critical dynamics of the Western-cum-Third World environmental problem which emanates from foreign industrial and domestic waste cultures. Once contracted, it has serious global consequences for the health and well-being of the ecological heritage, conservation, and eco-tourism industry. Whilst in monetary terms waste absorption may be twice the national annual revenues of impoverished countries, the long-term impact is, indeed, ecological disaster.

A related development to toxic dumping, no less interconnected with global pollution, is "toxic burning", generally referred to as "the incineration of toxic wastes" at sea. For the African continent that is wholly surrounded by water, marine incineration can only have disastrous consequences for the majority of states. With the current lack of appropriate technologies to deal with noxious waste, except for bannings, industrial countries, such as the United States and Britain, are now practising an open door policy - leaving the door open for the practice to continue away from their own shores - these countries have already banned incineration off their shores - but not preventing sea incineration plants being set up off Third World Countries. Here, perhaps, something can be learned from the letter, and the spirit of the "Rio Process", which details rules that provide an anti-dumping prospect and is, therefore, an improvement over the old anti-dumping code - in so far as methods of use, criteria for proof of injury, modalities for anti-dumping, and dispute settlements, etc. are concerned (Grossman et. at., 1994:111).

"Human" Conservation

Africa, as well, has its unique form of dumping the excesses of human brutality emanating from the policy of ethnic cleansing and effected through the instrumentality of tribal massacres, often on a horrific scale. The tragic mass killings inside Somalia, Ethiopia, and more recently, Rwanda are particular cases in point. Whilst these countries may vary in degree of planned genocide and spontaneous outburst of ethnic hatred, they nonetheless share a singular commonality - that of a tribalist approach to the worst blood-bath in Africa's recent history. In the following discussion, the illustrative case of Rwanda - clearly a case of the worst genocide Africa has ever seen - underscores the need for "human" conservation, a term to which our study title bears particular reference. Rather than a truce, reconciliation, or even the imposition of an international solution upon opposing sides, there has been, instead, the extermination of the entire section of national communities, both
Tutsi minorities as well as Hutu democrats opposed to the extremities of planned genocide (New Africa, 1994: 12 - 14).

While Rwanda's "Operation Genocide" was a calculated plot to ethnically cleanse the country, some experts put the killings as far more than the commonly accepted figure of 200,000, others as high as 500,000 - it has taken a horrific toll on the region's ecological and environmental well-being, putting a burden - 2,000,000 refugees who have been forced to seek refuge in surrounding territories - on all well-meaning neighbours. In terms of negative consequences for the country, one reporter talks about Rwanda, once Africa's most densely populated country, as "a country of the dead", (New Africa, 1994:15) and adds,

"whole villages are deserted save for the vultures feeding on the bodies and the swarms of flies: Babies, little children and their mothers are left to rot where they have been slain" (New Africa, 1994 : 12 - 14).

As for the regional consequences, these have had a telling effect on environmental sustainability - for the living, at least.

"So many bodies have been thrown into the rivers that the water sources are polluted ... Thousands of corpses have been swept more than 100 miles down the Kagera river into Lake Victoria ... Bodies were counted flowing into the Lake at the rate of 80 per hour. Nearly two months after the Presidents' plane had been brought down, the killings were continuing. Local Tanzanian peasants were being paid 6.5 (shillings) a day to clear up the corpses along the Lake shore. Uganda declared a whole tract of the Lake Victoria shoreline a disaster area" (New Africa, 1994 : 12 - 14).

The "human dumping" into the rivers and Lake Victoria which has acted as the region's life-line over the years, has resulted in the affected countries declaring the area an ecological disaster (New Africa, 1994 : 12 - 14). The full implications and effects of this human dumping are yet to be fathomed.

Suffice it to say that the disturbed ecological balance may erode the foundations, if not sustainability, of the region's economic growth - bringing
greater risks for future generations. In any event, the long-term, cumulative effects are transnational in character and can only be tackled through regional cooperation.

In light of the foregoing discussion of the current developments in Africa's ecological and environmental heritage and the "development problematique" associated with it, it would seem that this critical discussion, by extension, implicates what is generally referred to as the Western origins of Third World hostilities - the legacy of colonialism and foreign experts, and, in the special case of Islamic fundamentalists, aversion to what they perceive as flaws in the modernization of their countries ecological heritage.

A successful strategy would, therefore, require a unique process forged in Africa by Africans themselves, in search for environmentally friendly measures, initially to set up operational environmental and ecological information systems to meet the demands of resource users, planners, and decision-makers for better renewable resource management. In the longer term, there is the need for a process to identify country-specific environmental conditions along with causes, what must be done to overcome the problems. But, first, some of the development hurdles emanating from internal as well as external pressures need to be addressed.

These are, in effect, the vulnerabilities of Africa's political economy. The environmental vulnerabilities to which the African continent is exposed are, by and large, regional as well as country-specific. In regard to the Arab states in the north, these are - as already pointed out - characterized by ideological assaults from Islamic fundamentalists who perceive flaws in their countries' modernization schemes. Arab states will, therefore, increasingly have to intensity the modernization drive and restore domestic confidence of tourists in view also of the growing awareness of the knock-on effects tourism has on all other sectors of the economy-tourism based on ecological sustainability, one that would help boost employment creation, foreign exchange earnings, the GDP and, generally, diversification of the economy.

As for 'black' African countries, these are gradually moving their political economies away from dirigiste policies seeking - instead - transformation to market oriented and static controlled economies, and cleaning up the macro-economic environment. However, as they search for development paths to right past injustices, they are increasingly faced with in-built problems - economic and technological globalization that has reduced the scope for
national governments to control processes. With regard to the tragedy of "human dumping" and the spill-over of massive refugees to neighbouring countries, these are indicative of a reversive order. Having waged the battle for independence, Africa is now waging the battle for survival, often against a background of inadequate, and even indifferent, response from the international community to its plight. Following from this human catastrophe, is the disturbed ecological balance, the erosion of economic foundations of growth, and the risks, for future generations. These are serious consequences threatening the economic and political stability of the areas affected.

Given such disparate and, indeed, challenging tendencies, it follows that the African states need to give high priority to environmental and ecological concerns at the national level, followed by raising the level on a broad regional basis - if the continent is to experience an ecologically more sustainable development.

Conclusion

The centrepiece of these concluding comments is the implicit proposal that responsibility for ecological and environmental sustainability lies with national governments (and the people), which would enable development to be adapted more readily to the individual country's economic and social conditions. The absence of this political support all too often opens up Africa's ecological heritage to external conditions - leading to system's vulnerability. In a recent study entitled, "Environmental Sustainability with Development: What Prospects for Research Agenda?", a similar conclusion is simply reached:

"Undoing unsustainability and building sustainability in its place will be an enormous task, against great opposition, and made much worse by uncertainties, aggravated by human action, with which we have to live in the foreseeable future. It is further made worse by the widespread distrust of government. We need to pay attention to the past and to the immense fund of knowledge possessed by resource managers on the ground ... The political economy within which
resource management takes place is of fundamental importance, and if that continues to be based on licence to exploitation and greed, nothing will improve" (Brookfield, 1991:62).

Reforms at the level of the state and society are a sine qua non for sustainable development and, in the African context, a significant measure of intervention cannot be avoided. Rather than be informed by misguided ecological idealism, Africa's political economy needs to be guided by what is necessary and what is possible and what it will cost in financial terms, in institutional terms, and in terms of shared social responsibility, to achieve a sustainable future. This implies an interdisciplinary and collective approach which is essential to any social action, no less the sustainability of Africa's ecological heritage.

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