Resource Rents and the United Nations

Funding for a new global habitat conservation fund

Richard Steiner

THE WORLD is continuing to lose natural habitat – forests, wetlands, grasslands, mangroves – at unprecedented rates. An estimated 50-150 species become extinct every day. This may take decades to resolve, which is why an immediate mechanism must be established to protect critical ecological habitats, such as identified biodiversity "hotspots" and other threatened ecoregions.

Richard Steiner says that there is urgent need to establish an annual $5 billion-$10 billion Global Habitat Conservation Fund (GHCF) within the United Nations to pay for habitat protection. For the under-funded Global Environment Facility (a partnership of UNDP, UNEP, and the World Bank) is not able to provide the necessary protection.

The GHCF should be funded by a nominal (0.5%-1%) global tax on the rents of extracted fossil energy resources. At just $1/ton of oil equivalent, the Fund could raise over $7 billion every year from coal, gas, and oil production. This would amount to less than one cent per gallon of gasoline, for instance.

The GHCF was endorsed by the UN Millennium Forum in May 2000 in New York, and endorsed in the *We the Peoples Millennium Declaration and Agenda for Action* forwarded by UN Secretary General Kofi Anan to world leaders meeting at the Millennium Summit. With time running out for habitats, Richard Steiner appeals for the establishment of the Fund by securing agreement for it at the 2002 Earth Summit in Johannesburg.

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AS WE ENTER the 21st century, it is an appropriate time to address an issue of critical importance to the future of all humanity – the protection of the remaining natural habitat of our planet. Below, we outline the idea and need for the establishment within the United Nations of a Global Habitat Conservation Fund, modelled perhaps after the Land and Water Conservation Fund in the United States.

The recent century has seen remarkable advances in many criteria by which we measure human progress – health, science, equality, technology, commerce, democracy. At the same time, however, we have seen a dramatic threat develop that is simply unprecedented in our collective history – the continual, cumulative loss of natural habitat. The UN should be proud of its many historic accomplishments in the arena of global habitat protection, but when we honestly measure our efforts against the alarming realities of the continuing loss of natural habitat, it is evident that we are losing ground in this crisis, not gaining.

A poignant example is that of the continuing loss of forest habitat and the resulting biodiversity crisis. As Earth has lost about half of its original forest cover, and only about 20% remains today as large, relatively undisturbed frontier forests, the loss of biological and genetic wealth due to species extinction has soared. Other rapidly shrinking habitats include grasslands (savannas, prairies), wetlands, coral reefs, and mangroves. Some ecologists (Myers, *et al.* 1999) have estimated that as many as 600,000 species have become extinct just since the "biotic holocaust" began about 50 years ago. And it is clear that most of this mass extinction is being caused not by direct harvest, but rather by *the loss of habitat.* Some project that, if the present rate of habitat destruction continues, we could lose half of all species on Earth by 2050 – the 6th mass extinction. As extraordinary as this sounds, it is accepted as a realistic scenario by many scientists.

Just since the Convention on Biological Diversity entered into force on December 29, 1993, the world has lost over 100 million hectares of forest habitat, a comparable amount of other habitats, and some estimate that over 100,000 species have become extinct. And along with such species loss has been the loss of many indigenous cultures.

Beyond the ecological, scientific, and ethical reasons to conserve habitat and biodiversity, there is a very practical reason as well – the commercial potential of this biological wealth is enormous. It is clear that the medicinal, genetic, nutritional, and technological value of many known and unknown species dwarfs the nominal, short-term values being realised by conventional uses today. That through habitat destruction we are losing many of these species even before they are known to science is something that anyone should see as highly irresponsible.

While the underlying causes for this habitat destruction and loss of

biological diversity are complex and vary from region to region, a central facet of any solution will have to be substantial financial support. In addition to debt relief, easily accessible hard cash will be needed to purchase conservation easements from private land and resource owners, provide payments to governments for conservation of various publicly held habitat areas, enforcement of protected areas, retirement of certain industrial rights (timber concessions, etc.), payments to workers displaced by habitat conservation projects, payments to communities, and so on. Money alone may not solve all of these problems, but experience has shown that a few hundred million dollars can accomplish far more than decades of good intentions of government policymakers with little capital. To the extent that lack of money and economic opportunity is a cause of habitat destruction, providing money for conservation can be a solution.

It is appropriate that there is presently a great deal of development assistance being provided to habitat-rich nations through such instruments as the World Bank, International Monetary Fund, UN Development Program, Global Environment Facility, and other foreign aid efforts. However, there is woefully insufficient money available to these struggling regions for habitat conservation. Without sufficient capital flowing to these areas specifically for habitat protection, the spiral of poverty and habitat destruction will continue unabated. To address this critical problem, we propose that the United Nations establish a Global Habitat Conservation Fund (GHCF).

The causes of habitat loss

UNDERLYING CAUSES of habitat destruction are many, including poverty, production and consumption patterns, demographic pressures, land-tenure patterns, land speculation and markets, illegal harvests, unsustainable agriculture, refugee-related problems, trade, perverse incentives and subsidies, non-renewable resource exploitation (oil, coal, minerals, etc.), global climate change, trans-boundary pollution, poorly regulated investment, structural adjustment policies, external debt, corruption, political inertia, and so forth. In fact, these fundamental issues underlie many global problems today such as crime, starvation, ethnic strife, and human rights abuses. Addressing the complex of underlying causes is essential, but this will be a very difficult and long-term initiative, taking perhaps several decades. A resolution of the global habitat crisis simply cannot wait this long.

It will be necessary to endow a substantial global fund to be used for the conservation of critical habitats, while the fundamental issues above are addressed over the coming decades. If our house catches on fire we have to act immediately to put the fire out, leaving questions about causes and general fire safety for a later time. Similarly, if we get injured in a car wreck we need to be treated immediately in the emergency room for our

injuries, leaving questions about fundamental causes to be sorted out in the future. It is often necessary to immediately treat the symptoms of problems while long-term mitigation measures are taken.

It is important to address the fundamental causes of habitat loss, but while doing so we have to preserve our conservation options by protecting all of the threatened critical habitat that we can now. *We simply must protect threatened habitat while we seek to eliminate the fundamental causes of habitat damage and loss.* The critical interim remedy is to provide money up-front to pay for habitat conservation – the establishment of the Global Habitat Conservation Fund. The value of conserved habitats will pay for the present day costs to the Fund many times over in the coming century and beyond. And by protecting natural capital in this way, the Fund will also help stabilise communities. Such a financial instrument will also directly counteract some of the underlying causes of habitat loss such as enormous perverse incentives for habitat destruction (estimated at $1.5 trillion per year worldwide) and the inability of markets to capture true costs of habitat loss.

Potential models for the Fund

IT IS ESSENTIAL to establish a new financial instrument for the conservation of threatened habitats – a Global Habitat Conservation Fund (GHCF).

As a potential model for the GHCF, we could look to the Land and Water Conservation Fund (LWCF) in the United States. The LWCF was established to receive about $900 million each year from federal Outer Continental Shelf (OCS) oil and gas leasing revenues, and is intended to allocate these funds to the purchase of protections for threatened habitat. Through FY 1997, approximately $4.3 billion was appropriated to the LWCF to purchase federal parks and recreation lands, and $3.2 billion has gone to the individual states to protect habitat and recreational resources of state interest. The concept is somewhat sublime – use federal royalties from the private development of non-renewable public resources to finance public habitat protection for all. In the year 2000, the U.S. Congress passed legislation that significantly increased appropriations to the Land and Water Conservation Fund, something with bipartisan support.

Another example is the Exxon Valdez Oil Spill Restoration Fund, also in the United States. As a result of the extensive natural resource damage caused by the 1989 oil spill in Alaska, Exxon paid the federal government and State of Alaska $1 billion with which to conduct an environmental restoration program. Realising that little could be done to actually restore the injured environment, the governments, at the urging of local residents, used much of the money to purchase conservation easements on threatened habitat along the shoreline of the oil spill region. As a result,

about 300,000 hectares of coastal forest and wetlands that were threatened by various activities have been permanently protected, leaving an extraordinary legacy of this disastrous event. And by removing the perverse incentives for unsustainable economic activity, these funds have allowed local communities to redirect their economic futures toward sustainability.

It should be pointed out that the need for the GHCF is distinct from the existing Global Environment Facility (GEF) established in 1990 by the World Bank, UN Environment Program, and the UN Development Program. The GEF, while a necessary and worthwhile project, is terribly under-funded, broadly focused in many environmental issues, and is first and foremost a development fund. Habitat continues to be lost at unprecedented rates despite the operation of GEF for over 10 years, obviating the necessity of a GHCF. It is possible that the GHCF could be administered through the GEF.

Source of revenue for the Fund

THERE ARE MANY forms that the GHCF could take, but it is paramount that revenues be substantial and stable, thus not subject to annual political appropriations processes. Therefore, it is proposed here that a mechanism be established by which the Fund receives modest royalties, tariffs, or taxes on all global fossil energy (hyrdrocarbon) production – oil, gas, and coal. For instance, a 10 cent/barrel (0.5%) tax on global crude oil production alone would raise over $2.5 billion/year, and would not contribute measurably to any increased product cost to consumers. Similarly, a $1 per ton of oil-equivalent surcharge or tariff on global fossil fuel production would have raised in 1997 about $2.2 billion from coal, $3 billion from oil, and $2.2 billion from natural gas, for a total of $7.4 billion. Again, none of this would contribute to any significant increase in cost to consumers (less than one cent per gallon of gasoline for instance).

Each of the hydrocarbon producing nations should agree to establish this tax, with monies being passed immediately thereafter into the GHCF at the UN. According to the US Energy Information Agency, about 50% of the world's hydrocarbon energy resources are produced in just five countries: the United States, Russia, China, Saudi Arabia, and Canada. The next five largest producers are the United Kingdom, India, Iran, Norway, and Mexico, which together produce about 13% of the world total. Thus, two-thirds of the hydrocarbon production tax for the GHCF would be collected by just these 10 nations. Other principal producing nations include Venezuela, Iraq, Kuwait, United Arab Emirates, Algeria, Libya, Nigeria, Indonesia, Germany, Poland, South Africa, and Australia. The 22 nations listed above (10 OPEC members, 12 non-OPEC) produce about 80% of all the global fossil energy

resources at present. Thus, the agreement of just these 22 nations to establish the Fund would be a threshold for success, contributing about $6 billion to the Fund.

A $5 billion-$10 billion a year fund (only .01%-.02% of annual Gross World Product, or 1%-2% of annual world military expenditures for instance) would go a long way toward protecting the world's threatened habitat and allowing local societies to move toward sustainable economies. *This is the minimum scale of investment that is necessary if we are serious about stemming the loss of habitat worldwide.* This amount should be compared to the following recent value estimates that:

1) Earth's ecosystems provide services valued at $33 trillion/yr. (Costanza, 1997);
2) environmentally damaging government subsidies amount to approximately $1.5 trillion/year (Myers, 1998);
3) as much as $300 billion a year would be necessary to fully protect global biodiversity (James, *et al.*, 1999); and
4) over the past decade, worldwide NGO spending to protect biodiversity hotspots has amounted to only about $40 million per year (Myers, *et al.* 2000).

Further, revenues to the Global Habitat Conservation Fund that are not expended annually should accrue as the corpus of an endowment or trust, building a large fund to be available for future use as the world's fossil fuel resources are depleted over the coming decades. Thus, not only would critical ecological habitat be preserved in the near-term, but also a substantial fund would be available *in perpetuity* for various environmental and sustainable development purposes. In this sense, the GHCF would look something like the Alaska Permanent Fund, which today has grown to $27 billion from the State of Alaska's share of Alaska North Slope oil royalties as the oil fields become exhausted.

In this way, the long-term costs of non-renewable energy development – such as resource depletion and pollution – can be partially recovered and applied to global habitat conservation for all time and all people. Such financing would be an appropriate and workable mitigation mechanism to offset the long-term depletion of non-renewable energy resources by providing for the conservation of irreplaceable biological habitats and species diversity. Other creative revenue sources could be considered as well, such as global trade tariffs, a sales tax on luxury items, taxing financial transactions (the "Tobin tax"), etc.

Other revenue sources, such as payments made proportionate to a country's GNP, are certainly worth exploring. However, to the extent that they would rely on the political process of annual appropriations by governments, such sources may be less reliable than a fossil fuel tax subject to a legally binding multi-lateral agreement.

What to conserve

ALTHOUGH THE habitat conservation task before us is indeed immense, various comprehensive analyses have identified strategic conservation priorities. For instance, a recent analysis (Myers, *et al.*, 2000) concluded that 44% of all plant species and 35% of all vertebrate species are confined to just 2.1 million km^2, or 1.4% of the land surface of Earth, having formerly occupied some 17.4 million km^2, or 11.8%. These have been called "biodiversity hotspots" – biologically rich areas (extraordinary concentration of species and high endemism) under greatest threat of destruction. The eight "hottest of the hotspots" identified by Myers, *et al.*, are Madagascar, Phillipines, Sundaland, Brazil's Atlantic Forest, Caribbean, Indo-Burma, Western Ghats/Sri Lanka, and the Eastern Arc and Coastal Forests of Tanzania/Kenya. All have only 1% – 9% of their primary vegetation remaining. Clearly, these and other hotspots must receive priority consideration in a triage approach for the GHCF. Likewise, extensive areas around the biodiversity hotspots should be protected and allowed to gradually recover to their natural ecological condition in order to provide additional buffer from disturbance and restoration benefit.

Beyond the highly threatened biodiversity hotspots, other extensive habitat areas need immediate protection. One recent comprehensive analysis (WWF, 1998) identified some 233 representative and outstanding terrestrial, freshwater, and marine ecoregions in need of protection – "the Global 200". Selection criteria included species richness, endemism, higher taxonomic uniqueness, unusual ecological or evolutionary phenomena, and global rarity. The identified ecoregions include tropical forests, temperate forests, taiga, arctic tundra, grasslands and savannas, deserts, Mediterranean shrublands, coastal rivers, large deltas, coral reefs, estuarine ecosystems, polar and subpolar marine ecosystems.

Examples include Australia's Great Barrier Reef, the Florida Everglades, the Ganges Delta, the African Rift Lakes, the Yangtze River, South Africa's Fynbos shrubland, Namib-Karoo Desert, Maoke Range of New Guinea, Zambezian savanna, Chukotka tundra, coastal mangroves of Southeast Asia, boreal forests of Canada and Russia, dry tropical forests of Bolivia, the Choco-Darien region of northwestern South America, and so forth.

Another recent analysis of the world's primary forest cover (WRI, 1997) found that 70% of the world's remaining "frontier forests" (large, intact, undisturbed natural forest ecosystems) were found in just three countries – Brazil, Russia, and Canada.

Further, although most countries have already lost *all* of their frontier forest or were on the edge, several countries offer great opportunity to conserve remaining forest cover – Brazil, Venezuela, Russia, Colombia, Canada, Guyana, Suriname, and French Guiana.

That there is substantial overlap in these identified habitat conservation priorities should give policymakers confidence in directing funds from the GHCF. Decisions as to where to allocate monies from the Fund would probably best be decentralised into the various regions and the habitat-rich nations themselves, and an annual proposal process with clearly elucidated priorities and evaluation procedures should be initiated regionally. And it is imperative that sufficient monies be allocated from the Fund for local communities to participate in the enforcement of protected areas (from illegal logging, poaching, etc.) and for the development of sustainable economic alternatives to habitat destruction.

The Fund would be a win-win scenario and is urgently needed. In essence, it is time to put our monies where our minds, hearts, and mouths are – sustaining the biosphere. Such a funding mechanism is not just possible, it is inevitable. Without such funding, the UNDP admits that "almost total forest destruction in poor countries will be the result". Future generations will surely judge us harshly if we fail to act at this pivotal time.

It is essential that this proposal be added to the agenda for the upcoming 2002 Earth Summit, the legislative and administrative policy agendas of hydrocarbon producing nations, hydrocarbon producing companies, habitat-rich nations, and other venues as appropriate.

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