



## National Development Strategy

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January 13, 2002

### The environment

The chapter on the environment in the National Development Strategy (NDS) begins with a listing of the "environmental philosophies" on which Guyana's social and economic development should be based. Among these are that environmental considerations should underpin all aspects of development; that where there are threats of serious or irreversible damage, the absence of scientific certainty should not be used as a reason for postponing the implementation of measures to prevent environmental degradation; that each generation owes it to those who follow it to act responsibly to ensure that no lasting damage is done to the environment; and that, ultimately, the success of Guyana's development strategy would depend on the extent to which it integrates environmental and developmental imperatives.

The authors of the NDS point out that Guyana is particularly environmentally vulnerable because much of the country is covered by brittle, fragile forest ecosystems; because about 90 percent of the country's population lives on a small, cramped, coastal belt which is below sea-level and which is continuously threatened by inundation from the Atlantic Ocean and from the many rivers which flow through the country; because our entire economy is dependent upon coastal agriculture, and upon the exploitation of forest and mineral resources, meaning that the ordinary economic activities of the ordinary Guyanese constitute a continuous threat to the environment; and because the citizens of Guyana, being poor, find it difficult to resist the temptation to over-exploit their natural resources, and to repair any damage that might occur from such extravagance.

In an attempt to be more specific, the authors of the NDS assert that there is over-fishing in Guyana, leading to the depletion of fishing stocks of commercial species; that our mangrove swamps are being deforested, resulting in the loss of habitats for important juvenile marine species, and increasing the danger of coastal flooding; and that the sometimes over-harvesting of inland forests tends to reduce species diversity in some areas and leads to a loss of habitats in others.

They stress that although the most common examples of resource contamination are associated with water pollution from mining, from untreated human and animal wastes, and from agricultural and industrial wastes, air pollution is also a public health hazard, particularly in areas such as Linden, where suspended mineral particulates have been implicated in certain human respiratory disorders. Moreover, even the relatively small incidence of industrial activity in Guyana sometimes leads to air pollution (caused by the burning of fuel and wastes, and by fugitive dust), to water and soil pollution (caused by the release of chemically contaminated effluent), and to thermal pollution (caused by cooling water in industrial plant). The authors of the NDS place the most severe blame for environmental degradation in our country on the bauxite and gold mining industries. Indeed, they claim that almost all the stages that are followed in the mining and semi-refining of the ores of these industries contribute to the spoilage of our countryside and to the deterioration of the health of the country's citizens.

For example, initial bauxite mine-clearing involves the removal of forests, the destruction of ecosystems, and the displacement and loss of elements of flora and fauna. Thereafter, the removal of the overburden and subsequent mining activities, lead to the creation of huge craters which become receptacles of stagnant water. Moreover, the sediment released in these operations is transported to our streams and rivers, and causes their siltation, thus affecting the drainage systems of the mining areas. A similar litany of woes is recounted by the authors of the NDS in regard to the processes of drying and calcining the bauxite although, in these instances, the environmental damage is caused by the escape of dust from the kilns, by accidental oil spillages, and by the release of bauxite tailings.

Environmental degradation through the mining of gold is multifaceted: waste pollution (resulting in the death of streams, the destruction of aquatic plant life, and the asphyxiation of fish through the use of cyanide and mercury in various processes of recovery); erosion and other forms of land devastation through the utilisation of driverless "missile" suction dredges, and the employment of powerful water jets to create a slurry from which gold particles are recovered.

The preparatory phase in all of these gold-mining operations involves, of course, the removal of vegetative cover and topsoil to permit access to the deposits of gold-bearing rocks, leading again to erosion, a reduction in biodiversity and the destruction of habitats. One final note in respect of environmental degradation. The lucrative nature of the wildlife trade has led to the over-exploitation of the resource and a fierce resistance by exporters to any attempts to regulate activities. Indeed, exporters often enlist the aid of trappers, who plead the possible loss of their livelihoods if the trade is curtailed. What is generally overlooked in this debate, however, is the critical ecological role of wildlife in their natural environment. This includes functions such as the stabilisation of natural populations, the pollination of flowers, and the dispersion of fruits and other propagules. The strategy which has been formulated by the authors of the NDS to reduce the

occurrences of environmental degradation in all its forms, while at the same time ensuring the sustainable management of those renewable resources that provide the critical foundation for our current and long-term economic development, are adumbrated below.

The authors of the NDS are insistent that the provisions of the Environmental Protection Act should be rigorously enforced by the Environmental Protection Agency (EPA), which should set standards for air emissions, effluent discharges, and noise levels for industries; ensure strict compliance with environmental management plans; conduct regular environmental audits; and promote, in collaboration with industry, the training of adequate numbers of technicians to make certain that the nation adheres to legal environmental standards. Moreover, the EPA should strictly enforce those conservation measures that have been prescribed in the NDS in respect of forestry, fisheries, mining and agriculture. In addition, the environmental functions of sectoral agencies should be transferred to this Agency. The EPA should be institutionally strengthened so that it might be adequately staffed and funded to perform these important tasks.

The NDS is positive that community participation is vital if our efforts to manage many vulnerable ecosystems and to conserve the resources of protected areas are to succeed. It therefore suggests, with the EPA assuming the role of organisers, that relevant local communities should be involved at both the design and implementation stages, in all aspects of resource conservation.

The NDS strongly recommends that integrated, cross-sectoral management teams be established to work, again under the general guidance of the EPA, in identifying, monitoring, and solving possible problems of coastal degradation. Such problems would include sea-defence breaches, and damage to drainage and irrigation structures. A special unit should be established in the EPA to undertake these functions. Felling in mangrove areas should be banned.

The NDS suggests that mechanisms should be put in place to finance the non-timber uses of the forests. Moreover, a scheme should be devised and implemented to compensate Guyana for any decision it might make not to exploit its forests for timber and timber products, in the interests of the world at large.

The NDS proposes that mining companies should at a minimum be required by law to (i) recognise environmental management as a high priority activity. This would include strict adherence to the provisions of environmental management plans, based on environmental impact assessments, and embracing emergency procedures; and (ii) adapt environmentally sound technologies in all phases of mining. The NDS also suggests that the backfilling of excavations and the re-vegetation of sites, as mining operations

proceed, should be mandatory, and that maximum allowable dust emission levels should be established and enforced by the EPA.

It also recommends that regulations on the handling of waste should be established. It insists, in regard to wildlife, that the existing environmental regulations be replaced by new legislation which reflects international best practices and establishes a comprehensive system for the management, use and conservation of wildlife and the protection of biodiversity. It is also of the view that a new wildlife authority should be established by statute, that procedures be formulated to enable the new authority to meet modern standards of accountability, transparency and good governance, and that wildlife trading should be rigorously controlled in accordance with the requirements of CITES. It pays special attention to transport, prescribing that a safety programme should be established, and standards for cleaner fuels to eliminate lead and sulfur emissions introduced; that the impact of transport programmes and projects on the country's natural resources, and our safety, should be regularly monitored; that emission standards should be set for all vehicles; that the current practice of importing reconditioned vehicles into Guyana be phased out; and that a feasibility study on the re-introduction of railways should be undertaken.

And finally, it recommends that bio-prospecting should not be permitted in Guyana until and unless there is in place an adequate legal and institutional framework. It is also adamant that Amerindian intellectual property rights should be recognised and protected by law. The sharing of traditional knowledge should take place only on the bases of informed consent, and a fair share of benefits for the communities. [\(Back to top\)](#)