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the form of wide-ranging policies addressing environmental aspects within the context of sustainable development are in place.^{16–19} The principle of sustainable development is further enacted in Namibia's National Development Plan 2 (2002) and Vision 2030 (2002), which are strategic documents committing the country to environmental sustainability as an overall national goal. However, the concept of sustainable development leaves room for interpretation and what this actually means in practice is often a matter of lengthy and unresolved debates.²⁰ In terms of ecological restoration, no legal documents or policies mention restoration explicitly and restoration can hence be considered only a tool to make the use and extraction of natural resources sustainable.

Restoration and environmental management in practice

Despite ample legal and policy support, driven by the necessity of job creation and economic considerations, many economically marginal enterprises, although not sustainable in the long term and often damaging to the environment (such as small-scale mining), are allowed to operate in Namibia. These often leave environmental damage that is not repairable and which is discovered only once the company or individuals responsible have long ceased to exist or have left the country. Furthermore, there is inappropriate staffing of the institutions supposed to enforce enabling guidelines and undertake activities towards meeting the well-intentioned sustainable development and biodiversity objectives (many government positions in the line ministry responsible for the environment are currently inactivated or not staffed), there is a lack of understanding of the consequences of non-adherence, and sometimes political agendas prevail that conflict with biodiversity protection. The key legislation regulating environmental protection, the Environmental Management Bill, has not been ratified and at present exists simply as a policy rather than as a firm legal basis for action. This results in environmental management often being superficially addressed, if at all.

Restoring damaged ecosystems after mining and environmental impacts associated with other development projects is hence a far cry from implementation, and at present is seen as a luxury only the rich world can afford to address. Most decision-makers and developers do not realize that in many instances much can be achieved with minimal effort, good plan-

Towards implementing ecological restoration in Namibia

Antje Burke*

LIKE MANY OTHER DEVELOPING NATIONS, Namibia faces the dilemma of imminent ecological degradation in many parts of the country¹ versus expanding a struggling, largely resource-based economy to support its people. It is hard to argue that repairing damaged ecosystems for the benefit of maintaining ecological biodiversity is necessary in a poor country, unless the natural resource base for its people is directly affected (as in grazing and forest areas).² This article reviews the legal and policy framework for ecological restoration in Namibia and proposes some solutions to encourage restoration. Although the policy framework and suggested solutions are applicable to both, the focus here is on restoration in the context of infrastructure and mining developments and does not discuss explicitly the restoration of rangelands damaged by overgrazing.

Setting the legal and policy framework

The legal and policy framework for dealing with environmental matters in

Namibia is fairly advanced and places the principles of sustainable management and protecting natural resources high on the national agenda.³ Namibia is a signatory to many overarching international conventions, such as the Convention on Biological Diversity, the Convention to Combat Desertification, the Convention on Wetlands of International Importance, and the United Nations Framework Convention on Climate Change. Each of these provides a set of strategic objectives that addresses biodiversity conservation and land degradation issues.⁴ Environmental policy prescribes environmental assessments for all development projects,⁵ and a substantial body of legal documents is in place that addresses land degradation, pollution, soil erosion and water catchment management as well as species protection.^{6–10} Although many of the legally binding documents are out of date and are to be replaced with revised legislation in due course,^{11–15} enabling guidelines in

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ning and a basic understanding of ecological processes.^{21,22} The fact that this will result in new jobs and that there is also an opportunity to integrate environmental and social responsibilities,²³ is also overlooked.

What are the solutions?

If all draft environmental legislation in circulation were eventually passed into law in Namibia, there are four main actions that will facilitate placing restoration high on the decision-makers' and developers' agendas:

1. Emphasizing the positive social implications (job creation, and the long-term stability of the resource base for people);
2. stressing the link between restoration and sustainable development;
3. creating positive incentives (such as tax relief); and
4. providing practical, hands-on guidelines on how to restore.

As a first step, an analysis of available restoration methods and their applicability in the arid southern Namib (see page 413 of this issue²⁴) shows what may be feasible in a developing country with limited local capacity in restoration ecology, lack of incentives, and limited

pressure to implement environmental management.

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