Losses in biodiversity are becoming alarming. To safeguard what is left means placing priority on the protection of species and habitats. Ideally, this should be a goal in its own right. In practice, people have to see a direct gain. However, participation is by no means guaranteed to ensure adequate safeguard. However, participation as a prelude to partnerships that bind government, agencies, and communities through coordinated funding is much more likely to be successful. In the Cape Floral Kingdom of South Africa, one of the world’s 25 “hot-spots,” public–private partnerships are regarded as vital. In the Uckermark Lakes Nature Park in northeast Germany the partnership approach is proving the only uncontested way to biodiversity management. This article discusses why partnerships are so essential for the future of biodiversity. It also assesses what difficulties remain in order to ensure cooperative linkages between community gain and ecological enhancement.

Keywords biodiversity, Cape Floral Kingdom (South Africa), participation, partnership, Uckermark Lakes Nature Park (Germany)

Readers of Society and Natural Resources are familiar with a decade of discussion as to how far biodiversity can be protected by placing “ecology” or “people” first in biodiversity management (e.g., West and Brechin 1991; Wells and Brandon 1992; McNeely 1995; Pretty and Pimbert 1995; Sinclair et al. 2000). We briefly review this debate and observe that the primary objective must lie with the integrity of biodiversity (WBGU 2000, 4). This priority is most notably the case in regions where the remaining species and habitats are extraordinarily rich and extensively threatened. We also allude to the scientific evidence that justifies the extension of protection to larger and interlinked areas. We believe that this process necessarily embraces
ecological, economic, and social objectives into a coordinated approach. We note this because any process of extension will inevitably involve land users and landowners whose willing cooperation will be vital for the maintenance and enhancement of biodiversity.

To illustrate these preliminary observations we select two case studies. One derives from the experience of German protected areas management, and the other covers the emerging opportunities for the comprehensive management of the Cape Floral Kingdom in South Africa. The German case is significant because it provides a positive example of integrated biodiversity management in a country where there is still much opposition to protected areas (BNL 1994; Stoll 1999; WBGU 2000; Stoll-Kleemann 2001a; 2001b). The South African example is pertinent because of the sustained effort over the past 2 years to create a process for a coherent and participatory partnership for biodiversity management along the lines advocated in the literature we review. We explain that even well-meaning participation often fails. And we explore how partnerships can emerge from successful participation, and vice versa.

**Overview**

Biodiversity connects ecology and society through science, partnerships, and ethics. The planet bequeathed to humanity an abundance of species and habitats. Nowadays, by common agreement, we are witnessing, and are party to, an extraordinary loss of species and their ecological settings. Sala and his colleagues (2000, 1770), extrapolating present trends, believe that global biodiversity is likely to be substantially undermined by the year 2100. According to Pimm and Raven (2000, 844), some 18% of the species contained in the global “hot spots,” within which some 30–50% of all species may exist (Myers et al. 2000, 845), will be lost by 2050, even if all of those areas are fully protected. If only the existing safeguarded sites in the hot spots remain, these authors suggest that some 40% of their species may disappear over the next half century. This is due both to disturbance and to the destructive effects of fragmentation.

Soule and Sanjayan (1998, 2060) contend that at least half of total land area should be protected, compared to only 6–8% today, if species variety is to be guaranteed. Inamdar et al. (1999, 1856–1858) observe that only through a variety of financing and management partnerships could any extension in site safeguard beyond 10% be attained. They advocate the following prescriptions: prioritizing, consolidating, and rationalizing the protected area network; devolved responsibility for sustainable harvesting to the local scale; privatizing some of the protected area services; and devising new ways to generate income (e.g., providing carbon sequestration and water catchment functions).

The “ecology-first” perspective (also known as “fortress conservation” or “fences and fines”) emerged in its pure form in the colonial period when conservation “was imposed from the top” (Gbadegesin and Ayileka 2000, 89). Gbadegesin and Ayileka (2000, 90) are also convinced that in most parts of the developing world biodiversity conservation is still characterized by the top-down management echoing colonial governments. Such an approach continues to have its advocates. According to Brown (in press, 3), there is supportive literature that views “local communities’ welfare and development as directly conflicting with the objectives and practice of biodiversity conservation.” Salafsky and Wollenberg (2000) note that activities based on strict conservation of “core” protected areas require enforced boundaries within which no consumptive use of biological resources is permitted (see also Brown in press).
Another reason backing up this apparently "purist" contention is that convulsive changes in the global economy and the penetration of Western ideas and materialistic values into every corner of the globe may give rise to potentially chaotic and destabilizing socioeconomic conditions at the level of local communities (Terborgh 1999). Yet Inamdar et al. (1999, 1856–1885) state that in the majority view of the international community, "purely protectionist approaches to biodiversity conservation are widely criticised." Gbadebesin and Ayileka (2000, 90) add that "the failings of this top-down imposition of natural-resource policies and management on local people have been widely exposed in the literature."

The "people included" perspective (widely known as community-based conservation) looks to a direct cooperative relationship between the integrity of ecosystems and the sustainable livelihoods of local people (e.g., Salafsky and Wollenberg 2000). The claim is that biodiversity protection is maintained through mechanisms that not only support local economies, but that also rely on empathetic local management for its continuance (see McNeely 1995; Pimbert and Pretty 1995; Borrini-Feyerabend 1996; Barton et al. 1997; Davey 1998; Haynes 1998; Venter and Breen 1998). This is in line with Article 10 of the Convention on Biological Diversity (CBD).

The inclusion of local interests is now widely regarded as of fundamental significance for the sustainable management of biodiversity (see West and Brechin 1991; Lucas 1992; Wells and Brandon 1992; McNeely 1995; Pretty and Pimbert 1995; Borrini-Feyerabend 1996; Batisse 1997; WBGU 2000; Brown 2001). The Global Environment Facility (GEF) (2000, 46) directs its funding of National Biodiversity Strategies and Action Plans into such arrangements:

All plans and guidelines for national biodiversity planning emphasize the importance of local participation and consultation, and these areas are allocated more than half of the budget norms of enabling activity projects.

The following reasons are offered in favor of this participatory approach.

1. **Democratic necessity.** Bringing people into the management process recognizes their self-worth, appreciates their vital role and respects their citizenship credentials. This approach also incorporates the role of local property rights (McNeely 1995; Pretty and Pimbert 1995; Barton et al. 1997).

2. **Management legitimacy.** Effective and efficient management requires the understanding and the support of local people. Rigid management structures do not adjust easily to social, economic, or ecological changes. Protected areas established authoritatively from above without prior consent may make them "closed territories" with few links to the external worlds of hydrology, ecology, and culture on which biodiversity so depends (Batisse 1997, 9). From the point of view of peaceful coexistence, such a desperate state of affairs is not only counterproductive. It may also destroy any chance of long-term cooperation over economic activities such as ecotourism (as advocated in Article 8 of the CBD) (e.g., McNeely 1995; Borrini-Feyerabend 1996).

3. **Sharing knowledge and understanding** are vital for the success of protected areas. All actors have uniquely different perspectives as to what is a problem and what constitutes improvement. Since knowledge and understanding are socially constructed, what each actor knows and believes is a function of unique contexts and experiences. There is, therefore, no single "correct" understanding. What is taken
to be “true” depends on the framework of knowledge and assumptions brought in by individuals and their social and occupational settings. It is essential to seek multiple perspectives on any “problem assessment” by ensuring the wide involvement of different actors and groups (Pretty and Pimbert 1995, 10). Brown (in press) reminds us that local communities, often targeted for participatory processes, are rarely politically cohesive. They usually do not share a unified view and therefore do not always, or readily, see the need for peacefully linking multiple stakeholders and interests.

The GEF review of participation in National Biodiversity Strategy and Action Plans (NBSAPs) (GEF 2000, 40) agrees that participation is by no means easily attainable:

The broad participation of various stakeholders that started with the formation of multisectoral coordination committees or task forces has helped bring new information and ideas into the NBSAPs, thereby increasing their relevance and the prospects for support from various sectors. In many countries where broad participatory processes were implemented such as Argentina, Belize, Cuba, Mexico, and Zimbabwe, a sense of ownership has developed. But it should be noted that the contribution of these participatory processes to sustainability depends on the extent and depth of participation by key stakeholders. Participation sometimes did not extend beyond the coordination committees and task forces. A significant number of countries, however, had difficulties in their participatory processes. Thus, the effect of participatory processes on sustainability also depends on continuing these processes and ensuring they complement other factors that would support full implementation of the NBSAP.

Despite its beguiling attractiveness, therefore, the “people-first” approach is by no means easy to achieve. Barton et al. (1997, 75–77) provide a list of constraints that should be taken into consideration when designing and implementing participatory approaches.

- Participation by certain disadvantaged groups may clash with local customs (e.g., the participation of women, the landless, ethnic minorities, etc.) and may be quite alien (see also GEF 2000, 47).
- Governments may not support local participation or empowerment, especially if they regard these as a threat to the norms of their own authority or as an encouragement to opposition groups. The participatory approach also may not be viable because of local political opposition or sheer lack of institutional support.
- Participatory processes require specific investments of time and resources. In particular, the process of participation needs expert facilitation and clear objectives in order to avoid chaotic meetings and a general loss of direction. Furthermore, commitment over time is required and encouraging results may take a while to appear. This can tax the patience of donors, managers, staff and local people alike. Threats against natural resources may be escalating, and the urgency of taking action may discourage actors from undertaking lengthy participatory processes.
- Some compromises in conservation objectives may need to be made. For instance, a conservation initiative designed by outsiders may propose a total ban on local access to natural resources, which may be simply unacceptable to residents.
Brandon (1992, 564) describes some important “design dilemmas” when incorporating local participation into integrated conservation development projects (ICDPs):

What the project defines as a problem (which may be the entire reason for the project’s existence), e.g. decline in a species, may not be a concern of local communities. . . . Community participation may lead the community to define a set of needs which are not linked to the conservation objectives . . . what would happen if local people decided, through participatory mechanisms, that they wanted to use the resources in an unsustainable way?

Songorwa (1999, 2062–2064) reinforces the observations of Barton et al. (1997) from his review and experience of wildlife management programs in Africa. These failures of participation include:

- Failure to adopt a “bottom-up” participatory approach with genuine local involvement and understanding. Much of this is due to an absence of empathy among the implementing agencies. Other factors include unclear or contested property rights, so management agreements are difficult to establish.
- Empowerment is by no means a “clean” concept (Brown in press). It is rarely achieved because of the unwillingness to share power, already noted. In any case, empowerment operates on many social dimensions, and may not be achieved by economic measures alone (see also Agrawal and Gibson 1999; Cleaver 1999).
- An inability to address basic community needs and to distribute benefits equitably. In Tanzania, notes Songorwa (1999), wildlife protection scouts rarely receive payment, and are often at odds with poachers who are their neighbors. Few communities received the wildlife meat they were promised.
- Lack of trust in the implementing agencies, failure to underwrite donor grants for poor people unable to raise their own funds, and unreliable income flows combine to create a feeling of noncredibility, leading to an unwillingness to cooperate.
- Corruption among local officials and community leaders in mismanaging project funds and wildlife benefits. Consequently, requests for volunteer labor, so essential for the success of participatory management, may pass unheeded.

A different problem associated with implementing participatory biodiversity strategies is described in the GEF assessment (2000, 48):

In contrast, there have been cases of “participation fatigue” . . . where relatively small, heavily stretched organizations—both governmental and NGOs—are being exhausted by opportunities to contribute inputs to internationally driven planning projects. In other countries, there is growing sense of frustration, especially in the NGO sector, with discussing well understood issues yet again without any tangible commitments of political willpower or resources of effective action. It is a constant challenge to find the appropriate balance between the level and type of participation needed to achieve consensus and attract broad commitment on one side, with the urgent need for less talk and more action on the other hand.

To sum up, the issue here is not a matter of one strategy of protection or another of inclusion. Both may have their place. Indeed, it is increasingly likely that
conservation agencies will have to become rural development organizations, operating in partnership, if comprehensive biodiversity management is to be attained (Brandon 1997, 107). It is this extension of the conservation mandate that pervades the two case studies that follow.

Case-Study Analysis

The German Experience: Uckermark Lakes Nature Park

The designation and management of protected areas in Germany have been the subject of considerable conflict and opposition in recent years. This is so much the case that progress toward improving biodiversity is often stalled (see BNL 1994; Stoll 1999; WBGU 2000; Stoll-Kleemann 2001a; 2001b). The causes of resistance have less to do with possible economic losses to local livelihoods arising from conservation designation. The source of the trouble lies in the manner of consulting local interests. This process is often too late, too formal, and too narrow in compass (SRU 1996, 59). In addition, there is much miscommunication and misunderstanding between landowners and residents on the one hand, and the highly committed nature conservation officials on the other (BNL 1994; Stoll-Kleemann 2001b).

The Uckermark Lakes Nature Park is unusual in this context. The particular achievement there lies in the successful integration of nature conservation and regional economic development under the visionary and charismatic leadership of the current Park Director. This merging of objectives and adaptive management have helped to bring about reconciliation in a manner that loses little for either nature conservation or local sensitivities (Stoll 1999).

Covering an area of 895 km$^2$, the Uckermark Lakes Nature Park is one of the largest protected areas in Germany. It is situated some 80 km north of Berlin, and is composed of a mosaic of postglacial landscapes. These include about 230 interconnected lakes, heathlands, moorlands, and deciduous as well as coniferous forests. It is also surrounded by other protected areas including a national park, a biosphere reserve, and another nature park. It contains species that are threatened and rare elsewhere in middle Europe, such as otter, beaver, sea eagle, fish eagle, the black stork, and many large butterflies. It also boasts of some 1200 plant species of which 20% are highly endangered. This remarkable species richness is a product of the many variations in landscapes and vegetation types. The area has characteristically been extensively managed, partly due to low population densities, and partly because of a history of military exclusion. The main threats to biodiversity nowadays are nonsustainable forms of agriculture and intensive fishing. Tourism can become a major threat in this ecologically sensitive region, and needs therefore to be very carefully planned if nature conservation is to occur.

Originally the management priority for nature parks in Germany placed the needs of recreation over conservation (similar to category 5 “protected landscapes” of the IUCN definition of protected areas). But the new Länder (states) have reformulated these objectives to generate an even higher emphasis on conservation. The Uckermark Lakes Nature Park has 15 smaller nature conservation reserves, where strict nature reserve management practices are followed. There are also two larger landscape protection reserves, so that virtually the whole region is protected. Nowadays the management philosophy embraces the peaceful coexistence of nature conservation with symphatetic economic enterprise and sustainable use of natural resources (very similar to the overall goals of biosphere reserves).
Since 1996 the Uckermark Lakes Nature Park has been the subject of special funding from the federal government. Some 30 million DM will be available over a period of 10 years. This is designed to cover the purchase of land, special conservation measures, and compensation for limitations of existing use. In addition, money from the state government (Land) is geared to funding particular conservation contracts with farmers. For example, in 1999, contracts were made with local farmers or farming associations costing 650,000 DM. Other funds for these purposes come from the European Union environmental fund known as LIFE.

The Importance of Leadership

The first director of the Uckermark Lakes Nature Park was an enthusiastic biologist, but not a diplomat. He was neither understood by nor respected by the landowners. His successor is altogether different. A former politician, a man with vision, communication skills, and a legendary capacity to create consensus in public meetings, he regained trust, commanded respect, and restored credibility. As one of his staff noted:

You can see he is a politician, being able to deal with people, understand their needs, and be believed. He only says what we have all been saying before. But words are useless until a new person comes along and suddenly you can change direction. Our boss is able to communicate with people because he carries the authority, the image and the prestige. As a former minister, people believe him. If he were to go, than the implementation of the nature park objectives would be imperiled.

Another member of staff commented:

Our head has the relevant understanding to deal with many different issues. He is able to massage people but they remain content. Such individuals are rare. He has charisma in the way he talks and in the manner in which he appears.

Strategic Management

This leadership has helped to reduce scepticism and suspicion within the nature park regarding the purpose of nature conservation. The administration takes the views of local people very seriously, even when they speak ill of the park and its aims. The park staff have learned to be empathetic and to treat personal relations as a first priority. As the new director observed:

You really have to work through the people who live in the area. It is only via the process of acting together that full understanding is achieved. You must treat their proposals seriously, we must act on them, and we must respond quickly. This is the way to establish respect.

Park officials know that this process takes time. So they do not pressure. Sometimes they take into account new conflicts, such as disputes over hunting in the park. They are prepared to sacrifice short-term setbacks to ensure a long-term coherent goal.

A Servicing Agency

The Uckermark Lakes Nature Park administration visualizes itself as a servicing agency for local interests. This extends beyond conservation management to advice
and financial support for farm and other enterprise schemes. These include diversification into ecotourism and the manufacture and marketing of eco-products. Part of the drive is to build confidence and self-esteem among those who are unemployed and/or who are looking for new opportunities. The aim is to show what options are available, and to tailor these to the needs of individual households.

Another servicing strand is to gain the confidence of some local mayors and entrepreneurs to demonstrate that the park staff can work with economic and wider community interests. Demonstration projects, such as schemes to promote the sustainable use of resources, also help to convince the skeptics. Opposition is eroded when influential actors become enthusiastic, so broad objectives can be reconciled through example and good management.

In addition, local confidence is gained when park staff use bicycles, solar-powered boats, and their feet when entering the strictly protected areas. All this helps to reinforce credibility through consistency. The park also runs a comprehensive program of environmental education.

In essence, the success of this remarkable park lies in a staff with its empathetic management style, sensitive to people and to place, listening and caring, and constantly pursuing an integrated approach. This leads to effective partnerships of both understanding and management.

South Africa: Creating Effective Partnerships in the Cape Floral Kingdom

South Africa is by no means unique in promoting partnerships for biodiversity conservation. Such programs are being implemented in Botswana (the Natural Resources Scheme), Zimbabwe (the Communal Areas Management Programme for Indigenous Resources, CAMPFIRE), and Zambia (the Administrative Management Design, ADMADE) (Gbadegesin and Ayileka 2000, 90). What is reported next is new (Figure 1).

According to Myers and his colleagues (2000, 857), the Cape Floristic Province of western and southern South Africa is one of the most endemic-rich hot spots on the globe. Within this province, the Cape Floral Kingdom (CFK), of the Northern, Western, and Eastern Cape Provinces of South Africa, contains 70% endemics out of 9600 plant species (CAPE Project 2000, 7). Offshore, of the 11,000 marine animals and 800 species of seaweeds, 3500 marine animals are endemic. This total biome is not only irreplaceable in ecological terms, it also supports well over 300,000 jobs, and through tourism contributes over a fifth to the regional economy (CAPE Project 8). Well-maintained and resilient fynbos (the local name for the CFK plant species) ensures reliable and conserved water supplies, stabilizes slopes, provides an essential haven for pollinating insects, and enriches the spectacular landscapes. These “ecosystem services” are difficult to quantify but in replacement value alone they could be worth some 300 million South African Rand (45 million U.S. dollars) annually (CAPE Project 9).

The CFK is seriously under threat. Myers et al. (2000, 858) observe that only 24% of its primary vegetation remains, spread over many thousands of patches ranging from 100 km$^2$ to 0.1 km$^2$. One primary cause of this biodiversity decline is the spread of agriculture. Some 22.8% of the original vegetation is transformed, mostly on the more fertile lowlands. A second cause is invasion by high-fuel alien species. These eliminate the native vegetation and, through any additional threat, cause huge fire hazards because of their enormous fuel capacity for extremely hot burning in the dry winds of the Western Cape. A third cause of land degradation is
the spread of urbanization and poorly planned tourist developments with insufficient environmental safeguards. There are further threats like disconnected national, provincial, and local laws and regulations. These have the consequence that biodiversity in areas adjacent to protected sites is adversely affected. Finally, possible effects of climate change could well exacerbate further drying and heating (see Hulme and Downing 1996).

**The Cape Action Plan for the Environment**

The Cape Action Plan for the Environment (CAPE) is an innovative example of international partnerships in the preparation of a comprehensive management strategy for the CFK. The 2-year strategy development process, funded by the Global Environment Facility, through the World Bank, was coordinated by the World Wide Fund for Nature (WWF) in South Africa, and involved a host of South African governmental departments and agencies.

**FIGURE 1** Biodiversity in South Africa. The map shows the location of the three schemes in South Africa introduced in the text. The Cape Floral Kingdom covers most of the south west and south of the country. It is already seriously fragmented. The Ukuvuku Project is adjacent to the newly formed World Heritage Cape Peninsula National Park, and includes built-up areas where fire hazard to property as well as to plant and animal life is a serious threat. Grootbos is a small, privately run nature reserve that is in the process of expanding into a major protected site, involving around 20 properties.
The purposes of CAPE are:

- **To identify conservation priorities** through a computer-based scientific analysis of key sites and corridors designated for maximum protection. This was achieved by mapping biological habitat units based on physical features and vegetation types. An interactive computer program located key sites of high irreplaceability and extreme vulnerability.

- **To introduce a land protection and acquisition scheme** for critical sites and corridors, supported by donors and conservation charities, to create sophisticated management agreements and other financial inducements on agricultural land to ensure complementary protection. Only 5% of additional sites will be bought. The rest will require cooperative partnerships.

- **To produce a 5-year action plan and investment program** to meet conservation priorities. The integrated character of this plan is designed to provide an assurance for funders that there will be a high degree of reliability and coherence for money invested.

- **To seek international donors and private-sector sponsors plus conservation non-governmental organizations** in providing the essential funding. The five-year implementation program is estimated to cost 800 million Rand, a colossal figure in South African conservation terms. This is way beyond the capacity and political priorities of the South African governments. However, as much as 320 million Rand of this essential budget will be funded from national and provincial sources. This is a remarkably high figure for a nation economically beset by trying to alleviate 20 years of discrimination and poverty. The early positive response of possibly 300 million Rand from international donors attests to the success of the CAPE strategy in convincing outsiders of its likely effectiveness.

**The Grootbos Initiative**

Grootbos, a 1050-ha nature reserve, is a family-run business that is solely financed by money generated via nature-based tourism. The income derived through these educational and recreational activities has been plowed back into biodiversity conservation, notably alien clearing, fire control, and biological surveys. Grootbos initiated the Walker Bay Fynbos Conservancy with the aim of ensuring the long-term biodiversity conservation of part of this vital corridor situated by Walker Bay in the Western Cape.²

This Conservancy is an important pilot scheme that mirrors the CAPE mission. It is a cooperative arrangement run by a committed partnership of private, public, and voluntary shared landowners covering over 11,000 ha. It aims to become a self-sustaining model for sustainable biodiversity.

The Walker Bay Fynbos Conservancy (WBFC) has created a comprehensive management plan. This is vital for the future of biodiversity, as the area is part of a crucial designated corridor for the CAPE project. This plan is designed to remove all aliens, to create a comprehensive fire control service, to inform visitors about the biological and cultural heritage, to promote conservation generally throughout the region, and to engender a conservation ethic in the local communities. The aim is to enable the local unemployed to see how they can benefit from ecotourism and related activities, such as contract gardening in the locality.

Within the conservancy is the Flower Valley enterprise, run by Flora and Fauna International (FFI 2000). Flower Valley comprises 527 ha of fynbos. This is naturally managed to produce cut flowers for international and domestic markets.
It also uses the waste products from the plants to make specialty papers for greeting cards. The Flower Valley enterprise employs 55 full-time workers and 165 dependents. The network of farms that provide flowers for the enterprise employs 200 pickers with 500 dependents. The scheme trains around 6 gardeners and some 10 alien clearance contractors annually. These people will be assisted to find reliable work in the future management plan. In addition, the scheme provides training for natural farming, nutritional and health education, and preschool environmental education for the children of the employees. Parents who cannot afford the modest fees are invited to assist in the fynbos awareness projects to which the children are exposed.

The WBFC is seeking management funds to run an extended program of guided trails, to finance suitable accommodation for a wide range of local and overseas recreation users, and to extend the scope for marketing fynbos products. Already, the conservancy produces soaps, honey, and perfumes from the biome. One project is to use established poverty alleviation funds to clear the acacia from the nearby sand dunes so as to reintroduce an essential lost habitat and to create a fee-paying off-road recreational experience. It is this creative mix of biodiversity enhancement, private–public partnerships, recreational choice, local community social and economic involvement, and the prospect of long-term self-financing that is the hallmark of this fascinating initiative.

**Ukuvuka**

In the Cape Peninsula, the ecologically diverse and popular region south of Cape Town, an intriguing partnership for biodiversity protection and fire management is emerging. This region was ravaged by fires in January 2000. Over 11,000 hectares were affected. But for fortunate changes in wind direction, many valuable properties and countless shacks (occupied by the vulnerable poor) would have been lost.

In the wake of this catastrophe, a public–private partnership of four private-sector sponsors and five private-sector service providers plus a wide range of governmental bodies have combined to create a biodiversity enhancement and fire management program called Ukuvuka (meaning “wake-up!” in the Xhosa language). This partnership will:

- **Co-ordinate all relevant public and private actors** into a single fire-management collective linked by improved communication, education, training, and contracting enterprises. The local media and a gasoline company are two of the sponsors who have already initiated a process of awareness raising in broadcasts, newspapers, and in gasoline stations. For effective participation, increasing the sensitivity to spotting and reducing fire danger is a vital aspect of biodiversity protection.
- **Identify all alien invasions, soil degradation, and slope instability** so as to manage land systematically for clearance and stabilization. This critical process of stewardship land management will be statutory obligation on all public-sector bodies. Private land owners will also be required to clear and stabilize their land by a combination of tax incentives and specially financed management agreements. Landowners who do not meet their obligations may find that their property values will fall and that insurance coverage is difficult to obtain. To ensure likely cooperation, all landowners will be invited to join community groups. These will be combinations of settlement and agricultural owners who will be trained and funded to prepare and carry out fire avoidance and alien clearance projects in spatial units of biological and property vulnerability.
In this way, it is expected that everyone will learn to cooperate, so that participation will be guided by a powerful combination of awareness of responsibility and appropriate financial inducement, reinforced by specially trained managers. These community groups will be linked to a region-wide Fire Protection Association that will coordinate the funding, training, and monitoring of management schemes. Because each group will encompass a great range of races, income levels, and advantage/disadvantage, the strategy is to create genuine social bonding so as to reinforce community-driven participation.

- Provide job creation schemes for disadvantaged people. Ukuvuga will provide funding to create local contractual arrangements for the poorest people in the areas. It will be supported by microcredit schemes provided by a local bank. The targets are 60% women, 29% young people, and 2% disabled. Safeguards against nepotism and corruption are part of the performance indicators. One of the service-providing sponsors is PriceWaterhouseCoopers, which will advise and audit the host of key performance indicators for the Campaign. Over the 4 years of the program, these contracting enterprises will gradually be left to compete for work, based on the quality and effectiveness of their activity. They will therefore have an incentive to enter into training schemes that will also be on offer, to become better marketers, and to diversify into other activities, such as ecotourism services, fynbos guiding and environmental awareness raising, and the creation of commercial products from the removed vegetation. Providing real incentives for families that are very destitute and almost unemployable is another mechanism for ensuring effective participation. Furthermore, the aim is to deepen the understanding of the critical importance of rehabilitated biodiversity in the day-to-day lives of all residents. At present, this is far from being the case.

These programs are still in the design stage. It is by no means assured that they will fulfill their promise. The money is not in place. Donors and sponsors still have to be convinced. There is a chronic lack of administrative and financial capacity even in the rich administrations of the Western Cape. Less than a quarter of the resources of Cape Nature Conservation, the lead agency, is free to finance support services. The rest is locked up in unionized labor. When experienced staff leave, they are rarely replaced, stretching the goodwill of those who remain. Furthermore, local politicians are by no means convinced of the political advantages of biodiversity enhancement. This skepticism is in part an echo of the former colonialist attitudes they so despised in the apartheid era. Lack of coordinated political support does not bode well for assured funding.

From Participation to Partnership

We noted the difficulties that arise when trying to put participatory conservation strategies and plans into action, and why a process beyond participation is required for biodiversity protection in the modern age. The two case studies highlight the case for prolonged and committed partnerships, reliable funding, strong leadership, and comprehensive awareness raising. The case for conservation agencies to adopt the mantle of economic and social development, either by extension or through cooperation, is also compelling. The GEF report (2000) demonstrates how important inclusionary approaches are, what the impediments are, and which best practices are worthy of note. In Europe a major effort is under way to link habitat
protection to regional economic development (European Commission, Environmental Directorate 2000; Stoll-Kleemann 2001b). This is a major policy shift of potentially enormous significance. The German case study portrayed here is an important foretaste of that future.

**Economic Resistance and Reconciliation**

Wells and Brandon (1992, xi) note that many of the forces threatening biodiversity lie beyond the boundary fence, over which local people have little if any control. Local people are increasingly confronted by the relentless rules of global market economics. This means that land use and agriculture are not always determined in their own interests, forcing them to give top priority to survival rather than biodiversity (van Schaik and Kramer 1997, 219). Only when less protected market economies adversely affect agriculture, as is currently the case in Germany and South Africa, can multifunded stewardship schemes become more acceptable. Only if these forces are constructively harnessed, as is the case in the Uckermark Lakes example, can progress be relied upon. As yet, this arrangement is not assured in the CFK.

The lack of necessary financial and logistical support adequately available to manage protected areas (McNeely 1995, 4) is a fundamental issue for many administrations, not just in poor developing countries. The forces of global market-based economics often restrict the room for financing public-sector activities. This is certainly the case in South Africa. Even in Germany, various sources of funding seem necessary to ensure full participation and comprehensive management schemes. Money is often cut off in midproject, and valuable and experienced officers are not replaced when they leave, so goodwill evaporates along with empathetic communication. The continuity of funding created by financial partnerships and the application of rigorous performance indicators will have to work if CAPE and Ukuvuka are to succeed. The German example shows how this can be achieved with cooperative income and good leadership.

**Institutional Noncommunication**

A reason less covered in the literature is the apparent inability of individuals and their organizational cultures to communicate faithfully and meaningfully to each other. Even today, many biodiversity management cultures have evolved from a history of top-down relationships toward local people. This attitude of seeming arrogance, combined with an unwillingness to address local people on their own terms, produces anger, resentment, and a deep unwillingness to cooperate on the part of local interests (see Stoll-Kleemann 2001b). This form of communication by managers, specialist scientists, and programmatic administrators leads to a sense of alienation and misunderstanding among those whose interests are likely to be affected by controversial management decisions. This discourse of communicative barriers can indeed be self-reinforcing. For example, when threatened by aggressive challenge from local interests, scientists and administrators frequently recourse to even more self-protecting language. This in turn widens the gulf between managers and the managed, making mediation, even by trained third parties, very difficult. Much of this has to do with lack of appreciation. In both of our case studies, serious efforts to understand the motivations of local interests, to respect them, and to enable them to recognize real job opportunities arising from biodiversity conservation can overcome this impediment.
Furthermore, there is often a lack of training to help all parties appreciate their need to be shareholders rather than stakeholders. Training is not a matter of a few days of workshops. It is essentially a function of culture change, a shift in outlook, and a willingness seriously to understand the views and aspirations of others. Indeed, we go further. Training ought to create a fundamentally intuitive empathy between the manager and the managed. Such empathy can only come through case experience and a genuine willingness to reach out and admit to past mistakes. We believe that the two case studies help to show how this prospect is both daunting and possible.

Finally, we must not forget the social relations of the individual actor. All too often, research and publication ignore this sensitive area of social psychology—oriented management. In many cases, miscommunication and mistrust are the result of individuals who simply dislike each other or have no faith in each other’s abilities. This interpersonal relationship may override the organizational setting and management responsibilities of the institutions in which these individuals operate. But at times, these interpersonal struggles become so significant for coherent management that they drag into the conflict these same organizations. The lesson we learn is that organizations need to have sophisticated intelligence as to how their employees are perceived in any participatory framework. Sometimes this task is best left to independent facilitators to discover, and diplomatically to address. At other times this is a sensitive management issue for senior administrators to tackle.

We offer the following innovations in outlook and management that still may be needed. These build on, and do not replace, the many valuable initiatives already in place. We reported on these in the early part of this paper.

The conduct of local sustainability livelihood schemes should rest on community empowerment, on social education, and on training for enterprise and community sharing. This should be the target of new funding arrangements, such as are beginning to emerge in both Germany and South Africa. The key to such livelihoods is self-generated local income. Some of this can come from creative marketing of biodiversity products, some from high-quality tourism schemes, and some from cooperative projects to guarantee the continuation of biodiversity and water supplies (e.g., fire protection, alien removal). Sadly, it is most unlikely that self-funding will ever take the place of donation and subsidy through incentive payments. In South Africa, locally generated income from biodiversity conservation enterprise will always be desperately minimal in relation to the scale of poverty that has to be overcome. Participation is no guaranteed route to wealth creation.

Sustainable livelihoods also require attention to local property rights, to social and political justice and civil rights, and to various schemes for community involvement rooted in education and local enterprise. These are rarely integrated at the outset of a biodiversity management scheme. The South African prospect offers a promising opportunity to connect social support with ecological resilience to viable, self-sustaining enterprise. But the obstacles we have outlined bode ill for early successes.

There is a need to involve local interests and to share responsibilities. Here the ideas emanating from South Africa are heartening. Seeking to bring in local, regional, and national politicians, sharing interagency endeavor and budgets, joining up pilot projects through innovative local monitoring and evaluation, and guaranteeing “stewardship” payoff of local groups offer one way forward. Public–private partnerships in management, involving businesses and community leaders, are becoming commonplace (see, e.g., case studies in West and Brechin 1991; Wells and Brandon 1992; Lucas 1992; McNeely 1995). Connecting to the politicians in South
Africa, with their very pressurized and suspicious biases, will be very challenging. Payoffs will have to be demonstrated. Pilot schemes funded by donors may have to precede the full program.

In prospect is a fascinating process of widening and deepening the democratic and sustainability transition of protected area management around the globe. We may be witnessing a slow process of cultural change in favor of a greater sense of collective identity and coordination, by creating a more shared pattern of partnership governance. The need for a more coherent, yet culturally diverse, approach to sustainability at the local level will seek to link informal patterns of power sharing, transparency, and participatory governance to more formal, and established, management arrangements so that protected areas will be enabled to maintain and enhance their wildlife qualities and scenic specialties while fostering rural enterprise and community cohesion.

Notes

1. For a full survey of threats, see the web sites for the CAPE Project: www.panda.org.za/projects/megaprojects.html#cap and www.fred.csir.co.za/extra/cape.
2. For a full web reference to all this work, see www.grootbos.com and www.fynbos-conservancy.co.za.

References


