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- maintaining and improving an effective network of protected area managers throughout the world, building on the established network of CNPPA
- serving as a leading global forum for the exchange of information on issues relating to protected area establishment and management
- ensuring that protected areas are placed at the forefront of contemporary environmental issues such as biodiversity conservation and ecologically sustainable development

Cover: tourists watching giraffes in South Luangwa National Park, Zambia. Photo: Mark Boulton/ICCE

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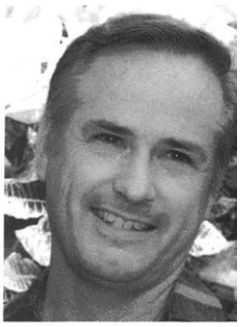
Editorial

ALLEN PUTNEY



THE THEME of this issue of PARKS is financing protected areas (PAs). I am pleased to have been invited to contribute this editorial, because I suspect my recent exposure to PA finance issues is fairly typical. Maybe a bit of reflection on my part will help set the stage for what follows. My tertiary education was in forestry, and much of my professional life has been spent working on PAs in Latin America and the Caribbean. Yet, it is only in the last couple of years, working with IUCN, that I have begun to work seriously on the issues of PA finance.

When I began my work in Latin America, it was assumed that the plethora of paper parks, and the poor distribution of the PAs that did exist, was due to a lack of planning. Experts were contracted to provide plans for PA systems and for the management of individual PAs. Many plans later it became clear that the existence of a plan did not guarantee its implementation. The blame was thought to lie with the method – those who were to implement the plan, or who would be affected by it, needed to be involved in the planning process. So in many cases, planning became a much more complex team effort, consuming more resources. Yet the number of plans that were actually implemented did not increase appreciably.

It seemed that what was needed was a much broader constituency in favour of PAs, to develop the political will to support PAs, and to translate that support into financial and policy commitments. It has also become clear that many of the traditional managers of PA programmes were ill-prepared to deal effectively with questions of finance. The heads of government PA agencies, especially, tended to rely on the agency budget. Some became skilled at increasing that budget, a few learned to seek extra-budgetary funds, but almost none had the time or inclination to mobilise all the resources that are potentially available.

Decreasing government budgets, increased international funding and the rise of non-governmental organisations have all contributed to recent changes. For those countries with developed PA systems, much has been done to implement and extend cost recovery systems, and to recruit volunteer personnel. For countries with less developed PA systems, NGOs have become major players. In many instances, governments have delegated the management of PAs to NGOs.

Perhaps the most astonishing, and promising, development has been the rapid establishment of trust funds (in 22 countries at last count) that support PAs. Such funds are generally independent institutions governed by boards of directors with representatives from government agencies, NGOs and the private sector. These trusts have demonstrated their capacity to capture international funding, mostly from grants and debt reduction arrangements. This is indeed good news.

I suspect, however, that the major impact of these new institutions will be their ability to use international funding to lever new sources of national funding into PA trust funds. But perhaps most important of all, trust funds are providing institutional homes for professionals dedicated to sustainably financing PA systems. Their ideas are already having a major impact on how governments, donors, and the public think of and value PAs. Let us give these new members of the PA team our warmest welcome and full support. We need them desperately!

User fees in natural parks – issues and management

ANTOINE LECLERC

It is only relatively recently that governments have begun to systematically charge user fees for their services. With regard to public lands used for recreational purposes, this development has mainly taken place since 1975. Not all government managers are yet reconciled with this trend, but there are few sectors of government activity that have not been affected by serious budgetary restrictions in recent years, and many services have had to turn to other sources for financing.

This article outlines the Canadian government's policies on external user fees for government services, and Parks Canada's User Fee Policy. It addresses policy issues pertaining to the application of user fees in the parks, and the more practical aspects of this application. In conclusion, a structured approach for implementing a user fee programme in parks is proposed.

IT IS ONLY relatively recently that governments have begun to systematically charge user fees for their services. With regard to public lands used for recreational purposes, this development has mainly taken place since 1975 (Driver and Koch 1986). Not all government managers are yet reconciled with this trend, but there are few sectors of government activity that have not been affected by serious budgetary restrictions in recent years, and many services have had to turn to other sources for financing.

The governmental or para-governmental agencies responsible for managing the parks have growing needs and, like most other government agencies, they are subject to the pressures of major budgetary restrictions. The contribution to parks financing that could be achieved by a judicious recourse to user fees is thus of growing interest to them.

Some park agencies are even giving increasing consideration to 'privatising' park operations, in their quest for economy and for enhanced efficiency. This recent trend has met with strong public opposition in Canadian provinces, and has somewhat fanned the flame for user fees as a more desirable, or at least less objectionable, option.

The Canadian policy for external user charges

In 1989 the Canadian Treasury Board published its *Policy on External User Charges*. This policy is based on a principle of equity, defined as follows: "While most government services generate broad public benefits, many are provided primarily for the benefit of specific groups such as users of the services and consumers of their products ... User charges provide a means to promote equity in financing these activities by shifting more of the financial burden from taxpayers in general to those who benefit most directly."

The Treasury Board adds that, in addition to the principle of equity, this policy also has two other goals: to better manage the resources allocated to each service by giving more weight to market forces, and to reduce the national budget deficit.

In practice, the various government agencies have to decide whether to try to recover all the costs involved in making services available, to follow the market or to justify the implicit subsidies to users if there is only partial cost recovery.

The document further provides that government bodies must evaluate the potential repercussions of fees before imposing them, and must consult with the users and other concerned groups to get to know their points of view.

Parks Canada user fee policy

Many of the services offered in the Canadian national parks constitute typical examples of services provided principally for the benefit of particular groups, especially the users of these services. The context in which these services are offered is unique, however, and Parks Canada has sought to develop a user fee policy that articulates how the principles accepted by the government as a whole should be applied to the particular activities of the Parks Service.

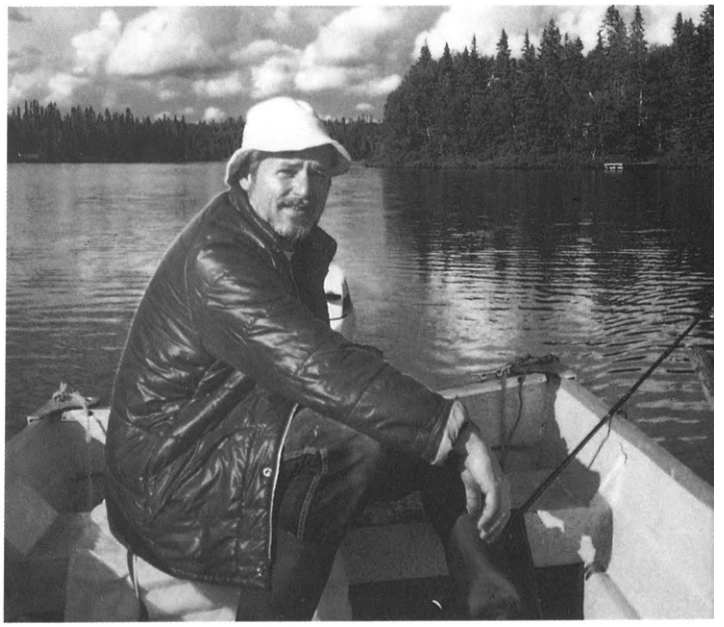
It should be noted that the policy addresses only those cases where Parks have chosen to provide the services as part of their operations. The choice of having certain services provided by the private sector, usually on a concession basis, is made on a case by case basis, depending on 'mission', operational and market dictates. In all cases, however, Parks seeks to derive appropriate fiscal benefits from granting the profit and non-profit enterprises the right to serve its users.

The policy is based on four guiding principles:

- **It is both legitimate and desirable to charge user fees in the parks.** Clearly, the parks provide services that are in the public interest, such as the protection of the natural patrimony and raising public awareness of environmental issues, but it also provides services whereby visitors receive benefits that are not available to non-visitors, such as installations and recreational services. Thus, to be fair to all taxpayers, the users should be asked to defray their fair share of the costs of those services from which they alone benefit.

- **Nevertheless, it is necessary to favour public access to the parks.** The general objective of the Parks Service remains to encourage public understanding, appreciation and enjoyment. The Service must concern itself with the effect of the user fee policy on Canadians' inclination to discover and appreciate their natural patrimony.

- **Decisions concerning the user fee policy must take into account the economic repercussions of parks operations.** Parks contribute to economic dynamism in that they offer attractive destinations to the travelling public. In return, the growth in economic activity that results from parks operations leads to an increase in tax revenues for all levels of government.



The author in a Zone d'Exploitation Controlée (ZEC), in the Province of Québec, Canada. These wilderness areas are operated under provincial government licence by non-profit associations. They are opened to the public at large, and finance their operations mainly through membership and recreational user fees, including fishing, hunting and day use passes, camping fees, and boat, canoe and cabin rentals.

Hence, in making decisions pertaining to user fees, Parks Canada will take into consideration the potential impact of the user fee programme on the capacities of the various communities and of the private enterprises to profit from the economic effects of the existence of the parks.

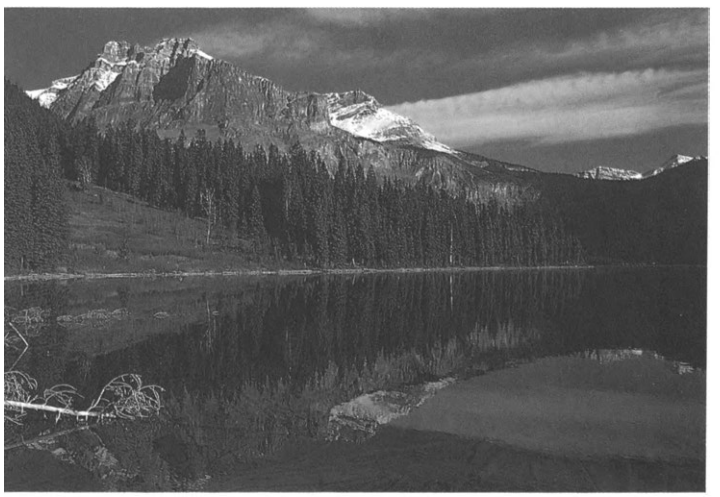
- **These guiding principles must be counterbalanced by the collection costs and the repercussions of the user fees on other aspects of management.** Parks will only apply fees in situations where it appeared they would be financially profitable and where it is believed that these fees would not constitute an unreasonable impediment to other park or government management priorities.

'Public' and 'private' services

The views of the Treasury Board of Canada and of Parks Canada concerning user fees for government services have thus been based above all on the ideas of 'public' and 'private' services. The most widely accepted version of the 'user pay' philosophy is that government services should only be offered free of charge when they benefit the population as a whole. These are the so-called 'public' services. Those services which provide personal benefits to their specific users, on the other hand, are termed 'private', and their costs should be defrayed by the users themselves; this is a question of basic social justice. It is also generally considered that services of a purely 'private' nature are strong candidates for provision by the private sector.

But it is rare that the benefits provided by government services are either purely 'private' or, for that matter, purely 'public'. For instance, roads in, and leading to, parks directly benefit those who use them, but it is generally considered that society as a whole benefits from having access to the land and, more specifically in this case, to parks.

Such services are what economists call 'merit services'. They are situated somewhere on a scale of 'merits' ranging from 'public' to 'private'. The degree to which cost recovery applies to each of these services depends on where they fall on this 'public-private continuum', as it is called by the American scholar John L. Crompton: "An important point in understanding this public–merit–private classification is that the decisions as to where a service should be located along the continuum ... are defined through political process. Hence this position may ebb and flow with changes in the values of the community ..." (Crompton 1986.)



Emerald Lake, Yoho National Park, Canada. Photo: WWF/ Eric Dragesco

What degree of socioeconomic benefit do services provided in the parks offer? Who really benefits from them? Why, and according to whose judgement? These are all questions that must be answered by a parks agency that is considering charging for its services. That is why Parks Canada saw the need to adopt a user fee policy and guidelines for applying it.

Pros and cons of user fees for parks services

Even though a variety of studies show that North American populations often support 'user pay' government policies, these policies nonetheless remain controversial. Government bodies that generate revenues must be able to justify their fees and to answer the numerous objections they entail.

A look at the recent literature on user fees shows that the arguments against charging for services in the natural parks fall under three main headings:

- Charging user fees in the parks is equivalent to double taxation, since the taxpayers already pay for the parks with their taxes.
- User fees must be avoided for recreational, cultural or other activities, since they turn these activities into consumer goods that must be paid for, whereas recreation should be considered a universal right, like health.
- Charging for park services discriminates against the less well off, since it constitutes an obstacle to their access to the parks, which is contrary to the principle of redistribution of wealth that every government must apply.

The majority of taxpayers do not visit parks, why then should they subsidise the recreation of the minority that do? Charging for parks services thus should not be seen as double taxation, but rather as a way to avoid making the taxpayer pay more to benefit a minority.

The free provision of recreation services in parks would be defensible if parks were the only places where people could obtain recreation services, and if it were demonstrated that it is the natural parks that can best provide the basic recreational services they need. Tax revenues cannot pay for everything. If the government simply doesn't have the means to increase budgets for these services, there is a risk that parks services, conservation and ultimately the population itself will suffer. Seen in this context, user fees do not restrict the right to recreation. They rather contribute to its preservation, since they reduce the net cost of operating the parks and thus permit a more judicious allocation of the public funds dedicated to recreation.

Finally, the common argument that "user fees impede access, especially for the less well-off, and are contrary to the redistribution of wealth" can be refuted, at least in North America, on the strength of studies of the clientele of American and Canadian natural parks. These show that the typical park user has above-average income, and that the less well-off use the natural parks very little, even when entry fees are low or nonexistent. Furthermore, data shows that a large majority of persons with low income are in favour of charging user fees in the parks. Thus when we subsidise all park visitors to favour the use of protected areas by the less well-off, we tend rather to help the wealthier people who use them. It would be better to find other ways to favour universal access.

"Fee systems needn't be inhumane. Waivers are a widespread way to exempt the poor, unemployed, disabled and senior citizens from entrance and other fees. For fees to work ... they simply need to be fairly levied, fully explained, and tactfully implemented." (Johnson 1984.)

Advantages and disadvantages of user fees

As demonstrated above, it can be supported that charging for certain services in the parks is legitimate, attainable and socially acceptable. Still, there are risks.

The largest inherent risk in implementing a user fee programme is clearly the risk of commercialisation. A parks agency that places its emphasis on user fee

revenues can lose sight of some of its objectives, if a) revenue production becomes a predominant measure of operational efficiency and/or an unwarranted performance criterion for managers, and if b) the government begins to abusively restrict tax resources for government programmes on the basis of their capacity to produce revenue. In all cases, there is also a risk of disaffection on the part of the staff, who may have the impression that the agency is neglecting its primary mandate.

Also, if this is the case, setting prices at market levels leads to a level of usage which is more representative of the 'commercial' demand for a service; but government services often aim to meet a need rather than a demand, and the two are often not equivalent. The notion of a measure of real demand must thus only be applied to certain services, and only for carefully defined evaluation purposes. There is a risk of abuse if it is applied without adequate consideration of the agency's objectives as a whole.

However, making parks 'revenue conscious', and visitors 'price conscious' has its advantages. When a user fee programme is implemented, the park users to a certain extent become 'clients' and the parks become providers. If commercialisation can be avoided, this transformation can favourably influence the respective dynamics of these two entities and the nature of their interaction. The personnel may become more attentive to their professional responsibilities regarding the clientele, and this clientele may be made more aware of the value of the 'product' purchased, and more respectful of it.

The one thing that is clear from this range of arguments and points of view is that nothing is absolute. The principle of user fees can neither be totally supported nor totally rejected on these grounds. But together, they show that we must approach the subject with caution.

For many governments, however, the current economic situation tends to make the arguments of the opponents of user fees sound somewhat theoretical. Many parks would be virtually paralysed within a few years were it not for the revenues from user fees.

The challenge is to assure the more efficient and harmonious implementation of user fee programmes which meet the social, political and economic imperatives to which the parks are subject in their own contexts.

Political and economic factors

The manner in which this challenge can be addressed will be affected significantly by social, cultural, economic and environmental imperatives. These constitute a complex whole of policy, economic, market and perception issues that are sometimes difficult to quantify, and cannot be ignored.

Government policies and park objectives

User fees should help the cause of protected areas by becoming a precious source of revenues for financing conservation and environmental education, not a source of friction between advocates of resource protection and those who advocate development.

Since the decision to recover the costs of government recreation services is a political one, supporters of user fees will find themselves in a policy vacuum if the agency to which they report has no precise position on the conservation, recreation and education vocations of their parks.

Economic dictates

Even if a parks agency that wishes to implement a user fee system can refer to clear environmental, educational and recreational policies, it still often has to deal with pressures from governmental and private economic organisations. It is impossible to ignore the regional economic development mission that is inevitably associated with parks, especially with regard to tourism.

In all likelihood, private enterprise will try to take control of as large a portion as possible of the activities where it makes its profits – often with the support of local politicians – and it will exert pressure to alter the rules of the game in its favour. On the other hand, it is also clear that visitors have access to a greater range of services – and at little or no cost to the government – when the private sector is involved.

The government/agency that needs revenues must consider reserving part of the market for itself, or make sure that it assesses appropriate licensing or concession fees from the businesses operated by the private sector on its territory. On the other hand, the agency should give consideration to the potential undesirable impact of its 'business' decisions on the private sector, when implementing a revenue programme.

Market dictates

Parks are tourist attractions, economic development tools and educational and recreational instruments as well as being mechanisms for conservation. The behaviours, needs and expectations of their clientele thus must be considered as pre-eminent factors in any decisions concerning user fees. In fact, it would be hard to resolve the questions surrounding user fees without having sufficient knowledge of the parks' 'markets'. A park that charges user fees is a consumer product. Like any other product, its services are subject to the laws of the market with respect to setting prices, promotion and the other essential elements of marketing.

The better we understand the composition and expectations of these markets, the more likely it is that their needs will be met, producing more efficient marketing and greater economic benefits. Knowing the markets is also essential to anticipate the potential repercussions of user fees on the parks' social vocation, whether on an educational, recreational or cultural level.

Subjectivity and reality

There is another important reason to acquire a broad factual knowledge of the context in which the parks operate: even if a park's policies and guiding principles are clearly established, the various players also need to share an objective view of the situation.

Each person's impressions and suppositions tend to mask the reality where park users' expectations and behaviours are concerned. The gap that exists between the way the less well-off are thought to see the parks and their actual views as represented in opinion polls is just one example of this phenomenon.

An important challenge for managers recommending user fees is thus to make sure that the reality depicted by the appropriate studies overrides the suppositions of the many other players involved in the issue. This will be easier if they can refer to the proper socioeconomic analyses to build a strong and rigorous case.

Administrative factors

Once the decision is made to charge user fees, one must expect the user fee programme to affect the agency's general management and administrative operations.

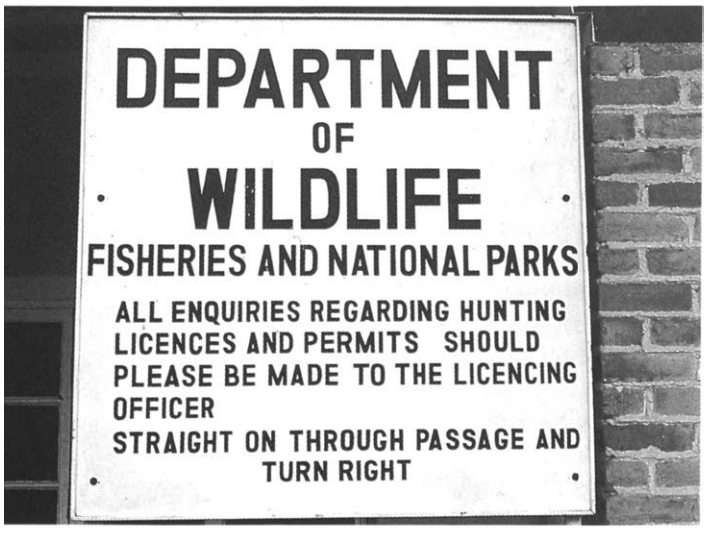
Depending on the particular park, its target markets and the agency's political will, the user fee system may simply consist of charging a unitary entry fee, or it may include a complex range of service fees charged either directly or by third parties, either individually or in packages.

It is only possible to predict the requirements of such a programme with respect to costs, administration and personnel once it has been decided precisely what fees will be collected, by whom, where, with what equipment, how the users are to be informed, etc. At all times, however, one must account for future requirement in equipment, staff, including training and control, and operational costs that may be significant. Also, as indicated above, there will be repercussions on agency management that could be quite significant. At issue is the organisational culture. Services become products, users become consumers and the personnel henceforth needs to think more in terms of 'business'.

The implementation of a user fee system implies training and recruitment, as well as long-term planning to make sure that personnel and management have time to learn and to adjust.

If necessary, it is also possible to use the services of consultants. The private sector is more at ease with marketing than are governments. Management consultants can be effective allies if they are judiciously used.

It must be anticipated that administrative, management and consultant costs may be substantial. Agencies that are considering user fee programmes often have access only to limited financial resources. Those who control the purse-strings must be convinced of the need to allocate resources to this project, which will quickly become self-financing and which will bring substantial dividends in the short term. Moneys spent on such a project should not be seen as an expense, but rather as an investment. In some cases, suitable arrangements will only be possible if the agency, and perhaps also the government itself, agree to rethink their financial administration policies.



The use fee system may include a range of service fees, and the administration of such fees must be budgeted in advance. Photo: Mark Boulton/ICCE

How to get there – the 'marketing' approach

The word 'marketing' is scary to some. In "What Are We in For?" (Parks & Recreation, January 1988), John H. Schultz *et al.* associate marketing with commercialisation and fear that by using marketing-based techniques we run the risk of neglecting the social vocation of the parks and protected territories. The preceding sections make clear that the risk does exist. But that is not a sufficient reason to reject marketing as such. "Even the most articulate

advocates of adopting a marketing orientation make the point 'that private-sector marketing knowledge is transferable, with important modifications, to government and social service agencies' ... Certainly we do not want to copy the worst characteristics of the commercial sector, but we shouldn't be above examining and borrowing from the commercial sector's strength." (Havitz 1988.)

Let's face it, user fees are relatively poorly understood by most governmental and para-governmental agencies, but they are quite well understood by the private sector, which is much better versed in marketing. In addition to using consultants from the private sector, parks can also take inspiration from techniques, proven in the business world, that could be applied to government services. John L. Crompton and Charles W. Lamb deal with this question at length in their book, *Marketing Government and Social Services* (John Wiley & Sons, New York, 1986).

One such technique, 'market planning' makes it possible among other things to fine-tune a product's characteristics, including its nature, its mode of distribution or access, the types of promotion used etc. to the needs and expectations of its potential clientele. The product could just as well be a service with a social vocation as a commercial article.

A marketing plan also makes it possible to take into consideration in an articulate way the organisational characteristics that create the product and the capacity to oversee its production and distribution.

A parks agency has much to gain by adapting this approach to try to harmonise the delicate and complex relationship between clientele and supplier found in the application of user fees for government services.

Proposed planning process for a user fee programme in the natural parks

This proposed process includes four main steps. Each of these can be more or less onerous and complex, depending on the territory and the services concerned, the quality of information the agency has at the outset, and the degree of rigour it chooses to pursue.

As a whole, the process must be pursued with flexibility. It is an iterative process where each step may need to be reviewed in the light of the results of the previous step.

1. Defining the mandate

What is the real purpose of introducing fees? Enhancing fairness in taxation? Reducing the government deficit? Providing recreational services without detracting limited operational resources from conservation programmes? Generating revenue for conservation measures? A combination of goals?

Having the true overall objective of the initiative well understood by all the players will help keep proper focus, determine the relative weight to attribute to the various factors under considerations, and make better decisions based on appropriate perspective.

2. Analysing the context

In what context will the mandate have to be achieved? What external factors (e.g. political climate, relevant government policies, lobbies, overall fiscal situation,

etc.) affect the agency and/or will impact on the project? Internally, what are the agency's limitations and potentials (e.g. financial and human resources, ability to access external resources, legal framework, etc.) for designing and implementing a user fee programme?

This review will permit the agency to set realistic goals for itself, and to design a realistic programme. Moreover, this will permit the agency to inform precisely senior management and, as required, the government, of true opportunities and of restraining factors.

With market dictates in mind, it will also be important to evaluate from the outset the quantity and quality of the available statistical data, and to seek remedies if these are insufficient. A lack of primary data is a serious handicap, but may not be an insurmountable obstacle. An abundance of data from secondary and tertiary sources may permit intelligent decision-making based on crosschecking information, deduction and common sense. It is nevertheless better to be prudent and sometimes delay implementation in order to have time to obtain the minimum data required.

3. Determining programme goals and setting the broad outline

Setting out specific programme goals based on the results of the above two steps will allow the players to establish the first tangible parameters for defining the outlines of the user fee programme, and to identify the basic criteria required for evaluating the relevance of the detailed potential measures to consider for implementing it.

The agency must define precisely options of approaches for charging, both in terms of policy and of management: what services and markets will be targeted and why? What are the revenue goals? What role will the private sector be called upon to play? And so on.

At this point, it is important to paint an image of the programme sufficiently precisely that relevant authorities can make final decisions on its orientation and component parts, and that external players (private sector, user groups, the public at large) can intervene as required in an enlightened way. Cost estimates can provide the appropriate indicator for deciding how precise the 'broad' outline should be. The authorities concerned cannot make a valid decision without at least a reasonable estimate of what the overall costs and potential revenue will be.

4. Preparing a detailed programme and action plan

The requirements for this next step evidently vary a great deal depending on the complexity of the option chosen and on the availability of data.

What is required, here, is to spell out in detail each of the planned programme's practical aspects, and to make a detailed plan for their implementation: targeted services and service levels; fee structures and price schedules; legal authority to charge and to enforce; regulatory process; administrative framework; financial, security and access control systems; participation of third parties; plans and programmes for announcements and information; systems and criteria for programme evaluation and adjustments; and so on.

Certain aspects of this planning are particularly important, because user fee programmes involve areas which are normally delicate for any government: the

legal and regulatory framework, and financial administration. Obtaining the relevant authorities can be time-consuming. On the other hand, the programme's implementation can require new, or modifications to, park physical installations; this is also likely to cause delays. Finally, one should never underestimate the importance of necessary modifications to the agency's management, including personnel management.

In lieu of conclusion

This overview of the implementation of user fees for park services brings out the complexity of this area of public service management. The importance and breadth of the challenge have been recognised for many years by several government agencies, and discussed by various authors.

Several broad management principles emerge from past experience and the relevant literature, which deserve special attention as they may be of use to agencies that wish to set up a framework in which their user fee projects are more likely to succeed. By way of conclusion, these principles are set out below.

- Implementing a user fee system is a major project, and leadership must come from the agency's top management.
- The project must be handled openly, and internal communications must be favoured at all levels. Dialogue with all the stakeholders is a key factor for success.
- Because user fees constitute a delicate and controversial issue, both internally and externally, it must be managed very rigorously.
- The programme is much more likely to be accepted both by the staff and the potential clientele if the revenues from user fees are reinvested in whole or in part in the parks.
- Because the expenses connected directly and indirectly with the user fee programme will almost inevitably appear suspect or totally inappropriate in the eyes of many, it is essential that operations in this area be particularly efficient.
- There is no perfect user fee system; we have to choose the one which is the least imperfect.
- User fees represent a complex management challenge which must be approached rigorously and methodically, but also with humanity, since setting up a user fee programme requires substantial modifications, on the part of both the affected groups and those who serve them, of their very way of looking at the world.
- However, once in place and weathered, a sound user fee programme can rapidly become a tremendous asset for any conservation/parks agency, giving it autonomy and resources to achieve otherwise impossible goals.

References

Crompton, J.L. 1988. Are You Ready to Implement a Comprehensive Revenue-Generating Programme? *Parks & Recreation, March 1988.*

Driver, B.L., & Koch, N.E. 1986. Cross-cultural Trends in User Fees Charged at National Outdoor Recreation Areas. *Proceedings.of the 18th Congress*, International Union of Forestry Research Organisations.

Economic Research Associates. 1976. *Evaluation of Public Willingness to Pay User Charges for Use of Outdoor Recreation Areas and Facilities.* US Department of the Interior, Bureau of Outdoor Recreation.

Government of Canada. 1986. *Treasury Board Policy on External User Charges*. Treasury Board Secretariat, Government of Canada.

Harris, C.C., & Driver, B.L. 1987. Recreation User Fees – I. Pros and Cons. *Journal of Forestry, May 1987*.

Havitz, M.E. 1988. Marketing is not Synonymous with Commercialism. *Parks & Recreation, May 1988*.

Johnson, R. 1991. A Rationale for User Fees. *American Forest, March/April 1991*.

US Department of the Interior. 1985. *Revenue Management*. (Excellence in NPS Series.) National Parks Service.

This article summarises and updates an extensive paper produced in November 1991 for presentation at the IVth World Congress on Parks and Protected Areas, in Caracas, Venezuela, February 1992. The more detailed and substantiated original version is available from the author upon request, in both French and English.

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Environmental economic guidelines - inter-country and inter-regional requests for financial support for protected areas

CLEM TISDELL

International aid and funding agencies usually receive more requests to support conservation proposals than can be supported by their available funds, and they therefore have to rank these proposals. A checklist of questions or factors which may be taken into account by funding agencies in prioritising inter-country and inter-regional requests is given. The mechanics of allocation of funds on the basis of net economic benefits are discussed and limitations of the cost-benefit approach are noted. A list of factors likely to favour the selection of particular projects is presented. Communicators should take these into account in framing proposals and approaching funding agencies. The possibility of non-economic and strategic factors influencing the distribution of funds for support of protected areas is discussed.

INTERNATIONAL AID and funding agencies supporting conservation projects financially often need to rank conservation proposals received from different countries and regions. To assign priorities to these is no easy task. In part, the way in which competing proposals are ranked will depend on the charter or aim of the funding organisation. Some bodies or associations, such as societies for the preservation of birds, may have a relatively narrow focus in terms of the conservation projects to which they will give financial support, e.g. they may only provide support for projects aimed at conserving particular species of birds. They are likely to give particular weight to this aspect rather than to more general types of benefits from conservation of protected areas. On the other hand organisations such as the World Bank, in allocating loans from its available funds from the Global Environmental Facility (GEF), may have primarily economic criteria in mind in allocating their funds. Clearly those seeking funds to support conservation projects would be well advised, in framing and communicating their proposals to potential providers of funds, to take into account the guidelines or criteria of funders. Not only should such considerations influence the way in which proposals are presented, but they will also influence the choice of bodies to approach. However, a number of basic economic and managerial questions are likely to be asked or considered by funding agencies before providing funds for a project.

Questions likely to be considered by funding agencies

Before providing funds for conservation projects, funding agencies may consider the following questions:

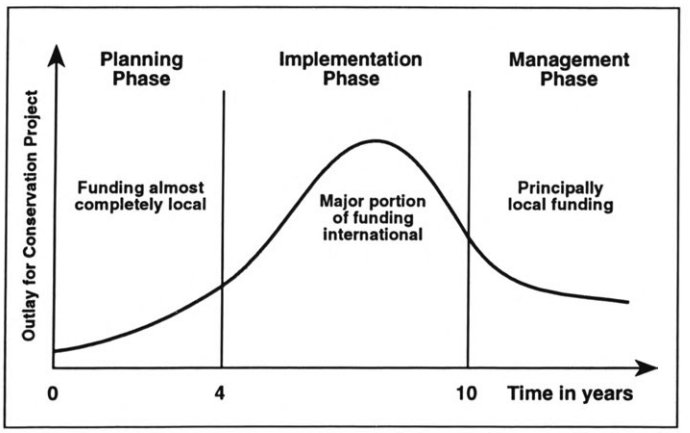
- Have the costs of the project for which funding is sought been realistically determined?

- Have the objectives of the conservation proposal been clearly specified and the reasons given for seeking the funds?
- Is the success of the project dependent upon funds being available from other funding sources apart from the funding agency being approached? What is the likelihood of these complementary funds being raised?
- Are there sources of funds within the country which could be tapped but have not been tapped?
- Will funding by the agency lead to a significant reduction in financial support from local sources or add to such support?
- What ability do those managing the conservation project have to carry it out successfully?
- Are there good prospects for sufficient financial support for the completed project to maintain or manage it on completion?

If funds are not likely to be available for maintenance of the project after its implementation, then it will not be sustainable. Houseal (1992) highlights this problem. He claims that there is a typical financial cycle for the establishment of protected areas and this involves three phases: (1) planning, (2) implementation and (3) management or maintenance. In his view, the planning stage usually takes 3–4 years with the implementation stage commencing in about the fifth year and lasting 3–5 years. After this, approximately from the tenth year onwards, the long term management plan begins and this basically involves maintenance of the project. He claims that it is only during the implementation phase that international funding is likely to be available as a major source of finance. The planning and management phases must as a rule depend mainly on local finance. The typical outlay pattern suggested by Houseal for a conservation project is indicated in the figure below.

As Houseal points out the length of the stages of a project may vary from project to project. However, the variation could be even greater than indicated by Houseal. If the project, for example, involves the development of a new national park in a remote area and this requires access roads, buildings and exclusion fencing to be constructed, the implementation phase may take much longer than 3–5 years. Furthermore, much depends upon how narrowly or widely one defines a conservation project. For example, the Project Tiger in India involves many sub-projects but even the sub-projects are often major ones. For instance, the implementation phase for Project Tiger in the Sundarbans of West Bengal, India could have taken more than five years for all associated works to be completed. At the Sudhanyakhali Watch Tower Complex in the Sundarbans not only the watchtower had to be built, but also a dam closer to the tower had to be constructed to attract wildlife, lodges and other accommodation had to be built and 'clearways' (wide pathways from which vegetation has been removed) radiating from the watchtower had to be completed (see the photographs opposite).

Typical cycle of outlays and funding for conservation projects as suggested by Houseal (1992).



In some cases, the management or maintenance phase of the project is of vital importance and should be seriously considered for international financial support. For example, the Forest Department of West Bengal operates a captive breeding programme for saltwater crocodiles *Crocodylus porosus* and olive ridley turtles *Lepidochelys olivacea* at Bhagabatpur in the Sundarbans (see the photographs overleaf). The purpose is to build up captive populations by breeding, and to release progeny to the wild in the Sundarbans for restocking of depleted natural populations. While considerable capital cost has been involved in establishing hatchery, nursery areas and enclosures for the breeding of captive stocks, a high level of costs and management expertise are needed in operating the complex successfully. Therefore, there is a case for international financial assistance for the management phase. The complex has obtained some international assistance from the WWF in its implementation and management phases. This assistance was first made available in 1982.

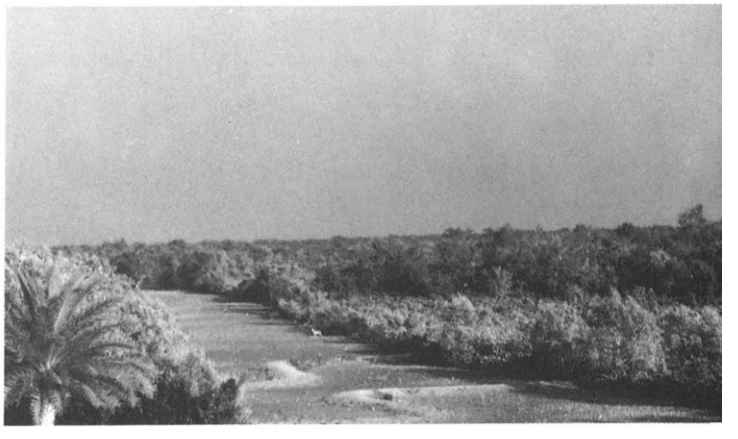
Observations on economics and allocation of funds

If the benefits of all competing conservation projects could be quantified in terms of say, monetary values, then the process of allocating available funds so as to maximise global benefit would be relatively straightforward. Projects with the highest benefit to cost ratio would be preferred.

However, actual quantification is difficult. For one thing, it may not be possible to quantify all benefits and express these in monetary terms. In such cases, economists traditionally proceed by identifying (in conjunction with scientists or specialists) the favourable and unfavourable effects of a project, quantifying those that can be quantified and expressing the benefits and costs of these in monetary values. Using these monetary values gives a first ranking. On the basis of the economic analysis projects are preferred which have the highest benefit to cost ratios based on estimated monetary values. Ranking of projects is in direct line with these ratios. This ranking may then subsequently be altered to take account of values which are not captured by the economic analysis. This could however introduce considerable subjectivity. Nevertheless, in some cases the 'preference' ordering of alternatives based on economic valuations will be the same or similar to that based on more general considerations. In these cases, the economic evaluation reinforces the general valuation.

left:
Portion of a very large dam constructed as a watering point for animals and as a source of water supply for humans viewed from the Sudhanyakhali Watch Tower in the Indian Sundarbans. Its construction would be part of the implementation phase for development of this site.
Photo: C.A. Tisdell.

right:
A 'clearway' for viewing animals from the Sudhanyakhali Watch Tower in the Sundarbans. The initial clearing would have been part of the implementation stage at this site but keeping down regrowth would be a part of the management stage.
Photo: M.E. Tisdell.



In practice, estimates of costs and benefits are likely to be uncertain. One should ask how accurate are the assessments? Furthermore, how sensitive are they to variations in any of the parameters, or the most important assumptions. For example, an economic benefit of a project might be predicted to be an increase in the net receipts from visitors to the protected area. But how sensitive is the predicted increase in net receipts to variation in the predicted increase in visitors to the area? In general, estimates should be subjected to sensitivity analysis.

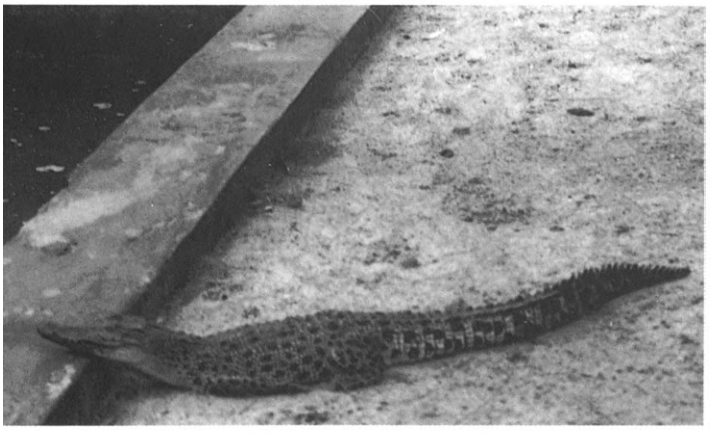
After such probing, some projects may still have a very high benefit to cost ratio and therefore be given a high priority. They may be doubly acceptable on economic and other grounds.

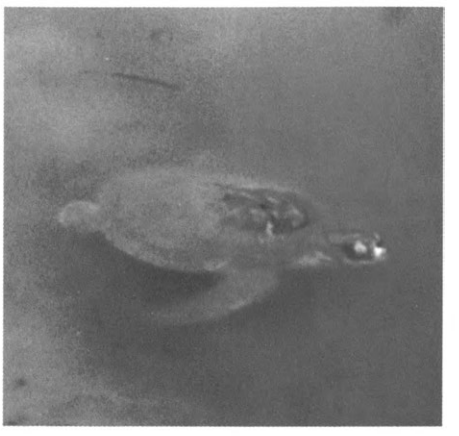
While it would not be appropriate to discuss the matter in depth here, the question arises of what data, economic and otherwise, should be collected, analysed and presented. There is a need for an appropriate balance in the type of data collected and analysed. Economic assessments are frequently reliant on inputs of biological and non-economic data for the valuation process. Therefore, an appropriate balance in collecting economic and non-economic data and analysing it needs to be struck (Tisdell 1983; 1993).

Furthermore, different types of economic data can be collected and analysed. Some benefits may be tangible, e.g. increased net revenue from visitors to a protected area, and other benefits intangible, e.g. existence and bequest value (McNeely 1988; McNeely *et al.* 1990; Tisdell 1991; DeGroot 1992), or benefits may be classified according to whether they are obtained on-site by visiting the protected area or are off-site benefits.

For some purposes, it may also be important to specify the level of economic benefits *appropriated* by the authority managing the protected area, or by the locality in which the protected area exists or by the nation in which it exists. If benefits on a *global* scale are considerable but the protected area or the host region is unable to appropriate these to any great extent, then there is a strong case for an international subsidy or grant for the area or for adopting special economic measures to ensure greater appropriation of benefits by the host region, e.g. by ensuring the employment of a high proportion of local people in the management of the conservation area.

Usually, available funding for international conservation projects is limited in relation to the demand and available projects. But it is possible, in special





Juvenile saltwater crocodile Crocodylus porosus *(left) and adult olive ridley turtle* Lepidochelys olivacea *(right) reared at the Bhagabatpur Forest Station in the Indian Sundarbans as part of a captive breeding programme to restock the area. While substantial costs were involved in construction, the managerial phase of this project is also costly and of crucial importance to the success of the programme.* Photo: C.A. Tisdell.

circumstances, for funding in relation to a particular country or conservation objective to exceed absorptive capacity. In the case of GEF (Global Environmental Facility) funds from the World Bank for Brazil and Bhutan, it has been suggested that size of these funds and their rapid availability made it difficult for the countries in question to absorb them most effectively for conservation ends, particularly since the funds were only available for a comparatively short time, around three years. From the viewpoint of the countries concerned, a smaller amount of funds per year over a longer time period would probably have been more effective. GEF funding seemed initially to be donor-driven and may have been inspired by the political motive of the appealing to the electorate in more developed countries. A trust-type fund or more even funding over a longer period is likely to be more productive from a conservation viewpoint. Donors should take this into account in their funding arrangements.

In calculating benefits, economists have traditionally put questions of income distribution to one side. Benefits are usually estimated given the existing distribution of income and by initially supposing that a unit of money is of the same value to everyone. At a later stage, weights may be introduced to take account of changes in income distribution. For example, a dollar increase in income for a poor person may be counted as $1.50 (given a weight of 1.5) compared with an increase of a dollar in income for a rich person. This weighting, however, involves value judgements.

In some cases, it *might* even be supposed that the only benefits that count for this exercise are those appropriated by the citizens in the country in which the conservation project is implemented. But this is an extreme assumption. A case can be made out for an international funding agency taking into account benefits not only to residents of a recipient country but also to citizens in other countries even if a lower weight is put on benefits to citizens from other countries than on gains to local residents. Within the country, benefits appropriated by the poor might be given a higher weight than those received by the rich. Benefits to those in the park or its vicinity may also be given an extra weighting. It should be noted that there can be a good deal of argument about the appropriate weightings to assign. However, projects which benefit the poor and those located in or near parks or protected areas possibly should be preferred, given prevailing sentiments.

Often benefits to the poor or those located in or near protected areas from investment in parks are not always immediately obvious. Park facilities and complexes can provide infrastructure which can be used by locals, e.g. a convenient place for holding meetings or a useful facility for more rapid communication with the outside world. For example, the park complex at Sudhanyakhali in the Indian Sundarbans, consisting of buildings, cleared areas, pathways, electricity generation units, wharves and so on, is used by Hindus in the area to stage their annual festival in the honour of the Goddess-of-the-Forest. Locals come long distances to participate in this festival which caters for local culture not tourists. The Sudhanyakhali complex provides electricity supplies for power and light at night-time festival events.

This is not to say that local residents do not constitute serious problems for conservation management in many parks and protected areas. 'Squatters' in a protected part of the Indian Sundarbans keep a large herd of black kid goats *Capris hircus,* which graze in the protected area. To provide economic benefits

to such 'squatters' may attract others to share in these economic benefits. The problem of squatting in and immigration to protected areas is a serious and politically sensitive one in many developing countries and is especially troublesome given the need for local support for protected areas (see Dahuri 1992).

From what has been said so far, conservation projects requiring international financial support are likely to be favoured if they:

- are well-presented.
- have capable managers.
- provide benefits for local people especially the poor and those in protected areas or their vicinity.
- are expected to attract continuing financial support.
- provide positive net economic benefits.
- are incapable of being financed without international aid.

A note on communicating requests for finance

The importance of good communication by managers of protected areas in their efforts to obtain finance has been stressed by Cobham (1992). Economic factors need to be taken into account in communicating such requests. In communicating requests for finance for conservation projects account should be taken of the following:

- The values of the targeted audience.
- The time available to them to consider proposals.
- The concepts which they understand and do not understand.

Proposals appealing to values not shared by the targeted audience, presented in great detail, requiring much time to grasp and introducing concepts not understood by the audience are unlikely to be successful.

Often there are variations in the ability of the audience to understand material or spend time on it. This can be overcome by the use of a summary general proposal with more detailed material on the proposal being available to those who want to delve further into it. To some extent, the detail in a proposal should also be tailored to the circumstance. In relation to some funds only broad information is required initially. Detailed information is called for once the proposal is being seriously considered.

But no matter what the values of the audience are, most like to see value for money. Most donors in giving funds, or financiers in providing funds at concessional rates, like to believe that they are getting value for money. Whether they do believe this is going to depend upon the nature of the presentation of the proposal and other factors.

To provide evidence of value for money, there are basically two ways in which one can proceed from an economic point of view:

- To show that the objectives for which the funds are sought will be achieved at minimum cost, that is without waste; e.g. that biological diversity will be maintained at a low cost, or that the method proposed is a low cost method of saving an endangered species.
- That there are positive economic benefits from the project(s) proposed, at least some of which can be quantified. It may be possible to show that these will exceed costs or if not, that they are substantial and that together with the non-economic advantages of the proposal, make the proposal attractive.

However, some funders – those for example making loans to a conservation body – will be most interested in the extra net income which the protected area can generate and be appropriated by the protection body. In such cases, attention needs to be given to specifying economic benefits appropriated by the protection body.

For some purposes, it may be sufficient to state the basic purpose of the projects put forward for support, and to give a realistic estimate of cost. This approach has been taken by The Bahamas National Trust (1992) in presenting its prospectus for financial support by establishing a heritage fund.

Discussion and concluding comments

As noted earlier, not all funding agencies are likely to take an economic point of view or even an entirely anthropocentric one in allocating funds. Some may have as their aim the preservation of particular life forms. Their aim is to save those life forms which they find relatively most valuable in relation to the cost involved. In essence, they are philanthropists who impose their values on others by sacrificing their own resources. But even they are affected by economics. For example, a conservation organisation may want to save two species, X and Y, but its resources may be insufficient to save both given the proposals available to it. It will then have to make a decision about which of the species to save. But if more cost effective management or methods of conservation of the species could be adopted, the agency might able to save both species. So the economics of management of protected areas and the efficiency of conservation techniques adopted will be of interest even to an agency which has ecocentric rather than anthropocentric goals.

Strategic factors can also influence funding by international agencies. For example, the imminence of the loss may be a consideration. Areas which are under greatest immediate threat from economic development may be targeted for conservation support. A number of conservation agencies in the USA have adopted this approach, e.g. they have concentrated on applying political pressure for the establishment of marine national parks in areas where the granting of leases for seabed oil mining have been imminent or have constituted an immediate threat. At first sight this may not seem to be an economic approach but a realistic political one given the irreversibility factor. However, it can also be regarded as an economic one if the aim of the protection body is to obtain maximum gains from using its available funds or resources for promoting conservation. In pursuing their objectives, conservation bodies should take into account the plans, actions and behaviour of other decision-makers in society and design their strategies with this in mind. While timely intervention by conservationists may not stop imminent development, it may enable a compromise solution to be reached.

Although the decisions by international funding and aid agencies about whether to support conservation projects financially should be influenced by economic factors, these are unlikely to be the only considerations. To some extent, donors like to impose their own value judgements, e.g. in favour of biodiversity for its own sake or maintenance of particular species, and are willing to fund projects which they believe have value in that regard. Many funders consider conservation generally or the conservation of particular living things as

merit goods and this must be recognised. Such funders are often described in the literature as ecocentric. Where an individual or group believes that a particular 'commodity' is a merit good, they regard its supply as meritorious and attempt to influence social choice in favour of provision of more of the good in question.

Even those funders with an apparent non-economic bent, e.g. espousing ecocentric ethics, cannot as pointed out above afford to ignore economics if they want value for money. Ideally they would like to see their objectives pursued at minimum cost and this requires efficient management of projects. Nevertheless, some conservation projects may be funded even when the projects are not efficiently managed. Ideally one would like management to be efficient in the sense of achieving desired results at minimum cost or almost so. But the level of expertise and social structure in some countries may not be such as to make this possible in the time required for the conservation action. Provided a positive net conservation benefit is achieved from this funding, this may be sufficient to justify the project. Up to a point we have to live with the world as it is, 'warts and all', and sometimes fund conservation projects which are executed less efficiently than is technically possible.

To conclude: there is little doubt that factors involving environmental economics are becoming increasingly important in the allocation of finance for the support of nature conservation projects, especially as between countries and regions. The increasing involvement of bodies like the World Bank and a number of government international aid agencies in providing financial support for such projects is reinforcing this process because given the limited availability of funds, priorities have to be established as objectively as possible, particularly since public accountability is required of such bodies. Furthermore, the Convention on Biological Diversity agreed upon at the Rio Conference (5 June, 1992) has now come into effect and involves the provision of additional financial resources by developed countries for biodiversity conservation by developing countries (Article 20). The distribution of these funds is likely to be influenced at least partially by economic and social criteria. This is not to suggest that environmental economic guidelines can be mechanically applied to ranking financial proposals, nor that they should be the final arbiter in relation to nature conservation projects. Nevertheless, they have become an important factor in project evaluation and financial decision-making in relation to projects for protected areas. Managers of such areas are increasingly being forced to consider these factors. While the use of such guidelines does not mean that economists displace park managers and natural scientists in the evaluation of projects, park managers need to increase their awareness of such guidelines.

Acknowledgments

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References

Cobham, R. 1992. Communication with funders: developing an investment portfolio. A contribution to Workshop 1.14, IVth World Congress on National Parks and Protected Areas, Venezuela, 10–21 February, 1992.

Dahuri, R. 1992. Dynamic interactions between regional development and Kutai National Park, East Kalimantan, Indonesia. *In*: J.M. Willison, S. Bondrup-Nielsen, C. Drysdale, T.B. Herman, N.W.P. Munro and T.L. Pollock (eds.) *Science and the Management of Protected Areas,* 55–62. Elsevier Science Publishers, Amsterdam.

De Groot, R. 1992. Functions and values of protected areas: a comprehensive framework for assessing the benefits of protected areas to human society. A contribution to Workshop 1.2 IVth World Congress on National Parks and Protected Areas, Caracas, Venezuela, 10–21 February, 1992.

Houseal, B. 1992. The cost of conserving. *Ecologica* 9:6–9.

McNeely, J.A. 1988. *Economics and biological diversity: developing and using economic incentives to conserve biological resources.* IUCN, Gland, Switzerland.

McNeely, J.A., Miller, K.N., Reid, W.V., Mittermier, R.A., & Werner, R.B. 1990. *Conserving the world's biological diversity.* IUCN, Gland, Switzerland, WRI, CI, WWF–US, and World Bank, Washington DC.

The Bahamas National Trust. 1992. *The heritage fund.* Nassau, Bahamas.

Tisdell, C.A. 1983. Cost–benefit analysis with particular reference to biological resources. *In*: Department of Home Affairs and Environment, *Economic and environment policy: the role of cost–benefit analysis.* Australian Government Publishing Service, Canberra.

Tisdell, C.A. 1991. *Economics of environmental conservation.* Elsevier Science Publishers, Amsterdam.

Tisdell, C.A. 1993. *Environmental economics.* Edward Elgar, Aldershot, UK.

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Self-funding state parks – the New Hampshire experience

WILBUR F. LAPAGE

Recognising the benefits of independence from the General Fund, and following three consecutive years of income in excess of its operating budget, the New Hampshire state park system became a self-funded agency in April of 1991. This system of 24 natural areas, 12 historic sites, and 36 diverse recreation areas now retains all earnings and reinvests its profit in new programmes, expansion of services, and accelerated maintenance. Its income source of fees, rents, and commissions is supplemented by an extensive volunteer corps and a growing array of innovative partnership programmes.

The success of self-funding is due to a combination of factors including low overheads, high volunteerism, outstanding attractions, a large population to draw from, highly motivated employees, and a history of legislative encouragement to be self-supporting. The extent to which the New Hampshire model may be relevant to other park systems may not be limited by its unusual confluence of success factors. The New Hampshire experiment in self-funding was created by park professionals in response to a need felt by most park systems to be free of the negative constraints of general fund budget philosophy and its implied promise of full-funding in the future – a false promise which encourages deferred maintenance and reduced service.

THE PHILOSOPHY of the General Fund, that enormous pool of tax revenue from which we fund the majority of American society's needs, is inimical to the protection of our parklands and nature reserves. Distribution of General Funds is overwhelmingly responsive to the urgency of today's needs. The result is anything but the so-called 'level playing field' of agency competition for dollars! Our needs for biological diversity, or simply for parks, cannot compete with the immediacy of law enforcement, hunger, illiteracy, and medical care for children. The persuasiveness of addressing these social concerns over the long-term by also preserving our parks and natural areas does little more than draw the line at 'closing the doors' and selling our assets. Because their benefits are perceived to be deferable, we continue to go through long cycles of park and natural area degradation interspersed with brief and infrequent periods of public embarrassment and short-term atonement. The level of vision which created these public lands deserves to be matched by funding sources which assure their benefits now and in the future. And, those funding sources must be protected from raids with a tenacity equal to the protection of the lands themselves.

User fees – the dedicated fund base

The search for funding begins (and too often ends) with park visitors. Their willingness to pay for the use of these lands has been the subject of numerous studies and agency 'experiments' in fee setting. The range in cost recovery from users runs from well under 10% (US National Park Service) to well over 100%

(New Hampshire state parks). While it is clear that users should (and want to) pay a portion of the costs, the jury is still out on whether total self-funding is desirable. What is clear is that some degree of self-funding is prerequisite to securing a supplemental dedicated revenue source. A variety of supplementary sources are currently favoured, generally in the form of a percentage of another tax, e.g. real estate transfer, cigarette, sales, gasoline, or a portion of lottery proceeds. The other tax may or may not have a direct relationship to the use or future availability of these resources; however, the more direct that relationship the stronger the case for dedicating a portion of the receipts to parks. Similarly, the higher the rate of self-sufficiency, the stronger the case for a dedicated income source to fill the gap between income and operation expense.

It has been demonstrated, time and time again, that Americans want their public lands to be protected. And there is ample evidence that they are very willing to pay for that protection. What has been missing from this winning combination is widespread understanding that protection means much more than acquisition. America's commitment to parks is unlikely to falter if their operations have to be funded from user fees. In fact, park advocacy, and stewardship may very well increase with the stronger sense of ownership that comes from paying directly for direct benefits!

The ideal experimental setting

In many respects, the New Hampshire state park system provides an ideal setting for a self-funding feasibility test. The park system is small in size (55,500 hectares), has a diversity of properties (72 recreational, historical and natural sites) and has had a legislative mandate to earn as much of its budget as possible over its 59 year history. This legacy has resulted in a very small overhead, and a staff committed to an experimental approach to management. (It was the first state park system to experiment with differential pricing of its campsites, visitor satisfaction monitoring and carrying capacity limits.) Its several 'world class' attractions are located within a two-hour drive of the Boston metropolitan area. Its natural areas have attracted national attention, with several having attained placement on the National Natural Landmark Register. Similarly, most of its historic sites are either National Historic Landmarks or on the National Register of Historic Places. Three of its major park attractions, totalling over 5,500 hectares, are totally surrounded by the added attraction and protection of a 300,000 hectare National Forest.

The people of New Hampshire are proud of their park system, rallying to its support with over 30 different 'friends of parks' volunteer groups. During 1992, volunteers contributed $2.8 million in labour and private funds in support of its park system. Volunteer effort clearly is a major component of 'self-support' even though many volunteer programmes are often 'extras'. Volunteers have opened parks early, kept them open late, provided interpretative services, hosted special events, raised funds, and provided an added degree of park protection that is invaluable. Public pride in the parks is what makes its Carry In/Carry Out litter control programme nearly 100% successful! In describing this system as 'ideal' for experimentation, it is clear that if self-funding cannot succeed in these circumstances, it probably cannot be considered feasible in any major way elsewhere. However, it is just as obvious that this exact combination of favourable

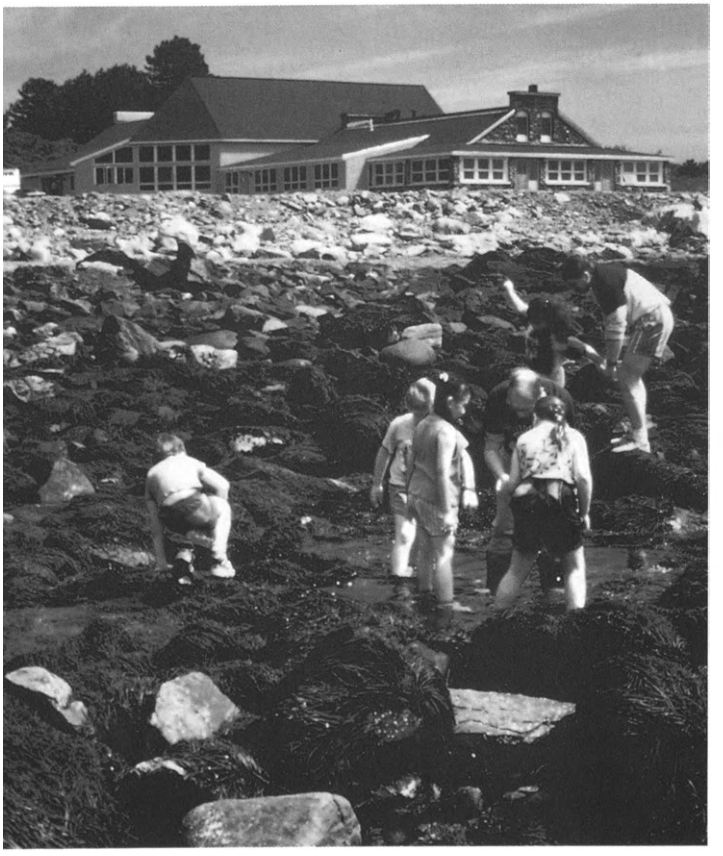
characteristics is unlikely to be replicated elsewhere. Nevertheless, the elements of success which work for New Hampshire will probably be individually successful in any setting.

The limits of success

Facing a growing General Fund budget crisis, the New Hampshire state legislature, in April of 1991, passed an Act which required the state park system to earn its own funds. In doing so, the legislature recognised the park system's income record over the previous three years as a sound basis for funding its operations. That record included, in addition to paying all direct operating costs, annual payments on over $10 million of capital development projects. What made the legislation experimental was the addition of nonoperational costs in its mandate. Charges for park systems planning, recreation extension, and overheads were added to the operational costs. Conversely, the costs of major maintenance and capital development were not initially charged to the parks bureau, but the success of self-funding has moved some of those costs into the system since 1991.

The 1991 legislature created a non-lapsing park fund into which all park income flows. Income in excess of budgeted expenses may be spent on any park project or programme, including staffing and promotion, with the approval of the Legislature's fiscal committee and the Governor and Executive Council. It is noteworthy that while the state park system includes two major downhill ski resorts, they are managed separately and cannot contribute to or draw from the non-lapsing Park Fund. Up until 1989, these two sites, representing one-half of the division's budget, were a consistent drain on any excess revenue generated by the rest of the park system. Although initially conceived as the system's 'money makers', the two ski areas both directly and indirectly (though their continuing needs for capital improvement) drained money and legislative attention from the other parks for over two decades. Capital improvements languished throughout the parks and the deferred maintenance bill climbed, as the two ski areas battled to compete with snow making, lodge improvements, and new ski lifts including a new $4 million aerial tramway. It is also important to note that in separating the ski areas, they took with them $850,000 of summer park income (income from other than skiing).

By the summer of 1991, the stage was set to see if the parks could not



The Seacoast Science Center at Odiorne Point State Park in Rye, New Hampshire, opened in 1992, and built at a cost of $1.2 million; two-thirds of the cost was raised by private and corporate donations over a two-year period. The Center hosts 100,000 visitors per year, offering a wide range of popular educational programmes and exhibits.

only survive on their own, but generate sufficient over-budget income to begin to address their deferred maintenance needs. With all of the success factors outlined above, two critical factors were working against them: a depressed regional economy; and summer weather which was both wetter and colder than normal. The combined effects of weather and a sluggish economy resulted in an income pattern which started out 24% ahead of 1990 and ended the season barely 7% ahead. But this was still a success and a new record income year (1990 income was 12% of 1989, which was 10% ahead of 1988)!

In at least one respect, the sluggish economy may have been an asset. New Hampshire state parks are ideally positioned to offer an alternative low-cost day outing or camping trip. And this seems to be exactly what happened in 1991. Camping, which had shown a steady decline during the past decade suddenly recorded a 10% increase. Ocean beaches showed a 14% increase while inland beaches declined 3% from their 1990 level. The bottom line for the 1991 season was a surplus of $640,000 for park improvements in a year which general fund budget cuts would probably have closed several parks! The surpluses for the 1992 and 1993 seasons averaged ½ million dollars *after* allowing for the first increases in staffing in a decade and *after* obligating funds for numerous park improvements. The 1994 estimated surplus for reinvesting is $300,000, again after allowing for needed budget growth.

The next step - a fund for the future

Any comprehensive system of parks has three income classes of properties: a) those that can never generate income in excess of costs; b) those with a profit potential; and c) those with a profit history. It is tempting to use the current year profits to propel us into an even more successful next season by expanding those park facilities which are already profitable, or are being used to capacity. Two considerations mitigate against using the parks fund in this way. The first is the obvious need to maintain a reserve to cover fixed costs in the event of poor weather and lower attendance. The second concern, that of maintaining the integrity of the park system for the future, has no easy answer. Should the fund be pro-rated between enhanced income production and deferred maintenance and between income-producing and non-income producing parks? Or, should it be totally reinvested to expand the income base so that more money might be available for maintenance needs and non-producers in future years? The total reinvestment option is very attractive for a park system which is marginally successful. It also has a very strong personal appeal for success! On the other hand, the pro-rated approach has a better chance for increasing public support, maintaining a viable volunteer corps, and emphasising the non-monetary benefits of parklands. Fortunately, a middle ground can be found. One half of the 'profits' are reserved for a rainy season. If not needed at the end of the second season these funds are used for needed improvements at historic sites, natural areas, and low-income producers. The second half of the fund is immediately used to address deferred maintenance and expansion needs at income-producing parks, with the hope of payback in the second and third years.

A number of other steps are being taken to assure continued success – increased promotion, merchandising, and cost monitoring. The New Hampshire state park system currently has vigorous programmes of: a) locating corporate

underwriting for all of its promotion, information, and education programmes; b) expanding its in-park and off-park merchandising; and c) reducing operating costs through expanded computerisation and cooperative management. Without resorting to fee increases, the opportunities for income enhancement are limited only by our own imagination.

Our parks, natural areas, and historic sites are very 'saleable' to potential cooperators. The images, mission, history, and popularity of parklands provide an endless array of benefits to our cooperators from the goodwill of community involvement to the increased sales of integrity identification. And, the financial benefits to the park system can be dwarfed by the impact of a broadened constituency and wider understanding of the park philosophy.

Restarting the public park movement

It's too early to signal 'success'. However, the significance of New Hampshire's experiment in self-funded state parks extends well beyond its borders. The general funding of our public parks has tended to trivialise them by artificially depressing their cost to the user. If public parklands are important enough to acquire, they are important enough to complete the job of perpetual stewardship. Acquisition without management simply protects those lands from one threat while exposing them to another. The park movement itself is threatened by the increasingly widely-voiced refrain that "they can't take care of what they have now!"

The perennial challenge 'to do more with less', which at first seemed to be a compliment to the park profession's abilities, has long since been exposed for what it really is: an immutable lack of priority in the battle for the budget. The importance of the park mission, however, requires an equally perennial positive response (as apposed to closures, reduced hours, minimal staffing, and other confrontational measures). In crafting that response over the past ten years, the New Hampshire state park system has developed a set of ten principles which not only guides the process of improving service on a smaller budget, but also moves the agency towards greater control of its own future! In fact, the fantasy of eventual full-funding has only served to prolong deferred maintenance and delay professional growth. The ten principles are:

1. The value of a 'community's' parklands is not correlated with the size of (or cuts in) the budget.
2. Parklands are living parts of their community, and their flow of benefits cannot be interrupted without adversely affecting that community.
3. The viability of a community's parklands is a highly visible barometer of the community's health, vigour, and pride.
4. Support for sustaining a park's flow of benefits cuts across all segments of the community and can be readily identified.
5. The only obstacles to developing alternative funding sources for parks are the lack of will and the lack of know-how to do it.
6. The number, quality, and diversity of potential park partnerships produces benefits vastly in excess of what might be achieved through 'full funding'.
7. By opening park management to true public involvement, our parks can play a major role not just in 're-inventing our government', but also in re-energising our democracy.

8. The usually silent constituency for parks exhibits a willingness to support their parks through fees and cooperation that is dramatically incongruent with political demands for free use.
9. There is no short-term 'fix' for underfunded park budgets; and multiple support sources with their attendant complex organisational relationships are not only here to stay but are a superior way to manage parks.
10. As our concept of park management matures, so too does our understanding of what constitutes park planning, protection, development, stewardship, and even what a park is.

If stewardship is the key to restarting the public parks movement, and if stewardship is limited by funding, then we can no longer afford to let our parklands wither under General Fund tokenism. Our parks, historic sites, and natural areas are essential parts of our lives and our economies. They deserve to be funded as such, not as wards of the state! Getting parks off the dole and onto a stable funding base will not be easy. But, parks have much more to 'sell' than entrance fees; and much more to manage than visitors! As we introduce the next generation of school children to their parklands heritage, let's not teach them that these places are so special that we have chosen to let the buildings rot, the lands be eroded, the vegetation be destroyed, and the waters be polluted because we had no funds. And that we lacked the courage and the commitment to aggressively seek alternative ways of doing business!

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Financing strategies for protected areas in the insular Caribbean

TIGHE GEOGHEGAN

This paper provides an overview of approaches that have been taken in financing protected areas in the insular Caribbean, and considers other possible approaches, with an emphasis on the potential roles of non-governmental organisations and the private sector. Based on lessons that have been learned to date, it presents a framework for use by managers in selecting the most appropriate funding mechanisms for individual sites and systems.

Despite its wide political, cultural, and socioeconomic diversity, there are sufficient commonalities to allow the insular Caribbean to be examined as a discrete region. For obvious reasons, however, the situation in Cuba is unique, and these differences are not addressed in this paper in any detail.

THE INSULAR CARIBBEAN is comprised of twenty-five individual states and territories, the vast majority of which are extremely small in geographic size and population; nearly half have populations under 200,000. Countries this small are not able to maintain large protected area management institutions with specialised staffs. The region's salient characteristic is its great diversity, which is largely a factor of geography and a colonial history. With a few exceptions, intra-regional institutions and multilateral assistance efforts reinforce historical divisions, with linguistic diversity being the greatest constraint to region-wide collaboration.

The economies of most Caribbean countries are small, open, and externally driven. Marketable resources are few, and tourism is rapidly supplanting agriculture as the primary economic sector. Many major tourism attractions are found within existing or proposed protected natural areas. There is heavy reliance on external assistance, or subsidies in the cases of dependencies. Some of the larger countries, particularly the Dominican Republic and Jamaica, incurred considerable commercial and bilateral debt during the 1980s, but have generally been able to adhere to their repayment schedules.

Protected area management is generally a governmental responsibility, and government budgets are usually insufficient to provide necessary support. This results either in inadequate management or reliance on external funding sources, or both. The Caribbean lacks a strong tradition of philanthropy, and support to conservation from private individuals is minimal.

Every country or major political unit in the region has either existing or planned protected areas. Several countries have prepared, or are in the process of preparing, system plans, but in virtually all cases full implementation is at least several years away. Since the mid-1970s, the trend to establish new protected areas has been increasing (Putney 1992), and the World Conservation Monitoring Centre lists 218 protected areas in the region (WCMC 1991). Many of these are extremely small in area, but are generally in scale with the size of the countries.

Marine parks are especially numerous. Marine conservation is critical for fisheries and tourism development, and their establishment usually results in fewer usage conflicts than for terrestrial parks. Finally, and most importantly, the management of most of the region's protected areas is inadequate to meet basic conservation objectives (OAS & NPS 1988).

Existing financing mechanisms: advantages and disadvantages

In nearly all countries where protected areas exist or are actively planned, government subventions currently provide the most consistent source of funding. Government sources are usually inadequate to finance start-up costs or major capital projects, and these are most frequently provided by major international assistance agencies. The US Agency for International Development, the Canadian International Development Agency, and the Organisation of American States have been the most important of these. Larger conservation organisations, such as WWF and the MacArthur Foundation, have provided support to a number of projects in many countries of the region.

In most cases, these sources are inadequate for proper management. Government subsidies rarely meet regular operating costs, which external grants and assistance generally do not cover. Larger externally funded capital projects can address management constraints in theory, but also can add to the cost of regular management, thus actually exacerbating the problem.

It has become clear that the region's governments will never be able to bear the full costs of protected area management, and that external funding sources alone cannot bridge the gap. There is a therefore a growing interest in expanding the base of support, and some intriguing approaches are emerging. The approaches that have the greatest chance of success are those that are tailored to the social and economic characteristics of the country involved, and that provide linkages between protected areas and economic development, particularly of surrounding rural areas.

In designing funding strategies for Caribbean protected areas, a number of constraints must be addressed. Many of the countries and protected areas in the region are too small to tap sources that have been successful elsewhere, such as those that require intensive groundwork and follow-up. The issues that are currently of greatest interest to funding agencies, such as rainforest destruction, biodiversity, and climate change, though highly relevant in the Caribbean, are more spectacularly represented in other regions, which therefore attract the bulk of available support. Finally, the personnel and skills required to implement complex funding strategies are generally not available due to small scale and budgetary constraints. In fact, the protected area agencies of many countries of the region have professional staffs of only one or two persons.

Government subvention

The government subvention is the predominant source of support to protected area management in the region, and for many countries the only source (Geoghegan 1989). Inclusion of protected area management in the governmental budgeting process facilitates its integration into national development planning, lessening the danger of its marginalisation. Reliance on governmental support

allows overtaxed managers to concentrate on management rather than fundraising. Unfortunately, government subsidies in the region are almost always inadequate for effective management, and must be subsidised by other sources. Heavy dependence on government support also fosters a 'politicisation' of protected area management. In the face of chronic budgetary shortfalls, protected area managers can find themselves vying with other bureaucrats for the favour of key politicians.

International assistance

Support from bilateral and multilateral assistance agencies has been critical to the development of Caribbean protected areas over the last twenty years. Most notable have been CIDA in the Commonwealth countries, US AID, and OAS. Because the support often includes capital improvement and technical assistance components, it has made detailed planning and establishment of infrastructure possible in several countries. A major disadvantage is that international assistance is rarely long-term and therefore cannot provide for ongoing management. In cases where technical advisors are not sensitive to the insular Caribbean context, it can impose inappropriate continental and 'developed world' biases and approaches.

Foundations and conservation NGOs

A number of private foundations and regional and international conservation NGOs have supported Caribbean protected area development. WWF, through its US, UK, and Netherlands offices, has been especially active (Geoghegan 1988), and many others have provided support as well. The Nature Conservancy is working in Jamaica and the Dominican Republic. Regional organisations, such as the Caribbean Conservation Association, the Caribbean Natural Resources Institute (CANARI) and Island Resources Foundation, have provided technical assistance through a variety of programmes and projects. In many countries, such as the British Virgin Islands and Dominica, this type of support has catalysed establishment of specific protected areas and national systems. Organisations such as WWF and CANARI have provided low-level but long-term support, facilitating institutional development. Support from these sources is generally more flexible and less politicised than that from international assistance agencies. However, it also requires more fundraising effort, including well researched proposals and careful follow-up. Although long-term funding is possible, routine management costs are generally not covered. For the most part, grants from private foundations are not available to government agencies, and require administration by an NGO.

Individual donations

Individual donations, whether specifically targeted, solicited through 'Friends' type support organisations, or in the form of volunteer services, are increasingly utilised to supplement other sources. This type of support can be sought from those who perceive themselves as stakeholders, for example neighbouring landowners, repeat park visitors, and tourism businesses. Donations provide a way to lessen reliance on government support or external assistance. Potential private donors require intensive cultivation, with support building slowly. This approach has been most successful in those Caribbean countries with a significant

wealthy population or which cater to an upscale tourist market, such as the British Virgin Islands. Since promotion is critical, those countries with the more attractive or 'interesting' protected areas or species also have a greater chance of success.

User fees

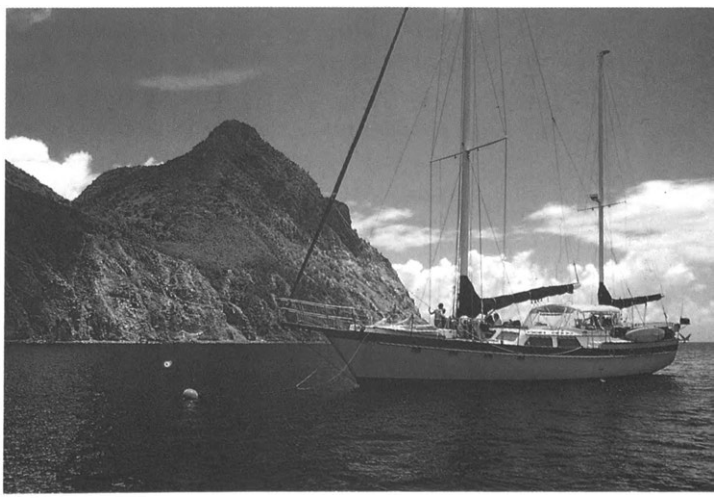
In recent years, user fees have proven their effectiveness in several countries of the region, including Saba, the British Virgin Islands, Antigua, St Kitts-Nevis, and Bonaire. User fee levels can be directly correlated to the cost of management, and adjusted as the cost changes. They allow management costs to be allocated to those accruing its benefits. For areas of heavy tourism use, it charges those most able to pay. Protected areas must often demonstrate their economic value to gain political support; user fees provide a simple mechanism for determining this. User fees are not appropriate for very small or little used areas, where the cost of collection can exceed the amount collected (Geoghegan 1989). When charges are levied on access, goods, and services that had previously been free, resentment can result among local residents and users, reducing local support. Full community involvement in development of fee systems and a clear understanding of their purpose can reduce this risk. It is important that mechanisms be put in place to assure that the fees collected are used for management of the area and not returned to a central treasury.

Sales

With a few exceptions, sales of souvenirs, publications, T-shirts, etc. are not used systematically or aggressively in the region. Sales can provide flexible funding to supplement other more substantial sources, and in parks with visitor centre/gift shops revenue from sales can be substantial. Sales items can be useful promotional tools, especially for building a base of support and soliciting donations.

Concessions

Concession systems are in effect in Virgin Islands National Park, Nelson's Dockyard National Park (Antigua), the Dominican Republic, and the British Virgin Islands. Services provided through concessions range from yacht chartering to gift shops to campsite rentals. Concessions provide services for visitors and some revenue for management. Assuring standards of quality for concessions operations can become a managerial burden. If planned well, concessions can provide opportunities for local entrepreneurs, thus increasing local support. As with user fees, concessions may not be appropriate for smaller or less visited protected areas, since construction of necessary infrastructure and monitoring can greatly exceed the revenue accrued. In areas where similar services are provided by private businesses,



Yacht moorings in Saba Marine Park, Netherlands Antilles. Photo: Tom van't Hof

concessions can be perceived as unfair competition. This is particularly applicable in the insular Caribbean, where most protected areas are small and commercial tourist services are usually available in reasonable proximity. The carrying capacity of the area must be factored in when planning concessions, to assure that they do not overtax the resource base or management capacity.

Debt swaps

Swaps of both commercial and bilateral debt have been implemented in Jamaica, to capitalise a trust fund for protected areas, and in the Dominican Republic, for conservation projects in several protected areas. Debt swaps appear to provide a 'free' source of revenue while reducing national debt. The actual situation is of course more complicated, and considerable financing is required up front to capitalise the swap. These funds must be secured through traditional mechanisms, generally through grants from international assistance or funding agencies. In both the Dominican Republic and Jamaica, there are concerns that debt swaps support continued economic regulation by externally imposed structural adjustment programmes, which are known to negatively affect living standards, particularly of the poor. In the Dominican Republic, the projects being undertaken through the swaps may result in disenfranchisement and marginalisation of the rural peasantry (Urbaéz 1991); while this is not a direct result of the swaps, it may be at least partially a factor of the conditions set by the agencies financing them. On the other hand, debt swaps have been useful for publicising conservation efforts in some Latin American countries, and the swaps in the Caribbean have received considerable media attention. Debt swaps are only possible for countries with discounted debt, which is generally not the case in the Caribbean. Even in Jamaica and the Dominican Republic, the discount rate is much less than for most Latin American countries that have negotiated swaps. Debt swaps are extremely complex undertakings, and generally require technical assistance from an international conservation agency. The Nature Conservancy provided this assistance in Jamaica and the Dominican Republic, and national institutions have now taken over management of the resulting trust funds.

Trust funds

Trust funds, capitalised in widely differing fashions, are currently being used or established in Puerto Rico (in lieu of corporate tax payments) (Geoghegan 1989), Jamaica (debt swap) and the Turks and Caicos Islands (surcharge on tourism services). Once established, trust funds provide a flexible, and unrestricted source of support for protected area management, which can be used to finance capital costs or as insurance against years of budgetary austerity. Intensive effort must go into the establishment of trust funds, which require a high level of initial capitalisation, generally at least ten times desired annual income. They also require a dedicated governing board, an executing agency, and professional assistance in investment and management.

Collaboration with NGOs and others

Many of the financing mechanisms discussed above are not suitable for or available to government agencies. The vesting of management authority in a national trust or equivalent or collaboration with a national conservation NGO

thus greatly increases the range of funding mechanisms available. These institutions, particularly NGOs, have less complex systems for decision-making and implementation than governments, and can thus take more rapid advantage of opportunities when they occur. NGO collaboration in protected area management can also stretch limited financial and human resources, and increase the local base of support. In ten countries in the region, the management of protected areas is either fully or partially vested in a statutory body such as a national trust. In nine others, national conservation NGOs are active partners in protected area management.

Role of private sector

In the Caribbean, private sector support to protected area management is critical. The linkages between protected natural areas and the private sector, particularly tourism, forestry, agriculture and real estate, are obvious. These linkages need to be reinforced, through cooperative programmes and private sector financing of management, for the benefit of both sides. Currently, most private sector support is project-specific and *ad hoc*, such as support from a major hotel for the development of the Baths National Park in the British Virgin Islands. However, more systematic cooperative programmes are starting to emerge. In the Turks and Caicos Islands, hotels and the national airline capitalised a trust fund to finance conservation projects. Similar approaches are now being considered in other countries. When the private sector is involved in protected area management, effective controls are required to ensure that the need for short-term profit does not result in resource degradation.

Involvement of local communities

In the Caribbean, the value of involving communities adjacent to or impacted by protected areas in their management is becoming widely accepted. A number of projects now underway in the region aim at increasing community involvement and improving the links between protected areas and rural development (Geoghegan *et al.* 1991; Kerr and Parchment 1992; Simmons 1992). Local communities can contribute to protected area management through provision of information, cooperation in protection and enhancement of the resource base, and assistance in enforcement of regulations. They can also take over actual management responsibilities, as discussed below.

Co-management arrangements

The management crisis being faced by most protected areas in the region makes it clear that existing resources are inadequate to meet conservation objectives. New and more creative approaches are needed to assure the long-term protection of the region's natural patrimony.

Co-management is the sharing of management responsibility, and usually requires delegation of some responsibilities from the designated management agency to an NGO or organised group of resource users. One successful example comes from Jamaica, where a local community group has taken responsibility for the management of visitor facilities within the Blue Mountain/John Crow Mountains National Park (Kerr and Parchment 1992). Other examples are emerging from around the region (Geoghegan and Barzetti 1994). Through co-

management, the financial and personnel resources of cooperating organisations can be tapped. Co-management also can greatly increase local support for protected areas. By demonstrating local commitment and in-kind support, it provides an effective tool for external fundraising as well. Co-management requires clear agreement of the responsibilities of each party involved and can only succeed in a climate of cooperation and mutual respect.

Regional collaboration

In a region such as the Caribbean, comprised of many small countries and territories with limited resources, cooperation is essential to survival. In the field of protected area management, existing forms of collaboration include regional training activities, sharing of technical expertise, exchange of information, and coordinated approaches to funding agencies. Well established protected areas, such as the Virgin Islands National Park and the Parc National de la Guadeloupe, have provided training and technical assistance to protected areas and individuals from throughout the region.

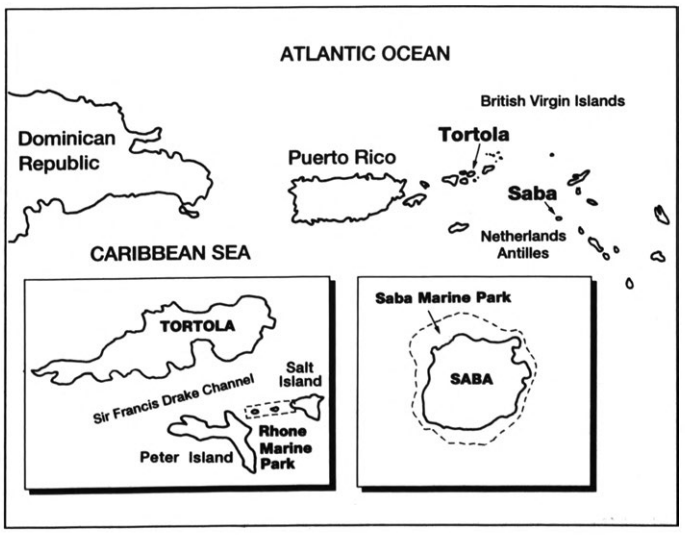
Case studies

The following case studies show some of the more creative approaches to financing being taken in the region. They also illustrate the value of NGO and private sector cooperation, and of effective co-management arrangements.

Marine Parks, British Virgin Islands

The British Virgin Islands (BVI) is one of the world's foremost yachting centres, attracting nearly 100,000 charter yacht visitors per year. Many of the territory's visitors also make use of its spectacular and accessible dive sites, including the wreck of the RMS Rhone, which became the BVI's first marine park in 1980, largely at the urging of the territory's commercial dive operators.

By the mid-1980s, it had become apparent that many of the territory's popular dive sites were being damaged from overuse, and particularly from anchoring on sensitive reef areas and seagrass beds. In order to halt the degradation, the BVI National Parks Trust and the Dive Operators Association collaborated on a series of projects to establish permanent moorings in critical areas, starting with the Wreck of the Rhone Marine Park. By 1993, through the joint efforts of the Trust and the dive operators, 180 moorings were in place throughout the territory (DeRavariere *et al.* 1993).



The Caribbean region, showing the locations of Rhone Marine Park, British Virgin Islands, and Saba Marine Park, Netherlands Antilles.

This system of moorings has become the basis for a revenue generation plan that has been highly successful. In exchange for use of the moorings, all charter boat and scuba dive visitors pay a modest fee, which is collected by the commercial operators and passed

and passed on to the National Parks Trust. All informational material, including brochures distributed to visitors and a video, stresses the conservation aspects of the system. The fees buy visitors a 'Marine Conservation Permit' which contributes towards the Trust's Reef Protection Programme.

The fee system was implemented in early 1992. Revenue in 1993 exceeded $110,000, and fully covered the salaries of a marine park warden and two assistant wardens, as well as all maintenance costs on the moorings and the project boat (DeRavariere*et al.* 1993). By mid-1993, it was also possible to employ a fee system administrator. Income is expected to continue to increase significantly, as foreign charter boat companies (mostly based in the adjacent US Virgin Islands) are brought into the system.

The programme's success has been largely due to the remarkably high level of collaboration between the National Parks Trust and the territory's charter boat and dive companies, which were instrumental in developing the system and which have been diligent in collecting the fees and educating the public on the need for reef conservation. In fact, the charter boat companies' daily briefings for clients, which include a description of the reef protection programme, often result in additional donations from visitors (DeRavariere *et al.* 1993).

Saba Marine Park

Saba is an extremely small island in the Netherlands Antilles. Steep terrain, undeveloped infrastructure, and few beaches have impeded tourism growth. In 1984, with a stagnating economy and net population loss, the government began promoting the island's high quality marine environment for dive tourism. In 1987, after extensive research, the Saba Marine Park was established, comprising the inshore waters surrounding the island (Van't Hof 1989).

Establishment of the Park was funded by the Dutch and Saba island governments and Dutch conservation organisations. It was the intention of management, however, to make the park self-sufficient within five years. In order to do so, a three-pronged fundraising strategy was put in place, consisting of dive fees, donations, and souvenir sales. In order to best implement the strategy and maximise management effectiveness, the running of the Park was turned over to a conservation NGO, the Saba Conservation Foundation (Van't Hof 1989).

With the cooperation of local commercial operators, a $1/dive fee system was developed. (The fee was later raised to $2 per dive.) Licensed operators collect the fees from their clients and pass them on to the Park. Since the establishment of the Park, Saba's dive industry has grown considerably, from 11,664 dives in 1988 to 19,607 in 1993 (Saba Conservation Foundation 1993). The dive fees represent the largest source of revenue for the Park.

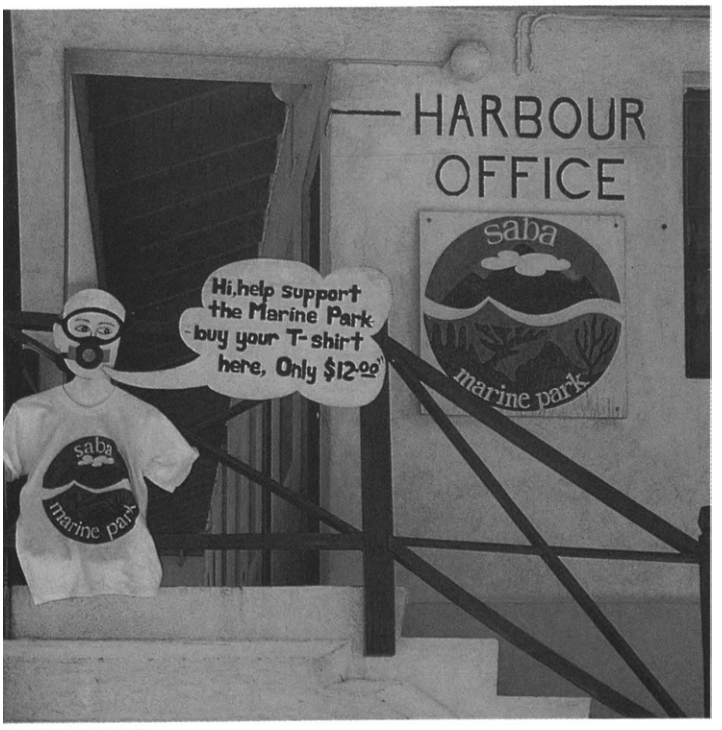
Rhone Marine Park, the first to be established in the British Virgin Islands, is popular with divers who come to visit the wreck of the RMS Rhone. Photo: ECNAMP.

A support group, the Friends of the Saba Conservation Foundation, was established to receive donations for the Park. Through an arrangement with a US conservation organisation, donations from US citizens are tax deductible. Several thousand dollars are raised for park management this way each year. Local 'Friends' also provide the Park volunteer services, including assisting with fundraising and administration and functioning as support divers and research assistants.

A number of souvenir items were developed for sale, including guidebooks, logo pins, polo shirts, and posters. These also bring in significant funding, which should increase when a planned gift shop is established. The Park is now investigating the possibility of 'corporate sponsorships', allowing businesses to use the Park's logo and name for an annual fee (Saba Conservation Foundation 1993).

The government subvention ended in December 1992, and since then, the Park has been fully self-sufficient. Employees include a manager and an assistant manager, who are well supported by a cadre of volunteers. Saba Marine Park is now considered one of the very few 'fully managed' marine parks in the Caribbean (OAS & NPS 1988). It has an active programme of patrolling, enforcement, public information, and reef monitoring. A mooring system has been in place since 1987.

The Park was able to meet its goal of self-sufficiency within five years, despite an economic downturn that resulted in fewer visitors in 1990 and 1991, because it incorporated a range of fundraising tools which reduce vulnerability to economic fluctuations and other external factors, and because, as in the case of the British Virgin Islands, it is well supported by its commercial users and the local community.



A variety of souvenir items are sold in aid of Saba Marine Park, and a gift shop is planned. Photo: Tom van't Hof

Guidelines in planning a strategy

Through the review of funding needs, existing financing mechanisms, management requirements, and the region's successes in fundraising, a number of lessons can be drawn that provide some guidelines in formulating funding strategies. These include the following:

- Diversified funding strategies are more effective than dependence on a single source of support.
- Partnerships among governments, NGOs, and the private sector take maximum advantage of the range of financing mechanisms available and can help to increase management capacity.
- Strategies should aim to secure adequate funding to meet management objectives; in other words, they should be based on and reflect budgetary requirements.
- It should be the aim of any strategy to reduce dependence on government subventions, and with it annual competition with other government agencies and budgetary uncertainties.

Table 1. *Framework for selection of appropriate funding mechanisms.*

Mechanism	*Conditions required*	*Constraints*
Government subvention:	Participation and lobbying in budgeting process. Encourages political interference.	Usually inadequate for full management.
International assistance agency:	Government request. Ongoing relationship or cooperative agreement.	Generally not available to NGOs. Usually not flexible: requires preparation of and adherence to project document. Can require use of foreign consultants.
Foundation grants:	Prospect research, initial inquiry, proposal submission, and follow-up.	Generally not available to governments. Usually not flexible: requires preparation of and adherence to project document. Limited field of interest of most foundations.
Donations and membership associations:	Personnel and mechanisms for making requests and following-up.	Generally only available to NGOs.
User fees:	Provision of 'valued' services. Personnel and system for collection. Legislation or regulation (sometimes).	System must be set up to assure that fees available to management agency; not returned to general fund.
Souvenir sales:	Retail outlets. Funding to manufacture sale items.	Can only be expected to provide small percentage of total revenue required; useful in conjunction with other mechanisms.
Concessions:	Sufficient market for services offered. Personnel and system for monitoring and collection. Infrastructure (usually).	Can be perceived as competition with existing businesses in area. Requires cost/benefit analysis prior to implementation. Can result in pressure to exceed carrying capacity.
Debt swaps:	Discounted commercial debt for sale Source of capitalisation. Agreement of government. Involvement of experienced advisors.	Not worthwhile if debt discount minimal.
Trust funds:	Source of capitalisation. Professional involvement in investment and management. Governing Board and management body.	Implementation and management require NGO or private sector involvement. Capitalisation must be at least 10 times required annual income.
Nature tourism:	Attractions appealing to ecotourism market. Relationship with tour companies. Personnel and other support resources. Mechanisms for capturing portion of revenue.	Little initial return; follow-up required. Need to break into market; industry now focusing on other regions. Can result in pressure to exceed carrying capacity.

- A successful funding strategy will provide some level of protection against economic fluctuations and unforeseen emergencies and a pool of funds to take advantage of opportunities when they arise.
- Whenever possible, strategies should include mechanisms to provide a return on services; i.e. the user should pay.
- Strategies should aim to improve the linkages between protected area management and the private sector, particularly the tourism industry.
- The accrual of benefits from management to local communities, such as business or employment opportunities or improvement of community services and infrastructure, should be an objective of any strategy.
- Regional collaboration can provide access to human, financial, and technical resources that are not available at the national level.

Bearing in mind the guidelines noted above, Table 1 provides a simple framework for the selection of appropriate funding mechanisms.

References

Geoghegan, T. (ed.) 1988. Technical and financial assistance. *Lesser Antilles Park and Protected Area News 1(2)*. Caribbean Conservation Association and Eastern Caribbean Natural Area Management Programme.

— 1989. Innovative funding strategies for protected areas. *Lesser Antilles Park and Protected Area News 2(2)*. Caribbean Conservation Association and Eastern Caribbean Natural Area Management Programme.

Geoghegan, T., & Barzetti, V. (eds.) 1994. Protected areas and community management. *Community and the Environment, Lessons from the Caribbean. No. 1.* Panos Institute and Caribbean Natural Resources Institute.

Geoghegan, T., Renard, Y., & Smith, A. 1991. Community participation in protected area management: some cases from the Caribbean. *In*: Cambers, G., (ed.) *Proceedings of the Regional Symposium on Public and Private Sector Cooperation in National Park Development*, 53–59. British Virgin Islands National Parks Trust.

Kerr, R. & Parchment, P. 1992. Parks and Protected Areas: turning problems into progress. *Caribbean Park and Protected Area News 4(2)*:9–10. Caribbean Natural Resources Institute.

OAS & NPS. 1988. *Inventory of Caribbean marine and coastal protected areas*. Dept. Reg. Dev., Organisation of American States and Office Intl. Affairs, National Park Service. Washington, D.C.

Putney, A.D. 1992. Caribbean regional review. *In*: IUCN – The World Conservation Union, *Regional reviews*, 14.1–14.28. IVth World Congress on National Parks and Protected Areas, Caracas, Venezuela, 10–21 February 1992.

DeRavariere, R., Banks, J., Elliott, P., & Seal, J. 1993. *British Virgin Islands National Parks Trust Reef Protection Programme and Mooring System, 5 Year Plan 1993–1998*. Final draft.

Saba Conservation Foundation. 1993. *Annual Report 1993*.

Simmons, A. 1992. JEMS: The Kingshill experience. *Caribbean Park and Protected Area News 4(2)*:5. Caribbean Natural Resources Institute.

Urbaéz, R. 1991. Smallholders fear Dominica's *(sic)* debt swaps. *Panoscope 27(8)*.

Van't Hof, T. 1989. Making marine parks self-sufficient: the case of Saba. Paper prepared for Conference on Economics and the Environment. September 1989. Barbados.

World Conservation Monitoring Centre (WCMC). 1991. *World Directory of National Parks and Protected Areas, Neotropical – Caribbean*. Draft report.

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National Environmental Funds: a new mechanism for conservation finance

MARK DILLENBECK

NATIONAL ENVIRONMENTAL FUNDS or "NEFs" (i.e. trust funds, foundations, endowments, and similar grant-making mechanisms) have emerged in the last four years as a major new trend in conservation finance. They have been established to support parks and protected areas as well as a wider range of environmental and sustainable development activities. They offer a variety of attributes which may make them more effective mechanisms for conservation than traditional funding approaches. While the main advantage of NEFs is generally perceived to be financial, NEFs need to be seen in a larger context as vehicles for catalysing national consensus on priority actions and as effective means for implementing national environmental planning frameworks.

Background

Since 1990, approximately $370 million has been committed to NEFs in 17 less developed countries (see Table 1). A number of NEFs are also being set up in Eastern Europe. The largest and most well known of these, the Polish Ecofund, claims commitments of $300 million. In addition, national funds for social and other charitable purposes have also grown rapidly although there has as yet been no survey of these parallel efforts. It may be reasonably predicted, however, that these 'social' purpose funds will, together with NEFs, increasingly form a principal foundation for 'sustainable' and equitable development at the national level.

The term 'national environmental funds' (NEFs) covers a variety of financial mechanisms including trust funds, endowments, foundations, and other grant-making entities. They share the common characteristics of (a) being governed by Boards of Directors which represent different elements of society, (b) being capable of receiving funds from a variety of sources, and (c) disbursing grants to beneficiary organisations and agencies.

NEFs have been capitalised from a variety of sources including debt-for-nature swaps, bilateral debt reduction agreements (e.g. the Enterprise for the Americas Initiative, Club of Paris "Houston Terms," and the Canadian debt-conversion initiative announced at UNCED), contributions from donor agencies, fees and levies of various types, and direct contributions from national treasuries. In addition to the vision and dedication of numerous local NGOs and government ministries, major international NGOs such as the World Wildlife Fund, The Nature Conservancy, and Conservation International have played key roles in promoting NEFs.

There are several indications that donor agencies are becoming increasingly enthusiastic about NEFs. For instance, the Danish parliament has reportedly adopted a new policy in favour of more trust fund programming instead of project funding. Greater resources for NEFs are likely to come from the next tranche of funding from the Global Environmental Facility which has just completed a major

'issues and options' paper addressing the design of GEF supported trust funds for biodiversity conservation, primarily in parks and protected areas (see bibliography below). In the United States, the Africa Bureau of the Agency for International Development has launched a "Sustainable Financing Initiative" specifically to identify and promote innovative financing tools such as endowments and foundations.

The programmes and activities supported by NEFs vary widely from country to country ranging from a relatively narrow focus on parks to a broader focus on environmental and sustainable development issues.

Even at this early stage of development of the concept of national funds, it is clear that each fund will be somewhat unique, responding to the particular situation in each country. Yet the diversity of experience is instructive, and there is much to be learned by the sharing of ideas and innovations.

The promise of NEFs

The emergence of NEFs represents a major new trend in conservation finance. When designed with care, NEFs have a series of attributes that make them attractive for funding environmental management:

- STABLE FINANCING: NEFs have the potential for providing the long-term stable financing necessary for effective implementation of conservation actions. They can lessen dependence on the vagaries of cyclical infusions of donor assistance and fluctuating government budgets.
- ABSORPTIVE CAPACITY: NEFs provide an institutional mechanism for disbursing appropriately-sized funds which are within the capacities of beneficiary institutions to absorb effectively. They can therefore accommodate donor's needs to move large sums of money with minimal overhead cost, while respecting recipients needs for appropriate investment levels and financial stability.
- DIVERSITY OF FUNDING SOURCES: NEFs can be funded from a variety of sources, both national and international. Diversity encourages stability, growth, self-reliance, and independence.
- PARTICIPATORY: NEFs encourage the participation of a wide range of interested parties (e.g. government agencies, non-governmental and business sectors, and relevant interest groups) through representation on the boards of directors, technical review committees, general assemblies etc., thus providing necessary checks and balances.
- TRANSPARENT: Decision making in NEFs is transparent and subject to public review and critique.
- ETHOS BUILDING: NEFs promote democratic values of participation, cooperation, and accountability which have implications beyond the environmental sector.
- SUPPORTIVE OF NATIONAL PLANNING FRAMEWORKS: NEFs can ensure that national environmental planning frameworks are effective tools for ordering national priorities rather than simply being prerequisites for donor assistance. They do this by putting the environmental action plans on a stable financial footing and ensuring selected priorities represent a consensus of relevant players.
- IMPROVED DONOR COORDINATION: NEFs may improve the effectiveness of external donor assistance by pooling financial support behind a common planning framework, thus avoiding a multiplicity of plans. NEFs may also improve

coherence in the implementation of national plans and strategies by ensuring that funded activities correspond to agreed national priorities rather than donor priorities.

- NATIONAL vs INTERNATIONAL PRIORITIES: NEFs offer a promising means for balancing global priorities with national needs and aspirations. This occurs in the negotiation over agreed criteria for the management of sub-accounts set up by particular donors.
- GROWTH WITH MINIMAL DISPLACEMENT: Through considered disbursement of funds to multiple beneficiaries within the context of national plans, NEFs help avoid the problem of displacement of scarce pools of trained national personnel and uneven coverage of environmental priorities.

Where NEFs fit

The principle advantage of NEFs is usually perceived to be financial – people primarily see NEFs as a means for providing long-term stable financing for environmental activities. For instance, the World Bank GEF secretariat views trust funds primarily as a mechanism for providing for the recurrent costs of parks and protected areas. While this is undeniably an important feature, NEFs need to be viewed in larger global context.

Environmental awareness worldwide has resulted in two rather striking phenomena: (1) the proliferation and growth of non-governmental environmental organisations, and (2) an increase in overseas development assistance (ODA) earmarked for environmental concerns in developing countries. This has been accompanied by the stagnation or decline of government budgets for the environment, especially in the developing countries.

The result of these trends has been a general fragmentation of effort in environmental management. Typically, the decline in centralised government programmes has not been matched with a systematic increase in dispersed non-governmental programmes. At the same time, the influence of bi-and multi-lateral ODA, and the international consultants that service them, have increased as the ODA share of total funding for government agencies and non-governmental organisations has increased.

Mechanisms are therefore needed that can deal with the fragmentation of effort by weaving the contributions of the many different actors into an efficient national environmental programme. While national environmental strategies, or their equivalent, have been successful in achieving the required cooperation and coordination in some instances, these efforts have often been dominated by one ODA organisation, whose international consultants do not remain in-country to implement the programme. In such circumstances, the buy-in of other international, national, and local organisations may be minimal, thus jeopardising any chance of effective implementation.

What is needed is a national financing mechanism that can fund implementation of a national environmental strategy (e.g. protected areas system plans, National Conservation Strategies, National Environmental Action Plans, Biodiversity Conservation Strategies, National Sustainable Development Strategies, Tropical Forest Action Plans, etc.) through a process that is accountable and transparent, includes major stakeholders in its governance, and is relatively independent of individual donors or implementing agencies.

Therefore, the role of NEFs is not simply to provide more money to environmental projects, but to serve as a focal point or catalyst for developing and implementing national level environmental planning frameworks.

Limitations of NEFs

While the promise of NEFs is great, the following limitations or pitfalls which must be kept in mind:

- EXCESSIVE PROJECT FOCUS: The existence of a NEF can reinforce the impression that environmental problems can be addressed by funding a series of projects, while in truth, resolving environmental problems generally requires a variety of ingredients such as policy reform, increased enforcement of existing regulations, and political will.
- OVERLY SECTORAL APPROACH: The very name 'environmental fund' may suggest to some people that the environment can be dealt with as an isolated sector. The key message of the Earth Summit was that environmental issues must be integrated with development activity (i.e. "sustainable development").
- DISPLACEMENT OF GOVERNMENT BUDGETS: The existence of an environmental fund may tempt government officials to reduce or eliminate budgets for government ministries or departments which address nature conservation and natural resource management.

None of these problems are insurmountable but they need to be kept in mind at the earliest phase of NEF design.

Brief histories of select NEFs which support parks

BOLIVIA: The Trust Fund for the National System of Protected Areas (Cuenta Fiduciaria para el Sistema Nacional de Areas Protegidas – CF/SNAP) was established to finance the recurrent costs of the administration of the management units belonging to the National System of Protected Areas (SNAP), the central support programmes of the SNAP, and the National and Regional Directorates of Protected areas. The GEF provided a project preparation advance of $40,000 to finance legal counsel to identify an appropriate legal structure for the fund to achieve its objectives and with regard to potential tax and attachment issues. The government of Switzerland provided additional support. The initial size of the fund is $5 million and the growth objective is $35 million (World Bank, 1994).

The fund will be managed as a sub-account of FONAMA, the National Environmental Fund of Bolivia (Fondo Nacional para el Medio-Ambiente), which is one of the oldest and most fully developed of all NEFs. To date, FONAMA has secured commitments of approximately $47 million (both actual transfers and legally binding obligations) and claims additional pledges of approximately $33 million which are being negotiated. As of mid-1993, FONAMA had approved forty-four projects, ranging in size from $13 million to $11,000 with a total value of $27 million. These projects are in various stages of execution, including $2 million worth of projects which have been completed.

In general, the Bolivian National Environmental Action Plan provides the priority setting framework, and FONAMA worked with the national environmental secretariat to develop a list of priority actions.

JAMAICA: The Jamaica National Park Trust Fund (JNPT) is a small endowed trust whose purpose is to support the operations of the Jamaican national park

system. As of July 1993, the value of the Fund was $720,000. Initial endowment of the Fund was $437,956.

The Jamaica Conservation and Development Trust, a not-for-profit organisation, was founded in 1987. In 1990 the Trust became an implementing agency of the Protected Areas Resources Conservation Project (PARC). One facet of this project was the development of the Jamaica National Park Trust Fund to support operations of national parks. The Fund was legally established in January 1991, and was capitalised in April 1992 with money from the first debt-for-nature swap in the English-speaking Caribbean. The design of the parks system coincided with the establishment of the Fund. To date, two parks have been established: one at Montego Bay and the other in the Blue Mountains. The income from the Fund has been used to pay salaries for staff at both parks.

It is the stated intention of the Natural Resources Conservation Authority (NRCA), the government agency in charge of the environment, that the JNPT should be the vehicle for all eligible funds to the park system whether public or private.

PERU: Peru is a country of extremely high biodiversity with a struggling economy. PROFONANPE (Fondo Nacional para Areas Naturales Protegidas por el Estado) is intended to aid in protection of areas of high representative biodiversity until the economy improves to the point where the government can cover costs. In January 1993, Peru established a National Institute of Natural Resources (INRENA) to bring together all public sectors involved in the management and conservation of natural resources.

PROFONANPE's primary objective is to provide financial support for the conservation of Peru's biological diversity; focusing primarily on the implementation of a management plan for protected areas which is under development. In the future, PROFONANPE may also provide support to conservation activities outside protected areas. The fund has received tentative commitments from the Global Environment Facility of a sizeable endowment which will be held and managed offshore. It is unusual in that its managing Board has equal representation from the Government of Peru and from the NGO community.

The PROFONANPE trust fund was created in December 1992 and began its activities in May 1993. It will eventually become established as a private, non-profit association in Peru with a General Assembly that will elect its members. Initial financial support to develop a plan for National Protected Areas and to start up four pilot projects came from The German Agency for Cooperation (GTZ). PROFONANPE is near agreement with the GEF to get $4 million for endowment and the Canadian International Development Agency has provided equipped office facilities in Lima. Furthermore, the Germans have offered DM 30 million (US $18 million) from their bilateral account of debt with Peru with a negotiable discount of 50%, which is at this time being negotiated with the Peruvian government. PROFONANPE's Coordinator is exploring other opportunities for increased funding.

IUCN's Programme to Support NEFs: At the recent 19th IUCN General Assembly, member organisations approved a resolution supporting IUCN's ongoing Global Initiative for National Environmental Funds (GINEF) (#19.35).

GINEF's long-term goal is to empower developing countries with the institutions and resources necessary for their societies to assume and execute effective care for their biological resources.

GINEF bases its programme on the premise that national funds can serve as effective means for catalysing and supporting the development of effective institutions for natural resource management. Therefore, GINEF's purpose is to strengthen the ability of NEFs to play a leading role in helping national societies exercise responsibility for their biological resources.

In implementing GINEF, IUCN will operate in a collaborative manner, drawing on the existing expertise of those organisations which have been involved in NEF design and development, and supporting those efforts.

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Select bibliography

IUCN. 1994. *National Environmental Fund Country Profiles.* IUCN Washington, DC.

Rubin, S.M., Shatz, J., & Deegan, C. 1994. *International Conservation Finance: Using Debt Swaps and Trust Funds to Foster Conservation of Biodiversity.* Conservation International, Washington, DC.

Spergel, B. *Trust Funds for Conservation.* World Wildlife Fund, Washington, DC.

Wells, M.P. 1993. Green Funds. *Ecologica 9*: 13–15. Bogot.

Wetherly, P., & Warnken, P. 1994. *Programming Agricultural and Environmental Endowments and Foundations in Africa: Lessons from Latin America.* US Agency for International Development, Bureau for Africa (AFR/ARTS/FARA).

Wetherly, P. 1994. *Guidelines for Planning and Programming Endowments and Endowed Foundations in Africa.* US Agency for International Development, Bureau for Africa (AFR/ARTS/FARA).

World Bank. 1994. *Issues and Options in the Design of GEF Supported Trust Funds for Biodiversity Conservation (Draft version).* World Bank, Washington, DC.

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Table 1. An overview of National Environmental Funds.

country and name of fund	*funds committed ($ millions)*	*date of commitment*	*assets transferred ($ millions)*	*date of transfer*	*purpose of funding*	*source of funding*	*number of grants awarded*	*governance*
1. Bhutan								
Bhutan Trust for	10.0	1992	7.0	1992	endowment	GEF		Gov/local
Environmental	1.0	1992	1.0	1992	endowment	Dutch	15	NGO/WWF/
Conservation	1.0	1991	1.0	1992	endowment	WWF		UNDP
	0.6	1992	0.6	1992	endowment	Norway		
total:	**12.6**		**9.6**					
2. Guatemala								
Guatemala Trust for Environmental Conservation	0.8	1992	0.8	3/93	endowment	UK Foundation, WWF, US banks	12	Gov/NGO NGO majority
3. Philippines								
Foundation for the	25.4	1990	8.8	3/92	endowment	USAID debt swap	41	Gov/NGO
Philippine		1991	0.2		endowment	Bank of Tokyo		NGO majority
Environment						debt swap		
		1992	17.1	9/93	endowment	USAID debt swap		
total:			**26.1**					
4. Bolivia								Gov/NGO
National Fund for	21.8	10/91	21.8	6/93	general	EAI	44	NGO majority
the Environment	4.5		4.5			GEF		Gov majority
(FONAMA)[1]	4.8		4.8			World Bank		Gov majority
	0.5		0.5			IDB		Gov majority
	6.4		1.4			USAID/PL-480		NGO majority
	0.8		0.8			DIFEN/USAID		Gov majority
	15.0		0.0			US Gov		Gov majority
	0.3		0.3			Gov of Japan		Gov majority
	6.7		3.5			Gov of Switzerland		Gov majority
	5.4		5.4			Gov of Canada		Gov majority
	3.0		0.0			Gov of Sweden		Gov majority
	2.5		0.0			Gov of Mexico		Gov majority
	4.0		0.5			Gov of Germany		Gov majority
	1.7		0.4			Gov of Netherlands		Gov majority
	0.9		0.9			TNC debt swap		Gov/NGO equal
	1.0		1.0			WWF debt swap		Gov/NGO equal
	1.0		1.0			GoB debt swap match		Gov/NGO equal
total:	**80.3**		**46.8**					
5. Jamaica								
Jamaica Parks	0.6	1991	0.4	2/92	endowment	AID & PR		Gov/NGO
Trust Fund						Cons'vn Trust, TNC		NGO majority
	0.1		0.0			Eagle Commercial Bank		
total:	**0.7**		**0.4**					
5A. Jamaica								
Environmental Foundation of Jamaica	22.0	10/91	2.0	6/93	endowment	EAI	3	Gov/NGO NGO majority
6. Dominican Republic								
Pronatura	0.6	1/91	0.6	1991	general	PR Cons'vn Trust		Gov/NGO NGO majority
7. Chile								
	18.7	6/91	3.4	6/93	general	EAI		Gov/NGO NGO majority
8. Colombia								
Ecofondo	46.0	12/92	4.2	6/93	general	EAI		Gov/NGO
	12.0	1993			general	Canada		NGO majority
	0.5		0.5		TA	AID/IUCN/TNC/WWF		
total:	**58.5**		**4.7**					

[1] FONAMA managers make the distinction between funds 'raised' and funds 'pledged'. Funds raised indicate either funds actually received or a formal written commitment to transfer funds and are included here under the "Assets Transferred" column. Funds pledged indicate an informal or verbal pledge and are included here under the "Funds committed" column. All figures given here are rounded.

(Table 1 continued.)

country and name of fund	*funds committed ($ millions)*	*date of commitment*	*assets transferred ($ millions)*	*date of transfer*	*purpose of funding*	*source of funding*	*number of grants awarded*	*governance*
9. Uruguay								
	7.0	12/92	0.6	6/93	general	EAI		Gov/NGO NGO majority
10. El Salvador								
SEMA	41.2	12/92	12.8	6/93	general	EAI		Gov/NGO
	8.0	1993			general	Canada		NGO majority
total:	**49.2**		**12.8**					
11. Argentina								
	3.1	1/93	0.1	6/93	general	EAI		Gov/NGO NGO majority
12. Panama								
Fundacion Natura	0.8	1991	0.8	1991	TA	AID		Gov/NGO
	8.0				endowment	AID		NGO majority
	2.0				endowment	TNC		
	15.0				endowment	US/Panama		
total:	**25.8**		**0.8**					
13. Honduras								
Fundacion Vida	6.0	1992	0.0		general	Gov Bond – debt forgiveness, AID		Gov/NGO NGO majority
	1.0	1993						
total:	**7.0**		**0.0**					
14. Indonesia								
	5.0		0.0		TA	AID		Gov/NGO
	15.0				endowment	AID		NGO majority
total:	**20.0**		**0.0**					
15. Mexico								
Fondo Mexicano	1.0	1994	1.0	1994	Gov of Mexico	US State Dept,		Gov/NGO
para la Conservacion de la Naturaleza	0.2	1993	0.2		TA	AID, Bankers Trust, MacArthur Found., WWF		NGO majority
	20.0	1993	0.0		endowment	USAID		
total (TA):	**21.2**		**1.2**					
16. Uganda								
	4.0	1993			endowment	GEF		Gov/NGO NGO majority
17. Peru								
PROFONANPE	1.5	1993	1.5		TA	GTZ		Gov/NGO
	4.0	1993	1.5		endowment	GEF		
total:	**5.5**		**3.0**					
18. Madagascar								
	12.0	1992			endowment	AID		Gov/NGO
GRAND TOTAL:	***374.4***		***112.2***					

Abbreviations:

EAI	Enterprise for the Americas Initiative	AID	US Agency for International Development
GEF	Global Environment Facility	TA	Technical Assistance
GTZ	German Agency for Technical Cooperation, Ltd.	WWF	World Wildlife Fund
IDB	Inter-American Development Bank	TNC	The Nature Conservancy

General Funds are available for implementation of projects or endowments.

Note:
Other National Environmental Foundations not yet established but in various stages of development include Belize, Papua New Guinea, Republic of Congo, Namibia, Ethiopia and Laos. WWF is assisting all of these. There are also several NEFs in Eastern Europe not listed here.

14 April 1994

Legal brief

Convention on Biological Diversity: an introduction for protected area managers

FRANÇOISE BURHENNE-GUILMIN, LYLE GLOWKA AND KENTON R. MILLER

MAINTAINING the variety of Earth's genes, species, and ecosystems – its biological diversity, or biodiversity – is key to our own species' survival. If the present rate of habitat destruction continues, over the next 25 years humans could cause the extinction of 15% of all species. Besides its profound ethical implications, such a loss could have many ecological and economic ramifications. For example, species are the biotic components of ecosystems and are the basis for ecosystem structure and such functions as watershed protection, nutrient recycling and maintaining the balance of atmosphere gases. We do not know how many species can be lost before ecosystem functioning is impaired. In addition, species extinction will retard economic development and rob future generations of untold medical, agricultural and industrial options as well.

Recognising these hazards, over 160 nations have agreed to take steps to conserve biological diversity and sustainably use biological resources by signing the Convention on Biological Diversity at the 1992 UN Conference on Environment and Development in Rio Janeiro. Presently the treaty has been ratified by over forty countries and it entered into force on 29 December 1993. In the interim period before the first Conference of the Parties in November 1994, two intergovernmental committees will have met to lay the ground work for the Convention's implementation. What follows is a brief introduction to the Convention and some of its implications for protected area management, which it is hoped will increase awareness of this important legal instrument among protected area managers.

The scope of the Convention on Biological Diversity

This is the first treaty aimed at conserving biodiversity *per se*. The Convention complements the other existing biodiversity-related global conventions on maintaining wetlands, controlling trade in endangered species, and protecting migratory species and their habitats. The biodiversity treaty is important not only for its comprehensive approach to the planet's biodiversity, but also because it addresses such related issues as access to genetic resources, the equitable sharing of benefits gained from their use, the transfer of relevant technologies, and financial resources. The treaty also proclaims the conservation of biodiversity as the 'common concern of humankind', while reaffirming each nation's sovereignty over the natural resources under its jurisdiction.

The Convention provides an international legal framework for the conservation of biological diversity and the sustainable use of biological resources, but leaves it to each Contracting Party to decide how to implement its specific provisions. The objectives of conservation, sustainable use, and benefit sharing set out in

article 1 lie at the heart of the political agreement upon which the treaty is founded. Among the other provisions, each Party agrees to develop a national biodiversity strategy, plan or programme to integrate the conservation of biodiversity and the sustainable use of biological resources into relevant sectoral or cross-sectoral plans, programmes or policies. Parties also agree to survey their biodiversity, identify components that may need special protection, identify, monitor and subsequently regulate or manage activities that may threaten biodiversity, spur research and training, increase public education and awareness, and develop such techniques as impact assessment and contingency plans for emergencies to minimise the loss of biodiversity.

The Convention explicitly recognises the need for a new level of north–south cooperation as well. Biological wealth is concentrated in the tropics; monetary wealth in the industrial North. It will be hard for industrial nations to conserve their remaining biodiversity, but harder for developing countries that are biologically rich but are limited in financial resources, access to credit, scientific and technical capabilities, trained personnel, and institutional infrastructure – all the underpinnings needed to support a new approach to biodiversity.

To move towards reforms that can conserve their biological assets while contributing to sustainable development, all countries need to reassess their approaches to biodiversity – whether legal, scientific, administrative or financial. In addition, developing countries, among other things, need greater access to financial resources, investment, environmentally benign technologies, and access to foreign markets for their products derived from biodiversity. Consequently, the biodiversity treaty calls for 'new and additional' financial flows from north to south and greater access to technology, including biotechnology. The success of national action will depend on the will of Parties from both developed and developing countries. How much the loss of biodiversity is stemmed in coming years will be the test of whether the breakthrough reached at Rio was real or illusory.

Article 8: *In situ* conservation

Article 8 may be the section most directly relevant to protected area managers because it outlines *in situ* conservation measures. These are presented as a set of goals against which nations can measure their own laws, policies and progress. The Convention notes that *in situ* conservation measures are to be complemented by *ex situ* measures, but the former should be the primary means of conserving biodiversity. The opening paragraphs of article 8 focus on protected areas and highlight that protected areas will be key components of effective national strategies to conserve biodiversity.

Indeed, the Convention requires a system of protected areas to be established. This implies that protected areas should be chosen in a logical way to form a *network* of different areas conserving different parts of a Party's biological and landscape variety. If this network includes areas of high biodiversity, its share of the national terrain could be quite small. For instance, some two hundred sites comprising a mere 2% of earth's surface are home to 70% of all threatened bird species. The most important first step in establishing a protected area system, then, may be to identify these priority areas. The next would be developing a system plan. Individual protected areas should be managed pursuant to their own management plan which itself implements a conservation strategy for the

protected area. Producing this plan and strategy is an opportunity for interested parties – conservation agencies, protected area managers, local communities, and tourist agencies, among others – to agree on priorities and objectives.

Nations may well designate and manage protected areas to fulfil several sets of international obligations simultaneously. For instance, sites protected under the World Heritage Convention may be managed to conserve important biodiversity components as well. Parties to the biodiversity treaty could meet some of their obligations by appropriately protecting and managing habitats already protected under, for example, the Convention on Migratory Species.

Paragraph (c) contains the Convention's sole explicit requirement to regulate or manage biological resources that are important elements of biodiversity to assure their conservation and sustainable use. The intent is to ensure that activities such as extracting timber, planting crops, collecting medicinal plants, or harvesting fish or wildlife do not harm the viability of the resource in question, whether the resource is located within a protected area or not.

Under paragraph (d), nations agree to promote ecosystem and natural habitat protection, and maintain viable populations of species in natural surroundings. This paragraph refers to *all* areas, whether inside or outside protected areas, whether publicly or privately owned. While the most obvious forms of protection extend to *use*, habitat destruction and pollution are implicitly included as well.

Many nations have legislation protecting particular species, but legislation protecting ecosystems is rare. Planning controls are one way to maintain habitats outside protected areas. In Denmark, for instance, a landowner must get permission to significantly alter such habitats as marshes or peat bogs, a stricture that makes them protected areas in all but name.

Paragraph (e) recognises that protected areas are more likely to be successful if they benefit people who live near them. Parties agree to promote environmentally sound and sustainable development in areas adjacent to protected areas, while ensuring that the objectives of the protected area are not undermined. Building an ore smelter or coal-fired power plant, both of which produce acid rain precursors, may be inappropriate, as would diverting water flowing into a wetland reserve for agriculture or a reservoir. However, if properly planned with the participation and input of protected area managers and local communities, environmentally sound development could make people in surrounding communities better off without compromising the protected area and actually facilitating its protection.

Paragraph (f) prescribes the rehabilitation and restoration of degraded ecosystems and promoting the recovery of threatened species. Few areas important for biodiversity, including protected areas, are pristine, that is untouched by humans. Since human beings interact with most ecosystems on earth, and since ecosystems are constantly evolving in any case, it is probably neither possible nor desirable to restore them to some imagined Pleistocene-era state. But degraded areas can be returned to productivity and their remaining biodiversity conserved, and even enhanced, if appropriate actions are taken. Other international agreements oblige nations to 'protect' species, but this is the first one to require remedial recovery measures, for instance, boosting a small population's size through captive breeding or artificial propagation to minimise inbreeding.

Under paragraph (h), Parties agree to prevent the introduction of alien species or to control or eradicate those that have already been introduced. Invasive

introduced plant and animal species are a grave threat to biodiversity, second only to habitat loss. Many protected areas around the world are threatened by alien species and so this paragraph is especially relevant to protected area managers. Especially on islands with no indigenous grazing or predatory mammals, introduced species often displace the native flora and fauna, since the invaders have no natural predators and the natives no defence mechanisms. Once an invader has taken hold, eradicating it can be expensive or – if it is a plant or a small mammal – almost impossible. Introducing control organisms has generally not been successful. Since prevention is far easier and cheaper than cure, new quarantine legislation should be introduced or the effectiveness of existing quarantine legislation reviewed and improved to guard against the introduction of potentially harmful plants or animals. Of course, intentional introductions into protected areas should be prohibited. Protected area managers should be actively involved in pointing out the potential dangers of alien species to their governments and the general public, and the need for improved means of controlling or eradicating them. If an invader should slip through such defences, quick action is vital; governments should grant agencies the power – and rapid funding – needed to control an invasion before it can spread.

Paragraph (i) requires Parties to "endeavour to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and the sustainable use of its components." The meaning is somewhat unclear, but seems to be that nations should try to ensure that the ways biological resources are currently being used do not jeopardise biodiversity conservation and the sustainable use of these resources over the long term. In other words, they should strike (and maintain) a balance between *present* and *future* use. The phrasing was likely kept vague in recognition of the fact that it will be very hard to change in the short-term the ways such resources as forests are currently being used, whether or not these practices are sustainable.

Paragraph (j), which addresses indigenous and local communities and biodiversity, begins with the unusual proviso of subjecting its obligations to national legislation, a qualification added to maintain the legal relationship some States have developed with indigenous peoples through treaties and national legislation. This means that existing national legislation could take precedence over the paragraph's objectives. Nevertheless, the paragraph does encourage nations to "respect, preserve and maintain the knowledge, innovations and practices" of traditional communities relevant to the conservation of biodiversity and the sustainable use of biological resources. There is much to learn from traditional societies that have husbanded biological resources for millennia, an achievement no modern society can match. Undoubtedly, some of this information will be relevant to protected area management. Since much traditional knowledge is fast disappearing, ethnobiologists should be deployed to document it, while bridging the gap between traditional peoples and outsiders to ensure that the holders of this knowledge do not lose out from sharing it with the rest of the world.

Article 10: sustainable use of components of biological diversity

Another article that, depending on the circumstances, is relevant to protected area managers is article 10. Paragraph (a) requires Parties to integrate consideration of the conservation and sustainable use of biological resources into national

decision-making. Paragraph (b) requires measures to be adopted relating to the use of biological resources to avoid or minimise adverse impacts on biological diversity. Paragraph (c) requires customary uses of biological resources, compatible with conservation and sustainable use requirements, to be protected and encouraged.

Protected area managers will need to be actively involved in implementing paragraph (a) at the national and sub-national levels. The obligation implies the development of anticipatory policies towards conservation and sustainable use, as well as establishing better coordination between relevant agencies and levels of government all of which are relevant to protected area siting and management. Paragraph (a) also complements other Convention obligations such as integrating conservation and sustainable use into relevant sectoral and cross-sectoral plans, programmes and policies (article 6(b)).

Paragraph (b) also has implications for protected area management, especially those protected areas that are not strictly protected but managed for sustainable use of biological resources. This paragraph contrasts with the related one at article 8(c), described above; here use of biological resources should not adversely impact biological diversity *in toto*.

The obligation to promote and encourage customary uses of biological resources also has implications for protected areas. In many cases, the establishment of protected areas has impeded customary uses of biological resources by local communities. In light of this obligation, protected area managers will need to evaluate how customary uses and community participation can be integrated into a protected area's management.

Conclusion

The Convention on Biological Diversity has other aspects that are relevant to protected area management, but articles 8 and 10 are perhaps the most important. In any event, the Convention should be required reading for all protected area managers. An important companion to the Convention could be IUCN's forthcoming guide which explains the Convention's text and suggests possible options for implementation. The primary message for protected area managers to be taken from the Convention is that protected areas will play an increasingly important role in every country's strategy to conserve biological diversity and sustainably use biological resources. Protected area managers should recognise this and, as soon as possible, lend their experience to the national dialogue initiated by the Convention. They should become actively involved in the Convention's implementation process at the national and sub-national levels. This will not only heighten the importance of protected areas, but will ultimately be in the best interest of biological diversity.

Dr Françoise Burhenne-Guilmin, Head of the Environmental Law Centre of the World Conservation Union (IUCN) and Lyle Glowka, Projects Officer (Biological Diversity) at the ELC, co-authored the forthcoming IUCN book A Guide to the Convention on Biological Diversity, from which this article draws. Dr Kenton Miller, co-author of Balancing the Scales: Managing Biodiversity at the Bioregional Level, Conserving the World's Biodiversity and related studies, directs the Biological Resources and Institutions programme of the World Resources Institute.

Resumenes

Cuotas para usuarios en los parques naturales - temas y manejo

ANTOINE LECLERC

Hasta haco poco, los gobiernos han empaezado a cobrarles sistematicamente a los usuarios por sus servicios. Este desarrollo ha tenido lugar principalmente desde 1975 pues se relaciona con tierras públicas usadas para propósitos recreacionales. No todos los administradores de gobierno han aceptado la idea de ésta tendencia, pero existen algunos sectores de actividad gubernamental que no han sido afectados por las serias restricciones presupuestales en los ultimos años y a muchos servicios se les ha tenido que buscar otras fuentes de financiamiento.

Este artículo presenta políticas del gobierno Canadiense sobre cuotas externas para los usuarios pro servicios gubernamentales y la política de Parques Canadá sobre las cuotas de usuarios. Discute temas relativos al uso de cuotas en los parques y aspectos más prácticos de esta aplicación. Al final se propone un enfogue estructurado para implementar un programa de cuotaas para usuarios en los parques.

Guías ambientales económicas - priorización del apoyo financiero para areas protegidas

CLEM TISDELL

Generalmente las agencias internacionales de apoyo y financiamiento reciben más solicitudes de financiamiento para propuestas de conservación de las que pueden apoyar con sus fondos disponibles y por lo tanto tienen que priorizar dichas propuestas. Para esto se les da una lista de preguntas o factores que se toman en consideración por las agencias para priorizar solicitudes nacionales o regionales. Se discuten la mecánica de designación de fondos sobre la base de beneficios económicos netos junto con las limitaciones del enfogue sobre costos-beneficios. Se presenta un listado de factores que pueden favorecer la selección de proyectos en particular. Los comunicadores deben tomar esto en cuenta al preparar propuestas y al dirigirse a las agencias fundadoras. Se discute la posibilidad de que factores no económicos y estratégicos influencien la distribución de fondos para el apoyo de las áreas protegidas.

Estrategias de financiamiento para areas protegidas en el Caribe insular

TIGHE GEOGHOGAN

Este reporte proporciona una visión de los enfoques que se han tomado para financiar a las áreas protegidas en el Caribe insular y considera otros posibles enfoques, con éntasis en los papeles potenciales de las organizaciones no gubernamentales y del sector privado.

Basado en experiencias aprendidas hasta la fecha, se presenta un marco para uso de los administradores para seleccionar el mecanismo de financiamiento más adecuado para sitios y sistemas individuales. A pesar de la gran diversidad política, cultural y socio-económica, existen suficientes aspectos en común que permiten que el Caribe insular sea examinado como una región discreta. Sin embargo, por razones obvias, la situación de Cuba es única y no se ha incluído en este reporte.

Parques estatales auto-financiados - la experiencia de New Hampshire

WILBUR F. LAPAGE

El sistema de parques estatales de New Hampshire pasó a ser una agencia auto-financiada en Abril de 1991 al recononcer los beneficios que le otorgaban el ser independientes del Fondo General y despues de tres años consecutivos de tener ingresos en exceso de su presupuesto operacional. Este sistema de 24 áreas naturales, 12 sitios históricos y 36 áreas diversas de recreación retiene ahora todos sus ingresos y reinvierte sus ganancias en nuevos programas, expansión de servicios y mantenimiento

acelerado. Su fuente de ingresos que incluye cuotas, rentas y comisiones, está suplementado por un cuerpo extenso de voluntarios y una creciente variedad de programas inovativos de colaboración. El éxito del auto-financiamiento se debe a la combinación de factores que incluyen bajos gastos fijos, alto grado de voluntariado, atracciones excepcionales, alto nivel poblacional, empleados altamente motivados y una historia de apoyo legislativo pára llegar a ser auto-suificiente.

El grado al cual el modelo de New Hampshire puede ser relevante para otros sistemas de parques no estará limitado por su situación poco usual de factores favorables. El experimento de New Hampshire dentro del auto-financiamiento se creó por profesionales en parques en respuesta a la necesidad sentida por la mayoria de los sistemas de parques por las limitaciones negativas de la filosofía presupuestal del Fondo General y la promesa tácita de financiamiento completo en el futuro – promesa falsa que promueve el aplazamiento de mantenimiento y servicios reducidos.

Résumés

Droits d'usage dans les parcs naturels - problèmes et gestion

ANTOINE LECLERC

Ce n'est que depuis relativement récemment que les gouvernements font payer systématiquement des droits d'usage pour leurs services. Cette pratique concernant les domaines utilisés comme sites de loisirs n'a donc vraiment commencé que depuis 1975. Les administrateurs officiels ne sont pas tous réconciliés avec cette tendance, mais comme il existe peu de secteurs de l'activité gouvernementale n'ayant pas été touchés par les restrictions budgétaires sévères des dernières années, de nombreux services ont dû se tourner vers d'autres sources de financement.

Cet article présente la politique du gouvernement canadien sur les droits d'usage externes pour les services gouvernementaux et la politique des droits d'usage de Parks Canada. Il discute des problèmes se rapportant à l'application des droits d'usage dans les parcs, ainsi que des aspects plus pratiques de cette application. Une approche structurée de la mise en oeuvre d'un programme de droits d'usage dans les parcs est finalement proposée.

Lignes directrices économiques environnementales - classement, par ordre de priorité, de l'aide financière pour les aires protégées

CLEM TISDELL

Les organismes d'aide et de financement internationaux reçoivent en général plus de demandes de support de programmes de conservation qu'ils ne peuvent satisfaire avec les fonds mis à leur disposition et ils doivent donc les classer par ordre d'importance. Une liste de référence des points ou des facteurs dont peuvent tenir compte les organismes de financement pour classer les demandes entre pays et régions est proposée. Le système d'allocation de fonds sur la base des profits économiques nets est discuté et les limitations de l'approche dépenses-bénéfices sont abordées. Une liste de facteurs pouvant favoriser la sélection de projets particuliers est aussi présentée. Les postulants devraient tenir compte de ces facteurs lors de l'élaboration de demandes de financement et lorsqu'ils s'adressent aux organismes de financement. Les facteurs non économiques et stratégiques pouvant influencer la distribution de fonds pour le soutien des aires protégées sont également discutés.

Financement des stratégies pour les aires protégées de la région insulaire des Antilles

TIGHE GEOGHEGAN

Cet article présente une vue d'ensemble des différentes approches choisies lors du financement des aires protégées de la région insulaire des Antilles et il considère les autres approches possibles, en portant un accent particulier sur le rôle potentiel des organismes non-gouvernementaux et du secteur privé. Sur la base de l'expérience acquise à ce jour, il offre un système à l'usage des administrateurs

afin de les aider à choisir les formules de financement les plus appropriées pour des sites ou des systèmes particuliers.

Malgrè son immense diversité politique, culturelle et socio-économique, il existe suffisamment de points communs dans la région insulaire des Antilles pour qu'elle soit considérée comme une région distincte. Pour des raisons évidentes, cependant, la situation de Cuba est unique et n'est pas examinée en détail dans cet article.

Auto-financement des parcs nationaux - l'expérience du New Hampshire

WILBUR F. LAPAGE

Reconnaissant les avantages de son indépendance du Fonds Général et après trois années consécutives pendant lesquelles ses revenus ont dépassé ses frais d'exploitation, le réseau des parcs nationaux du New Hampshire est devenu un organisme à auto-financement en avril 1991. Ce système de 24 aires naturelles, 12 sites historiques et 36 sites de loisirs variés garde maintenant tous ses revenus et réinvestit ses bénéfices dans de nouveaux programmes, dans l'expansion des services et un programme d'entretien actif. Ses revenus, provenant de droits, de rentes et de commissions, sont augmentés grâce à un corps important de volontaires et un éventail croissant de programmes d'associations innovateurs. Une combinaison de différents facteurs, dont des frais généraux peu élevés, un important volontariat, des attractions remarquables, une importante population, des employés très motivés et une politique législative d'encouragement à l'autofinancement expliquent ce succès.

La mesure dans laquelle on peut appliquer le modèle du New Hampshire à d'autres systèmes de parcs n'est pas nécessairement limitée par ce concours inhabituel de facteurs de réussite. L'expérience d'autofinancement du New Hampshire a été instituée par des professionnels des parcs afin de répondre au besoin, ressenti par la majorité des systèmes de parcs, de se libérer des contraintes négatives imposées par la philosophie budgétaire du Fonds Général et sa promesse implicite d'un futur financement total – une fausse promesse ne faisant qu'encourager à remettre à plus tard les travaux d'entretien et à réduire les services.

IUCN - The World Conservation Union

Founded in 1948, The World Conservation Union brings together States, government agencies and a diverse range of non-governmental organisations in a unique world partnership: over 800 members in all, spread across some 125 countries.

As a Union, IUCN seeks to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

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Commission on National Parks and Protected Areas (CNPPA)

CNPPA is the largest worldwide network of protected area managers and specialists. It comprises over 600 members in 150 countries. CNPPA is one of the six voluntary Commissions of IUCN – The World Conservation Union, and is serviced by the Protected Areas Programme at the IUCN Headquarters in Gland, Switzerland.

The CNPPA mission is to promote the establishment and effective management of a worldwide network of terrestrial and marine protected areas.

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