

SUSTAINING CONSERVATION FINANCE: FUTURE DIRECTIONS FOR THE BHUTAN TRUST FUND FOR ENVIRONMENTAL CONSERVATION

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Abstract

The Bhutan Trust Fund for Environmental Conservation (BT FEC) was established in 1991 as a sustainable, domestic funding source for Bhutan's environmental programmes. Almost a decade after its inception, the trust fund has spent US\$1.66 million against an accumulated capital base of US\$34.7¹ million. Grant making is guided by five-year funding objectives, focusing on conservation of biological diversity and promoting both government and non-government human capacity to manage the projects. However, there is no framework in place to strategically address new and emerging environmental issues, particularly the ecological stress factors from rapidly increasing basic human needs arising out of growing urban demographics, and the impacts of geo-politics and globalisation.

This paper discusses three scenarios for the future direction of the trust fund in Bhutan: as a financier of the government's recurrent costs of conservation; as an autonomous parastatal conservation agency; and as an independent grant maker guided by strategic five-year planning cycles. These scenarios are evaluated for their potential to fulfill the trust fund's social welfare mandate, as well as their possible contribution to gross national happiness (GNH), based on quantitative parameters established through a conceptual predictive model (Namgyal and Wangchuk, 1999) to measure the social and environmental well-being of Bhutan.

Introduction

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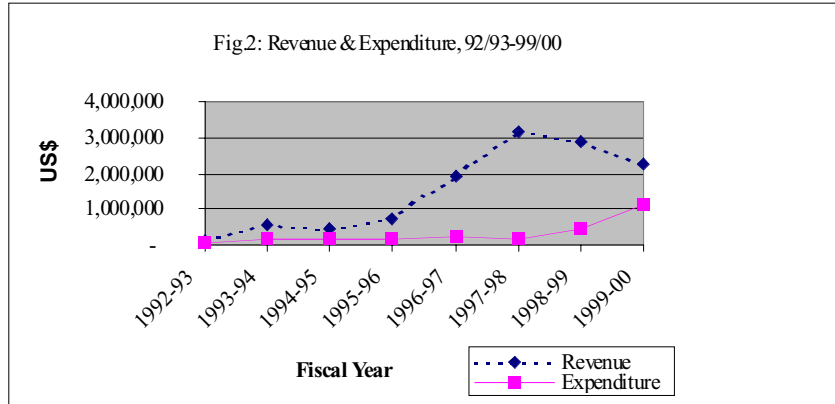
The concept of a trust fund as a common endowment is not new to Bhutan. For centuries, resident communities have owed monasteries throughout Bhutan. Their assets were actively invested in local economic systems, either through sharecropping of monastery land and livestock, financing trade expeditions, or monetary and in-kind loans whose investment returns financed community rituals, prayers and the upkeep of the monastery. Stewardship of the monastery and its assets was rotated within the community, particularly among families with monks. These early trust funds ensured a consistent economic foundation for a community, and in many ways contributed to a sense of spiritual and social well-being.

With the advent of social modernisation and economic monetisation, Bhutan began to address issues of financial sustainability in its national commitment to environmental conservation. Based on ancient principles of common resource stewardship, an innovative and sophisticated financing mechanism was conceived in the late 1980's in order to create an endowment to sustain the conservation of Bhutan's natural heritage. The Bhutan Trust Fund for Environmental Conservation was established in January 1991, as the world's first environmental trust fund, with a US\$1 million donation from World Wildlife Fund (WWF) and technical assistance from the United Nations Development Programme (UNDP). Following the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, the endowment received a \$10 million grant from the Global Environment Facility (GEF), its second-ever grant, and its first to an environmental trust fund. Between 1992 and 1998, the trust fund was capitalized with an additional \$10.304 million (Fig.1.0).

Fig.1: Capitalisation History of The Trust Fund

Donor	Year of contribution	Amount in US\$
World Wildlife Fund	1992	1,000,000
Royal Govt.of Bhutan	1992-94	173,818
Global Environment Facility	1992-96	10,000,000
Govt.of the Netherlands	1992-96	2,454,500
Govt.of Norway	1992-98	2,688,435
Govt.of Finland	1995-97	66,312
Govt.of Denmark	1996	2,334,418
Govt.of Switzerland	1996	2,586,207
	Total	21,303,690

In 1996, the trust fund was legally incorporated in Bhutan under Royal Charter, and its assets of \$21 million were then invested - with a view to maximizing returns - in the United States and global capital markets with a professional fund manager. As a social welfare organisation, the trust fund enjoys income tax- exempt status from the U.S government under 401(c)3 exemption. Today, the market value of the fund's assets almost total \$35 million. The rapid growth of the endowment within a period of four years can be attributed both to the remarkable growth of the U.S economy and the low spending capacity in Bhutan. However, the trust fund has focused on increasing its programme spending and for the first time in its history exceeded \$1 million in annual expenditure in the financial year 1999-2000 (Fig.2).



The Bhutan Trust Fund is widely acknowledged to be the world's first environmental trust fund. Following its success, 17 other trust funds have been established around the world to finance environmental conservation. These second and third generation environmental funds have advanced more sophisticated financing and investment mechanisms (Mikitin 1995, Tavera 1996, Norris 1997 & 2000), presenting tremendous opportunities for the original Bhutanese fund to further refine its future strategic direction and fundraising efforts (World Bank, 1999).

Even within Bhutan, the trust fund has inspired other innovative funding mechanisms for social development. A recent example is the Royal Government of Bhutan's (RGoB) Health Trust Fund, currently capitalized with \$15 million against an operational target of \$24 million. In a highly innovative strategy, Bhutan secured a concessional loan of \$10 million from the Asian Development Bank repayable over the next 40 years at one percent per annum, which it is using as one-on-one matching funds to attract bilateral donor contributions. A Youth Development Fund and Cultural Trust Fund are also being planned, to sustain financing for social development and the preservation of Bhutan's cultural heritage respectively, although neither yet enjoy the fiscal leverage and donor attraction of the health trust fund. All three funds are using the environmental trust fund as a model since its financial innovation and technical credibility have received wide international support.

Governance

The trust fund is governed by Royal Charter of 1996, and operates independently of both the government and any particular civil society group. The trust fund's highest decision-making body is its Management Board. The director of the trust fund secretariat is the board's ex-officio member secretary. The Management Board was fully Bhutanised in May 2001 by replacing its former non-government members by Bhutanese representatives from a national environmental NGO and the private sector including civil society.

The board decides on policy issues, reviews and approves project proposals and annual workplans. On financial matters, the board is advised by its Asset Management Committee chaired by a board member. The Fund's secretariat is run by five full-time staff. The trust fund director chairs a multi-sectoral, seven-member technical advisory panel, which reviews grant proposals and advises on programme matters.

Grants are implemented by various government agencies, local government units, communities, NGOs, and individual scientists. The secretariat supervises and coordinates grant implementation, and reports progress to the board twice a year. At the end of each fiscal year, a consolidated technical and financial report is published for public dissemination.

Goals

The trust fund was established for the promotion of social welfare through environmental conservation of the forests, flora, fauna, diverse ecosystems and biodiversity in Bhutan (Royal Charter, 1996). Conservation grants are focused on the following areas:

- Training professionals in ecology, natural resources management, forestry, and the environment;
- Assessment of biological resources and development of an ecological information base;
- Development and implementation of management plans for protected areas;
- Enhancement of public awareness and environmental education in schools;
- Provision of institutional support to organisations engaged in environmental conservation;
- Development and implementation of projects integrating conservation and development.

The development of the trust fund's strategic funding priorities are based on articulated needs and conservation priorities outlined in the Biodiversity Action Plan (1998(a)), the National Environmental Strategy (1998(b)) and the government's five-year socio-economic development plans. To prevent ad-hoc grant making, the trust fund widely consults Bhutanese society to formulate five-year frameworks of strategic funding priorities (Bhutan Trust Fund, 1997). The following section illustrates the three basic strategic funding objectives identified for the trust fund's first five-year strategic plan.

Strategic Funding Objectives, 1997-2002

Strategic Funding Objective	Eligible activities
<p>I. Supporting <i>in-situ</i> and <i>ex-situ</i> conservation initiatives in the entire green sector, including sustainable utilization of genetic and species resources.</p>	<p>(i) Capacity building for integrated conservation & development in protected areas with management plans. (ii) Conservation management planning & infrastructure building for parks not yet under scientific management. (iii) Enhancing central government capability to provide specialized support to protected area management. (iv) Protecting and/or restoring the biophysical environment from natural & anthropogenic threats. (v) Sustainable forest management planning & agro-biodiversity conservation.</p>
<p>II. Strengthening integrated conservation and development planning through conservation research and monitoring of biodiversity change.</p>	<p>(i) Capacity building for socioeconomic & biodiversity assessments, & development & conservation research. (ii) Promoting central government capability for organizing, storing, analyzing & providing access to conservation information. (iii) Assessing & monitoring biological change in protected areas & national forests, consistent with the Biodiversity Action Plan.</p>
<p>III. Promoting conservation education and awareness of conservation policies and issues.</p>	<p>(i) Non-formal conservation awareness programs. (ii) Integrating environmental education into the national education curriculum & strengthening capacity for conservation</p>

	education. (iii) Developing resource materials & teaching aids on Bhutan's natural heritage. (iv) Involving religious communities in promoting conservation values & ethics. (v) Building awareness of conservation legislation, public policy & regulations.
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The trust fund awards grants in the spring and fall when the board convenes its semi-annual meetings. Government agencies, non-government organisations (NGO), grassroots communities, and eligible Bhutanese individuals are encouraged to access grant resources. Unless otherwise approved by the board, grants are limited to \$300,000 for a maximum period of three years. The trust fund secretariat has annual discretionary small grants of \$43,000, mainly for applied conservation research projects of less than \$8,500 each.

In 1999, the trust fund adopted an annual spending ceiling, with total annual expenditure to remain within five percent of the investment portfolio's cost value as measured at the end of the previous fiscal year. This enables trust fund staff to operate within a financial target, and permits re-investment of unspent investment income to hedge against inflation and continuously increase the endowment. Almost a decade since its inception, the trust fund has expended \$1,663,830, against an accumulated capital base of \$34,705,974 (market value as of end-September, 2000).

The broad criteria for institutional success - as measured by capitalisation, revenue meeting expenditure, strategic grant making, and growing market value - include demonstrated global benefits, credibility of grantees, donor interest to focal areas, and financial innovation. Until a monitoring and evaluation system is developed, the trust fund has been using GEF developed benchmarks. At the end of each fiscal year, the trust fund's books are audited by a board-approved auditor, and financial statements are publicly disseminated.

Investment Policy

The investment portfolio is the trust fund's most critical asset since conservation financing can not be sustained without healthy investment

revenues. Realising this, the trust fund's board contracted investment management to a professional asset manager based in the United States in mid-1996. Fund management receives the highest fiduciary attention and the trust fund's investments and performance are carefully and regularly reviewed by the board.

In order to earn maximum returns over a long term investment horizon, the entire trust fund endowment is invested in a mixed portfolio of global and U.S. equities (70 percent) and U.S. fixed income instruments (30 percent). The asset manager is issued prudent, board-approved investment guidelines, and performance is measured against board-approved market benchmarks such as the S&P500, EAFE, Lehmann Aggregate and Money market indices, for large-capitalisation U.S equities, large-cap global equities, U.S fixed income and money market portfolio categories, respectively. In order to remain competitive, the trust fund is also regularising periodic, independent evaluations of the performance of both the investment portfolio and it's fund manager.

Contractual Investment Guidelines

The primary investment objective is to attain a total return over the long-term consisting of income and capital appreciation, net of investment expenses, that is at least five percentage points greater than the rate of inflation as measured by the Consumer Price Index in the United States over a five-year period.

The Investment Manager is expected to achieve these objectives within a range of portfolio risk that a prudent manager with professional skills in investment would take in similar economic, financial, and market environments. As a general rule, the Management Board of the Bhutan Trust Fund is more concerned with the consistency of the total return over an extended period of time rather than the fluctuating returns that may occur over shorter interim periods.

Equity investments are permitted to equal as much as 70% of the market value of the total assets under management.

Fixed-income investments (corporate and government bonds) shall equal

at least 30% of the total assets' market value.

Equity investments shall be concentrated in dividend-paying corporations and shall exclude corporations capitalized at less than \$250 million except when such corporations are part of a mutual fund which may include smaller holdings as long as the average holding is capitalized above \$250 million.

Quality of fixed-income investments shall be maintained at a level of at least Moody's top two ratings or the equivalent rating by another agency.

Individual holdings of equities or fixed-income investments shall not exceed 10% of the total market value of the assets except in the case of OECD Government-guaranteed bonds.

Ngultrum investments in Bhutan should be considered as long as its purchasing power can be prudently protected. The Investment Manager is not expected to advise on Ngultrum investments.

Non-marketable securities, short selling, or other similarly risky investments are prohibited.

Investments shall be made in corporations whose activities generally are in line with the conservation philosophy of the trust fund. In addition, the Management Board will review the investments from time to time for this purpose and advise the investment firm of any necessary changes. The Management Board may provide more detailed instructions to the Investment Manager regarding environmental criteria.

Mutual funds shall be avoided except in the case of mutual funds of non-U.S. market countries or smaller capitalization holdings where individual stock selection may be less advantageous.

The investment firm shall provide quarterly investment reports to the Management Board or on other occasions as reasonably requested.

Annually, the investment firm shall provide an analysis of the past year's investment performance plus recommendations for the upcoming year.

There shall be at least an annual face-to-face meeting between the investment firm and the Management Board (or its representative) to discuss investment performance and recommendations.

As a socially responsible investor, the trust fund regularly reviews its holdings to screen out any individual holdings in the portfolio that appear to represent poor environmental performers. The trust fund has deliberately not adopted an automatic negative screen as it is difficult to differentiate between good environmental performers in a "dirty" industry and poor performers in a more benign industry. Normal industry disclosure requirements (such as the U.S Securities and Exchange Commission's requirement for companies to disclose significant environment liabilities) are also not rigorous enough to yield sufficient information to judge a particular company's relative environmental performance. While indexed, socially-responsible mutual funds represent potential investment vehicles for the trust fund, it is important to note that the positive criteria of these funds substantially limits their universe of investment choices and thus implies different risk/return trade-offs.

The investment portfolio has significantly increased (Fig.2 & 3) since investing in the global capital markets. This is due equally to strong investment revenues and low programme spending. Recent indications that the U.S economy could be slowing down have not yet seriously affected the portfolio, and actually presents a good opportunity to increase equity exposure up to the board-approved 70 percent. In order to seek greater diversification, the trust fund also invests one percent of its assets in the Bhutanese equities market.

Fig.3: Growth of the Investment Portfolio in US\$ (Fiscal '92-93 to '99-00)

Fiscal Year	Investment Portfolio	Revenue	Expendit-ure	Reinvested Income
'92-93	9,654,076	119,188	71,115	48,073
'93-94	10,460,609	540,092	173,342	366,750

Sustaining Conservation Finance

'94-95	11,409,139	455,133	144,946	310,187
'95-96	15,970,346	716,482	164,370	552,112
'96-97	23,255,736	1,920,924	213,754	1,707,170
'97-98	26,250,447	3,132,153	177,462	2,954,691
'98-99	28,781,214	2,849,755	430,612	2,419,143
'99-00	29,896,698	2,251,779	1,129,499	1,122,280
	Total	11,985,506	2,505,100	9,480,406

Problem

Within a narrow, 46,000 sq.km of land sandwiched between the Indian plains and the Tibetan Plateau, Bhutan lies at the juncture of the Palearctic realm of temperate Euro-Asia and the Indo-Malayan realm of the Indian sub-continent. The kingdom has an ecological diversity hardly matched anywhere throughout Asia. Ongoing biological assessments indicate the presence of more than 5,446 species of vascular plants, 178 mammals, and 770 species of resident and migratory birds (RGoB, 1998(a)). The invertebrate and amphibious fauna have yet to be inventoried. Bhutan's environmental leadership has attracted considerable global attention due to its progressive vision of sustainability driven by a harmonized position between conservation and wise utilisation (RGoB, 1999). Unlike elsewhere in the developing world, Bhutan has taken strong actions to preserve its natural heritage for future generations, especially since much of its culture has grown out of a pristine natural environment.

Bhutan's social and political commitment to conservation is manifest through a pledge by the National Assembly in 1995, to maintain in perpetuity a national forest cover at 60 percent of the country's landmass.

Furthermore, as a criteria of the GEF grant to the trust fund, Bhutan's protected areas system was revised to make it ecologically representative, and covers 26 percent of landmass. In 1999, another nine percent of the country was demarcated as biological corridors linking all nine protected areas. Sustainable economic development policies, backed by strong environmental legislation such as the Forest and Nature Conservation Act (1995) and the Environmental Assessment Act (2000), are ensuring the enforcement of collective national commitments.

Traditional factors such as a small population of over 600,000 and subsistence landuse systems had permitted a scale of socio-economic experimentation to demonstrate Bhutan's environmental leadership. These conditions are now being challenged as a result of changing demographics, rapid urbanisation and the ensuing unbalanced development. The National Environment Commission (1998(b)) projects that if the present annual growth rate of 3.1 percent is not checked, Bhutan's total human population could cross 2.5 million by 2040. Rapid urbanisation is now a well-

recognized trend with increasing basic human needs such as fuelwood and clean water. Rapid development is increasing economic activity and Bhutan cannot remain isolated from the pressure of globalisation, geo-politics, and consumerism with ensuing issues of global warming, waste disposal, and a possible energy crises. Furthermore, the evolving political structure in Bhutan could strengthen the lobby culture for powerful vested interests, whether for political or economic gain, thereby compromising the environmental successes achieved to date. These emerging ecological stressors from urban Bhutan collectively pose the most serious threats to the country's biodiversity. They also present significant challenges to current environmental successes and the national sustainable development strategy, of which the trust fund is a main proponent.

Threats to Bhutan's Environment (RGoB, 1998(a))

The main threats to ecological integrity of habitats and species include:

1. Land conversion causing habitat destruction and fragmentation, resulting in the loss of biomes, ecosystems and wildlife species that depend on the habitats, particularly in the tropical and subtropical zones of the south and the temperate zones of the interior;
2. In certain areas, overexploitation of land, causing habitat degradation and loss of plant and animal species;

3. Competition with/replacement of indigenous species by domestic and/or exotic species.

Direct and underlying causes of threats include:

1. Annual population growth of 3.1 percent puts ever-increasing pressure on natural resource base;
2. Overgrazing by domestic livestock in certain locations, both in range and pasture areas leads to attrition or loss of species, reduction of productivity and erosion; in forest areas it seriously impacts national regeneration and changes in vegetation composition;
3. Reliance on wood for fuel is exacerbated wherever there is human habitation;
4. Gaps in implementation of policies and legislation;
5. Unsustainable cropping practises - such as permanent dryland cultivation on steep slopes without proper soil conservation, or shifting cultivation - result in declining soil fertility and diminution of species composition;
6. Forest fires, mostly if not entirely caused by humans;
7. Overexploitation of species, especially through collection, poaching and heavy use;
8. Limited human resources;
9. Introduction of exotic species, especially associated with agriculture, forestry and fisheries;
10. Pollution, primarily of water in the vicinity of urban areas;
11. Inadequate information on biodiversity, its management and use, and inefficient use of existing information;
12. Transborder pressures including atmospheric pollution, and poaching of medicinal plants and animals.

The Trust Fund is investing considerable resources to build up the institutional and human capacity to manage the country's unique biological diversity (Fig.4). However, it could be argued that such substantive interventions cannot by themselves effectively mitigate the pressures from a rapidly urbanising society. It is the emerging urban "root causes" of increasing basic human needs that the trust fund has so far not addressed in

its grant making, that pose a far more serious threat to the natural environment than any rural pressures.

Therefore, the Trust Fund's biggest shortcomings arise from the lack of a clear focus in dealing with emerging environmental threats. While its annual grant making is guided by a strategic five year funding framework, there are no minimum impact assessment methodologies in place, and the public participation crucial to long-term sustainability is currently inadequate. Clearly, if its programmes are to make any lasting impact on environmental conservation in Bhutan, the trust fund will need to develop a more holistic approach to grant making that addresses national and localised environmental issues, and incorporate broader social parameters in its funding criteria. Against such a scenario, the next section will discuss a future role for the trust fund as articulated by stakeholders.

Future Directions

The following discussion can be separated into three possible scenarios: the trust fund as a financier of the full recurrent costs of the protected areas and relevant central government agencies; a gradual evolution of the trust fund into a parastatal conservation agency autonomous of the government and responsible for financing and managing Bhutan's protected areas and conservation programmes; or the trust fund maintaining its status quo as an independent grant maker guided by strategic funding frameworks.

Fig.4: Ongoing Support for Recurrent Costs of Incremental Staff, and HRD (1997-2002)

Incremental staffing & Recurrent costs				Human Resources Development			
Beneficiary	Inc*	Estab♣	Cost (\$)	Beneficiary	MSc	Short term	Cost (\$)
1. Nature Conservation Div.	10	96,061	272,952	1. Nature Conservation Div.	9	10	739,500
2. Royal Manas NP	29	30,150	301,232	2. General park mgmt.	-	52	60,358
3. Jigme Dorji NP	35	-	295,065	3. Thrumshingla NP	1	-	87,000
4. Black Mountains NP	11	-	114,524	4. National Environment Commission			394,948
5. Bomdelling WS	16	-	202,963	5. Royal Society for Protection of Nature	2	-	174,000
6. Thrumshingla NP	9	33,080	121,616	6. Dept. of Education	-	8	69,225
7. Phibsoo WS	4	-	42,779	7. BSc. (Env. Economics)	1	-	151,509
8. National Environment Commission	2	-	40,275	8. Sherubtse College	1	-	120,000
9. Dept. of Education	1	-	20,138	9. Dept. of Forestry Services	5	-	250,000
10. Royal Society for Protection of Nature	11	40,877	362,471	10. Levy/overhead to RCSC	1		43,600
							227,504
<i>Total incremental staff & establishment</i>	<i>128</i>	<i>200,168</i>	<i>1,774,015</i>	<i>Total:</i>	<i>20</i>	<i>70</i>	<i>2,317,644</i>
<i>Grand Total</i>	<i>128</i>	<i>200,168</i>	<i>1,774,015</i>	<i>Grand Total:</i>	<i>20</i>	<i>70</i>	<i>2,317,644</i>

* Incremental costs

♣ Establishment costs

The Royal Government has been generally receptive to all three options, but administrative convenience and the relatively small capital base of the trust fund have guided the trust fund's decision to maintain its existing institutional and programming structure. However, issues of sustainability, financial viability and the need to articulate a concrete vision for the trust fund's future role in Bhutanese society continue to call for clear future directions.

The following discussion is based on the three aforementioned scenarios, each option's perceived advantages and problems, the necessary conditions for success, and key issues.

Financing the Government's Recurrent Costs of Conservation

During its initial period, when mobilising capital contributions to its endowment, the trust fund was expected to finance the recurrent costs of the government's conservation programmes, especially Bhutan's protected areas and their central coordinating agency, the Nature Conservation Division in the Department of Forests. The trust fund has moved away from this position as its resources can now be more effectively utilised to set up conservation infrastructure in the field, rather than assuming the central government's budgetary responsibilities. Furthermore, the government wished to continue funding conservation directly to demonstrate its commitment to environmental conservation.

However, various stakeholders again raised the proposal, particularly as the trust fund is partially supporting the recurrent costs of at least 117 incremental positions identified throughout the government.

Perceived Advantages

(a) A primary mandate of the trust fund to support biodiversity conservation would be fulfilled if investment revenues could support the full budgetary requirements of the parks and their central headquarters. Such support would be limited to direct recurrent costs such as salaries, benefits, field allowances and basic overhead, but it would ensure that conservation in Bhutan enjoyed a well-funded, consistent operating budget as long as the trust fund existed, and would not depend on unforeseeable government budgetary fluctuations.

(b) Using trust fund revenues to finance the recurrent costs of the government's parks division would not only free up considerable resources for spending in other crucial social service sectors, but also permit the government to step up its capital support for field conservation activities. In the latter area, Bhutan has primarily relied on external donor support to finance conservation planning and implementation, and the government's direct cost sharing could foster greater ownership of local programmes.

(c) In this scenario, the trust fund's full budgetary support would facilitate administrative convenience in financial reporting and management. It would streamline financial contributions currently being spent on identified incremental positions in six parks and headquarters, and eliminate the need for painfully extracting progress reports out of the government treasury, where such records are allegedly maintained. The general experience on progress reporting to date has been fairly complicated, since the government never had to utilise external funding for any of its recurrent costs.

Perceived Problems

(a) Unless the trust fund were to increase its annual spending ceiling, using its resources for budgetary, recurrent support to government programmes would mean fully committing its annual investment revenues to a single project. By necessity, this would close the window on other equally if not more worthwhile projects, and exclude the rest of Bhutanese society from grant making. A common reason often cited for the inadequate public participation in the trust fund, is a public perception of the trust fund as a government resource focused on government owned programmes. This

could be a serious fiduciary issue, as the trust fund's assets are a public resource and belong to every Bhutanese citizen including future generations.

(b) This approach goes against the trust fund's own mandate to promote social welfare through environmental conservation. While the government would perceive the trust fund as a donor for the green sector (i.e. for both in-situ and ex-situ conservation), only the \$10 million contributed by the GEF, or half of the trust fund's original principal, is strictly earmarked for conservation grant making in the green sector. The trust fund, therefore, has a responsibility to ensure that both the green and brown sectors are equally addressed through its grant making.

(c) As a mere recurrent cost financier of a government agency, the trust fund eventually could have little or no control over the long term impact of its spending. While human infrastructure is obviously crucial for successful conservation, non-specialised staff would be of little value except as conventional enforcers of a traditional command-and-control management regime. Tying up the trust fund's resources in salaries deprives conservation staff of the specialised training needed at all field levels. Currently, almost half the trust fund's annual revenues are directed to funding specialised training, to ensure that staff are adequately equipped with the requisite knowledge and expertise as resource managers in Bhutan's rapidly changing environment.

Necessary Conditions for Success

The single biggest determining factor, while discussing the trust fund's role as the government's recurrent cost financier, is its capital base. If the trust fund had a much larger asset base than present levels, it could possibly finance the government's full recurrent costs for conservation. However, preliminary estimates indicate that the trust fund endowment would need more than \$50 million before its revenues, based on present rates of return, could feasibly support all recurrent costs in government and also maintain a public grant making window. In the world of financial investments, present rates of return are no guarantee for future performance.

Key Issues

Clearly, the amount of funding available from the Trust Fund is a major issue. Various strategies could be realized to expeditiously increase the fund's asset base. These include soliciting further contributions from external donors and the Bhutanese themselves, seeking innovative mechanisms to generate in-country contributions including capital donations from the government, and growing the endowment internally through a combination of risky but profitable investments and further limiting annual spending.

Beginning with the Eighth Five Year Plan, external donor support has increased conspicuously for both in-situ and ex-situ conservation efforts. However, the full impact of Bhutan's donor funded conservation programmes has yet to be assessed. It is also not foreseeable how long external support will continue for national conservation efforts. If the trust fund were to take on RGoB's recurrent costs of conservation, it would mean that additional funds would not be available for any other conservation grants, as the amount required for the government's Nature Conservation Division far exceeds the trust fund's annual spending limit.

One could also argue that RGoB has a legal and moral responsibility to integrate environmental conservation into the country's socio-economic development plans and programmes. All existing RGoB legislation and policies support this development philosophy. As a priority, this should

mean that the government would directly finance at least the basic costs of conservation.

Evolution into an Autonomous Parastatal Conservation Agency

A second scenario for the future role of the trust fund could be to gradually evolve into an autonomous parastatal conservation agency. The term "parastatal" refers to an organisation that has many of the functions of a government agency, but is run by an independent board of directors, who are appointed by the government. There are many conservation agencies that operate as parastatals, with the more successful ones located in Africa (South Africa, Kenya, Tanzania, Madagascar, the Seychelles), and a number of other countries whose conservation agencies are now in the process of changing from government departments into parastatals (Zimbabwe, Uganda and Zambia). In late 1998, Canada launched its own Parks Canada Agency by an Act of Parliament.

In the context of Bhutan, the trust fund's evolution to parastatal status could gain broad support if it was proposed as an "autonomous" organisation, in the same manner that established several high-level government institutions such as the Royal Audit Authority and Royal Civil Service Commission. The nature of services provided by these organisations require independence from the government's daily operations, and yet they have remained accountable to their respective boards/commissions and the government. Similarly, the board of directors of an autonomous Bhutanese parastatal could be ultimately accountable to a government Minister or Council of Ministers which appoints the board members, and to the legislation that established the law creating the parastatal. The day-to-day operations of a parastatal will be managed by a chief executive officer, normally appointed by the board of directors. The core indicative costs required to set up and run a parastatal agency in Bhutan would be similar to those projected earlier.

Spergel (2000) summed up the major advantages and constraints to setting up a parastatal conservation agency in Bhutan, by raising some interesting scenarios with regard to the management and financial structure of a possible parastatal, vis-a-vis the role of the trust fund as a grant maker or recurrent cost financier.

Perceived Advantages

(a) Most importantly, a parastatal represents decentralized government functions and authority, thereby making it possible to achieve greater local participation, and to more effectively and efficiently implement grants. The business culture could enable it to substantially cut costs, by contracting with private businesses or local communities to perform specific functions. Decision-making in a parastatal would be subject to less "red tape" than a government department, and therefore could respond more quickly and flexibly to new problems and changing circumstances. As a result, a parastatal would promote easier partnerships with local communities, NGOs and private businesses, compared to a government agency.

(b) The evolution into an autonomous parastatal would put the financial resources of the trust fund at the disposal of an institution separate from the government and fully responsible for Bhutan's protected areas and biodiversity conservation programmes. This would serve the trust fund's primary mandate for biodiversity conservation and introduce critical elements of private sector innovation, efficiency and competitiveness to a service-based organisation traditionally perceived as an uninvolved government regulator.

(c) A parastatal also has more incentive to increase revenues generated from "user fees" and other sources, and to develop innovative new ways of raising revenues, because it could be permitted to keep all the revenues that it earns, rather than having to hand them over to the government treasury. This would give staff an incentive to be efficient and "service-oriented". A parastatal could also continue to receive financial support from international donors.

(d) Within the limits of its charter or by-laws, a parastatal would be free to establish its own rules and procedures, and its staff would usually be non-government employees. It is not subject to civil service salary scales and personnel rules, and can more easily hire, fire and promote staff based on their job performance, and offer higher compensation in order to attract and retain the most qualified people. Staff would have a greater sense of mission, higher morale, and greater professionalism.

Perceived Problems

(a) It is foreseeable that the parastatal's core costs could use up a significant portion, if not the entire annual investment revenue, of the trust fund's revenue projections. While the parastatal could certainly harbour other opportunities for generating additional revenues, it could be argued that Bhutan has not yet reached the economic level when parastatals can be sustained by tourism or even budgetary support from the government treasury. Internal revenue generation remains a priority for the government and it would be unrealistic, though highly desirable, to expect conservation earnings to be fully reinvested into field conservation efforts.

(b) There could be general government reluctance to devolve administrative authority over 26 percent of Bhutan to a parastatal agency. An initial way of overcoming this would be to gradually introduce the parastatal concept by using a park as an experimental pilot, which could then generate important lessons when considering a national-level parastatal.

(c) Conservation goals could become compromised if generating revenues becomes the driving motive for a parastatal - either in order to make profits, or in order to meet a government demand that the parks must be 100 percent financially self-sustaining. For instance, a parastatal might be tempted to approve the construction of a large tourist lodge in an ecologically sensitive place in order to increase the parastatal's revenues. If a parastatal becomes overly dependent on tourism revenues for financing its field operations, it could have severe problems if tourism decreases because of external events, civil unrest in a neighbouring country, an economic crisis in tourists' home countries, or due to changes in Bhutan's tourism policy.

Necessary Conditions for Success

Most importantly, the relationship between a parastatal and its former Ministry would have to be very clearly defined in the Act/Decree that establishes the parastatal. The legislation would need to define how specific functions and responsibilities relating to forests, wildlife, and law enforcement are going to be divided or shared in the future. It would need

to define what services the government will continue to provide, such as security for visitors to and from protected areas; access roads and other infrastructure; and any legal, accounting or technical services. Unless these issues are clearly defined and agreed upon at the outset, there may be endless disputes later on, and the parastatal agency may find itself without the initial support crucial for its success.

The process of establishing a parastatal must be driven from inside the country, and have very strong government support, rather than being driven by international donors. The parastatal must have enough technically competent mid-level managers (versus a few good people at the top level), who are open to new ways of thinking and doing things.

Key Issues

A basic issue would be if a single parastatal should be established to manage all of Bhutan's national parks. The alternative is to establish a pilot for a single park, such as Jigme Dorji National Park, which could then generate important lessons when setting up a national-level parastatal. If a national-level parastatal is established, should individual parks nevertheless be allowed to keep, and to decide how to spend, part of the revenues that each of them generates? And should a national-level conservation parastatal delegate some of its authority and functions to semi-autonomous boards that could be established for each park, and that could include representatives of local governments and local communities?

The governance structure of a parastatal would also require careful thought, particularly regarding board composition, tenure, and membership including local participation. Should the board's decisions be subject to veto by a government Minister or the Council of Ministers? Should the parastatal be primarily an implementing agency for policies which are set by the Ministry, or should the parastatal's board have primary responsibility for setting policies relating to parks, wildlife, and biodiversity conservation? Should the parastatal have authority over wildlife and biodiversity conservation outside of the parks (as is the case in Kenya?), or should it only have authority inside the parks?

Regarding funding, a critical issue is if income from the trust fund should pay for part or all of the recurrent costs of a new parastatal agency that would be responsible for parks and conservation in Bhutan. Spergel (2000) explored other potential sources of revenue a parastatal could have, besides the trust fund's investment revenues and possible government budget allocations. Initial proposals might include a "conservation fee" that is added onto the airport tax, hotel taxes or visa fees, individual park entry fees and other types of user fees, profits from tourism concessions and other commercial enterprises operating inside the parks, or from visitor facilities that are operated by the parastatal itself. Finally, to what extent could expanding the number and geographical distribution of foreign tourists within Bhutan be a way of generating more revenues for parks and conservation, or to what extent could this harm the pristine environment that the parastatal was set up in order to better conserve?

Grant Making Based on Strategic Planning in Five-Year Cycles

A third scenario on the future role of the trust fund could be to maintain its status quo, whereby annual grant making is guided by five-year cycles planned carefully in tandem with the government's five-year socio-economic development plans. Currently, the trust fund is implementing its first five-year strategic plan of funding objectives (1997-2002), formulated to coincide with RGoB's Eighth Five Year Plan. Presently, the annual five percent spending ceiling averages to \$1.5 million.

Strategic Funding Objectives

1. Supporting in-situ and ex-situ conservation initiatives in the entire green sector, including sustainable utilisation of genetic and species resources.
2. Strengthening integrated conservation and development planning through applied conservation research and monitoring of biodiversity change.
3. Promoting conservation education and awareness of conservation policies and issues.

Perceived Advantages

(a) The trust fund is presently well positioned to address its primary biodiversity conservation mandates, and also progress to popular participation through public grant making. While its core funding mandates have focused on the green sector, the trust fund can and does accommodate broader issues of sustainable utilisation and management of natural resources. It also promotes civil society participation in environmental programmes through long-term, core institutional support to Bhutan's only environmental NGO, the Royal Society for the Protection of Nature.

(b) Strategic planning in five-year cycles presents a cohesive well-grounded funding strategy to ensure the most effective utilisation of trust fund resources. Effective planning could ensure the adequate fulfillment of both the trust fund's primary mandate to support biodiversity conservation, and the need to respond quickly to emerging environmental issues arising from changing demographics and rapid urbanisation. In addition, the existing small management structure and a compact organisation of only five full time staff has minimized the trust fund's overhead costs, while simultaneously increasing the amount available for conservation grants.

(c) The diversification of conservation grants allows the trust fund to address multiple environmental issues, within a conservative annual budget. The fixed annual spending ceiling outlines both an operational spending target and a prudent fiduciary principle to reinvest a portion of annual revenues to hedge against inflation and continuously increase the capital base. The latter is particularly essential since the trust fund has not pursued any major fundraising since it became fully operational with \$21 million in 1996.

(d) The ongoing incorporation of critical private-sector principles of innovation and efficiency would ensure that trust fund resources are used most effectively, within a dynamic portfolio of conservation grants ranging from capacity building of key stakeholders to timely policy research initiatives. In fact, such flexibility has enabled the trust fund to identify and develop a mitigating strategy to overcome one of the biggest constraints to spending - the lack of absorptive capacity both within and outside government for environmental programmes.

Perceived Problems

(a) While the broader five-year funding cycle is an excellent indicator of efficient strategic planning, the experience to date has not fully justified the rationale. Even with the inception of strategic planning, grant making is still dependent on ad-hoc annual proposal solicitation and approval, with varying levels of response to the established strategic funding objectives. Current participation is limited to stakeholders from government and a non-government agency, and leaves out the voices of civil society.

(b) A major constraint under the ongoing funding strategy is the absence of any specific yardstick to measure the impact of the trust fund's programmes. Only in the past year has there been any concerted effort directed towards measuring significant long-term conservation successes. It is hoped that by mid 2001, a concrete impact evaluation framework will be in place for the trust fund to assess the impact of its grants, particularly those supporting government conservation efforts. Otherwise, the trust fund will have little quantitative criteria on which to base future interventions.

(c) Inadvertently, some duplication exists with external donor funding for environmental programmes. This was also one of the reasons for the trust fund's earlier low spending capacity. Several European governments, multilateral agencies and an international NGO have conservation projects in five of Bhutan's six operational protected areas. In addition, the Dutch-funded Sustainable Development Secretariat and the GEF Small Grants Programme have substantive budgets for annual conservation grant making. Against such a scenario, the trust fund has often had to step back to avoid duplicating conservation initiatives, and instead promote cost-sharing with other donors, with limited success so far.

Necessary Conditions for Success

In order for the trust fund to make a significant difference to Bhutan's environmental management, civil society's effective participation in trust fund programmes is critical. Hopefully, the degree of public involvement will increase over present levels by the end of the first five-year strategic plan. Results from an impact assessment of trust fund programmes should

reflect ground situations, and honestly assess the shortcomings and constraints of both the donor and the grantee.

Capital markets are the most unpredictable avenues of investment, and it is not certain if future revenues will match, if not exceed, previous years' earnings. Investment income has to be sustained at present levels to ensure steady revenues for future strategic plans and reinvestment into the endowment. However, the trust fund's exposure to global equities (currently permitted up to 70 percent of the portfolio) could possibly be an area of concern, notwithstanding fund management's credible risk diversification strategies.

Key Issue

The inadequate level of public participation in the trust fund's environmental grant making is a major constraint to optimum grant resource utilisation. The trust fund realized this early in its programmes, and the first, currently ongoing strategic plan addresses basic capacity issues both in government agencies and in the non-government environmental sector. Over a five-year period, the trust fund has committed more than \$4 million to develop the necessary human infrastructure, in order to eventually step up conservation stakeholders' absorptive capacity of grant resources. While investments in human infrastructure take considerable time to mature, an early hopeful sign is the recent unprecedented increase in the trust fund's annual expenditure.

In summary, the Bhutanese people will need to determine which of the above three scenarios can adequately fulfill the trust fund's social and environmental mandates and promote public participation in conservation. The above analysis demonstrates that the first scenario would tie up a considerable portion of the trust fund's investment income in a single, recurrent-cost grant to government. This does not directly help the trust fund to solicit broader participation in conservation and could instead convert the trust fund into a purely financing unit within the Royal Government. The second scenario for the trust fund to evolve into an autonomous parastatal conservation agency is an important option considering RGoB's policy on decentralisation. As a parastatal, the trust fund could mobilise optimum levels of grassroots and civil society

participation in conservation. The government's perceived concern on devolving administrative authority over 26 percent of the country could be addressed by introducing this option on a purely pilot scale in a selected protected forest area. While the final scenario to continue the trust fund's existing approach to grant making through strategic five-year planning cycles has the most potential to contribute to environmental management throughout society, the experience to date is far from satisfactory. Unless the trust fund receives an increased level of solicitation for grants from Bhutanese society by the end of 2002, or the conclusion of the first five-year strategic plan, it should explore and test the feasibility of alternative mechanisms to promote popular participation in conservation. Such mechanisms must ensure that the trust fund's resources are publicly accessible as grants for education and research, environmental advocacy, and innovative schemes to balance the consumption of natural resources with rapid development.

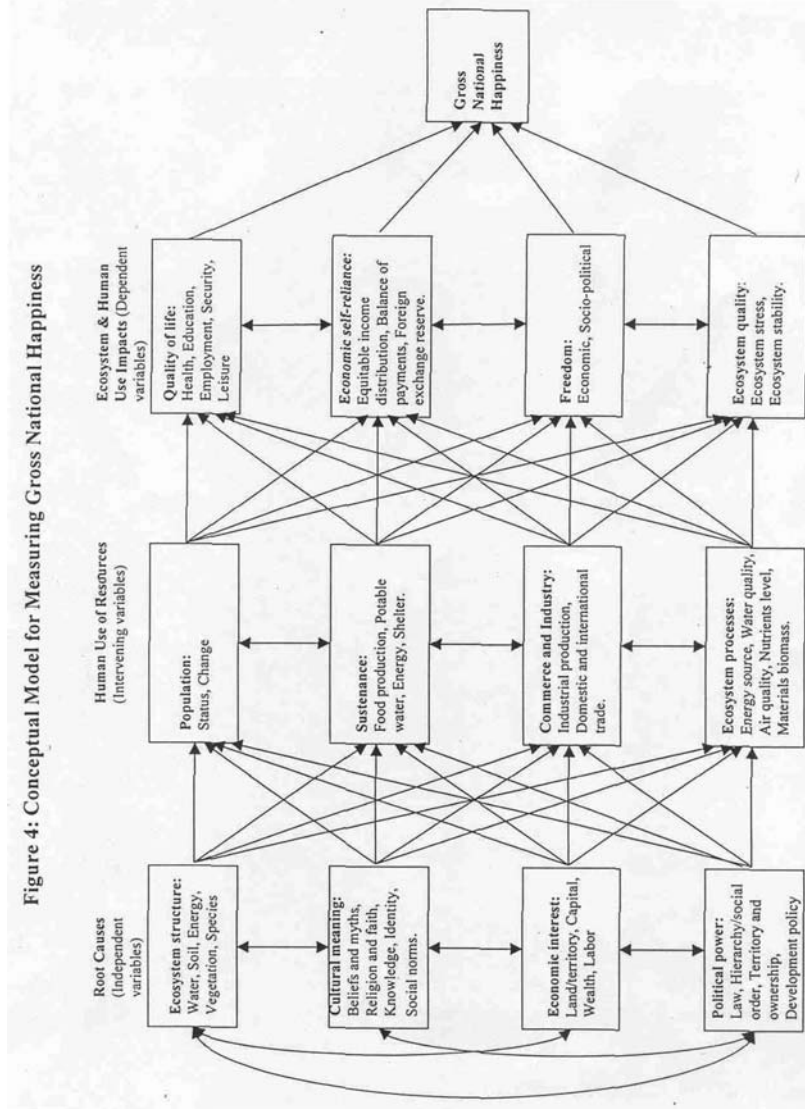
Ultimately, the trust fund's future direction will be largely determined by the need to prove, both to society and its own donors, a key role in maintaining the country's natural heritage for unborn generations and sustaining Bhutan's commitment to conservation when international donors depart. Pursued wisely, Bhutan can demonstrate again its profound environmental leadership by designing the most appropriate direction for the world's pioneer environmental trust fund.

Conclusion: A Contribution to Gross National Happiness

How can the trust fund's contribution to Gross National Happiness (GNH) be measured when contributing to environmental conservation? A useful approach could integrate quantitative parameters to measure GNH, as outlined in a predictive model (Fig.5) to quantify social and environmental well-being in Bhutan (Namgyal and Wangchuk, 1999). The model was developed as an alternative to conventional indicators such as Gross Domestic Product and the Human Development Index, and is based on culture and political economy and human ecosystem management theory. This will enable environmental and economic planners to understand and articulate the long-term effects of national development in a predictive manner, and the implications of such development on human ecosystem management.

Any effort of the trust fund to measure its contributions to Bhutan's social and environmental well-being should incorporate basic quantitative parameters such as those outlined in Namgyal and Wangchuk's conceptual framework. It should particularly incorporate root causes of GNH - ecosystem structure, cultural meaning, economic interest, and political power in order to assess the intervening variables (or human use of resources) to understand human use impacts. Based on simple yet profound analyses of cause and effect, it would be possible to statistically measure the positive or negative levels of GNH in Bhutan. Such a quantitative framework would enable the trust fund to measure its impacts on conservation, and meaningfully contribute to a rational assessment of GNH.

Figure 4: Conceptual Model for Measuring Gross National Happiness



Note

¹ Market value as of end September, 2000

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