

Sustainable Financing for Georgia's PA-system (GPAS)

Profile of a Proposed Strategy

1 Background and Rationale

1.1 There is consensus that the continuing financial and technical support to the GPAS over the past decade by WWF, KfW and the international donor community at large, has significantly contributed to the overall protection of Georgia's biodiversity. Thanks to this international support and Georgia's pledge to give 20 % of the country's area to conservation as a "gift to the earth", and another 15% of its forests to be converted into protection forests by 2010, the country's protected area system has been expanded and conservation efforts increased. The international conservation efforts in support of the country's biodiversity with a focus on areas with a special protection status appears well justified in the light of the global significance of the Caucasian ecosystems that are considered "unique" on a global scale. They have been identified as one of the global ecological hotspots by Conservation International and as one of the global 200 Ecoregions by WWF. This has qualified the Caucasus for financial assistance under the umbrella of the recently established "Critical Ecosystem Partnership Fund".

1.2 Although it is widely recognized that the Government of Georgia is seriously committed to biodiversity conservation, it has not the financial means to provide sustainability for its conservation efforts. There is consensus that long-term security of the ecological integrity of Georgia's PAs cannot be guaranteed through common Government sources due to chronic budget shortfalls, the lack of marketable natural resources in the country and the urgent need to address other priorities such as poverty alleviation. In this light it is evident that without a realistic and feasible long-term financial strategy the goal of PA cannot be achieved. It also is evident that this goal may only be reached with the support of the international donor community.

1.3 Georgia's Department of Protected Areas (DPA) that is entrusted with the management of the country's protected area system, continues to be under-staffed and under-financed, unable to effectively fulfill its mandate without outside assistance. Furthermore, revenue generating opportunities by protected areas in Georgia are practically non-existent and promise little hope for the future. This equally applies to the tourism sector that cannot be expected to provide any substantial contribution to protected area revenues in Georgia, not even under the most favorable circumstances.

1.4 In due consideration of the volatility of the tourism industry worldwide and the chronic budget shortages of the GoG in particular, financial mechanisms other than Government contributions and opportunities from internal revenue generation have to be found to achieve financial sustainability for protected areas.

1.5 The issue of financial sustainability of protected area conservation is a serious problem worldwide that is increasingly been addressed by environmental NGOs and the

donor community at large. This is of particular importance to donors that are trying to secure their investments in protected areas. In a struggle to find a feasible solution to this problem many avenues have been tried in the past, mostly concentrating on revenue generating opportunities from the protected areas (see Annex 1). Lessons, however, show that most of these efforts have failed. Amongst the wide range of options tried, trust funds are becoming increasingly more popular, seemingly resulting in a growing consensus that trust funds may become the most promising -and feasible- long-term solution in many countries as long as national budgets are unable to cover the conservation costs from sources within. Numerous of the Trusts established in favour of PAs and PA systems worldwide (well in excess of 400 known cases), manage "endowment funds" which cover shortfalls of PA specific operational costs through the generated interest. Many of such trusts are managed by mixed governance ranging from traditional Government administrations to private sector management (see Annex 2). Mixed governance involving the Government and Private sector appears to gain international popularity, especially in countries promoting decentralization and privatization, or countries in search of alternatives to centralized PA governance plagued by chronic budget shortfalls. In this context it is suggested that similar avenues should be assessed for Georgia. Independent of PA governance, the Trust Fund option for Georgia's PA system appears to be the most viable long-term solution to the problem of financial sustainability. This option appears to be particularly attractive in the case of Georgia due to the overall quite favourable framework conditions in the country:

- strong Government commitment;
- strong cultural/historic affinity of the Georgian people to nature;
- global significance of the country's ecosystems;
- wide-spread international interest in the country's biodiversity;
- sound policy and legal framework in support of protected areas;
- well established system of protected areas in urgent need of financial support;
- sound international financial support for the development of protected areas.

2 The System of Protected Areas of Georgia

2.6 The location of Georgia's protected areas by category is illustrated on the attached map (see Annex 1). As shown by Table 2 Georgia's protected area system is composed of three principle protection categories covering a total area of approximately 330, 000 has. The sixteen State Nature Reserves (i.e., equivalent of IUCN category I) encompass approximately 170,000 has, the two National Parks (i.e., IUCN category II) approximately 100,000 has (minus 18,000 has that form the Borjomi State Nature Reserve as integral part of Borjomi-Kharagauli National Park), and the six Sanctuaries (i.e., IUCN category IV) approximately 165,000 has. The size of individual protected areas ranges from 300 to 50,000 has of which National Parks with almost 50,000 has each form the largest contiguous conservation blocks. National Parks are a relatively new category in Georgia that was introduced after the democratization in 1992 when Georgia adopted the internationally recognized IUCN classification system for protected areas. The oldest PAs in the country are State Nature Reserves, dating back as far as 1929, the

most recent addition is National Park Kolkheti, established in 1998. State Nature Reserves and National Parks are composed of over 60% by forest ecosystems, the remainder is made up mostly of sub-alpine and alpine meadows and wetlands (see Kolkheti National Park).

Table 2 Current Operational Costs of Protected Areas in Georgia

Protected Area	IUCN	Longitude/Latitude	Total area (has)	Forested area (has)	Date of Establish.	Budget (in GEL)
State Nature Reserves						
Algeti	Ia-Ib	41°43'00"N/44°22'00"E	6,822	5,835	1965	11,566
Ajemeti	Ia-Ib	42°08'00"N/42°48'00"E	4,845	4,738	1946	17,470
Akhmeta	Ia-Ib		16,297	13,766	1980	9,366
- Tusheti plot		42°22'00"N/45°39'00"E	12,485		1980	
- Batsara plot		42°14'00"N/45°16'00"E	3,042		1935	
- Babaneuri plot		42°06'00"N/45°24'00"E	770		1960	
Bichvinta-Miusera	Ia-Ib	43°10'00"N/40°25'00"E	3,645	3,480	1965	
Borjomi	Ia-Ib	41°50'00"N/43°15'00"E	17,948	16,251	1929	
Vashlovani	Ia-Ib		8,034	3,414	1935	8,432
- Eastern plot		41°08'00"N/46°37'00"E				
- Western plot		41°14'00"N/46°28'00"E				
Kazbegi	Ia-Ib	42°40'00"N/44°39'00"E	8,707	3,957	1976	8,996
Kintrishi	Ia-Ib	41°45'00"N/42°03'00"E	13,893	12,850	1959	9,246
Kobuleti	Ia-Ib	41°51'00"N/41°48'00"E	331.25	?	1998	
Lagodekhi	Ia-Ib	41°52'00"N/46°19'00"E	17,932	12,167	1912	14,746
Liakhvi	Ia-Ib	42°19'00"N/44°17'00"E	6,388	5,386	1977	7,736
Mariamjvari	Ia-Ib	41°46'00"N/45°23'00"E	1,040	931	1939	
Pskhu-Gumista	Ia-Ib		40,819	37,800	1976	
Pskhu plot		43°20'00"N/40°55'00"E	27,334		1976	
Gumista plot		43°11'00"N/41°05'00"E	13,400		1941	
Skurcha plot			0.085		1977	
Ritsa	Ia-Ib	43°28'00"N/40°33'00"E	16,289	14,921	1957	
Saguramo	Ia-Ib	41°52'00"N/44°48'00"E	5,359	4,979	1948	11,852
Sataplia	Ia-Ib	42°18'00"N/42°40'00"E	354	209	1935	6,598
			168,699.25	140,684		106,008
National Parks						
Borjomi-Kharagauli	II	41°50'00"N/43°15'00"E	50,400	~ 40,000	1995	102,200
Colkheti	II		44,849	21,300	1998	78,000
- Imnati plot		42°06'00"N/41°51'00"E	20,414	15.00		
- Anaklia-Churia plot		42°18'00"N/41°39'00"E	4,478	3,300		
- Nabada plot		42°13'00"N/41°42'00"E	4,215	3.00		
- The Black Sea plot		42°10'00"N/41°30'00"E	15,742	0		
			95,249	61,300		180,200
Sanctuary						
Chachuni	IV	41°17'00"N/46°00'00"E	21,245	1,439	1996 (1965)	5,496
Gardabani	IV	41°25'00"N/45°03'00"E	3,484	1,947	1996 (1957)	10,332
Iori	IV	41°28'00"N/45°38'00"E	17,307	1,314	1996 (1958)	9,830
Katsoburi	IV	42°10'00"N/42°04'00"E	295	130	1996 (1964)	6,990
Kobuleti	IV	41°51'00"N/41°48'00"E	438.75	?	1998	
Korugi	IV	41°38'00"N/45°27'00"E	16,281	1,162	1996 (1958)	12,542
			59,050.75	5,992		45,190
2.15 GEL=USD 1						
			322,299.00			331,398

2.7 It is noteworthy that the core costs (i.e., basic annual operational costs composed of wages and running costs) for all protected areas combined currently amount to approximately 160,000 /a. This compares very favourably (i.e., very low) to international standards. The highest operational costs per unit area are recorded for the Borjomi-Kharagauli National Park. This is explained by the high investment costs for this NP during the past four years thanks to the substantial German bilateral aid that facilitated the infrastructure development and the successful establishment of the management structure of the park, required for the sustainable protection of this flagship conservation area.

2.8 The BKNP example clearly demonstrates that financial interventions, especially those that are related to infrastructure development, come at a cost. It therefore is safe to conclude that operational costs increase proportionately to the investment costs for a protected area as a result of expanded maintenance and manpower requirements. This has to be taken into consideration when addressing operational cost development (=increase) that can be expected through further, much needed infrastructure development of the country's PA system.

2.9 In this context it also is noteworthy that there has not been any increase in wages of PA staff over the past five years, although the living costs in the country have skyrocketed within the same time-period. In other words, realistically, wages could be expected to at least triple over the next five years, bringing the total operational cost for all areas combined to an estimated 70 % over and above increasing maintenance and personnel costs as a result of an expanded infrastructure development program. Assuming that the minimum infrastructure and equipment requirements of Georgia's current protected areas can be met in the future, the projected total operational annual costs by the year 2007 could be as high as 1 Mio USD which still compares favourably to most other countries in the world.

3 International Support to Georgia's Protected Area System

3.10 Table 3 reflects the significant international financial contributions within the past decade to Georgia's protected areas, well in excess of???? USD. It is noteworthy that this massive assistance package has made little effort to strengthen the DPA and/or to develop fund-raising skills within this parastatal agency. Furthermore, no significant effort has been made to search for financial security for the PAs that have benefited from the international aid. On the other hand it is evident that without financial sustainability the long-term success of the past international efforts are in jeopardy.

Table 3 International financial and technical assistance to the PA system of Georgia since 1992.

DONOR	PROJECT TITLE	YEAR DURATION	USD	%
--------------	----------------------	----------------------	------------	----------

WWF	System wide to PA s and Support zones	1992-2002 on-going		
KfW	a) Borjomi Kharagauli NP (BKNP) b) Support zone of BKNP c) Ecoregional Planning of Caucasus Ecoregion (Georgia portion)			
GEF				
World Bank				
UNDP				
CEPF				
		Total		

4 Conservation Trust Funds

4.11 Various types of environment funds are currently being used internationally. The Global Environment Facility (GEF) has supported conservation trust funds in several countries as a means to provide long-term funding for biodiversity conservation. The GEF is currently the major source of international funding available for capitalization of trust funds. Those funds supported by the GEF have been set up as *trust funds* (in countries whose legal systems are based on British or US models) or (in most civil law countries) as *foundations*. In either case, these funds legally set aside assets (e.g., GEF grants) whose use is restricted to specific purposes set out in a legal trust instrument. They can be structured financially in three ways. When an *endowment fund* is created, the financial assets of the fund are invested to earn income, and only that income is used to finance agreed-upon activities. *Sinking funds* are designed to disburse their entire principal and investment income over a fixed period of time, usually a relatively long period of about 15 years. *Revolving funds* provide for the receipt of new resources on a regular basis: for example, proceeds of special taxes to pay for conservation programs which can replenish or augment the original capital of the fund and provide a continuing source of money for specific activities. Any environmental fund can combine these features depending on its sources of capital (Schuerholz, 2001).

4.12 It seems that there is no "typical" trust fund. The fund's structure, scope of activities, priorities, and procedures vary according to the purposes for which it is set up, and according to the situation of the country they serve. Some are national, some regional, some dedicated to a particular biodiversity resource. Many current conservation trust funds have rather broad mandates. Most current conservation trust funds either support specific protected areas such as national parks within a national protected area system, or they operate as "grant" funds that channel resources to target groups (NGOs and community-based organizations). The latter typically support a broad range of conservation and sustainable management projects, and often include the development of civil society institutions in their objectives.

4.13 A recent assessment of a broad array of conservation trust funds supported by GEF and others resulted in the following observations and recommendations:

- Financial mechanism that facilitates large-scale debts-swaps or international grants that can "retail" funds into smaller projects over long periods of time;
- Success depends on ability to (a) participate in developing national conservation strategies, (b) work with public and private agencies to develop flexible and effective management approaches, and (c) nurture community groups and other organizations becoming involved in biodiversity conservation for the first time;
- Excellent for supporting protected areas, and expanding national networks of PAs, and providing a basic "resource security" for their operations;
- Generating and managing financial resources;
- Enabling participation of civil society institutions in resource conservation;
- Increase level of scientific research;
- Increase public awareness of conservation issues;
- Trust funds have leveraged substantial additional funding for conservation;
- Most funds are set up as non-government institutions with mixed public-private governing bodies. Larger boards seem to be more advantageous than smaller boards;
- Most funds keep their operating costs below 25 per cent;
- Most funds displayed successful asset management based on sound conservation risk strategies and portfolio diversification.

4.14 It was noted in the same report that where there is a clear need and strong local support site-specific funds have been very effective. It is concluded that trust funds are generally appropriate when the issue addressed is long-term in nature. Where threats to biodiversity are serious and immediate, and where such threats can be readily addressed through rapid mobilization of relatively large amounts of funding, traditional project funding may be more appropriate but will not solve the problem of financial sustainability that may only be achieved through an endowment within a trust fund structure.

5 Proposed Approach to the Establishment of a "Caucasus Trust Fund" in Support of Georgia's PA system.

5.15 It is suggested that the Minister of Environment (the MoE is the responsible umbrella agency for Georgia's PA system) appoints a Trust Fund Steering Committee (TFSC) in order to establish a trust fund for protected areas of Georgia by the middle of 2003. It further is suggested that this process be spearheaded by the WWF Programme office of Georgia in close cooperation with CI and other key players with interest in this area. It is suggested that WWF provides technical assistance through available in-house expertise for the design of the trust fund, including its fundraising strategy. The TFSC should be composed of non-governmental members serving in an individual capacity and representing expertise in different sectors, including conservation, banking, private sector, legal and non-profit management. With the assistance of a Coordinator and

technical consultants, the TFSC should draft a trust fund profile, legal statutes and operational procedures. It further is suggested that The MoE jointly with the WWF Programme office approaches KfW for financial assistance in this endeavor.

5.16 It is proposed that the trust fund, the "Caucasus Protected Areas Foundation for Georgia", be established in Georgia as a foundation under the Georgian Foundation Law N⁰ ??????????????????. With assistance from legal counsel, the TFSC should ascertain that the legal status of a foundation is the most appropriate legal form for a trust fund in Georgia. It is suggested that although the Foundation would be legally registered in Georgia, most of its assets would be invested offshore.

5.17 The Foundation will be designed to manage an "endowment fund" and "sinking funds". Revenues to be generated by the endowment fund would mostly be used to cover financial shortfalls in operational costs of protected areas, whereas the sinking funds would focus on financing required infrastructure development inside PAs, equipment and capacity building needs, and selected support zone projects expected to enhance the overall conservation efforts.

5.18 The **Caucasus Protected Areas Foundation for Georgia (CPAFG)** is perceived as a pillar to the larger sustainable finance agenda for Georgia's Environmental Protection Strategy. It is expected to lead the mobilization of substantial funding necessary to cover the core costs of the PA network and its expansion and the sustainable development of priority ecological corridors. In parallel, individual agencies and protected areas are requested to prepare their own strategies to improve cost recovery and revenue opportunities to be modeled after the marketing and business plan that currently is being developed by the WWF Programme Office jointly with the staff of the BKNP for the Borjomi-Kharagauli National Park with financial assistance by KfW.

5.19 Lessons learned from trust funds elsewhere indicate the critical importance of involving the private sector. Ownership in the sustainable protected area management by the private sector has proven a key requisite for successful long-term solutions to financial bottlenecks. The TFSC responsible for the establishment of the CPAFG should take this into account and fully capitalize on private sector opportunities to be identified in due course. The trust fund should establish "windows" that permit private sector investment especially towards the sinking fund section of the trust.

5.20 The first step in the fund raising strategy will be the successful establishment of the CPAFG. Once the Foundation structure is in place, governed by a trustworthy Board of Directors, it is much easier to find donors willing to invest.

5.21 In parallel it is proposed that KfW be approached to finance the preparation of a concept paper in an effort to secure GEF co-financing for the establishment of the endowment fund of the CPAFG, capitalizing on the expressed interest by the Georgian UNDP office to closely cooperate with KfW in pursuing the GEF option (i.e., initial discussions with the regional UNDP office in this context are positive; the chances of

getting this project into GEF's financing pipeline are very good according to informed UNDP sources).

I

5.22 In addition, as part of the overall fund-raising strategy for the CPAFG, it is recommended to approach the German Government for co-financing of the CPAFG, especially in the light of Germany's strong desire to secure its investments in the Caucasus protected areas.

6 Expected Results

6.23 The principal result of the project will be the secured financial sustainability of Georgia's protected area system as the backbone of biodiversity conservation in the country.

7 Financing Plan of Full Project

7.24 The minimum total program cost equals the shortfall of the estimated annual operational cost of Georgia's protected areas, estimated at approximately 0.8 Mio USD by the year 2007 assuming that the GoG continues to be able to cover personnel costs at the current level and taking into account additional revenues that realistically may be generated by the PAs. The combined total operational budget for all PAs is forecasted at approximately 1 Mio USD by 2007. It should be the overall goal that half of the recurrent costs of the PA system should eventually be covered through the Government budget and revenues to be generated through the PAs and the private sector from the support zones.

7.25 In this light it is suggested that the proposed Foundation sets a fundraising target for its endowment fund of 15 Mio USD. This would provide approximately for the Programme based on the following formula:

750,000 USD	Gross return @ 5 % average return
minus	minus 1% asset management fees
	reinvested for inflation at 3% rate
	net return
	administrative cost @ 10% (or less for protected area fund)

7.26 The fund-raising target for the proposed sinking fund as part of the Foundation is flexible but should be based on an aggressive fund-raising campaign with focus on the private sector, capitalizing on opportunities such as international pipeline development through Georgia, carbon sequestration, and debt swaps through the Club of Paris assuming Georgia's eligibility. WWF is asked to pledge the funding needed for the legal establishment of the Foundation.

Proposed Strategy for Sustainable Financing of Georgia's PA System. Prepared by
Dr. Goetz Schuerholz, Oct.2002.

- Annex 1 Current management models for protected areas in developing countries.
- Annex 2 Nature-based tourism and other recreational activities offered in protected areas worldwide.
- Annex 3 Location of Georgia's Protected Areas by Category

Annex 2: Current management models for protected areas in developing countries (Source: Schuerholz G., 2002. The Arche Noah Project. Unpubl. Document prepared for KfW)

PROS	CONS
<p>1) International donor and government</p> <ul style="list-style-type: none"> • Funds mostly used for elaboration of management plans, institutional strengthening, infrastructure development and capacity building; recently also include financing of pilot projects in support zone of PAs (classical model). • Opportunity for debt swaps. • Opportunity to include in overall country negotiations. • Opportunities to establish endowment funds that involve the private sector in the governing board. 	<ul style="list-style-type: none"> • Financial and technical support mostly temporary, unless endowment fund associated. • Government poor executant and ill equipped for efficient management. • Generally low status of legal entity with mandate for protected areas. • Generally poor relations with communities and low/no community involvement in management. • Frequently no authority and/or interest in sustainable support zone development. • Mostly donor driven projects. • Cumbersome bureaucracy. • Turnover in personnel and unsecured wages. • Subject to political changes.
<p>2) International donor and local NGO</p> <ul style="list-style-type: none"> • Support may cover: NGO strengthening, infrastructure development, management plan, capacity development etc. • Generally more cost-efficient than government model. • Circumventing government bureaucracy. • Development of local ownership. • Generally excellent public standing. • Involvement of local stakeholders. • Generally integration of support zones. • May serve as model. • In-kind contributions by local partner. • Largely independent of political changes. 	<ul style="list-style-type: none"> • Funding generally not sustainable. • Generally lacking legal authority for policing. • Needs officially delegated management mandate and Memorandum of Understanding. • Mostly temporary financing, rarely endowment funds attached. • Lost opportunity to strengthen government institution with legal mandate for PAs. • No legal authority for support zone.
<p>3) International NGO and local NGO (with or without government participation)</p> <ul style="list-style-type: none"> • Similar to previous model but generally more flexible and better funded. • Opportunities for capacity building in fund raising. • Good opportunity to use network of 	<p>Similar to previous model.</p>

<p>international NGO and to learn from lessons elsewhere.</p> <ul style="list-style-type: none"> • May serve as model. • In-kind contributions by local partner. 	
<p>4) International NGO and ethnic group</p> <ul style="list-style-type: none"> • Similar to previous model. • Generally, development of strong ownership. • Opportunity for community financing, strong commitment and people involvement. 	<ul style="list-style-type: none"> • Generally no support zone activities and no stakeholder involvement from support zone.
<p>5) International NGO and private land-owner</p> <ul style="list-style-type: none"> • Strong ownership and commitment due to vested interest. • Generally secured sustainable financing. • Excellent potential to generate revenues through conservation compatible activities. • Little/no government interference in management. 	<ul style="list-style-type: none"> • Potential danger of over-exploitation and jeopardy to the ecological integrity through poor land use. • Mostly not subject to Stet laws applied to publicly owned PAs.
<p>6) Private land-owner and government</p> <ul style="list-style-type: none"> • Potential to receive government incentives. • Frequently subject to official policy and legal framework. • Land and resource use restrictions apply. • Potential for development of strong ownership. • High potential for revenue generation and sustainable management. 	<ul style="list-style-type: none"> • Potential for stifling restrictions. • Potential for incentives be turned into Disincentives.
<p>7) Foreign company and government (Ownership and management by Co.)</p> <ul style="list-style-type: none"> • Opportunity to dictate the terms of MoUs. • Potential for sound revenue generation. • Opportunity to receive government incentives (tax incentives etc.). • Local employment opportunities. 	<ul style="list-style-type: none"> • Full dependency on government cooperation and commitment. • Inherent danger regarding expropriation. • Subject to changing partners, rules and policies. • Potentially low interest in support zone development and/or stakeholder involvement. • Pursuit of own vested interests
<p>8) Foreign company and NGO (co-management, or exclusive management by NGO with financial/technical support by foreign company)</p> <ul style="list-style-type: none"> • Use of NGO as lobby. • Vested interest by NGO: ownership. 	<ul style="list-style-type: none"> • National laws may prohibit land purchase

<ul style="list-style-type: none"> • Strengthening NGO. • Good potential for community and stakeholder involvement. • Excellent opportunity for revenue generation and sustainable financing. • Circumventing government bureaucracy. • Use of international network. • Potential for sound marketing strategies. • Access to international markets. 	<p>by foreign company.</p> <ul style="list-style-type: none"> • No land registry in name of foreign company. • Subject to government imposed restrictions.
<p>9) Foreign company and land-owner</p> <ul style="list-style-type: none"> • Strong ownership and commitment by both profit-oriented parties. • Excellent opportunity for revenue generation and sustainable financing. • Good potential for sustainable land/resource use models. • Avoiding government bureaucracy. • Access to international markets. 	<ul style="list-style-type: none"> • Possibly forfeiting government incentives. • Presumably low potential for community and stakeholder involvement. • Subject to government sanctions and restrictions. • Potential for bad land and resource use practices. • Potential threat to biodiversity conservation.

Annex 3: Nature-based tourism and other recreational activities offered in protected areas worldwide (Source: Schuerholz G., 2002. The Arche Noah Project. Unpubl. document prepared for KfW)

PROS	CONS
<p>1) Hiking, trekking, mountaineering.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Opportunity for environmental education and awareness building. • Low maintenance/operational costs. 	<ul style="list-style-type: none"> • Potential threat to ecological integrity. • Attracts mostly low budget "rucksack" tourists and younger age classes.
<p>2) Self-guided nature trails, canopy trails, etc.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Opportunity for environmental education and awareness building. • Popular with all income level tourists and age classes. • Excellent revenue generation. 	<ul style="list-style-type: none"> • Ecologically fully compatible if properly controlled. • Costly construction and maintenance.
<p>3) Guided nature interpretation.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Opportunity for environmental education and awareness building. • Employment for nature guides. • Low maintenance cost. 	<ul style="list-style-type: none"> • Unfavourable cost -profit ratio. • Restricted target groups.
<p>4) Scientific tourism.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Production of valuable background information on conservation unit. • Potential to generate funding through research data. 	<ul style="list-style-type: none"> • Very specific target group. • Poor economic returns.
<p>5) Trailriding (horseback, yak, mule), elephant safaris, pack-trips with llamas and donkeys, and horse drawn carriage rides, etc.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the 	<ul style="list-style-type: none"> • High operating cost for concessionaire. • High costs related to control.

<p>carrying capacity.</p> <ul style="list-style-type: none"> ● Opportunity for environmental education and awareness building. ● Involvement of local people. ● Attractive income generation for local people and the conservation unit (concessions, leases etc.). ● High appeal to diversified target clientele. ● Low maintenance costs if activities are out-sourced. 	
<p>6) Camping, picnic.</p> <ul style="list-style-type: none"> ● Environmentally compatible if properly controlled and if not exceeding the carrying capacity. ● Good for public relations. ● Can generate high revenues. ● Attracts diversified clientele. 	<ul style="list-style-type: none"> ● Costly maintenance. ● Potential threat to ecological integrity. ● Potential for adverse environmental impacts. ● Low opportunity for profit sharing and community involvement.
<p>7) Vehicle safaris.</p> <ul style="list-style-type: none"> ● Environmentally compatible if properly controlled and if not exceeding the carrying capacity. ● Excellent for revenue generation for conservation unit and operator. ● Opportunity for profit sharing. ● Attracts diversified clientele. 	<ul style="list-style-type: none"> ● High operational costs for road maintenance and control. ● Potential hazard to wildlife. ● Potentially incompatible with other activities. ● Causes pollution and contamination.
<p>8) Motorized boating and other motorized water sports. (Only environmentally compatible under strict control and restrictions. Not commendable in general).</p>	<ul style="list-style-type: none"> ● Generally not environmentally compatible. ● Needs strict controls (costly). ● Low potential for revenue generation. ● Very specific target groups (rich people sports). ● Highly controversial.
<p>9) Swimming and non-motorized water activities (snorkeling, canoeing, kayaking, windsurfing, sailing, etc.).</p> <ul style="list-style-type: none"> ● Environmentally compatible if properly controlled and if not exceeding the carrying capacity. ● Attracts diversified clientele. ● Opportunity for concessions and revenue generation. ● Low maintenance costs. 	<ul style="list-style-type: none"> ● Limited opportunity for community participation.
<p>10) Sport fishing, trapping etc.</p> <ul style="list-style-type: none"> ● Revenues from sale of licenses and leases. 	<ul style="list-style-type: none"> ● Highly controversial. Trapping not compatible with conservation goals.

	<ul style="list-style-type: none"> • Very limited target groups.
<p>11) Hang-gliding, ultra-lights, parachuting.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. 	<ul style="list-style-type: none"> • Very limited target groups and low potential for revenue generation. • Unfavourable cost-profit ratio. • Dangerous sports with high liabilities.
<p>12) River rafting.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Profit sharing opportunities and good potential for revenues. • Appeals to diversified clientele of all income brackets. • No/low operational costs if out-sourced. 	<ul style="list-style-type: none"> • Limited clientele, dangerous, and high liabilities.
<p>13) "Robinson Crusoe Club".</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Opportunity for environmental education and awareness building. • Appeals to families and diversified clientele. • Potential for high revenue generation. • Excellent potential for revenue sharing and local employment opportunities. 	<ul style="list-style-type: none"> • Very cost- and maintenance intensive. • Potential for adverse environmental impacts. • Costly marketing effort.
<p>14) Conventions and environmental training facilities.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled. • Opportunity for environmental education and awareness building. • High potential for revenue generation. 	<ul style="list-style-type: none"> • Very restricted target groups. • High operational costs. • Costly marketing process.
<p>15) Weekend cottages and recreational land leases.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled. • Good source of revenue from land sale and/or lease agreements. and if not exceeding the carrying capacity. 	<ul style="list-style-type: none"> • Mostly controversial. • Serving rich people only. • Potential for adverse environmental impacts. • No/low potential for public involvement and/or profit sharing.

<p>16) Snow-based non-motorized activities (snowshoeing, cross country skiing, sly-rides etc.).</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Opportunity for environmental education and awareness building. 	<ul style="list-style-type: none"> • Low cost-profit ratio. • Limited target groups.
<p>17) Motorized winter activities (snow machines etc.).</p>	<ul style="list-style-type: none"> • Highly controversial and environmentally not compatible.
<p>18) Cultural activities</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Appeals to diversified clientele. • Excellent potential for public involvement and profit sharing. 	<ul style="list-style-type: none"> • High maintenance costs and high costs related to control.
<p>19) Arboretum, interpretation centers, museums and zoos</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Opportunity for environmental education and awareness building. • Appeals to diversified clientele. • High potential for revenue generation. 	<ul style="list-style-type: none"> • Zoos and captive animals are highly controversial and may mostly not be compatible with conservation objectives.
<p>20) Eco-villages and concessions.</p> <ul style="list-style-type: none"> • Environmentally compatible if properly controlled and if not exceeding the carrying capacity. • Opportunity for environmental education and awareness building. • High potential for public involvement, revenue generation, and profit-sharing.. 	<ul style="list-style-type: none"> • Little objections if properly designed and controlled.