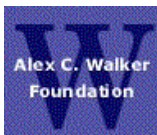


Evaluation of the Pilot Fee System at Eduardo Avaroa Reserve and Recommendations for the Bolivian Protected Area System



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January, 2004



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Executive Summary

Eduardo Avaroa Reserve has just completed a four-year pilot entrance fee program. This report evaluates this experiment and makes recommendations for modifications to strengthen the system and for its extension throughout the Bolivian Protected Area System.

The Eduardo Avaroa reserve (REA) is the most visited protected area in the Bolivian system with more than 40,000 foreign visitors in 2003. This visitation represents both a significant threat to biodiversity and an opportunity to generate much-needed income for reserve management and local community development.

This evaluation sought to identify management strategies that would reduce threats and maximize income generation for conservation. It included an examination of three aspects of the entrance fee pilot:

- 1) Fee Levels and Structure
- 2) Fee collection and revenue management
- 3) Perceptions of key stakeholders

Price responsiveness studies were carried out which show that significantly higher entrance fees can be charged without impacting visitor numbers in a significant way. The increase could be greater if three basic tourism management issues are addressed immediately: road maintenance, toilets, and quality accommodation.

To improve security, fee collection should take place outside the Reserve and should be devolved to tour operators to a large degree. Over \$100,000 has been lost to conservation during the pilot due to maintaining a fixed fee level in Bolivianos as opposed to charging in US dollars as is the norm in other countries.

Income generated should be designated principally for investment in tourism management in the REA and should not replace the minimum budget allocation from SERNAP that is necessary to guarantee basic functionality of the Reserve.

All key stakeholders agree that higher fees are necessary or desirable in order to facilitate improvements in reserve tourism management.

The basic system should be applied following brief evaluations at each of five other Bolivian protected areas, beginning with Amboro and Madidi.

Additional tourism-based mechanisms including concessions, donations and annual operating license fees for tour operators should be introduced at the same time as the new entrance fee regime in October 2004.

It is estimated that the implementation of these recommendations will result in approximately \$800,000 in revenue for Eduardo Avaroa reserve in 2005, up from \$160,000 in 2003, as well as approximately \$200,000 in new revenue for the other participating protected areas.

Introduction

Visitation to natural protected areas is increasing rapidly around the world and Bolivia is no exception. Consequently this rising tourism tide is exceeding protected areas' capacity to keep it within sustainable levels so that tourism is increasingly being identified as a threat to biodiversity. To avoid the loss of valuable biodiversity through tourism related pressures, and in order to access the benefits that tourism can generate for protected areas, it is essential that they have sufficient capacity in terms of infrastructure, personnel and management systems in place.

As is the case in many developing countries, the Bolivian government has not been able to finance the investments necessary to install this capacity at the areas facing pressure from visitation. *Unlike* many countries though, Bolivia has not yet implemented a comprehensive system of tourism-based income generation mechanisms to at least cover the costs that visitation creates for protected areas. Consequently the Bolivian Park System (SERNAP) is foregoing a significant source of income which could contribute to much-needed investments that could result in:

- Improved PA management capacity
- Reduced threat to biodiversity
- Better quality visitor experience
- Greater investment in sustainable development opportunities for local communities
- Higher national and international profile of protected areas
- More employment opportunities for local people
- Enhanced environmental education function

The Conservation Area Planning process carried out for Eduardo Avaroa Reserve (REA) in 2002 identified tourism as a critical threat to conservation (see Table 1 in appendix).

Responses to a survey of protected areas conducted in the early 1990s suggest that about one-half of the world's protected areas charged entrance fees at that time (Giongo, Bosco-Nizeye and Wallace 1994), and it is likely that this proportion has increased in the ensuing years (Lindberg and Halpenny, 2002). In recognition of the urgent need of funds to address these tourism-related threats, and given that the REA is Bolivia's most visited protected area, a pilot entrance fee system was introduced there in September 1999. This pilot was in accordance with Ministry of Sustainable Development and Planning Administrative Resolution No. 039/99 of 23 August, 1999 and based on the recommendations of the document - Planificacion Estrategica del Sistema de Cobros para la Reserva Nacional de Fauna Andina Eduardo Avaroa; Ministerio de Desarrollo Sostenible y Planificacion, SERNAP 1999.

When the fee system was introduced in 1999, the above mentioned document estimated visitor growth for the following 10 years at 12% annually. In reality REA has reached estimated 2008 visitor levels in 2003! Clearly, the establishment of adequate tourism management capacity of the reserve is even more pressing than when the pilot began.

It was anticipated that the pilot fee system would generate experiences and lessons that would facilitate its application in other protected areas in the Bolivian system.

The present report presents an evaluation of this pilot fee program (1999-2003) and makes recommendations for consolidating the lessons learned in a new system for the site. As there are implications for the PA system as a whole, recommendations for a system wide fee system are also presented.

Methodology

The basic methodology for establishing the terms of reference for this study is outlined in a document prepared by SERNAP and agreed with TNC (SERNAP 2002). This divides the process in three parts:

1. Fee levels and structure
2. Fee collection system and revenue management
3. Perceptions of key stakeholders

1. Fee Levels and Structure

A single entrance fee of Bs. 30 was established by resolution 039/99 for all visitors. In order to evaluate the acceptance of this fee and evaluate more accurately the market potential, a small team was contacted by TNC to implement surveys as part of a price responsiveness study, using both contingent valuation and contingent behavior analyses. 80 visitors were surveyed in a pilot survey in April 2002. Some adjustments were subsequently made to the questionnaire. A total of more than 400 visitors were interviewed in the main survey. Interviews took place in the REA and at Uyuni and San Pedro de Atacama, the principal entry and exit points to the Reserve. The surveys were designed in collaboration with Dr. Kreg Lindberg, then of the University of Colorado, who also carried out the statistical analysis of the results. The results are displayed in graphic form below.

Additionally, fee structures at other protected areas around Latin America were analyzed for the sake of comparison and to indicate how the pilot at REA could be modified to maximize benefits for the REA.

2. Fee collection system and revenue management

Consultations were held with SERNAP staff in La Paz, Uyuni and in the Reserve itself to describe and evaluate how fee collection is implemented and managed.

3. Perceptions of key stakeholders

In addition to consultations with SERNAP staff, a meeting was held with representatives of Quetena Grande and Quetena Chico and a written questionnaire was also prepared to seek further responses from community leaders. Consultations were also held with tour operator and hotel association representatives and a workshop was held in August 2003 to present the results of the contingent valuation and behavior studies and to gather tour operator perceptions. 26 Uyuni-based tour operators participated.

Observations

The pilot design was based on a report by LT&T Consultores (1999) commissioned by SERNAP with support from TNC and USAID, and also the Plan de Ordenamiento Turístico Mínimo; Reserva Nacional de Fauna Andina Eduardo Avaroa (SERNAP 1999). The legal framework for the pilot was established by Administrative Resolution No. 039/99 on 23rd August, 1999.

The pilot was initially designed to last for a period of months while further research was carried out. In reality it has been four years. However, during this time it is important to note that the SERNAP REA staff has done an excellent job in establishing the fee as an accepted norm by visitors and the tourism industry and in constantly evaluating and improving the efficiency of the administration of the system.

Results

1) Fee Levels and Structure

Objectives of fees

Various objectives exist, including:

- ! *Cost recovery*, which involves generation of sufficient revenue to cover part or all of tourism's financial costs (e.g., construction and maintenance of a visitor center, signposting, impact monitoring).
- ! *Generation of "profit,"* with the excess of revenue over cost being used to finance traditional conservation activities (at the destination or at other sites).
- ! *Generation of local business opportunities*, by the earmarking of fees to enhance site or experience quality.
- ! *Provision of maximum opportunities for learning and appreciation* of the natural resource, which may also involve low fees for nationals.
- ! *Visitor management* to reduce congestion and/or ecological damage, which would involve fees high enough to influence visitor behavior.

With these objectives in mind, fee levels should be determined after evaluation of the following three criteria:

1. The fair market value
2. Comparable fee levels at other protected areas
3. The actual costs to the protected area of providing quality tourism opportunities

i) The fair market value

In order to determine the fair market value, surveys of visitors were carried out. Prior to presenting an analysis of the results, it is useful to quantify the visitation and financial results of the pilot to date:

a) Visitation levels

Visitation to the REA has risen continuously since registration began. Some of the increase is likely due to improved control by park staff in recent years. But visitation is expected to continue to grow. In addition to the high quality of the natural attractions of the reserve, it is also located on the principal overland route linking Southern Bolivia with Northern Chile. As facilities are developed and better tourism management capacity is implemented, it is expected that the quality of the visitor experience will increase. This will lead to a higher profile for the Reserve and a broadening of the market beyond the current dominant visitor profile and increased demand.

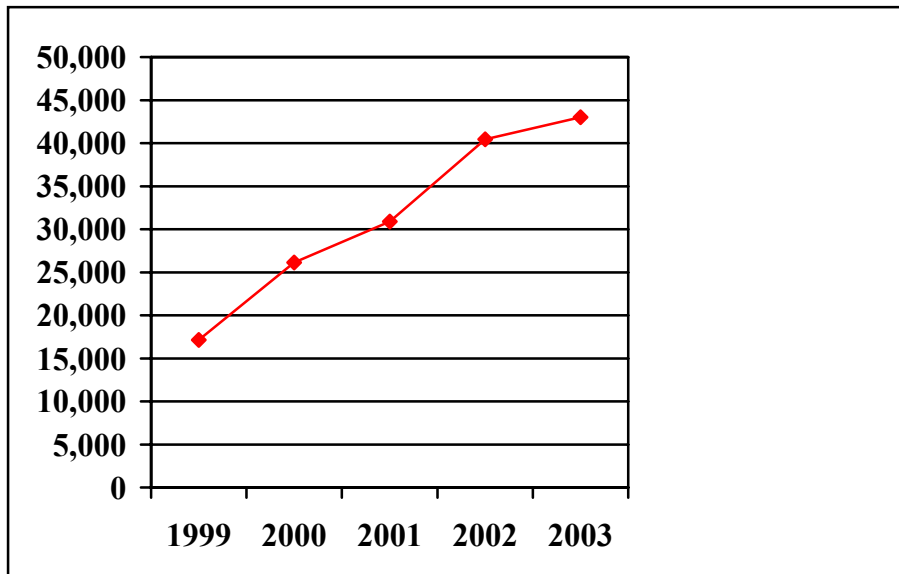


Figure 1: Visitation to Eduardo Avaroa Reserve 1999-2003*

*SERNAP figures. 2003 figure was estimated in August 2003

b) Pilot fee program revenues

The entrance fee level for REA was established at Bs.30 per person for the pilot, which at the time was equivalent to US\$5. Figure 2 shows actual revenues converted to dollars. Although visitor numbers have increased dramatically, revenue growth has been more modest and in fact has started to fall. This is because while the fee level has remained a constant Bs.30, its value in dollars has depreciated.

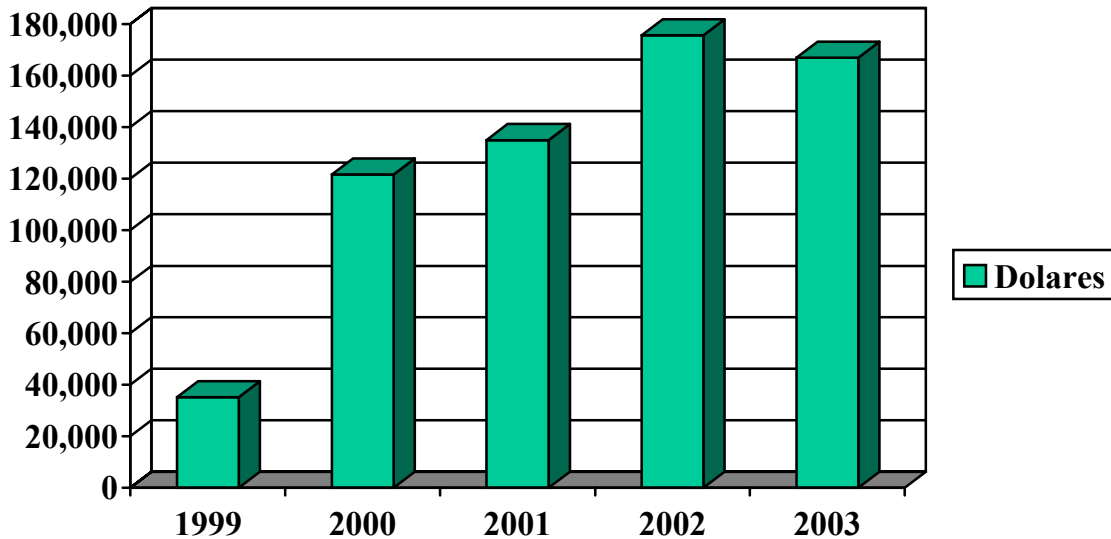


Figure 2: Actual Revenue Generated by Pilot Entrance Fee Program

c) Visitor profile

The visitor surveys also generated demographic information helping establish a profile of visitors to the REA. These results are tabulated below. Europe, especially Britain, is by far the largest market, with Israelis being important seasonally. North America is currently not an important market. (Fig.3). The vast majority of visitors fall into the 18-29 age group and include university students and recent former students, though all age groups are represented (Fig. 4). Income levels are more spread over all ranges, though almost half earn below US\$20,000 pa. Interestingly, the other 50% earn average and above average salaries.

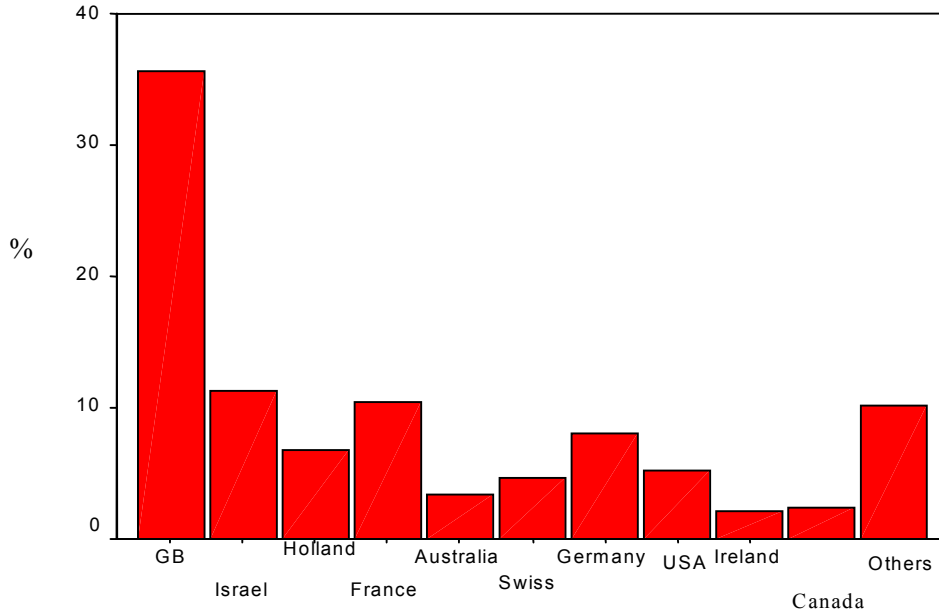


Figure 3: Countries of Origin of Visitors to Eduardo Avaroa Reserve (2003)

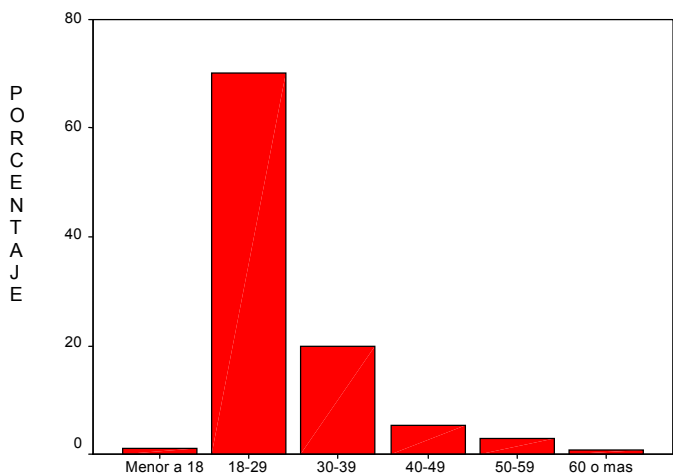


Figure 4: Age Groups of Visitors

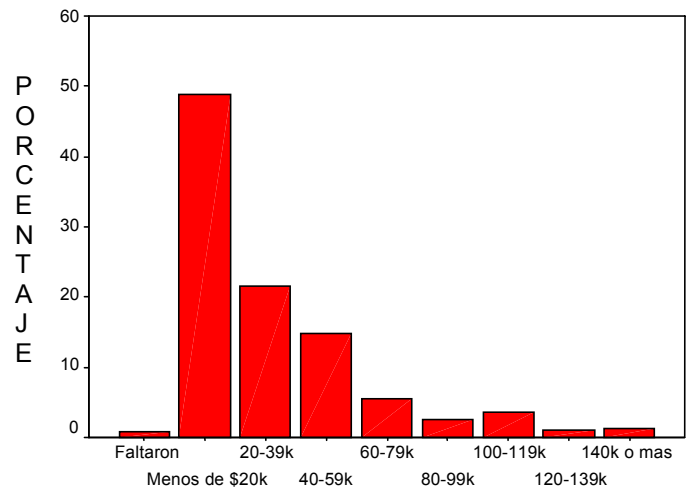


Figure 5: Annual Income of Visitors

There is a roughly 50-50 split between genders of visitors (Fig.6). Education levels of visitors to the Reserve are quite high, with most either having a graduate degree or post-graduate degree.

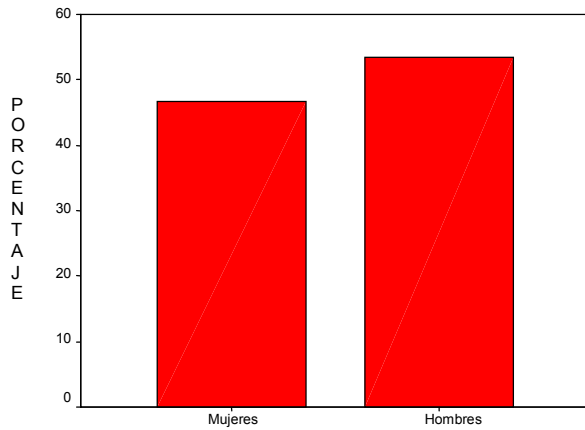


Figure 6: Gender of Visitors

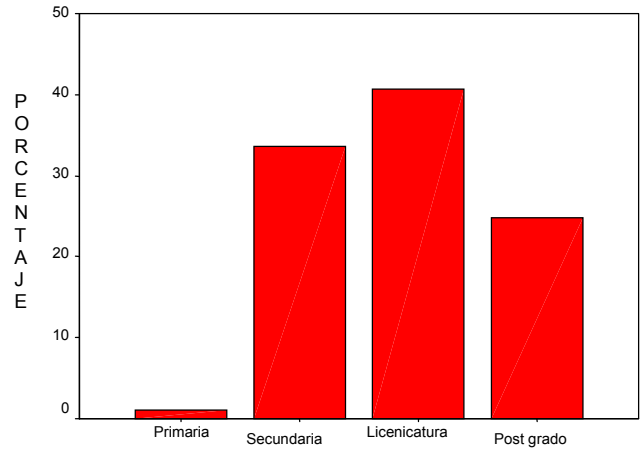


Figure 7: Education Level of Visitors

The current visitor profile for the REA then might be described as entirely international, largely young, European adventure seekers. Many have low incomes corresponding with their youth, though most are highly educated and have high earning potential. The high-income levels of a significant segment reflect this. While visitors might overall be described as ‘backpackers’, the very limited diversity of tourism opportunities and single modality of tours tends to lump everyone into the same category. In reality, there is a distinction between higher spending young professional adventure travelers from the low budget backpackers. These young professionals would likely be prepared to spend more if higher quality tours and accommodations were available.

Higher quality tours and accommodations would also likely attract more US visitors that are currently grossly underrepresented.

d) Contingent valuation

Fig 8. shows results of the contingent valuation (CV) question in the CV survey version, which used the dichotomous choice (yes/no) format. Almost all respondents would be willing to pay an additional \$5. An equal number of visitors were each asked about just one of the fee increases indicated in the horizontal access. The vertical axis shows the percentage of those surveyed who indicated they would still have visited the REA had the entrance fee been increased by \$x.

As expected, the percentage of respondents indicating they would still visit decreases as the additional fee increases. However, the fee would need to be raised by more than \$30 before visitation would be reduced by half. This is noteworthy considering the modest income levels of half the sample.

More than 95% were willing to pay \$5 more than the current fee of Bs.80 (theoretically \$5). In other words, everyone would pay a \$10 entrance fee. 80% would pay a \$15 entrance fee and a majority would pay a \$25 or \$35 entrance fee.

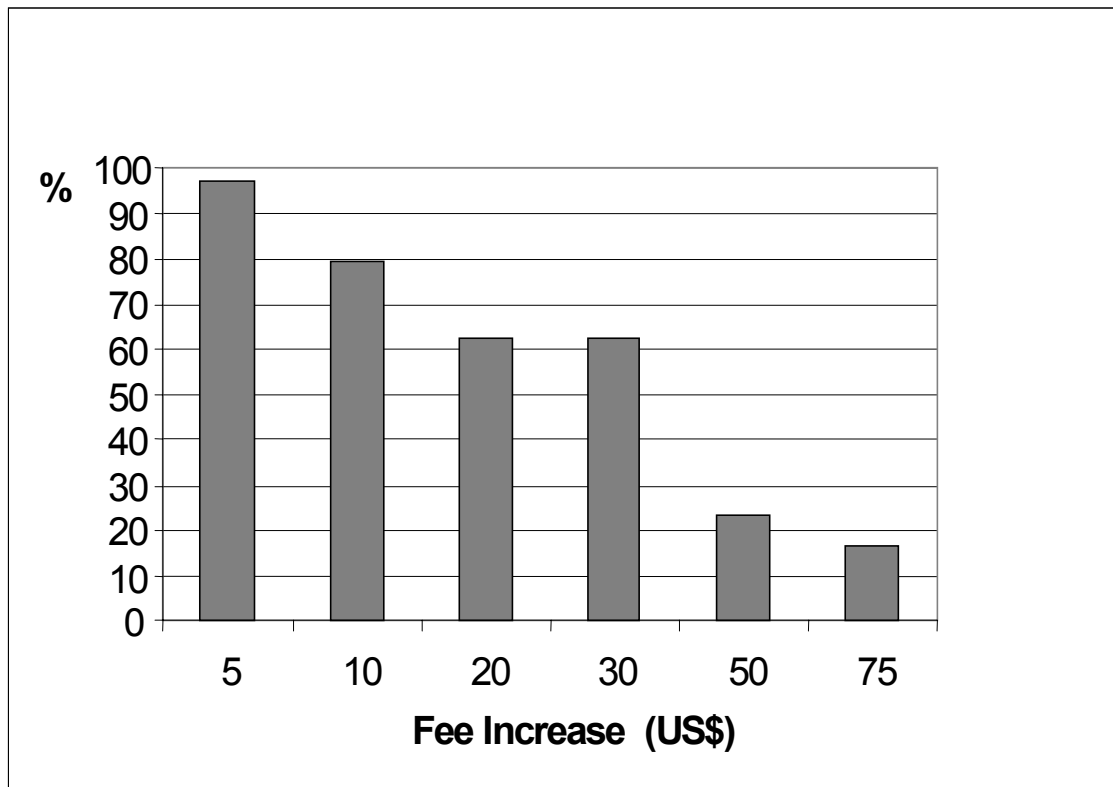


Figure 8: Dichotomous Choice CV – Response to Fee Increases

A similar number of visitors were asked an open-ended question. Rather than report whether they would still visit at a specific fee increase, respondents were asked to report the maximum fee increase they would be willing to pay to still visit REA. Here they provided their own figures rather than responding to the suggested figure in the dichotomous choice version. 90% said they would be willing to pay \$5 more than the current fee level (for a total of \$10) and 60% said they would be willing to pay \$15 entrance fee.

Results from this open-ended CV question are then compared with those from the dichotomous-choice version. This comparison is shown in figure 9. The percent for open-ended is the cumulative percent having a maximum willingness to pay at least as great as the indicated fee. For example, 10.7 (11) percent of respondents reported a maximum WTP of \$4 or less, so 89% have a WTP of \$5 or higher. The graph illustrates how the two WTP measures can differ from each other. It is possible that respondents overstate their WTP in the dichotomous choice format (e.g., by “yea saying”), but it is also possible that respondents understate their WTP in the open-ended format (e.g., they actually would be willing to pay more than they report).

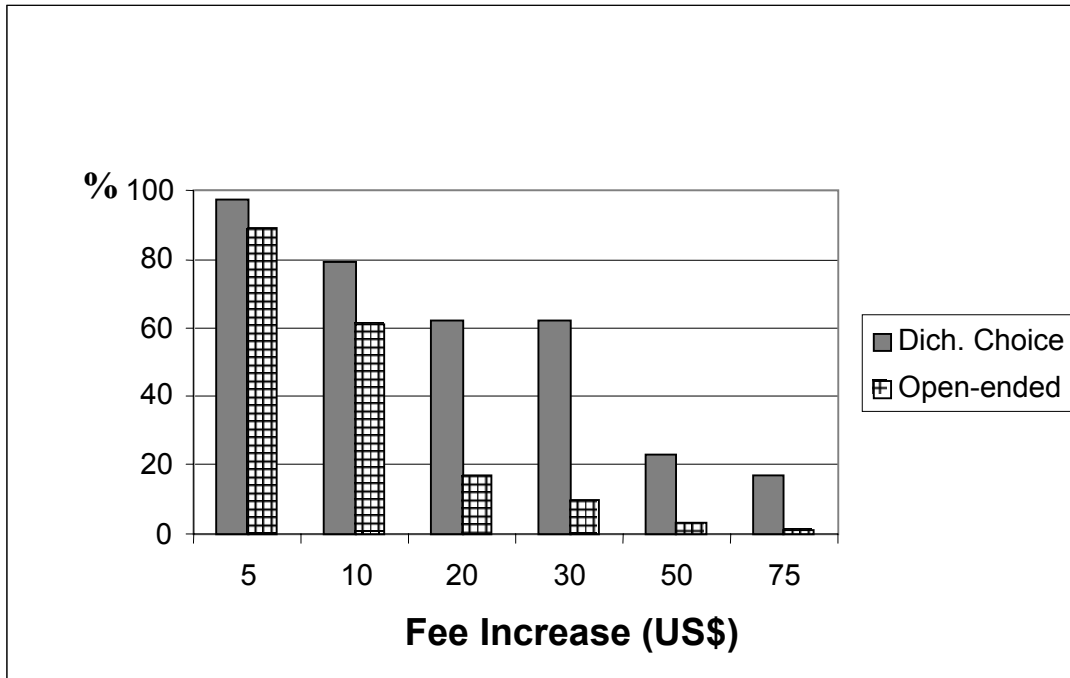


Figure 9: Dichotomous Choice vs. Open-Ended Fee Increase

e) Contingent behavior

Contingent behavior takes another approach to estimating visitor attitude to fees, looking at how visitors would modify their itinerary in response to a given fee increase. In this case – keeping the same itinerary, changing the itinerary to spend less time in the REA and canceling the visit to the REA. The basic CB results are shown in Figure 10 below. They are somewhat similar to the (dichotomous choice) CV results above, though the percentages for “still visit/same itinerary” remain quite high even at the highest fees.

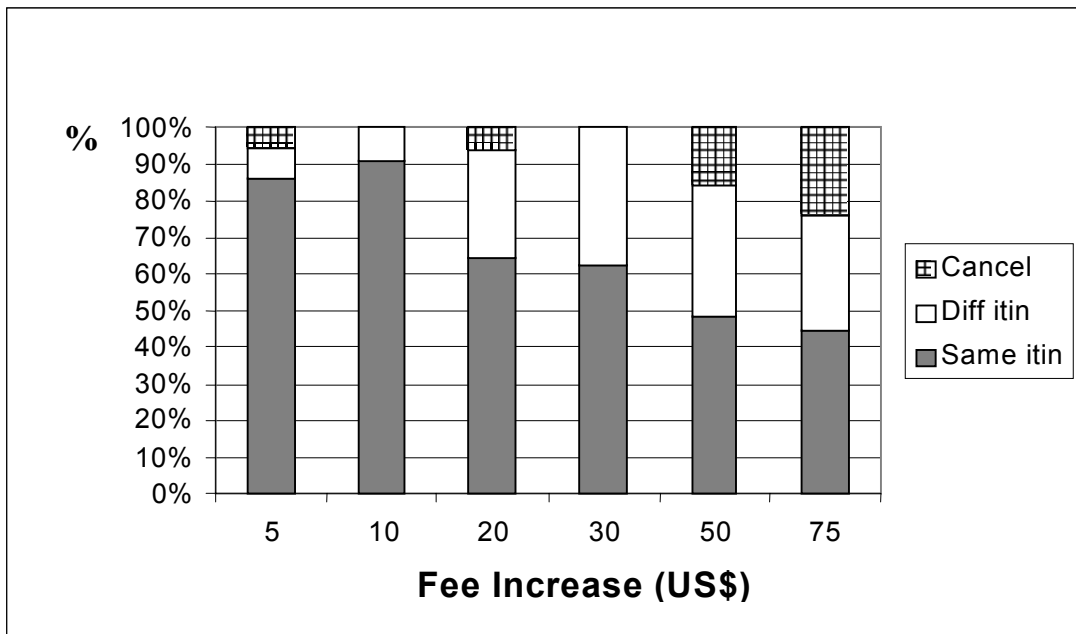


Figure 10: Behavioral Response to Fee Increase

The following is further analysis of the contingent behavior results.

Elasticity is calculated by multiplying the coefficient by the price. At the current \$5 level, the price elasticity is $5 * -.012 = -.060$. In other words, a 10% increase in price would lead to a 0.6% decrease in visitation.

The effect of fee on number of days visiting REA is calculated as $e^{(\alpha+\beta X)}$, where e is the base for natural logarithms and $\alpha+\beta X$ represents the constant and fee*coefficient. This is shown graphically in Figure 11. Note that this is for total fee (including the current \$5), whereas the previous CV + CB results are shown for a fee increase (excluding the current \$5). This graph is similar to the previous CB one above, but the model “smoothes” the line, and the effect of itinerary change is incorporated (a changed itinerary leads to fewer days at REA, but not a total cancellation).

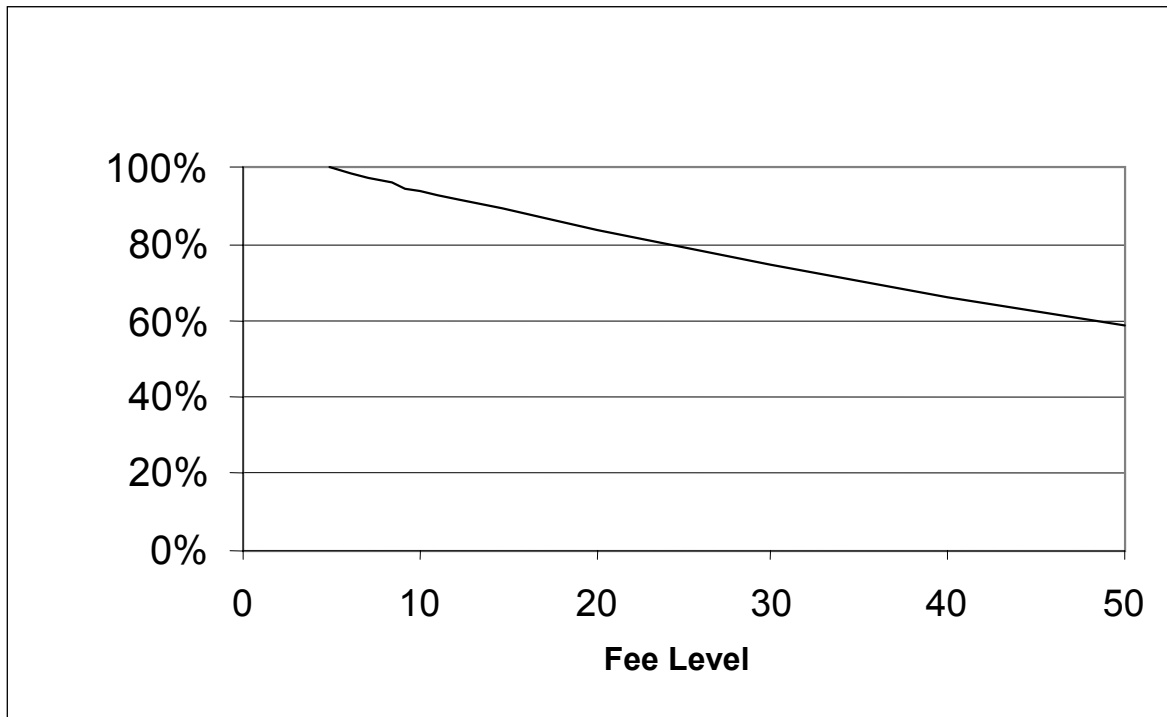


Figure 11: Predicted Impact on Visitation Levels in Response to Alternative Fee Levels

Table 1: Theoretical projection of visitation levels and income generated for different fee levels

50,000 visitors	@BS.30 = \$214,000
50,000 (100%)	@ \$5 = \$250,000
47,500 (95%)	@ \$10 = \$475,000
45,000 (90%)	@ \$15 = \$675,000
41,000 (82%)	@ \$20 = \$820,000
29,500 (59%)	@ \$50 = \$1,475,000

Monitoring *actual* responses to fee changes at REA will allow us to evaluate which of these models best estimates/reflects response behavior. In the meantime, we can compare model results for general trends and conclusions. For example, they all tell us that there would only be modest responses to a \$5 increase.

ii) Comparable fee levels and structures at other protected areas

In most protected areas around the world there is a tiered fee structure with typically a lower fee charged to nationals than to foreigners. This differential recognizes:

- nationals already pay taxes for their park system which foreigners do not;
- the lower economic capacity of nationals compared to European and North American visitors;
- provides greater opportunities for access by nationals to know and learn from their own protected areas

In addition, entrance fees may be further tiered to distinguish between adults and children and possibly students.

Table 2: Some examples of tiered entrance fees include:

	Foreigners	Nationals
Galapagos NP	\$100	\$6
Amboseli (Kenya)	\$27	\$7 in local currency
Cotopaxi (Ecuador)	\$10	\$2
Annapurna (Nepal)	\$12	

A comparison with other similar protected areas indicates that the current \$5 fee is quite low.

It is important to recognize that entrance fees are just one of a series of income generation mechanisms which are typically applied at protected areas internationally, including user fees, licenses, permits, royalties, concessions and donations. All of these should be considered for application in REA and in the SNAP in general.

iii) The Actual Costs to the protected area of providing tourism opportunities

As a minimum objective a fee system is to recover at least the costs incurred by SERNAP in the provision and maintenance of tourism opportunities in its reserves. The current system does not achieve this for three reasons:

1. Revenues are currently partially replacing part of the budget allocation from SERNAP, freeing funds for SERNAP to invest in other areas. Consequently, the SISCO revenues are not complementing the basic budget allocation, but partially replacing it;

2. Insufficient revenue is generated (due to single mechanism and low fee);
3. The costs of implementing the necessary tourism management has not been fully calculated and budgeted.

Point 1. Is addressed in the Recommendations below. Point 2 is addressed in section 2) “Fee collection and revenue management” below. Point 3 is addressed in the next section.

Examples of the indicators of the costs that should be covered by tourism fees are outlined below:

- **Cost of Fee Collection**

Inevitably, there are costs involved in collecting fees (transaction costs), and in some cases these costs will make it uneconomic to collect fees. For example, some recreation areas have many entrances, few visitors, and/or high capital costs for collection facilities (Loomis and Walsh 1997). Nonetheless, there often are ways to reduce collection costs by, for example, selling tickets or passes through tourism or other businesses and by using an honor system, with spot-check enforcement. Data indicate that collection costs for the US National Park Service and Forest Service are about 20% of fee revenue (Lindberg and Halpenny 1999).

- **Definition of tourist-use zones and visitor sites in the Reserve**

- **Implementation of Limits of Acceptable Change method of controlling visitor impacts.** (Tropico has obtained some funding for this work)

- **Signposting**

More and clearer signposts needed (with better distances to various points both near and far) at crossroads. Inform that only (subtly) marked trails can be used.

- **Road maintenance** (in collaboration with regional authorities)

Make sure the main track gets enough regular maintenance to not turn into a deadly washboard, which drivers necessarily must avoid using for safety and comfort.

- **New infrastructure**

- Hides on the shores of Laguna Colorada and maintenance. These will stop the constant yo-yo effect arriving vehicles have on flamingoes, causing them to move, in and out of their drinking spots with every new tourist load. Walls fanning out to either side of these buildings would allow cars to pull up and unload without being seen by the birds (they are not afraid of passing traffic, only the ones that stop and disgorge). Such buildings would have some impact on the landscape, but this necessary. The key is that they be placed right near the edge of the water so people can get a better view from within than outside. Otherwise, the problem will persist.
- Visitor Center in Quetena.
- Latrines. There has to be a series of strategically placed SOLAR toilets around the tour loop. These should not be located in or near points of interest, but rather hidden in the least interesting spots which then become stops in their own right.

- Highlight a greater number of stops and points of interest in the reserve so as to diversify and extend the average tour. Highlighting more stops would benefit the operators who could offer longer, less hurried options and make more money with less mileage.
 - Tent Camps. Lower impact than adobe or block construction and just as comfortable.
- **Interpretative information and guidelines for visitors**
 - **Annual tour operator licensing system**
 - **Naturalist guide certification program**

The cost of implementing these components of a tourism management plan needs to be defined, but Tropico, in 1999 estimated the annual cost of such a plan at \$105,000. This should be considered a minimum investment level over the next five years in order to establish the minimum necessary level of tourism management to reduce tourism-related threats to acceptable levels, and to increase the quality of experience for visitors and the income generation opportunities for tour operators including local communities.

2) Fee Collection and Revenue Management

SERNAP REA administration staff has achieved considerable success in difficult conditions in administering the fee collection system. With great skill and dedication they have won the collaboration of the tourism industry and tourists for the system. They have also made improvements to the original model over time to increase efficiency. Consequently they have been responsible for gathering an average of \$150,000 per year on behalf of SERNAP over the past four years.

This is all the more laudable given that this has not represented any tangible increase in operating budget for the REA, but rather has been utilized by SERNAP at a national level. However, the current flow of revenues does not provide a tangible incentive at Reserve level that is needed to maximize efficiency in the long term.

Additionally, the fee system is not currently enshrined in an official government regulation. In the face of pressures from other SERNAP programs, local municipalities and other institutions, it is essential that the appropriate legal framework be established as soon as possible to ensure its future along the lines recommended in this report.

Fee collection

Initially, fees were collected in the Uyuni office and via bank deposit by the visitor or tour operator, and park rangers simply controlled at the access points that all visitors arrived with their tickets (SERNAP, 1999b). However, the bank deposit system proved to be overly complicated and inconsistent, which contributed to large numbers of visitors arriving at the control points without the necessary entrance ticket. This created difficulties for the park rangers who were obliged to either refuse entry and force the

visitors to return the eight hours to Uyuni, to let them through without paying, or to charge the fee but without the necessary documentation. Consequently REA administration staff were forced to create more viable alternatives.

The current collection system involves the production of numbered, three-part tickets which are sent in a tightly monitored fashion to each of the Reserve's three principal entry points: Laguna Colorada, Sulor, Laguna Verde. Additionally a stock is maintained at the Uyuni SERNAP office and the new office in Tupiza.

Several "cobradores" or field accountants have been hired to manage the fee collection process at the control points. On a regular basis, a cobrador, accompanied by a ranger for security, returns with considerable sums of cash for deposit in Uyuni.

Occasionally, some visitors have expressed a demand to know "where the money goes". The REA administration has taken some steps to address this need to know with a poster campaign.

There is good cooperation from tour operators and visitors in paying the fee. It is now an established and accepted requirement for visiting the REA.

However, the current system has several negative implications:

- Considerable risk to the security of the REA field staff and SERNAP revenue, both at the control points and in travelling between them and Uyuni.
- Higher administration costs for fee collection that might otherwise be spent on other aspects of Reserve management.
- Park rangers tied up with providing security for cobradores.

Finally, the original plan (SERNAP, 1999b) attempted to link fee collection with visitor management strategy through the requirement of written authorization from REA for access. This has not been implemented. Visitor management is a key element of the tourism management plan that should be developed separately.

Fee currency implications

The original fee was set at Bs.30, which was the equivalent of \$5, but collection is restricted to Bolivianos. However, Bs.30 has now devalued to less than \$4, reducing in real terms the value of the revenue generated.

Figure 12 compares actual revenues generated in the pilot in the first column with potential revenues had the fee been maintained at US\$5.

"Lost" revenue totals \$103, 137 over the 4 years of the pilot.

In addition to the net loss of potential income, there is also a loss of purchasing power through working with Bolivianos instead of dollars.

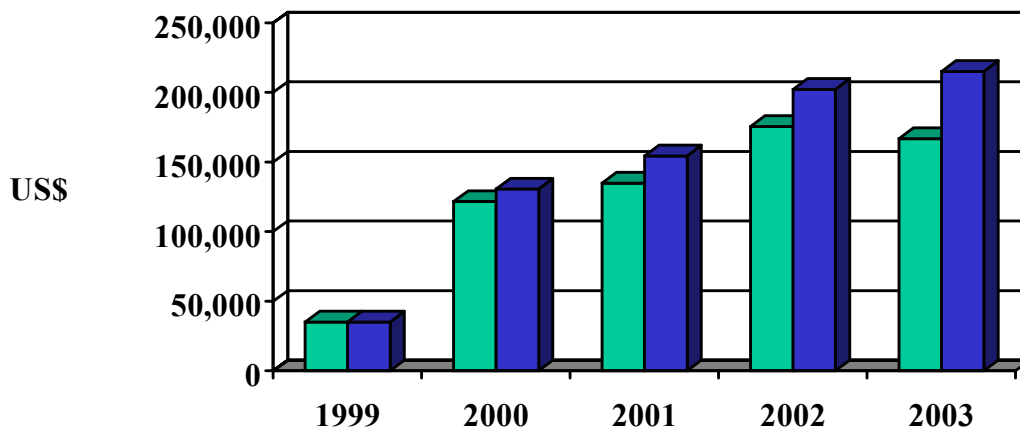


Figure 12: Actual revenue generated by pilot entrance fee program and potential revenue had fee been collected in US\$ instead of Bolivianos

Revenue Management

Currently SISCO revenues flow in the following fashion:

Visitor – Cobrador – REA Administration Uyuni – Bank Account 13% IVA tax deducted and submitted prior to deposit in the receiving account at the Banco de Credito – Banco Central – through SIGMA (the state accounting system) - Banco de Credito (Paying account) - REA

Additionally there is the funding which comes from international assistance:- Fuente de Financiamiento Externo. This is unrelated to the Entrance fee system.

On the ‘demand’ side, the REA administration registers its annual budget requirement; SERNAP’s Unidad Central requests the assignation of a trimestral quota for the REA; This “ideal” budget is then modified in the following way:

The minimum necessary budget for the “protection” program is estimated roughly on the number of park rangers at a particular protected area e.g. 15 park rangers = \$150,000 budget;

This assignation is made based on past needs and multilateral (GEF) bilateral funds (BIAP – KfW, PASNAPHolanda, matching funds -Kfw debt swap) that become available.

However, SISCO revenues do not actually complement the basic budget assignment, rather in the current system, the basic budget is allocated, but assignations from international assistance to REA is then reduced based on fee revenues. In this way, REA is becoming largely dependent on self-generated revenues virtually exclusively. Clearly this makes the REA very vulnerable to fluctuations in the tourism market and may lead to encouraging more visitation than can be sustainably managed in order to increase income.

The Bolivian government contributes approximately 2% of the SERNAP budget (\$137,000pa). \$100,000 goes to salaries in three areas, the remainder to the rent of the La Paz office and part of the insurance bill.

Distribution

13% IVA - Ministerio Finanzas
87% SERNAP Unidad Central - REA
From the remaining 87%:
 Comunidades 25%
 REA Operaciones 75%

However, up to 25% of revenue is earmarked for spending on community projects in the Quetena communities. In reality it seems that less than this amount is being spent. Additionally, there is no system in place to ensure that this spending is invested in programs compatible with the conservation goals of the Reserve

As a consequence of this allocation system, the REA sees no tangible benefit for implementing the SISCO. The REA is unable to demonstrate to the tourism sector and visitors *any* benefit to the Reserve of having paid the fee. Consequently, a perverse situation exists whereby:

- Biodiversity values of the REA are being eroded;
- Confidence in SERNAP and the fee system among tourism operators and visitors is weak.

30% of fee revenue generated has not been spent and is available for investment in the REA.

3) Perceptions of Key Stakeholders

Visitors

In surveys of 480 visitors it was clear that the REA rates highly as an ecotourism destination exclusively because of its great natural attractions, principally: landscapes, lakes and flamingoes. However, there were a small number of comments that were repeated by a very high number of respondents:

- **Great Concern for the lack of management of tourism impacts**
- **High visible presence of human excrement**
- **Low quality of guides**
- **Unsafe aspects of tourism operation**
- **Absence of interpretative information**

The overwhelming impression of the REA among visitors is an appreciation of its great natural values, combined with great dissatisfaction and concern about the quality of tourism operations and the negative environmental impact of these tourism operations.

Tour Operators

24 people from 16 of Uyuni's 60 tour operations participated. (20 of these have started up in the last year participated in a workshop in September 2003. A further 20 participated in a consultation in December, 2003. There are currently 89 operators registered in Uyuni. Key perceptions of the tour operators in this workshop and in one-on one interviews with several more are:

- A strong desire expressed to establish a regular dialogue with the Reserve administration.
- Tourism is increasing – as is the number of local tour operators.
- There was a great deal of interest to know how SISCO income was being spent.
- A strong assertion that there were no visible benefits of this spending in the Reserve.

Local Communities

The Communities of Quetena Chico and Quetena Grande demonstrate varying degrees of hostility towards the Reserve administration. While satisfaction is expressed with the new benefits being received as a result of the entrance fee. A desire for more is expressed. A dysfunctional and paternalistic relationship has evolved between the communities and the REA administration. Inconsistencies in the approach applied by the REA management have exacerbated this relationship.

Community leaders have a very limited understanding of the tourism business, but have proven very single-minded in developing accommodation near Laguna Colorada. This is of extremely poor quality, such that minimal economic benefits are generated, while the image of the Reserve is tarnished and the public health and safety is threatened by the poor design, management and operational style used.

However in a meeting with the Corridor and Vice President of Quetena Chico in December, 2003, the author obtained the following positive responses to a prepared list of six questions (See Appendix):

- The pilot fee system has been beneficial to the community
- The following benefits have been received:
 - House for the schoolteacher
 - A sports arena
 - 2 –roomed health center
 - Co-funding for the electricity supply to be established (approx.12% of total cost)
 - Equipment and finishings for community lodge
 - Salaries for 10-person road maintenance teams for 10 day periods
 - Diesel for tractor for road maintenance
 - Promotional flyers for community ecotourism operation
- Desire future REA support for
 - Installing an antenna that would give them cellular phone and Internet access; which would give them direct access to the tourism market;
 - A fund for student grants to allow local high school graduates to go to university in Potosi or La Paz;
 - Training for guides;
 - Business training for the Guallajaras lodge;
 - English language training (for tourism).

Additionally, the corrigidor requested that Quetena Chico receive a greater proportion of the 25% than the current fifty-fifty share with Quetena Grande, as they are a larger community.

Although they expressed a desire for a bigger percentage of entrance fee revenue to be invested in the community – above the current 25%, when pressed as to who should receive less to facilitate this, they were very uncertain. Such that a concerted effort to socialize the system and improve transparency, would likely result in a greater degree of conformity and support for the REA.

Finally, on the subject of the proposed IDB/Prodem/Fremen ecolodge joint venture, they fell dubious about the project, saying they have been offered much, but it is very unclear and uncertain for them if this is real or not.

SERNAP Staff

SERNAP Staff at the Uyuni and in the field are a dedicated team of conservationists working in challenging conditions. They have internalized the need for an entrance fee system and have worked diligently to implement and improve it.

However they feel that there have been no tangible benefits for the REA from the SISCO, rather, it had created significantly more work for REA Staff.

Additionally, the responsibility of the REA management currently, to administer the 25% of revenue earmarked for community investment is proving to be a constant source of headaches and time consuming activities for them. This money should be managed by another authority to relieve the REA management of the responsibility of being “developers” for the community.

Recommendations for Tourism-based Fees at Eduardo Avaroa

It should be noted that the majority of the basic concepts outlined in the document on which the pilot was based are well founded and should continue to apply. These recommendations will not repeat those guidelines which should be maintained, rather they highlight specific areas which were either not addressed in the initial proposal or which based on the results of this analysis, should be modified.

Recommendations are in four parts:

- The REA entrance fee system (SISCO)
- Other tourism-based income generation mechanisms
- System-wide recommendations
- Next Steps

The REA Entrance Fee System

It is proposed that a new Administrative Resolution be published which contains the following key adjustments to the REA entrance fee system:

- **Increase the entrance fee to \$10 -\$15 for foreign visitors and establish a fee of the equivalent of \$1 in Bolivianos for nationals.** Based on the results of the extensive visitor surveys, it is clear that the vast majority of visitors are prepared to pay a much higher entrance fee than the current BS.30. This is especially true if they can see evidence of the fee they are paying being used to protect the REA. Figure 11 indicates that visitor numbers would not be seriously affected even if the fee were \$20. However, although this might be an appropriate fee to charge once there is visible investment in tourism management in the Reserve, it is likely that to raise the fee to that level in the near future would cause some degree of resistance from some visitors and more vocal dissent from tour operators as they may fear losing demand.

The lower fee for Bolivians is to demonstrate that the Reserve is accessible for Bolivians and to encourage visitation so as to strengthen the value of the Reserve in peoples' consciousness and promote environmental education opportunities.

Notice of a minimum 6 –12 months is recommended between announcing the resolution and the implementation date for tour operators to adjust their pricing and budgeting and to allow time for the change to be communicated to the market place via guide books and travel agencies. Local tour operators indicated that their planning cycle begins in October, thus it is proposed that the change be introduced October 1st, 2004. This will enable tour operators to incorporate the new fee into their promotional materials and will allow time for a targeted public awareness campaign.

In order to provide a degree of stability for the tourism industry and SERNAP staff, these fees should remain valid for three to five years before being considered for modification. During this time, annual surveys of visitor perceptions, including of the fee level, should be carried out as part of an impact monitoring program.

Category	Fee
International Visitor	\$10 ¹
Bolivian visitor	Bs.10

- **Authorize that payment be made in US\$ or the equivalent in Bolivianos** on the date of entry to the Reserve. Official exchange rates will be communicated by radio from La Paz or Uyuni on a daily or weekly, monthly or annual basis as practicable. This will stem the losses borne by SERNAP due to devaluation of the exchange rate, bring Bolivia into line with other countries, provide consistency for visitors and SERNAP staff, reduce the risk of abuse of the system by tour operators or others.
- **Authorize direct management of revenues at site level.** Revenues should be distributed in the following fashion:

REA Administration	40%
REA Fondo Emergencias	10%
REA Community Sustainable Development Fund	17%
Fondo Fiduciario SNAP	20%
Finance Ministry (IVA)	13%

- 1) 40% will be divided in order of priority between
 - i) Tourism management plan implementation
 - ii) Capital investments and in REA administration capacity

\$105,000 per year should be considered a minimum investment level over the next five years in order to:

- **establish the minimum necessary level of tourism management to reduce tourism-related threats to acceptable levels,**
- **increase the quality of experience for visitors and**
- **Increase the income generation opportunities for tour operators including local communities.**

2) 10% in a separate REA account for contingencies and emergencies for use when tourism income may be sharply reduced or insufficient to cover basic costs.

3) 20% to a national level trust fund for the benefit of the Protected area system and support of other protected areas in the system, which do not have means of generating income. FUNDESNAP would be an appropriate home for this fund as an NGO (working closely with SERNAP) can more easily maintain consistency over long periods of time in the face of changing government priorities.

¹ This should be the minimum new fee level. If significant advances can be made in addressing priority tourism management investment needs in the Reserve in the first semester of 2004, then the fee should be raised to \$15 for international visitors.

- 4) 17% for the creation of a community development fund. This fund will be managed by a committee consisting of the Reserve director, two community representatives (one from the municipality of San Pablo de Lipez) and a local NGO representative. The fund will invest in projects that will benefit local communities inside and in the buffer zone of the reserve, which will enhance the compatibility of community activities with the management goals of the Reserve. This fund could be utilized as match for attracting additional investment funds from bilaterals.

Some, though not all, should be dedicated exclusively for spending in the Quetenas as it is expected that other communities in the REA's buffer zone will also benefit from this investment. The proportion earmarked for the Quetenas, because of their special role in Reserve conservation should be up to 25% of REA's net SISCO income in 2003 levels which corresponds to a previous provisional agreement with SERNAP. It is essential that guidelines for investment be developed for this fund to ensure its compatibility with REA management goals.

- 5) The current 13% Value Added Tax being returned to the Finance Ministry will continue as a contribution of the Protected area system to the government's central funds;

These percentage distributions should not be permanently fixed but subject to modification by REA management. These distributions should be reviewed after five years, a period by which consistent investment in tourism management should produce visible and tangible results and tourism should be by then, brought under control.

A table showing the distribution should be made visible in public places, in SERNAP offices and on informational materials made available to visitors. Also, details of how this revenue is invested should also be made available to the public including the tourism sector in order to inspire confidence in the fee system and support for the Reserve administration.

It is crucial to ensure that the REA not be assumed to be self-sufficient because of its current income generation capacity as tourism can easily fluctuate enormously for reasons beyond the control of Bolivia. The minimum budget for protection should continue to be financed by SERNAP Unidad Central so as to provide a bare minimum in capacity should visitation collapse, and to avoid over-dependence on tourism.

- **Entrance fee ticket sales points should be moved out of the Reserve** (with the exception of the Laguna Verde Control)
This would reduce administration costs and reduce security risks to staff and resources. It would also improve efficiency of collection.
- Tickets should be sold from the clock tower in Uyuni, the SERNAP offices in Uyuni and Tupiza and should be made available to licensed tour operators in batches of up to 50 at a time with advance payment.

- Tickets should also be sold at the Laguna Verde control for visitors arriving from Chile. Though it is recommendable that over time, an alternative be sought in order to limit cash accumulation in the Reserve for security.
- Visitors who arrive at the reserve control point without a ticket should be charged double the relevant fee. Any tour operator who brings visitors to the reserve without a ticket should also be charged a fee equivalent to the sum of all the fees charged to their offending passengers. Offending twice in this way should be sanctioned by the REA administration with potential non-renewal of the tour operator's annual operating license.

Other Tourism-Based Income Generation Mechanisms

- **Complete design, inc. consultation and implement tour operator annual licensing process in accordance with Article 120 of the Regulation**

Year one - No charge;

Year two - \$200 per company plus \$50 per 5 seat vehicle.

This system should be integrated with a possible categorization process being discussed currently which would create two or three classes of operation based on quality of interpretation and group size and possibly other criteria such as age of vehicle.

- **Create legal framework and regulations for strengthening community-tour operator business for accommodation, food provision and souvenir shops.**
 - Create conditions that make it attractive to tour operators and community members to utilize the lodge at Quetena Chico.
 - Establish a second lodge between Laguna Verde and Laguna Colorada with community-private sector management in accordance with SERNAP zonification and guidelines. SERNAP's legal counsel has deemed that the legal framework of a concession is not socially or politically viable. However a license framework has been identified and is being used to facilitate the development of a joint venture ecolodge (IDB/PRODEM/Fremen/Quetena Chico) south of Laguna Colorada.
 - Improve road conditions between Quetenas and other REA visitor sites.
 - Build Visitor Center in Quetena
 - Build toilet facilities in association with Visitor center
 - Establish souvenir shop in association with visitor center.
- **Establish mechanism for soliciting and receiving donations - "Friends of Eduardo Avaroa" or "Friends of Bolivia's Parks".** This should be managed by FUNDESAP and can be based on the experience developed in Baja California and Galapagos with Conservancy partners.
- **Require purchase of special permit for professional filmmakers wishing to film in the Reserve.** Commercial productions should pay a fee of \$500 per day of

presence in the REA and provide a refundable deposit of \$2000 returnable when copies of the edited film are presented to SERNAP.

Tourism-Based Fees at the System Level

Tourism-based revenues can be a hugely important boost to the management capacity and biodiversity protection of protected areas, leading to international recognition, improved funding opportunities and greater demand for visitation which in turn leads to greater revenues without necessarily increasing visitor numbers.

The system and mechanisms established and proposed for the REA should be replicated at all the other protected areas in the system where visitation is at a level sufficient to justify fee collection. These are currently: Amoro, Carrasco, Sajama, Madidi and Cotopata.

Next Steps

- Carry out comparative evaluation of alternative fee collecting systems for REA
 - a) SERNAP collecting US\$
 - b) SERNAP collecting Bs. at current exchange rate
 - c) Private company collecting
 - d) NGO e.g. FUNDESNAP collecting
- Define new fee collection system
- Redefine REA budget and Annual Operations Plan (POA) priorities in favor of tourism management actions for 2005
- Establish supportive legal framework for the new system
- Identify funding source for new tourism management investment in REA
 - a) Unused funds at SERNAP (\$100,000+)
 - b) Loan from GEF II
 - c) Other
- Prepare project investment profiles
- Complementing the existing Annual Operations Plan (POA), invest immediately in visible and strategic tourism management projects in REA.
 1. Road maintenance
 2. Solution to toilet facilities
 3. Quality accommodation
- Clarify tourism management costs and establish budget and timeline for implementing Tourism Management Plan

- Validate/Update the draft tourism management plan, with particular attention to
 - Tourism use zones
 - capacity building in the Quetena communities in business planning and management, guiding, service provision, environmental education in schools (Link with Ministry of Education allies for this);
 - Developing and implementing system of impact monitoring (Limits of Acceptable Change);
 - Tour operator licensing system;
 - Naturalist guide licensing and training;
 - Interpretation

- Present updated Tourism Management Plan and new fee system to tour operators in Uyuni (By mid February) and announce implementation date (October 2004, based on feedback from tour operator consultation)

- Prepare promotional campaign for REA which includes new fee levels; Targets will include guide books and video production for train

- Facilitate market research to demonstrate impact on demand of higher price/quality tour offerings

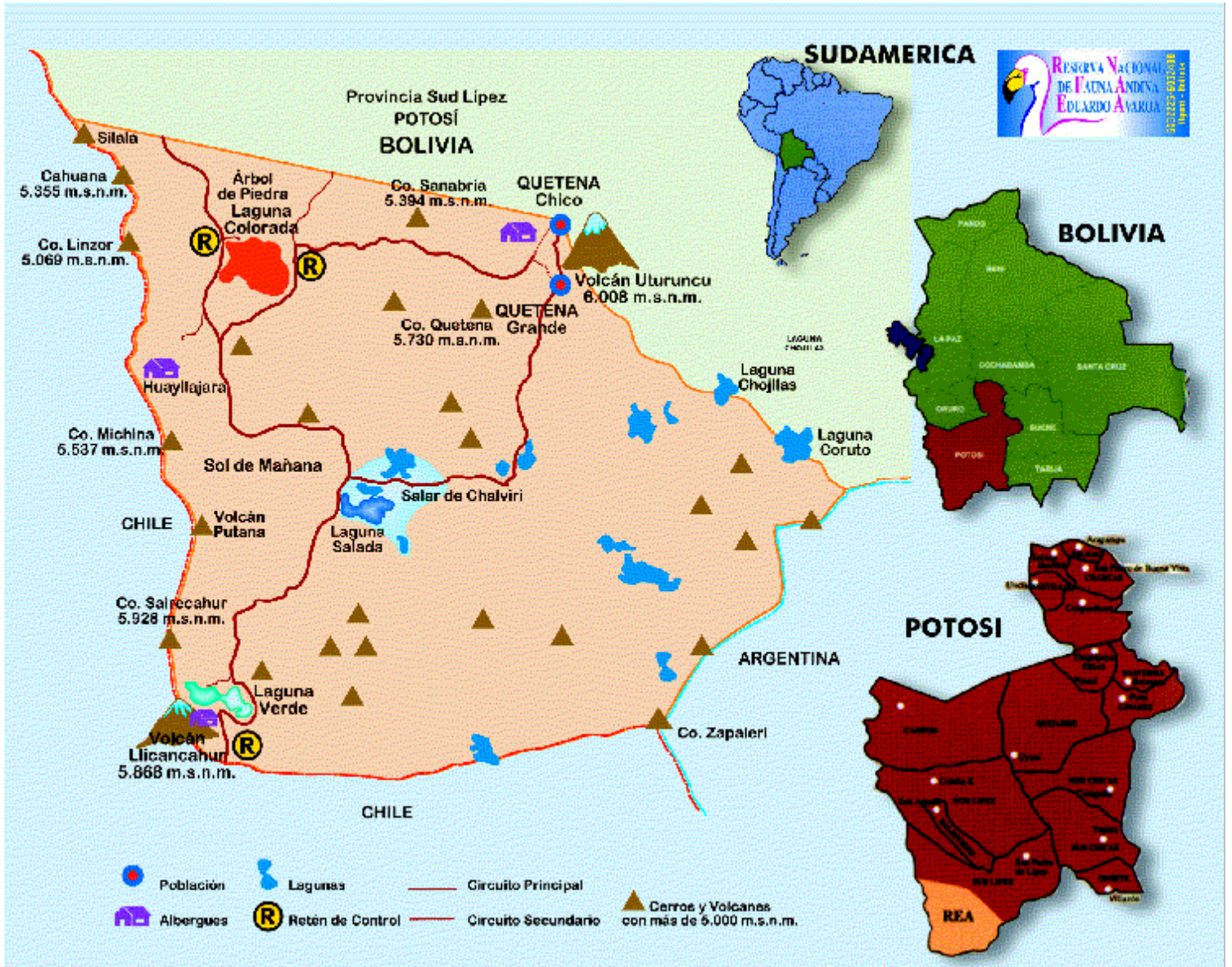
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Appendices

- 1. Map and location of the Reserve**
- 2. Consultation Workshop with Uyuni Tour Operators**
- 3. Participant Lists for Consultation Workshops**
- 4. Threat Evaluation Matrix from Site Conservation Planning workshop at REA**
- 5. Examples of fee systems in other countries**
- 6. Visitor Registration Form**
- 7. List of Tour Operators and trips registered in the REA**
- 8. Community Consultation questionnaire**
- 9. Contingent Valuation Survey form example**

Appendix 1: Map and Location of the Reserve



Appendix 2: Consultation Workshop with Uyuni Tour Operators

August 30, 2003

Objectives

- Consult tour operators regarding their experience of the SISCO
- Identify issues of tour operator concern
- Generate input for Evaluation of SISCO

Methodology

The author introduced himself, TNC and the objectives and methodology for the workshop and proceeded to describe the experience of user fee systems in other countries including in the Galapagos. He then went on to present information on the growth of tourism in the REA, income generated by the SISCO and how this income is spent. After some discussion and clarification key questions were asked of the participants.

Key Questions

1. What difficulties associate with the fee have been perceived by the tour operators?
2. What are the benefits associated with the fee?
3. Do you agree there should be a charge for visitors entering the Reserve?
4. What recommendations would you make to improve the SISCO?

After the key question consultation, the results of the price responsiveness surveys were presented and discussed. Finally, broader issues of concern to the tour operators were discussed and an agenda established for a future meeting.

Results

24 people from 16 of Uyuni's 60 tour operations participated. (20 of these have started up in the last year). This seemed very positive given that the invitations were sent out only 24 hours previously. Three individuals were particularly vocal. About 12 people actually expressed themselves during the course of the meeting. There was a strong desire expressed to establish a regular dialogue with the Reserve administration. The operators agreed that the sharp rise in visitor numbers to the Reserve was partly due to more efficient registration by SERNAP, but that tourism was increasing – as is the number of local tour operators. There was a great deal of interest to know how SISCO income was being spent and a strong assertion that there were no visible benefits of this spending in the Reserve. Alvaro Baez, REA Director presented information on investment projects underway and planned.

In response to the Key Questions:

Q1.

1. Visitors are obliged by SERNAP to pay the entrance fee in Bolivianos and this sometimes causes complaints from visitors who want to be able to pay in Dollars or Euros or in Chilean or Argentinian currency.

Q.2

1. The unanimous response both immediately and follow-up questions that there had been no visible benefits of the SISCO for tourism.

Q.3

1. There was a general consensus that an entrance fee should be charged to help finance Reserve management costs.

Q.4

1. Greater flexibility from SERNAP to accept other currencies for the tickets.
2. Some tour operators would like to purchase stocks (talonarios) of tickets to sell to their clients for greater simplicity and speed for their clients.
3. Greater transparency in how SISCO funds are spent.
4. A concern for security of the funds obtained was expressed

The trends identified in the demographic segment of the price responsiveness survey were generally recognized. One felt that higher entrance fees would be rejected by tourists without the provision of better services. No strong opinions expressed about possibly charging higher fees.

The consultation re: the SISCO was concluded and a discussion was opened and broader tourism management issues.

- Highest priority expressed was for road improvement,
- Need for toilets
- Emergency health services
- A lack of dialogue between REA admin and tour operators was a strong complaint. A request to participate in the Comité de Gestión was made.
- The lamentable condition and services of accommodation in Laguna Colorada is a major issue. They question the legal basis for community members to have exclusive rights to build lodges in the REA.
- Concern over the opening of a new SERNAP office in Tupiza.
- Concern that Tourist information Office is not always open.
- Need guidance on management of trash.
- Interest in participating in development of Tourism Management Plan
- Agreement for the need, but uncertainty about implications for tourism regulations to be implemented in the REA.

Appendix 3: Participant Lists for Consultation Workshops

Presentación SERNAP UNIDAD CENTRAL. DIC 03

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Presentación-Consulta Administracion REA/TROPICO Uyuni, Diciembre 2003

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Presentacion-Consulta Actores inc ONGs nivel nacional (en SERNAP) Dic 03

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Appendix 4: Threat Evaluation Results from the Site Conservation Planning Process for Eduardo Avaroa Reserve

Principales amenazas activas en el sitio	Lagunas saladas	Bofedales	Flamencos	Areas deserticas	Roquedales	Calificación global de amenaza	Puntuación total
Gasoducto (potencial)	-	-	-	Muy Alto	Bajo	Alto	3.02
Transito desordenado de vehiculos	Bajo	-	-	Muy Alto	-	Alto	3.02
Turismo no planificado	Bajo	-	Bajo	Alto	Bajo	Medio	1.09
Introduccion de trucha	-	Alto	-	-	-	Medio	1.00
Proyecto geotermico en Laguna Colorada	Medio	-	Medio	-	-	Medio	0.40
Asentamientos humanos	-	Medio	-	-	-	Bajo	0.20
Transporte de productos quimicos y petroquimicos	Medio	-	-	-	-	Bajo	0.20
Actividades mineras	Bajo	-	Bajo	-	-	Bajo	0.06
Pastoreo no sostenible	-	Bajo	-	-	-	Bajo	0.03
Mal manejo de basura	-	Bajo	-	-	-	Bajo	0.03
Extraccion no sostenible de thola	-	-	-	-	-	Bajo	0.03
Pastoreo de chivos	-	-	-	-	-	Bajo	0.03
Concesiones de uso de agua	-	-	-	-	-	Bajo	0.03
Captaciones de agua	-	-	-	-	-	Bajo	0.03
Aguas residuales	-	-	-	-	-	Bajo	0.03
	-	-	-	-	-	-	0.00
Estado de amenaza para los objetos focales y el sitio en su totalidad	Medio	Medio	Bajo	Muy Alto	Bajo	Alto	

Appendix 5: Examples of fee systems in other countries

Example #1: Galápagos National Park charged a tiered fee structure, as of 1998:

Galápagos National Park	
Category	US\$
Foreign tourist (non-resident)	100
Foreign tourist under 12 years	50
Foreign tourist of a member country of the Andean Community or Mercosur	50
Foreign tourist of a member country of the Andean Community or Mercosur under 12 years	25
Citizen or resident of Ecuador	6
Citizen or resident of Ecuador under 12 years	3
Foreign tourist non-resident attending a national academic institution	25
National or foreign children under 2 years	No fee

Source: Government of Ecuador, 1998

Example #2: Yellowstone National Park in the US charged the following entrance fees, as of April 2001:

- Private, non-commercial vehicle: \$20 for 7 days or \$40 annual.
- Individual (e.g., hike or bicycle): \$10 for 7 days or \$40 annual.
- Snowmobile or motorcycle: \$15 for 7 days or \$40 annual.
- Commercial vehicle: per-entry, rates vary by type of vehicle from \$25 and \$10 per person for a sedan to \$300 for a motorcoach (bus). (Lindberg and Halpenny 1999)

Appendix 6: Visitor Registration Form

REGISTRO DE INGRESO DE TURISTAS A LA RESERVA NACIONAL DE FAUNA ANDINA "EDUARDO AVAROA"					
Nombre de la Agencia				Placa y Color Vehículo	
Nombre del Chofer				No. Licencia	
Nombre del Guía				No. Registro	
Retén de Control				Fecha de Ingreso	
No.	Nombre y Apellido First and Family Name	Sexo Sex	Nacionalidad Nationality	No. Pasaporte Passport Number	Número de Factura Ticket Number
OBSERVACIONES					

7: List of Tour Operators and trips registered in the REA

NÓMINA DE AGENCIAS QUE INGRESARON A LA R.E.A.																																				
PUESTO DE CONTROL FLAMENCO																																				
CORRESPONDIENTE AL MES DE																																				
ENERO, 2002																																				
No.	Nombre Agencia	FECHAS																														TOTAL				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	INGRESOS			
1	AMANECER						1	2							1					2																6
2	ANDREA	1			1	1		1	1		1	1					1							2				1					1			12
3	BRAULIO EXP.																			1																1
4	BRISA															1												1								2
5	COLQUE	1		2	5	4	7	2	4	2	3	3	3	1	4	2	4	6	1	3	6	5	4	4	5	3	3	4	3	4	3	4	3	4	105	
6	CORDILLERA										2			1				1	1		1			2	2										10	
7	CRISTAL										2			1						1			2									1			7	
8	DAYANA	1															1		1											1					4	
9	DESIERTO															1				1		1	1												4	
10	ESMERALDA				1			2		1									1		1	1													7	
11	EURO	1			1	1			1	1		2	2	3		2	2		2		3	1	4			1	1	3			1			32		
12	JULIET	1						1						1	2				1	1	1	1				2		1						12		
13	KANTUTA					1						1																							2	
14	LA PAZ TOURS																										1									1
15	LICANCABUR					2	2		1							1			1		1		1	2							1				11	
16	LÍPEZ								1																											1
17	NO IDENTIFICADO			1	1																															2
18	NUEVO MILENIO																																	1		1

Appendix 8: Community Consultation questionnaire (in Spanish)

Evaluación del Sistema de Cobros a visitantes (SISCO) en la Reserva Eduardo Avaroa (REA)

La REA es, desde 1999, la base de un programa piloto para generar ingresos económicos para el manejo de la Reserva. Por acuerdo entre SERNAP, las comunidades de Quetena Grande y Quetena Chico, y el Municipio de San Pablo de Lipez, se destina 25% de los fondos recaudados a proyectos de desarrollo sustentable en las comunidades.

Ahora, con el afán de evaluar este programa piloto del SISCO, una organización internacional – The Nature Conservancy está en proceso de consultar con los actores locales sobre cuáles han sido los impactos del SISCO.

A continuación se encuentra un cuestionario a los dirigentes de cada comunidad, a quienes les solicitamos su colaboración en la evaluación respondiendo a las siguientes preguntas.

1. Ha sido beneficioso el SISCO para su comunidad?
Si responde SI, por favor pase a pregunta número 2
Si responde NO, por favor pase a pregunta número 4

2. De qué manera ha sido beneficioso?

3. Qué proyectos se han podido implementar en su comunidad a través del apoyo de SERNAP con recursos del SISCO?

4. Ha sido negativo para su comunidad, la implementación del SISCO?

Si responde SI, favor indicar cómo?

5. Está de acuerdo que el aporte de SERNAP a su comunidad sea usado para inversiones en :
 - i) Establecer fuentes de energía sustentable?
 - ii) Educación y Capacitación?
 - iii) Desarrollo en proyectos productivos sustentables y compatibles con los objetivos de la REA?
 - iv) Otras cosas? – favor de indicar cuáles?

6. Favor use este espacio y otra hoja si desea para añadir cualquier comentario adicional sobre el SISCO.

Appendix 9: Contingent Valuation Survey form example

Interviewer use only

Date _____ Interviewer _____ Survey No. _____ Version CV-1

Self completed _____ OR Administered by interviewer _____ Location _____

Tour Operator:

Reserva Eduardo Avaroa Visitor Survey



Conducted by
The Nature Conservancy

This survey is **voluntary**, **anonymous**, and completely **confidential**. Please answer all of the questions. If anything is unclear, please ask the interviewer who gave you the survey. Thank you for your participation!

1. Please circle the appropriate number to indicate whether you are completing this survey as an individual or as a couple or family. If you are a couple/family, please write how many people are in your family group.

1. As an individual
2. As a couple/family – there are _____ of us traveling together as a couple/family

(for the following questions, when we say "you" or "I" we are referring to your family group)

2. Next, we'd like to find out more about your current trip. By "trip," we mean the period from when you left your home (usual place of residence) to when you will return home.

How many days will you spend...	Days
a. in total on this trip	
b. in Latin America	
c. in Bolivia	

3. During the days you are spending in Bolivia, are you traveling as part of a tour package (booked with an operator or travel agent), traveling independently, or some of both?

1. I am traveling as part of a tour package for the whole time in Bolivia
2. I am traveling independently for the whole time in Bolivia
3. For some of the time in Bolivia I am traveling as part of a tour package and for some I am traveling independently. Please write how many days you are spending:

a. as part of a tour package _____ days **and** b. traveling independently _____ days

4. Approximately how much money will you spend in total for your time in Bolivia – including airfare (if you are flying to/from Bolivia), accommodation, food, souvenirs, and other expenses? If you are traveling as part of a tour package, include both the cost of the package and the cost of any items not included in the package – if the package covers travel both in Bolivia and elsewhere, please estimate how much of the cost is for the Bolivia portion.

Please specify the amount and currency (for example, US\$, euros, £, or bolivianos).

Individuals:

I will spend approximately: _____

Couples/families:

We will spend approximately: _____ per person

or

We will spend approximately: _____ total for _____ persons

5. In question 2, you wrote how many days you will spend in Bolivia and in Latin America as a whole. In the following table, please write how many days in total *during this trip* you will spend in Eduardo Avaroa Reserve, how many days in other Bolivian nature reserves or parks, and how many days in nature reserves or parks outside of Bolivia. (If you do not know the exact number of days, please write your best estimate.)

Area	Days
a. Eduardo Avaroa	
b. Other nature reserves or parks in Bolivia	
c. Nature reserves or parks in other countries	

6. In Eduardo Avaroa, the Bolivian Park Service charges visitors US\$5 (€5) per person to pay for protecting the reserve (the fee is only paid once, regardless of how many days you stay). The Park Service may decide to charge a higher fee – with money being used to improve visitor services and facilities. For example, the income would be used to build and maintain a visitor center and to train local naturalist guides.

This fee would increase the cost of your visit, as operators would add it to your tour price. We would like to know how this would affect your trip. Please assume that the fee changes only at Eduardo Avaroa – not at other parks.

If the trip price had been US\$10 (€10) higher than what you paid, would you still have come to the reserve? (Please circle the appropriate number.)

1. Yes, I would still have come to Eduardo Avaroa.
2. No, I would not have come to Eduardo Avaroa (I would have gone elsewhere or not visited parks).

Lastly, we'd like to learn more about the characteristics of people that visit Eduardo Avaroa Reserve. All responses are confidential, and we will not ask your name or anything else to identify you.

For questions 7 through 10, please answer only for yourself, even if you are completing the survey as a couple or family.

7. Where do you live? (Please circle the appropriate number.)

- | | |
|------------------------------------------------------------------|----------------|
| 1. United Kingdom | 4. France |
| 2. Germany | 5. Netherlands |
| 3. United States | 6. Switzerland |
| 7. Another country – please write the name of your country _____ | |

8. What is your gender?

1. Female
2. Male

9. What is your age?

- | | |
|-------------------|---------------------|
| 1. Under 18 years | 4. 40 - 49 years |
| 2. 18 - 29 years | 5. 50 - 59 years |
| 3. 30 - 39 years | 6. 60 years or over |

10. What is your highest level of completed education?

- | | |
|---------------------------------|----------------------------------------------------------|
| 1. Primary school
Bachelors) | 3. Undergraduate college/university (e.g.,
Bachelors) |
| 2. High school (diploma) | 4. Graduate (e.g., Masters or Ph.D.) |

11. What is your pre-tax income per year *from all sources*? Those answering as *individuals* should circle the number that shows their individual income. *Couples/families* should circle the number that shows their combined household income.

a. If you know your annual income in US\$ (US dollars) or in € (euros), please circle the relevant number from this list:

- | | |
|---------------------|-----------------------|
| 1. Less than 20,000 | 5. 80,000 to 99,999 |
| 2. 20,000 to 39,999 | 6. 100,000 to 119,999 |
| 3. 40,000 to 59,999 | 7. 120,000 to 139,999 |
| 4. 60,000 to 79,999 | 8. 140,000 or above |

b. If you do not know your income in US\$ or €, please write the name of the currency and the amount in the following spaces:

Currency name: _____ Amount: _____

Thank you for completing this survey! If you have any further comments about the Eduardo Avaroa Reserve, your guide, or other aspects of your visit, please write them on the back of this page. When you are finished, please hand the survey back to the interviewer.