

Ordenamiento del turismo ecologico en el Parque Nacional Noel Kempff Mercado (PNNKM)

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Resumen Ejecutivo

Este informe sirve para la parte económica del documento de planificación en el proyecto "ordenamiento del turismo ecológico en el Parque Nacional Noel Kempff Mercado (PNNKM)".

La **análisis de mercado** muestra que PNNKM tiene su potencial principal en el segmento de observadores de aves. Los turistas con interés más general de naturaleza tienen también alternativas más baratas y con acceso más fácil. El potencial tiene que ser clarificado en contactos directos con operadores especializados. Una demanda alrededor de 500 hasta 1'500 noches en PNNKM es probable, a largo plazo pueden ser más.

Algunos elementos de un plan de mercadeo son mencionados en el informe. Es muy importante de establecer una lista más detallada de los elementos de la oferta natural y de elementos de itinerarios. El acceso del lado de Brasil debe ser analizado. Una cooperación con Brasil es importante para evitar impactos negativos (pescadores, basura).

La calculation de **costos y beneficios** **sigun** las tarifas propuestas muestra que 860 noches cada año son necesarias para cubrir solo los costos fijos de operación de Flor de Oro y del departamento ecoturismo de FAN. A largo plazo también las inversiones (pagadas por COTESU) tendrían que ser amortizadas para un desarrollo económicamente sostenible: Eso significa que 2'200 noches cada año son necesarios. Es recomendable de extender las actividades de FAN en los paquetes (y incluir también servicios de organización en Santa Cruz y el servicio de avión) por ejemplo para aumentar las ganancias de FAN.

Los **beneficios para las comunidades** de la zona (fuente de trabajo, venta de productos) son relativamente pequeños pero la idea de un flotel (hotel flotante) y un alojamiento simple en Piso Firme parece económicamente viable. Es muy importante de incluir Pimenteiras en el proyecto para evitar impactos negativos (basura) etc.

Los **beneficios para PNNKM** son las entradas y los proyectos especiales financiados por la "donación para proyectos de FAN" incluida en la tarifa. Con 800 noches un ingreso de 10'000 \$ de entradas y de 50'000 \$ para proyectos de FAN es posible.

La **conclusion** es que va ser muy difícil - pero no imposible - de obtener un desarrollo económicamente sostenible (incluso una amortización de las inversiones). Del punto de vista de FAN el proyecto parece positivo y para el parque y las comunidades también, pero los beneficios son relativamente pequeños. Para los financiadores (COTESU) la inversión puede ser justificada si se valora el efecto de un proyecto piloto para el ecoturismo.

En los **aspectos de organización** se recomienda

- de bien clarificar el rol de FAN en la relación con las autoridades del parque y el gobierno y de definir como utilizar ganancias de ecoturismo
- de estudiar una separación del departamento de ecoturismo - creando una sociedad "FAN-ecotur"
- de manejar Flor de Oro como "profit center" con una cuenta separata y clarificar las responsabilidades.

Summary

1 Scope of the study

The development of tourism at Noel Kempff Mercado National Park (PNNKM) in Bolivia is currently being planned with support from the Swiss Government's Technical Cooperation COTESU. This report is a subreport for the planning document focusing only economic aspects. The main tasks of the consultancy were a marketing analysis, calculations about rentability (economic feasibility) and some remarks concerning management.

2 Market analysis

2.1 The offer

- ❑ PNNKM offers one of the best places in South America for bird-watching. For more generally interested ecotourists, the good probabilities to see animals like giant otters, dolphins and jaguars as well as the waterfalls are attractive but PNNKM may look not very different from other South American jungle sites to many of them.
- ❑ Flor de Oro is a very good infrastructure base but the interpretation and the other infrastructure items need improvement (which is planned).
- ❑ Due to the difficult and costly access, PNNKM will certainly be a destination with relatively high prices. Access from Brazil has to be explored in more detail.

The main recommendations are:

- ❑ establish a list of the natural resources including place, time and probability of seeing different types of animals and a list of elements of itineraries including length, attractions/difficulties
- ❑ consider additional, perhaps simpler lodging capacity at Flor de Oro (as planned within the COTESU-project)
- ❑ stress a careful development of trails, interpretation and other touristic facilities at Flor de Oro (from maps to sport activities)
- ❑ make sure that a person with "a western eye" and good English knowledge is present at Flor de Oro at least when groups are there
- ❑ evaluate costs and possibilities of an access from Sao Paulo/Vilhena by air/bus.
- ❑ develop a program to support protection activities on the Brazilian side and try to prevent garbage in the river
- ❑ pay attention to a careful evaluation of the carrying capacity of each site

2.2 The demand/the market

There are different market segments to be considered:

- a) the **bird-watchers** are a small but growing and economically powerful segment; due to the special attractions of PNNKM this should be the **main target**; it will be possible to have between 2 and 5 groups per year, but more reliable information will be the result of direct contacts with the operators
- b) the **more generally interested visitors** are a larger segment but they have better alternatives; after a good development of infrastructure and interpretation, a limited number of groups will be attracted; business people living in or visiting Bolivia could be another target group
- c) the **Brazilian fishermen** (of course with limited fishing activities) could be attracted for short trips on the river and maybe a night at Flor de Oro - a combination with a floating hotel (see below) could be interesting
- d) the **scientists** are an interesting segment if they produce knowledge about the park - the demand for a good working base (Flor de Oro) in a scientifically highly interesting park will certainly create a flow of some groups per year.

The **positive points** of the analysis of the demand for PNNKM are:

- the important segments are growing and large enough for the small needs of PNNKM
- the general image of nature tourism managed non-commercially through an environmental organisation is good
- there are good and specialised international operators with their client network established
- even if there are powerful competitors, PNNKM has its advantages especially in the bird-watching segment and being a pristine, (hopefully) well protected and non-commercially managed area.

The **negative points** are:

- the segment interested in PNNKM is small - and difficult to foresee precisely
- the demand will not be a result of tourism already existing to Santa Cruz or Bolivia but has to be newly established
- Bolivia has so far no image (and no specialised operators) for ecotourism
- many competitors at the international level have important advantages (price, access, image, infrastructure, attractiveness)
- the infrastructure and the interpretation has still to be developed

If PNNKM would need 20'000 nights per year one would certainly be very sceptical about the potentials. As we are talking about maybe 500 - 1500 nights to begin with, I believe that the potentials are enough. However it will be the only way to get more precise and reliable information by **contacting directly some of the best specialised operators**. Additionally, a questionnaire should be designed to find out as much as possible about the impressions, desires etc. of tourists at PNNKM.

2.3 Guidelines of a marketing plan

The product

- ❑ The product offered should be concentrated on bird-watching tourism and with second priority on general nature tourism. A high standard of interpretation and information (maps, information papers etc.) is necessary.
- ❑ The access from Piso Firme should not be strongly marketed as the road is bad and the control for FAN is difficult. However the idea of a floating hotel (flotel) used also by Brazilian visitors looks promising.
- ❑ It is crucial and urgent to define possible elements of itineraries (based on a more detailed analysis of the offer).
- ❑ Because of the high specialisation of the product, a combination with other possible sites in Bolivia (Andes, La Paz) should not be a point of priority.
- ❑ As a general recommendation, the development and the marketing of the product should be done step by step because of the uncertainty of demand and of the ecological carrying capacity.

The price

Prices will be high because of the costs. This is a chance to prevent an overflow of tourism. Pricing suggestions are given in chapter 3.

The distribution and promotion

The promotion of FAN should be oriented towards operators and environmental organisations and not directly to the clients. This means that a good documentation with a lot of background information should be established in English but not a folder for the public. The promotion should then be done directly through contacts with selected operators.

3 Costs and benefits

3.1 Costs

An analysis of the different cost items can be summarised as follows (US \$):

Yearly amortisation of costs of all investments incl. those paid by COTESU	98'000
Fixed operating costs ecotourism staff and Flor de Oro	63'470
Operating/protecting costs PNNKM	226'000

The variable costs of tours were also calculated in detail.

3.2 Tariffs

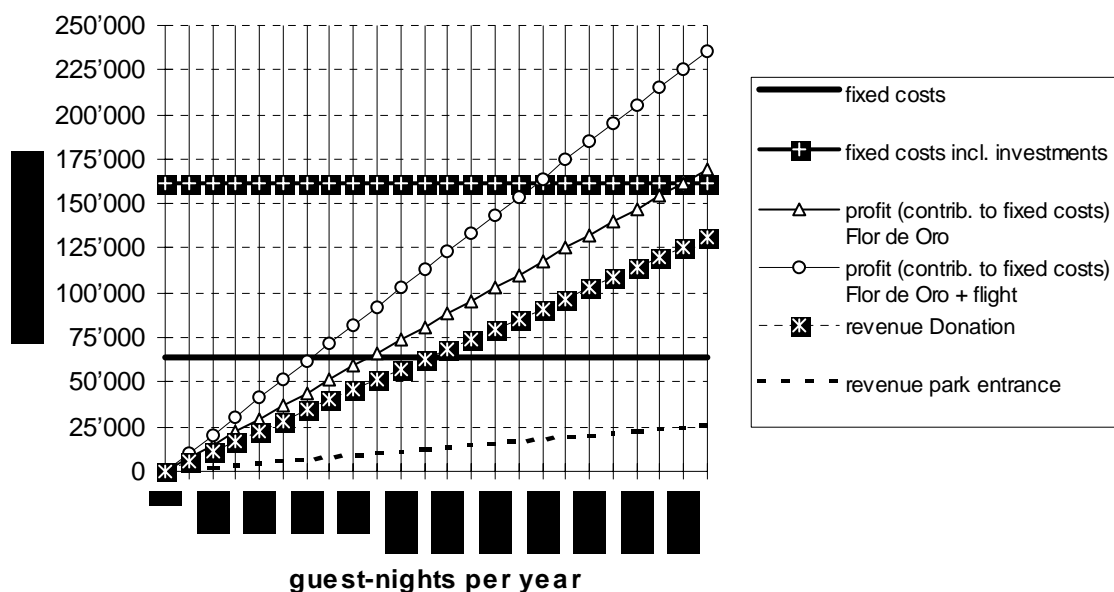
A tariff scheme was developed for different categories of visitors. Some of the most important tariffs for foreigners are:

Night at Flor de Oro	90 \$
Entrance fee per week used for the park	60 \$
Donation for special FAN-projects per week ⁽¹⁾	300 \$

3.3 Scenarios and break-even points

With the costs and the revenues calculated the break-even points were discussed. A "standard tour" was defined including 5 nights at Flor de Oro in order to simplify calculations - take the results as rough indicators! The "key number" is that per night a profit (contribution to fixed costs) can be expected of around 74 \$. Figure S-1 shows the results.

Figure K-1: How many nights to cover fixed costs?



- With the tariff scheme proposed, around 860 tourist nights per year will be necessary to cover variable and fixed ecotourism costs and at the same time generate contribu-

¹ The "donation for special FAN-projects" was introduced because we think that generally tourists will be willing to spend money for projects of an environmentally oriented NGO if they are somehow related to the park. Of course, these projects should be specified clearly, e.g. garbage prevention project on the Brazil side of the Rio Itenez, lowering entrance fees for Bolivians etc.

In order to allow additional expenditure for the enthusiastic we mentioned two kinds of sponsor clubs, named Noel-Kempff-Club and Golden-Otter-Club, just to remind the fact that some kind of support organisation should be created.

tions of 10'500 \$ to the park (entrance fees) and 52'000 \$ for special FAN-projects (donations).

- ❑ As a mid or long term objective, around 2'200 nights would be necessary to cover also the costs for capital and depreciation of the investments.
- ❑ An extension of FAN's activities - selling larger packages including more services - would result in higher profits, especially providing aircraft services with FAN-planes and pilots. These operations should be charged at full costs to the ecotourism department. If the ecotourism department can sell the flights above these costs the profit should not go to the aviation department. This would result in a reduction of the number of necessary nights to cover fixed costs: 700 nights will do in this case (1900 to cover also investments).
- ❑ For the case of success where FAN would make a considerable profit from ecotourism, a solution should be defined about how to use the money (considering the fact that the investments will have been sponsored by COTESU, the profits cannot simply be used for any FAN-project). The best will be to define that any profit from ecotourism will be kept in a fund where also the sponsors and the national authorities will control the use of the money.
- ❑ The numbers of necessary nights for a sustainable tourism are relatively high. Even if we assume a bit larger groups staying a bit longer than mentioned above, let's say groups of 15 people staying 7 nights within the park, a financially sustainable path would be quite ambitious: About 8 such groups in the first years, about 20 groups afterwards to cover also investments. It is therefore not sure if an economically sustainable development (covering also investment costs) will take place in the long run.

3.4 Benefits to communities?

The benefits to local communities will be rather small in this project. This is due to the small scale of the tourism and the unfavourable geographical conditions of the Bolivian communities around the PNNKM. The expectations should therefore be rather low.

At least the concept of a basic lodge at **Piso Firme** and a flotel operating from there could offer an interesting opportunity for the involvement of this community and at the same time be an interesting complement for the touristical offer at Flor de Oro, especially for Brazilians.⁽²⁾

Other benefits were examined: The job creation effect will however hardly be more than 20 Bolivian jobs unless large parts of the revenue from the donations will be invested in specific (maybe non-touristic) projects.

² Some calculations were done for costs and revenues: The ticket at full cost (but no profit) would then be around 32 \$ for a one-day trip and 64 \$ for a two-day trip with excursions. A profit would have to be added. For the tourists, the entrance fee to the park would be an additional cost item. These very provisional estimations show that it could be possible (not certain) to offer reasonably attractive services at acceptable prices - more detailed planning and budgeting is however needed.

The most important point is: Not Piso Firme alone will be the community to integrate into the project - **Pimenteiras** and the other small settlements on the Brazilian side will affect tourism much more and should therefore be involved explicitly.

3.5 Benefits to the park

The park will benefit from the entrance fees (with 800 nights: around 10'000 \$) - not much compared to the costs of park maintenance of around 230'000 \$.

It will also benefit from special projects financed through the donations and from better motivation and a possible extension of the protection activities towards Piso Firme.

On the other hand there might be damages caused by tourism - a point beyond the scope of this report. The question is if no tourism would be the better solution for the park. Not knowing the exact negative impacts of tourism, an answer is difficult. However, the different benefits mentioned, the relatively low risk of important damage due to careful planning and the small scale of tourism are indicators that a well managed and controlled tourism is a better alternative than a difficult prevention of any tourism at all.

3.6 Benefits to the visitors

Most visitors will enjoy visiting PNNKM very much and therefore get a benefit as well, most of them being foreigners however (this can improve the international image of Bolivia and help for other touristical developments). Lower tariffs for Bolivians will allow them to travel to PNNKM but the expected number of national visitors is small.

3.7 Conclusions

The question of this chapter was: Is tourism at PNNKM economically feasible and sustainable? For whom is it worth-while? The answer is difficult because of uncertainties about the touristical demand for an offer which is not easy to compare and to analyse in advance. However, our conclusions are as follows:

- It will be difficult but not impossible to get an economically sustainable tourism at PNNKM.
- There are some limited possibilities to improve rentability
- If this rather optimistic scenario will happen the park will benefit through the entrance fees
- The local communities could get some limited benefits from the projects
- The tourism will mainly but not only be for foreign upper class people

The cost-benefit-analysis from different perspectives leads thus to the following conclusions:

- ❑ **For FAN** the risk not to get around 800 nights per year seems reasonably limited and therefore there is a good chance that benefits are higher than costs. For FAN the project is certainly worth-while.
- ❑ **For both the park and for the local communities** the benefits will be relatively small but the opportunity to realise a small scale touristic project in Piso Firme has a good chance to be economically viable - to sum up: "not much but more than nothing".
- ❑ **For the sponsors** (COTESU), the outcome of their investment is also rather positive. However it will be difficult (but not impossible in the long-run) that tourism activities will also "pay" in a socio-economic sense for the investments sponsored by COTESU. Part of the benefits will go to the visitors who will mainly consist of foreign groups. The benefits to the park and the communities are rather small. It is thus open to discussion if other forms of development projects will have better outcomes or not per dollar invested. If the project is seen as a pilot project where a lot of experiences will help to improve tourism planning and management in other areas of Bolivia, the balance of costs and benefits looks reasonable.

The **recommendations** are therefore

- ❑ Realise the investments - considering the recommendations made
- ❑ Try to improve the cost-benefit-ratios through a reduction of costs and an enlargement of FAN's touristic activities
- ❑ Carefully plan the infrastructure and the flotel for Piso Firme and its touristical concept; provided our estimates are confirmed, realise the investment.
- ❑ Do not exaggerate the expectations concerning additional benefits for the park and the local communities.

4 Management

The main recommendations of this chapter are:

- ❑ The status of FAN as park administrator and especially as ecotourism operator must be clearly defined in agreements with the government. The status of FAN as an exclusive operator should be discussed at the end of the COTESU-project even if it looks very reasonable to go ahead with this model.
- ❑ A legal separation of ecotourism activities from FAN should be discussed with the aim to create a FAN-ecotur-corporation under control of FAN. The advantages would be more flexibility, clearer financial separation from donations and with respect to liability problems.
- ❑ The use of any possible profit from ecotourism after the COTESU-project period should be discussed, defined and controlled.
- ❑ The management at Flor de Oro needs some improvements: Financially it should be managed as a profit centre, charging to the other FAN-project budgets for food,

lodging and boat use at Flor de Oro. The responsibilities should be defined more clearly as should be the working program and the protection rules.

- Rather more personal capacity should be attributed to project management of the COTESU project within FAN.

5 Final remark

It is certainly very difficult - but not impossible - to obtain an economically sustainable development (considering the investments) and important additional benefits with this project - PNNKM is a wonderful site but not easy to sell. The advantage is that a careful planning is possible and an environmentally conscious team is at work. I think it is therefore worth-while to realise this project and hereby get a lot of experiences for further ecotourism activities in Bolivia.