

Eco-Tourism Business Plan as Strategy on Income Generating Schemes from Non-Timber Forest Product (NTFPs) for Arsi Mountains National Park, Dhera-Dilfaqar Block, Oromia, Ethiopia

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Abstract

Dhera-Dilfaqar block is a 13.4km² area of wildlife habitat that has been designated as a protected area by Oromia Region in 1995 and harbours some 25 species of mammals and more than 150 bird species. Due to its good access and its proximity to Sodere Resort and to the Adama city, the park offers good prospects for eco-tourism development. Although the Park was declared a protected area, it is still accessible and to some extent used by the bordering communities for grazing and cutting grass for housing.

Based on the site specific strategy's recommendations and field visits to the area, an assessment of potential activities and services was carried out. The activities proposed encompass as strong income generating and benefit sharing effect for the local communities while at the same time targeting at generating revenue for the Enterprise from entrance fees. First priority shall be given to guide wildlife observation services, in particular guided wildlife tours on foot, guided tours on horse or camel, and coach rides.

These activities at any circumstances shall avoid to overstraining the Park's carrying capacity. However a few constructions works, in particular the establishment of a visitor information centre are required. Even more important is training local community members to providing qualified guide services. In addition some promotion activities are necessary to attract the targeted number of visitors, which is assumed to be rising from approximately 1.000 in the first year to about 5.200 in the fifth year of operation. The cost assessment projects total investment cost for the project amount to approx. ETB 406.000.

In scenario 1, with investments paid from existing assets, the 5-years operating result shows a total net profit of approx. ETB 856.500 which equals almost 102 % of the operating cost including costs of keep-up/depreciation. The venture is profitable already in year one. As a result of the investment cost, a cash-flow of approx. -403.300 ETB can be expected for year one. From year two onwards a positive cash-flow development of approx. ETB 70.000 (year two) to approx. ETB 340.900 in year five is being projected. The overall cash-flow in this period is at approx. ETB 453.200. Under the present scenario the break-even point is reached in year four. The 5-year Net Present Values (NPV) compared to a 5 % bank deposit (scenario 1b) and 10 % returns on investment (scenario 1a) respectively are both positive at ETB 928 and ETB 3.360 respectively.

In scenario 2, with investments paid from bank loan at 8,5 % interest p.a. an no repayment, the 5-years operating result shows a total net profit of approx. ETB 721.400 which equals almost 86 % of the operating cost including costs of keep-up/depreciation. The venture operates at profitable level from year two onwards. As a result of the investment cost, a cash-flow of approx. -437.700 ETB can be expected for year one. From year two onwards a positive cash-flow development of approx. ETB 36.000 (year two) to approx. ETB 307.000 in year five is being projected. The overall cash-flow in this period is at approx. ETB 283.700. Under the present scenario the break-even point is reached in the course of year five. The 5-year Net Present Values (NPV) compared to a 5 % bank deposit (scenario 2b) and 10 % returns on investment (scenario 2a) respectively are both negative at ETB -3.508 and ETB -2.512 respectively. This means that in the middle run and with an annual number of 3.100 to 5.200 visitors the Park could be run at a quite profitable level and benefit sharing from entrance fees with communities would be feasible. Still, at present it cannot be assessed whether the targeted visitor figures would overstrain the Park's carrying capacity. Besides the option of direct benefit sharing from entrance fees, income opportunities for community members are estimated at minimum 25.000 ETB per thousand visitors. The success of the Park as eco-tourism destination however will mainly depend on a clever and effective marketing strategy.

1. Introduction

The Oromia Forest and Wildlife Enterprise (OFWE) considers eco-tourism as one of its core businesses. As eco-tourism is gaining increasing national and international attention, it can provide a substantial opportunity for income generation for local communities and thus an incentive to sustainable use and management of natural resources. In prior consultancies the tourism potentials of various a under the administration of the Enterprise with their physical, biological and cultural aspects have been thoroughly assessed and evaluated. Subsequently candidate sites could be ranked according to a set of criteria in order to facilitate the priority setting for future

development activities building on both a corporate strategy and site specific strategies.



Fig1. Image of Adult male Greater Kudu in Dhera Dilfekar block

2. Objective

In his present assignment the international short term expert shall translate the business strategy into business plans for highly ranked candidate sites and evaluate their viability based on different business scenarios.

3. Methods

The eco-tourism business plans have been elaborated jointly by a team of wildlife and eco-tourism experts from OFWE-branches Fin Fine and Arsi and with support of ZESMAN Consultancy. They are furthermore based on

1. The Eco-tourism Development Strategy 2011-2015¹
2. An already existing project proposal on eco-tourism in Suba-Sabata² and other forest areas under management of the OFWE
3. Field visits
4. Given OFWE policies, structural and financial premises, and
5. Stakeholder and experts consultations

4. Drafting Eco-tourism Activities and Services

Due to time short time available for the consultancy and the composition of the team, only two of the top four ranked sites were selected for detailed businesses planning, which are Suba-Sabata (ranked 1) and Dhera-Dilfaqr Block (ranked 3). The task force and the team leader agreed that it should be possible to adapt the business planning for other sites from those two plans developed by the task force.

4.1 Portfolio of Activities and Services at Dhera-Dilfaqr Block

4.1.1 Overview of the area

Dera dilfekar block is a 13.4km² wildlife habitat that has been designated as a protected area by Oromia Region in 1995. Since 2010 it is under the administration of the OFWE. It extends from the rapids of Awash River near Sodare to the town of Dhera. Dhera has been selected as headquarters of Arsi Mountains National Park.

Although the Park's area is quite limited, it harbours some 25 species of mammals, in particular the Greater and Lesser Kudu, the Spotted Hyena, the Caracal, the Common Warthog or the African Leopard. In addition more than 150 bird species are abundant.

¹ ZESMAN Consultancy, 2011

² Teketel Fetene (2001 G.C.): Project proposal on the opportunities of eco-tourism surrounding Fin-Fine

The town of Dhera, counting some 20.000 inhabitants, is currently witnessing and accelerating urban development which is due to the neighbouring expanding sugar cane plantations and its location on the transport axis between Adama and Assela. As a result also the number of accommodation facilities is increasing.

Due to its good access, the proximity to Sodere Hot Springs Resort, a recently privatized recreational area frequented by about 150.000 guest per annum, and to the capital of Oromia Regional State, Adama with some 250.000 inhabitants, the Park offers good prospects for eco-tourism development.

Yet, to present, no major activities related to wildlife and eco-tourism have been started. The number of visitors is supposed not to exceed 50 per year.

Although the Park was declared a protected area, it is still accessible and to some extent used by the bordering communities, e.g. for grazing and cutting grass for housing. In order to stipulate community based forest management as by Article 4(3) of the Oromia Forest proclamation the Community Based Dilfaqar Park User Group Association is in the process of formation. Facilitated by ASDA the Association for Sustainable Development Alternative community representatives for the adjacent Kebeles and the Woreda Agricultural Rural Development Office have drafted bylaws that shall a.o. give “user groups the power and accountability for the proper protection of the park” and “ensuring that the products of the parks are used in a sustainable way”¹

4.1.2 Activities proposed

The eco-tourism strategy report identifies two major challenges or threats to eco-tourism, namely the absence of coordination between different stakeholders, in particular the OFWE, the District Culture and Tourism Office, the private sector and the user group.

In addition, despite the existing fencing of the area towards the roadside, increasing traffic on the new tarmac road imposes a direct threat to wildlife and travellers.

Based on the site specific strategy’s recommendations and field visits to the area, an assessment of potential activities and services was carried out. The activities proposed hereinafter encompass as strong income generating and benefit sharing effect for the local communities while at the same time target at generating revenue for the Enterprise from entrance fees.

The main attraction of the park certainly is its diverse wildlife. Due to its hilly character, a number of vantage points offer a natural opportunity to simply enjoy the landscape and observe wildlife. At the same time wide areas of the park can be explored by different means of transport.

In order to preserve and restore the landscape’s natural beauty, disturbances both by human access and constructions shall be kept to a minimum. Instead guided wildlife observation services shall be built up to cater the various needs of future customers. These services shall include development of

- Guided wildlife tours on foot,
- Guided tours on horse or camel, and
- Coach rides.

To facilitate these services, only a few constructions works are required. More important in this context is to involve the local communities and build the necessary capacities for quality service provision. In addition some promotion activities shall be proposed to attract the necessary number of visitors.

However it shall be considered that the Park’s carrying capacity must not be overstrained. Visitor numbers therefore shall be limited (initial assumption: 50 visitors/day, 5.200/year), wildlife behaviour shall be monitored by the wildlife guides and experts and retreat areas shall be designated and demarcated.

5. Business Plan and Cost-Benefit Analysis for the Dhera-Dilfaqar Block

Based on the strategy and the proposed activities, a cost-benefit-analysis is carried out. It covers the following elements:

- Initial investment costs,
- Operating costs including costs for upkeep/depreciation, and
- Expected revenues from fees, rent and services provided.

5.1 Investment Activities

Although a strong involvement of the communities in providing eco-tourism services shall be given high priority, it is being assumed that the OFWE would take responsibility to set and maintain the infrastructural framework for all major tourism activities. This also applies to major capacity building and promotion activities.

The investment activities can be categorized as follows:

- Investment in common infrastructure (e.g. visitor centre),
- Investment in general promotion (e.g. flyers, brochures, promotion tours, public-private partnership)

¹ Association for Sustainable Development Alternative (ASDA), 2007 (EC): Community Based Dilefekar Park Protection, Rehabilitation and Development User Group Bylaw

workshop, radio spots, publicity),

- Investment in general capacity building (e.g. at OFWE level, community awareness raising, eco-tourism forum meeting),
- Activity-related investment in infrastructure (e.g. camp site, trails, view point pavilions),
- Activity related investment in promotion (e.g. specific flyers, maps etc.), and
- Investment in activity-related capacity building and training (tour guide trainings, small business development workshop, horse keeping training).

5.1.1 Investment in Common Infrastructure

Visitor information centre

The visitor information centre as the entrance point to the area is considered the core element of the Dhera Dilfaquar Park. It shall be given an attractive, innovative name that somehow relates to the main functions of the park. A re-naming to *Greater Kudu Wildlife Park* should be seriously considered as it reflects its main attraction. The centre shall be located at the Western entrance of the park.

It shall have the function of reception and service centre to visitors, providing them with all the necessary information and customer advice. It shall be the starting point for all guided tours. At the centre, fees shall be collected, and guided tours shall be arranged.

As it is a place where customers may stay for a short time, it shall provide an atmosphere of hospitality and service, which would include some parking facilities, sitting accommodation, sanitation facilities.

The service centre can also serve as a sales point for souvenirs and soft drinks. Thus some space shall be provided for a small souvenir counter that could be rented out to a local small business association.

As this shall be a model site for eco-tourism, the construction shall be carried out in local style, wherever possible with local materials. Solar-powered electrification shall be considered but are not included in the plan.

The Enterprise has planned to also establish the Arsi Highlands Park's headquarters at the same location and construction plans including cost calculation already exist. However the plan at present does not provide explicitly facilities for visitor reception and management. We therefore suggest to adding an additional reception premise, either as separate building or as annex to the planned structure.

5.1.2 Investment in Site Promotion

At present no noteworthy touristic wildlife observation activities has been recorded. Visitor figures are not available.

As the Park is even hardly known as a tourist destination in the neighbouring Sodere Resort and the city of Adama, activities shall mainly focus on promoting the Park in these locations, in particular because it would also add on to the touristic value of these two destinations. Sodere Resort could even act as an additional entry point for tours crossing the Park on foot, horse or camel, if ferry services were provided at the Awash River.

The following general promotion activities shall be considered for the business plan:

- Promotion workshop/site visit with tour operators and hotel owners,
- Design and production of a promotion flyer, giving and overview of attractions and services,
- Design and production of stand-up displays, to be distributed to major hotels,
- Production of posters,
- Production of a promotion video, also as TV-spot (optional),
- Production of a promotion radio spot (optional), and
- Advertisement campaigns.

5.1.3 Investment in General Capacity Building

As outlined in the strategy, capacity building is required for the major stakeholders at various levels. This applies in particular to the designated OFWE staff, communities and private sector.

For the designated OFWE staff, capacity building shall cover

- Destination management,
- Participation,
- Communication, promotion and marketing,
- Hospitality, and
- Pricing and benefit sharing.

At community level an awareness raising workshop that deals with challenges and opportunities of eco-tourism is strongly indicated. This workshop shall also include major public and potential private partners, such as tour operators and hotel owners. It can be used as a start-up event for a public eco-tourism forum that shall meet on a regular basis to improve communication and cooperation among stakeholders.

5.1.4 Investment in Activity-Related Infrastructure

Wildlife tour guiding, horse and coach riding

As the park offers great opportunities for nature observation, in particular birds' and mammals' diversity which

can be spotted need been systematically worked up for touristic purposes. This mainly relates to the identification of good observation spots and areas of particular interest.

An eco-friendly observation of wildlife requires apart from competent guidance only few facilities and equipment, in particular signboards, and binoculars for sale and/or rent. In addition professional guidebooks such as birds of “Ethiopia and Eritrea”¹ shall be made available to the tour guides and experts.

Wildlife observation can be carried out using various means of transportation. To minimize the environmental impact, eco-friendly transportation shall be preferred and motorized transportation shall be avoided and/or limited. Guided tours on foot, on horse or camel or using coaches would also strongly benefit the local communities.

As the park is traversed by a number of trails used by the wildlife and the local communities, only a few additional trails may be necessary. In particular, a connection trail leading from the Southern watering places to a viewpoint on the hill at the Southern edge of the park, facing Dhera town, and from there to the South-North connection road shall be established and signed.

Horse, camel and coach riding shall be restricted to the existing road network. Horse riding tours may be allowed access to some watering places at off wildlife watering times.

A number of three viewpoint pavilions is proposed. These pavilions shall also serve as hides for wildlife observation and for pick-nick.

Additional funding on form of a revolving fund may be required to facilitate communities’ investment in horse riding activities, such as buying horses, construction of stables, veterinary costs or protective gear.

Accommodation services

Providing accommodation is not considered as major source of income for the Enterprise. However it there may arise some demand for spending a night in the Park in a tented camp. A suitable location for an optional camp site yet needs to be identified. It may e.g. be located around the guard house on the hill near the Western entrance.

Handicrafts/souvenirs

For these activities no major investment in infrastructure is needed.

5.1.5 Investment in Activity-Related Promotion Materials

Wildlife tour guiding, horse and coach riding

Though horse, camel and coach riding activities shall be in the responsibility of the community and/or private business partner the investment in specific promotion materials shall provide visitors with specific information in form of a leaflet. The leaflet shall give detailed information on community or private sector-managed wildlife guiding services, such as departure times, itineraries, duration, contact details, itineraries, costs etc.

Accommodation

As these services are not a focal activity it does not need specific promotion. Some information may be included in the general promotion materials.

Handicrafts/souvenirs

Information on the availability of souvenirs shall be given in the general promotion material. In addition a set of merchandizing postcards, posters and T-shirts, caps with different motives shall be offered.

Contingencies

10 % contingency costs shall cover the unforeseen and price increase.

5.2 Costs of Upkeep/Depreciation

The offsetting of financial reserves is crucial to ensure maintenance, conservation of value and replacement of structures. This is of particular relevance as tourism activities require special attention to keeping up and improve the standard of the facilities. This applies in particular to facilities that are rented out to the private sector, such as restaurant and lodges. These costs shall therefore be included into the cost calculation. Besides it is, in form of depreciation cost, a tax relevant factor. Though, not included into the investment cost, the depreciation costs for the shell construction of the new lodges shall be included in the maintenance and depreciation cost.

5.3 Operating Activities

The operating activities at Dhera Park mainly relate to providing information services to the customers, to coordinating touristic activities such as arranging for tour guides, horses and cultural events or shuttle services as well as to ensure the maintenance of all tourism related facilities. At Dhera Park the need for these services is expected to cumulate mainly on the weekends.

In addition the designated staffs shall coordinate capacity building activities, follow up promotion activities and ensure the communication both with private sector and communities.

¹ Authors: John Ash, John Atkins, ISBN-10: 1408109794, ISBN-13: 9781408109793

According to the strategy and assuming that eco-tourism as such should be run as a self-sustaining business unit, both side specific personnel costs and overhead costs as well as portions of head-office costs arise

5.3.1 Operating Costs

The operational costs assessed were categorized into

Personnel costs

The personnel costs comprise

- One full position of an OFWE eco-tourism expert at district level
- Half position of an OFWE eco-tourism expert at branch level (assuming that this expert is also responsible for a second site, e.g. Adaba Dodola)
- Half position of an eco-tourism expert at OFWE level (cf. 3 positions recommended in the strategy report)

The following services shall be provided as stand-by duties free of charge by a group of certified tour guides:

- Front desk services as eco-tourism assistants, to work in weekend-shift with the district expert to ensure provision of services 7 days a week,
- Guarding of the visitors information centre, and
- Cleaning and green keeping of the visitor centre.

Transportation costs and fuel

This cost position shall cover the operating costs for one pick-up, including service and maintenance on the basis of a kilometrage of 12.000 per year.

Costs for promotion activities

After initial purchase of promotion materials both for sale and for give-away need to be replaced in time before running out of stock. The related costs shall be covered from the related revenue generated. In addition advertisement campaigns shall be repeated regularly. It is being assumed that the consumption rate is increasing in the same way than the increase in customers.

Costs for capacity building

Ongoing capacity building among the OFWE staffs and tour guides is required to continuously build up and professionalize eco-touristic services and compensate for fluctuation in staffs. A capacity building curriculum shall be developed according to the recommendations given in the strategy report.

Consumables

Consumables and other unforeseen expenses are subsumed under contingencies.

5.3.2 Operating Revenues

The operating revenue assessment is based on of identified business options and the targeted visitor figures. The revenue will mainly depend on the configuration of activities, the setting of entrance fees and the ability to attract and increase the number of visitors. The following sources of revenues can be identified:

Entrance fees

With given attractiveness of the Park, a distinct increase in Park entrance fees in particular for foreign tourists is indicated. Yet it is unknown to the author, if a universal entrance fee setting would be preferred by the Enterprise management. An adjustment of the fees should be carried out annually based on the price trends and exchange rate. The adjustment of fees can also be used to regulate the influx of visitors.

Entrance fees should include the free use of pick-nick pavilions. Family and group tickets, or even a lifetime supporting memberships with free entrance at any time are recommended. Motorized vehicles in the park should be discouraged by higher fees and be limited in number. In addition a parking fee at the visitor centre can be charged. The video camera fee should not be charged for regular visitors but only for professional filming, which would also require tour guides. Pricing is proposed as follows:

Table 1: Proposed entrance fees at Arsi Mountains National Park and expected visitor distribution (year 1, baseline – 1.040 visitors)

No.	Visitors	ETB	Targeted no. of tickets/no of visitor	Expected revenue
		Proposed		ETB
1	Foreigners		208	27.605
1.1	Adult, single entry	170	26/26	4.420
1.2.	Adult, lifetime sponsor	1.000	1/1	1.000
1.3	Group fee, 5 pers., single entry	750	20/100	15.000
1.4	Children, single entry	85	21/21	1.785
1.5.	Family, single entry	450	12/60	5.400
2	Ethiopians		728	42.440
2.1	Adult single entry	85	92/92	7.820
2.2	Adult, lifetime sponsor	500	3/3	1.500
2.3	Group fee, 5 pers.	325	70/350	22.750
2.4	Children, single entry	40	73/73	920
2.5	Family, single entry	225	42/210	9.450
3	Students		104	1.225
3.1	University,	20		
3.1.1.	Group fee, 5 pers.	90	10/50	900
3.2	Secondary school, single	10		
3.2.1	Group fee, 5pers.	45	5/25	225
3.3	Primary school	5		
3.3.1	Group fee 5 pers.	20	5/25	100
4	Vehicles			5.900
	Car up to 12, park, max 2 per day	100	52	5.200
	Car up to 12 at parking	5	100	500
	Bus > 12 at parking	20	10	200
5	Video camera			3.500
5.1	Foreigner, professional license	2.500	1	2.500
5.2	Ethiopian, professional license	1.000	1	1.000

Camping fees

Camping in the park will be rather the exception. It shall be allowed only on reservation, for tour operators or researchers for a limited number of people, e.g. 15 at once. The fee might include a mandatory fee for firewood – in case campfires are allowed – as well as a fee for waste disposal. Some 2 % overnights of the total number of visitors are being assumed.

Pricing is proposed as follows:

Table 2: Proposed camping fees for Dhera and expected visitor distribution in the baseline scenario

	Camping	ETB	No. of guests	Revenue
		Proposed		ETB
1	Foreigners		15	2.025
1.1	Adult, including waste collection fee	150/night	12	1.800
1.2	Children, including waste collection fee	75/night	3	225
2	Ethiopians		6	410
2.1	Adult, including waste management fee	75/night	5	375
2.2	Children, including waste management fee	35/night	1	35
3	Fire wood			150
3.1	Fire wood, per m ³	150	150	150

Under this scenario, the total revenue generated from entrance, vehicle and camping fees would be ETB 83.255, which is equivalent to ETB 80,05 per visitor.

Merchandizing items

This position is a by-product of promotion activities but considered to substantially contribute to the overall revenue. I can improve the liquidity and compensates for replacement costs. It is being assumed that 57 % of the

customers are buying at least one of the items below. The following pricing is proposed:

Table 3: Proposed pricing for merchandizing items

Item	Price ETB
Guide booklet, 12 pgs.	20
Map folder	7
Poster	20
T-Shirt	150
Cap	80
Postcard	7
Binoculars	50/day plus ETB 200 and ID as deposit

5.4 Financing Activities

5.4.1 Financing Costs

Small credit fund

Starting small business activities, such providing horses to tourists producing souvenirs and handicrafts or running a small kiosk mostly require access to credit facilities. This fund could be part of the benefit sharing agreement between OFWE and the communities and be supplied from the net income generated from the entrance fees.

5.4.2 Financing Revenues

Third party contributions

To date no financial contributions by the Project are earmarked.

5.5 Cash-Flow and Net Profit Forecast

5.5.1 Approach

“Cash flow is the movement of cash into or out of a business, project, or financial product. It is usually measured during a specified, finite period of time. Measurement of cash flow can be used for calculating other parameters that give information on the companies' value and situation. Cash flow can e.g. be used for calculating parameters such as

- To determine a project's rate of return or value. The time of cash flows into and out of projects are used as inputs in financial models such as internal rate of return, and net present value.
- To determine problems with a business's liquidity. Being profitable does not necessarily mean being liquid. A company can fail because of a shortage of cash, even while profitable...”¹

The herein performed cash-flow forecast is a simplified and exemplary one. I shall in particular demonstrate, under which scenario(s) eco-tourism is profitable both for the Enterprise and the communities.

Some major underlying assumptions are listed below:

Baseline scenario

In the baseline scenario a visitor figure of 1.040 per annum is being projected, based on the assumption that the core business time would be the weekends. The number is equivalent to 20 visitors per weekend. This rather low figure is set because the destination is yet almost unknown among local and foreign tourists.

For the projection the number customers had to be distributed in a somewhat arbitrary however in plausible way according to the pricing proposed. It is for instance being assumed, that students would travel in group and therefore would use group tickets instead of single entries. It is also being assumed that 70 % of the visitors would be Ethiopians, as the neighbouring Sodere Resort is mainly being frequented by Ethiopian residents.

We assume that at least 57 % of all visitors would at least buy one of the merchandizing items being offered.

Initial promotion costs and costs for capacity building are calculated as part of the investment.

Increase in prices and devaluation are being assumed to be compensated by an annual adjustment of fees and rent so that the cost and revenue figures were projected undiscounted.

Growth scenario

For the five year projection it is being assumed that the figure of visitors is growing in a linear way from year to year to 5.200. With 104 working days and a maximum group size of 5 persons, the number of visitors would offer between 10 and 20 part time jobs as tour guide, be it on horse, camel, and coach or on foot. These capacities shall be built according to the rising demand.

Also recurring costs for repurchasing promotion and marketing materials would be growing

¹ http://en.wikipedia.org/wiki/Cash_flow, 2020-10-15

analogously.

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Table 4: 5-year cash-flow projection and NPV, scenario 1

Scenario 1000	1st year	scenario 2000	following year	scenario 3000	following year	scenario 4000	following year	scenario 5000	following year
	ETB		ETB		ETB		ETB		ETB
Investing activities	-405.450	Investing activities	0	Investing activities	0	Investing activities	0	Investing activities	0
General investment in infrastructure	-85.100	General investment in infrastructure	0	General investment in infrastructure	0	General investment in infrastructure	0	General investment in infrastructure	0
Investment in activity-related infrastructure	-96.300	Investment in activity-related infrastructure	0	Investment in activity-related infrastructure	0	Investment in activity-related infrastructure	0	Investment in activity-related infrastructure	0
Promotion	-76.391	Promotion	0	Promotion	0	Promotion	0	Promotion	0
Capacity building	-110.800	Capacity building	0	Capacity building	0	Capacity building	0	Capacity building	0
Contingencies	-36.859	Contingencies		Contingencies		Contingencies		Contingencies	
Operating activities	-121.957	Operating activities	-176.940	Operating activities	-197.069	Operating activities	-217.197	Operating activities	-256.941
Personnel costs	-54.300	Personnel costs	-54.300	Personnel costs	-54.300	Personnel costs	-54.300	Personnel costs	-54.300
Transportation and fuel	-30.000	Transportation and fuel	-30.000	Transportation and fuel	-30.000	Transportation and fuel	-30.000	Transportation and fuel	-30.000
Promotion	0	Promotion	-49.984	Promotion	-68.283	Promotion	-86.582	Promotion	-112.557
Capacity building	0	Capacity building	0	Capacity building	0	Capacity building	0	Capacity building	0
Costs of up-keep/depreciation	-26.570	Costs of up-keep/depreciation	-26.570	Costs of up-keep/depreciation	-26.570	Costs of up-keep/depreciation	-26.570	Costs of up-keep/depreciation	-26.570
Contingencies	-11.087	Contingencies	-16.085	Contingencies	-17.915	Contingencies	-19.745	Contingencies	-33.514
Operating revenues scenario 'baseline'	124.155	Operating revenues scenario '20plus'	248.310	Operating revenues scenario '50plus'	372.465	Operating revenues scenario '100plus'	496.620	Operating revenues scenario '100plus'	645.606
Entrance fees	83.255	Entrance fees	166.510	Entrance fees	249.765	Entrance fees	333.020	Entrance fees	432.926
Merchandizing	40.900	Merchandizing	81.800	Merchandizing	122.700	Merchandizing	163.600	Merchandizing	212.680
Financing activities	0	Financing activities	0	Financing activities	0	Financing activities	0	Financing activities	0
Operating result scenario 'baseline', incl. Interst	2.198	Operating result scenario '20 plus'	71.370	Operating result scenario '50 plus'	175.396	Operating result scenario '100 plus'	279.423	Operating result scenario '100 plus'	388.665
Cash-Flow scenario 1000	-403.252	Cash-Flow scenario 2000	71.370	Cash-Flow scenario 3000	175.396	Cash-Flow scenario 4000	279.423	Cash-Flow scenario 5000	388.665

The scenario shows that with 1040 visitors a year, the park could be operating at sustainable level, however without producing a substantial return on investment. Therefore, for a 5-year projection, a scenario is chosen that assumes growing visitor figures to a number of 5.200 in year 5. The results are displayed in Table 5 and Table 6.

Table 5: Simplified five-year cash-flow projection (direct method)

Scenario 'Capital deposited'	year 1	year 2	year 3	year 4	year 5	5-year period
	scenario 1000	scenario 2000	scenario 3000	scenario 4000	scenario 5000	
	ETB	ETB	ETB	ETB	ETB	
Investing activities	-405.450	0	0	0	0	0
Operating costs	-121.957	-176.940	-197.069	-217.197	-248.114	-839.320
Operating revenues	124.155	248.310	372.465	496.620	595.944	1.713.339
Financing activities	0	0	0	0	0	0
Pre-tax profit	2.198	71.370	175.396	279.423	347.830	874.019
2 % income tax	-44	-1.427	-3.508	-5.588	-6.957	-17.480
Net profit	2.154	69.943	171.888	273.834	340.873	856.539
Cash-Flow	-403.296	69.943	171.888	273.834	340.873	453.243

NVP compared to 10 % added interest from alternative investment	927,82
NVP compared to 5 % added interest from alternative investment	3.360,10

In this scenario it is assumed that the necessary capital for investment is available. It is also being assumed that the liquidation value of the investment in year five is the same as in year of investment.

Two interest scenarios have been compared:

Scenario 1a with 10 % interest on capital invested
Scenario 1b with 5 % interest on capital invested

Both scenarios show a slightly positive NVP.

Table 6: 5-year cash-flow projection and NPV, scenario 2

Scenario 'Capital borrowed'	year 1 scenario 1000	year 2 scenario 2000	year 3 scenario 3000	year 4 scenario 4000	year 5 scenario 5000	5-year period
	ETB	ETB	ETB	ETB	ETB	
Investing activities	-405.450	0	0	0	0	0
Operating costs	-121.957	-176.940	-197.069	-217.197	-248.114	-839.320
Operating revenues	124.155	248.310	372.465	496.620	595.944	1.713.339
Financing activities at 8,5 % credit interest	-34.463	-34.463	-34.463	-34.463	-34.463	-137.853
Pre-tax profit	-32.265	36.907	140.933	244.959	313.367	736.166
2 % income tax		-738	-2.819	-4.899	-6.267	-14.723
Net Profit	-32.265	36.169	138.115	240.060	307.100	721.443
Cash-Flow	-437.715	36.169	138.115	240.060	307.100	283.728

NPV for compared to 10 % added interest from alternative investment	-2.512,21
NPV for compared to 5 % added interest from alternative investment	-3.508,70

In this scenario it is assumed that the necessary capital for investment is borrowed from the bank. It is also being assumed that the liquidation value of the invest in year five is the same as in year of investment.

Two interest scenarios have been compared:

Scenario 2a with 10 % interest on capital invested

Scenario 2b with 5 % interest on capital invested

Both scenarios show a slightly negative NVP.

5.5.2 Results

- The total investment costs for the project amount to approx. ETB 405.450, with so far no third party contribution.
- The five year operating result in scenario 1 shows a total net profit of approx. ETB 856.500 which equals almost 102 % of the operating costs including costs of keep-up/depreciation. In this scenario it is being assumed that the investment is paid from existing OFWE assets. The venture is profitable already in year one. Cash-flow is expected to grow from -403.000 ETB in year one to about ETB 340.900 in year five. The overall cash-flow in this period is projected at ETB 453.000.
- The five year operating result in scenario 2 shows a total net profit of approx. ETB 721.400 which equals almost 86 % of the operating costs including costs of keep-up/depreciation and interest rate of loan. The venture is profitable from year two onwards. Cash-flow is expected to grow from -437.700 ETB in year one to about ETB 307.100 in year five. The overall cash-flow in this period is projected at ETB - 283.700.

5.6 Cost-Benefit Analysis

5.6.1 Benefits for the OFWE

As shown in the previous chapter, profit opportunities depend on the achieved increment in customer numbers. In the long run, an annual number of 5.200 visitors should be targeted. At present it cannot be assessed whether this figure exceeds the carrying capacity of the area.

In scenario 1, break-even is reached during the fourth year of operation. The 5-year Net Present Values (NPV) compared to a 5 % bank deposit (scenario 1b) and 10 % returns on investment (scenario 1a) respectively are both slightly positive at ETB 3.360 and ETB 928 respectively.

In scenario 2, where investment has to be financed through bank loans, break-even is reached in the fifth year of operation. The 5-year Net Present Values compared to a 5 % bank deposit (scenario 2b) and a 10 % return on investment (scenario 2a) are both slightly negative at ETB -3.509 and ETB -2.512 respectively. Scenario 2b should be discarded as the interest rate for bank loans is 8.5 % and exceeds the interest rate for bank deposit.

5.6.2 Benefits for the Communities

The eco-tourism activities described above are offering manifold opportunities for providing and sharing benefits with the communities. A business development workshop, horse and tour guide trainings supported by the Enterprise, the Project or some other organization can only be the starting point for joint business development activities, not only with the Enterprise, but also with the private sector. These trainings, possibly combined with small credit facilities, will enable a number of local community members to directly benefit from eco-tourism. However, financial benefit is difficult to quantify. The Wonchi-Eco-tourism project gives evidence that without long term substantial organizational and financial support local communities would hardly be able to establish substantial sources of income.

Additional activities to facilitate the communities' involvement and benefit shall be

- The provision of space within and outside the visitors information centre at the Park entrance and the visitor centre at the top edge of the forest (e.g. for soft drink and snack kiosk and sales of souvenirs).
- The employment of local staffs by the Enterprise and the private sector (eco-tourism assistants, housekeeping staffs).

Assuming the performed cash-flow projection to be a realistic one, sharing profits from entrance fees with the communities as proposed in the strategy is a viable option to support community development.

As guided tours through the park are mandatory, some substantial revenue can be generated for a limited number of community members. Depending on the means of transportation (on foot, horse or coach) and the group size, a guide fee between ETB 15 and 50 could be charged. With an average fee of ETB 25 per person, ETB 25.000 per one thousand visitors could be generated as direct income.

6. Implementation Priorities

The main challenge to make the project a sustainable one is to attract a certain number of visitors to the park. Therefore promotion should be given first priority. This does not only imply to produce promotion materials but to actively approach the private sector in Dhera, Adama and Sodare Resort. Right from the beginning, communities should be included in these activities.

The following prioritization of activities is proposed

1. Recruit expert staffs as recommended in the strategy.
2. Carry out capacity building workshop including familiarization with the strategy and business plan.
3. Carry out eco-tourism awareness creation workshop with the communities and the private sector.
4. Conceptualize and implement a promotion campaign.
5. Conceptualize and implement visitor centre (incl. construction works, staffs recruitment)
6. Explore and develop the trail network and related structures.

Annex

Annex 1: Activities Eco-tourism Consulting Assignment

January 22, 2011 to February 10, 2011

Date	Activity
Sat, Jan 22	Preparation time
Sun, Jan 23	Departure to Addis
Mon, Jan 24	Arrival in Addis Briefing with the expert team. Group work: Brain storming potential eco-tourism activities, selection criteria and cost positions
Tue, Jan 25	Compiling information of the team meeting, preparing field trip
Wed, Jan 26	Field visit to Suba-Sabata, site assessment and evaluation using criteria
Thur, Jan 27	Field visit to Dhera Dilfaqar, site assessment, discussion with the team
Fri, Jan 28	Field visit to Dhera Dilfaqar, site assessment ctd., visit to Sodere Resort, discussion with manager, return to Addis
Sat, Jan 29	Report structuring and writing
Sun, Jan 30	Report structuring and writing
Mon, Jan 31	Data gathering for various cost positions Meeting with Fin-Fine Expert for reviewing cost estimations
Tue, Feb 1	Data gathering for various cost positions
Wed, Feb 2	Data gathering for various cost positions Compiling data
Thu, Feb 3	Report writing Suba-Sabata
Fri, Feb 4	Report writing Suba-Sabata
Sat, Feb 5	Field visit to Wonchi Crater eco-tourism Report writing Suba-Sabata
Sun, Feb 6	Report writing Suba-Sabata
Mon, Feb 7	Report writing Suba-Sabata Presenting and discussing report with the team
Tue, Feb 8	Report writing Suba-Sabata Meeting with Horn of Africa to initialize coordination of eco-tourism activities
Wed, Feb 9	Report writing Dhera Park
Thu, Feb 10	Departure to Germany
Fri, Feb 11 – Feb 22	Finalizing reports

Annex2: Investment activities

No	Position	unit	unit cost	Qty	total cost	type of running costs	Life span	cost of upkeep	rent or sale
General Infrastructure					85.100			11.660	
	Visitor centre as annex of the Park headquarters				85.100			11.660	
1.1	Greening with trees, grass, hedges (1200 m ²)	lump	3000	1	3.000				
1.2	Entrance gate (wooden)	lump	5000	1	5.000		20	250	
1.3	Guard house	pcs	1000	1	1.000		20	50	
1.4	Centre, construction works	m ²	1000	30	30.000	maintenance	20	1500	
	Interior furnishing (2 counters, office desk, coffee table, 2 coffee desks, 8 chairs, 2 small shelves, 1 big shelves, 1 wooden cubboards)	lump	18.000	1	18.000	replacement	5	3600	
1.6	Electric system	lump	2.500	1	2.500	maintenance	10	250	
1.7	Telephone/Internet connection	lump	500	1	500	maintenance			
1.8	Computer with printer	lump	20.000	1	20.000	replacement	4	5000	
1.9	Refrigerator	pcs	5.000	1	5.000	replacement	5	1000	
1.10	Donation box with lock	pcs	100	1	100		10	10	
General Promotion					44.843			13.386	
2.1	Promotion workshop with four operators and hotel owners	lump	25.000	1	25.000				
2.2	Promotion flyer/folder, full colour	pcs	0,81	5.000	4.050	reprinting	1	4.050	
2.3	Stand-up displays, full colour (43x21 cm)	pcs	36,5	25	913	reprinting	2	456	
2.4	optional	pcs	19,8	100	1.978				
2.5	Production of posters (42x60 cm)	pcs	5,5	500	2.760	reprinting	1	2.760	x
2.6	optional	pcs	3,4	1.000	3.370				
2.7	optional: Production of a promotion video/ TV-spot	lump			0				
2.8	optional: Production of a promotion radio spot	lump			0				
2.9	Newspaper advertisement campaign, e.g. Daily Monitor	per advert	770	6	4.620	re-run	1	4.620	
2.10	optional: Hosting a promotion event	lump		1	0	sponsored	1		
2.11	Sign board (2x1,5)	pcs	1.500	5	7.500		5	1.500	
General Capacity Building					65.000			30.000	
3.1	OFWE capacity building programme experts all levels, one week, proportionally	lump	10.000	1	10.000				
3.2	Stakeholder and community awareness raising workshop (two days), 30 people, incl. Facilitator, per diems	lump	25.000	1	25.000				
3.2	Ecotourism forum, 15 people, bi-annual	lump	15.000	2	30.000	repeated	1	30.000	
Activity-related infrastructure					96.300			14.910	
Tour guiding					96.300			14.910	
4.1	Signpost, 3 pcs/km	pcs	20	15	300	repainting	5	60	
4.2	trail establishment and management	km	1.500	5	7.500		10	750	
4.3	guide books, birds, manuals, plants for guides and rent	pcs	1.200	10	12.000	replacement	5	2400	x
4.4	binoculars for guides and for rent	pcs	3.000	10	30.000	replacement	5	6000	x
4.5	view point Pavilion with sitting booth	entitly	9.000	3	27.000	maintenance	10	2700	
4.6	bergarden bench set	entitly	5.000	3	15.000	replacement	5	3000	
4.7	Camp site	lump	4.500	1	4.500	maintenance	10	450	
Activity-related promotion					31.548			18.299	
Tour guiding					10.100			7.575	
5.1	promotion flyer for the divers guiding services	pcs	1,01	5.000	5.050	reprinting	1	5050	
5.2	guide booklets for sale, 12 pages, A5, including layout	pcs	5,05	1.000	5.050	reprinting	2	2525	x
Merchandizing					21.448			10.724	
6.1	posters with birds, wildlife or plants, specified, 3 motives	pcs	5,5	400	2.208	reprinting	2	1104	x
6.2	T-shirts, different size and colour, printed	pcs	51	200	10.200	reprinting	2	5100	x
6.3	Cap, printed	pcs	39	200	7.800	reprinting	2	3900	x
6.4	post-cards, different motives, 3 motives	pcs	3,1	400	1.240	reprinting	2	620	x
Activity-related capacity building					45.800				
7.1	Horse keeping/horse guide training (10 pers), with Suba-Sabata	lump	12.500	1	12.500				
7.2	Training for nature-guides (total 5 guides), jointly with Suba-Sabata		8.300	1	8.300				
7.3	small business development workshop with communities (25 pers)		25.000	1	25.000				
Subtotal					368.590,50			88.255,25	
10 % contingencies					36.859				
Total investment					405.450				

Annex 3: Operating Cost, Year One – Scenario 1000

Scenario 1000					Scenario 2000				
	price	units	customer number	revenue		price	units	customer number	revenue
Entrance Fees					Entrance Fees				
Total number of visitors			1,040	83.255	Total number of visitors			2,080	166.510
Foreigners			208	27.605	Foreigners			416	55.210
Ethiopians			728	42.440	Ethiopians			1,456	84.880
Students			104	1.225	Students			208	2.450
Vehicles				5.900	Vehicles				11.800
Video camera				3.500	Video camera				7.000
Camping				2.585	Camping				5.170
Merchandizing					Merchandizing				
Guide booklet, 12 pgs.	20	500		10.000	Guide booklet, 12 pgs.	20	1000		20.000
Posters	20	200		4.000	Posters	20	400		8.000
T-Shirt	150	100		15.000	T-Shirt	150	200		30.000
Cap	80	100		8.000	Cap	80	200		16.000
Postcard	7	200		1.400	Postcard	7	400		2.800
Binocular rent	50	50		2.500	Binocular rent	50	100		5.000
Total revenue					Total revenue				
Scenario 3000					Scenario 4000				
	price	units	customer number	revenue		price	units	total number	revenue
Entrance Fees					Entrance Fees plus 100 %				
Total number of visitors			3,120	249.765	Total number of visitors			4,160	333.020
Foreigners			624	82.815	Foreigners			832	110.420
Ethiopians			2,184	127.320	Ethiopians			2,912	169.760
Students			312	3.675	Students			416	4.900
Vehicles				17.700	Vehicles				23.600
Video camera				10.500	Video camera				14.000
Camping				7.755	Camping				10.340
Merchandizing					Merchandizing				
Guide booklet, 12 pgs.	20	1500		30.000	Guide booklet, 12 pgs.	20	2,000		40.000
Posters	20	600		12.000	Posters	20	800		16.000
T-Shirt	150	300		45.000	T-Shirt	150	400		60.000
Cap	80	300		24.000	Cap	80	400		32.000
Postcard	7	600		4.200	Postcard	7	800		5.600
Binocular rent	50	150		7.500	Binocular rent	50	200		10.000
Total revenue					Total revenue				
Scenario 5000									
	price	units	total number	revenue					
Entrance Fees									
Total number of visitors			5,200	416.275					
Foreigners			1,040	138.025					
Ethiopians			3,640	212.200					
Students			520	6.125					
Vehicles				29.500					
Video camera				17.500					
Camping				12.925					
Merchandizing									
Guide booklet, 12 pgs.	20	2,500		50.000					
Posters	20	1,000		20.000					
T-Shirt	150	500		75.000					
Cap	80	500		40.000					
Postcard	7	1,000		7.000					
Binocular rent	50	250		12.500					

Annex4: Revenue Scenarios

Scenario 1000		year 1			
No	Position	unit	unit cost	units	total cost
Personnel Costs					
	OFWE district ecotourism expert	person *year	26.200	1	26.200
	OFWE ecotourism branch officer (proportional)	person *year	26.200	0,5	13.100
	OFWE ecotourism head office officer (proportional)	person *year	30.000	0,5	15.000
Transportation and fuel					
	operating costs pick-up (12.000 km/year, including service, tyres, petrol)	lump	30.000	1	30.000
Promotion					
	General promotion				0
	Activity-related promotion				0
Capacity building					
	General capacity building				0
	Activity-related capacity building				
Maintenance/conservation of value					
	Visitor centre				11.660
	activity related infrastructure				14.910
	Subtotal				110.870
	contingencies	10 % of above pos.			11.087
	Total operating cost				121.957