

Environmental Management Plan

BELIZE RIVER VALLEY COMMUNITIES TOURISM PROJECT

Community Baboon Sanctuary – Women Conservation Group
Bermudian Landing Village
May 2016

PROJECT DESCRIPTION

The nine Belize River valley communities (Lemonal included) account for a total population of approximately 1,800 inhabitants. As the crow flies the communities are within eight miles of each other. Bermudian Landing is the central point and is approximately 30 miles from Belize City. Structural unemployment continues to be a major challenge in the area with the highest rates being among women and youths. Historically the area was settled by people who moved along the river following the logging operations. Until recently logging was still a major source of income for the communities. However, with the decline of available resources economic activity has shifted to agriculture and service. Approximately half the adult population are employed outside the area and commute to work on a daily basis. For the unemployed the forest resources are a natural option of last resort and has been under sustained pressure from the communities. In recent years tourism has begun to play a larger role but still has not reached its full potential.

Group Information:

The Community Baboon Sanctuary Women's Conservation Group was established on August 5th, 1998, and later registered as a NGO with a woman representing each of the seven communities that originally formed the sanctuary. Since its formation, the group has responsibility for the management of the CBS. The CBSWCG projects are supported with funding from GEF/SGP, PACT, PACT foundation, German Embassy (Janus Foundation), ECADERT, and Via Venture Foundation. As a result several new businesses were created and existing ones strengthened. Examples of these businesses are: fast food shop, hair and beauty salon, home improvements to accommodate home stays, arts and crafts, catering, and certified home nursing, certified tour guides, local fruit food and beverages, backyard tilapia farming , chicken , pigs and sheep farming, and organic backyard gardening To date the CBSWCG successfully implemented projects in the amount of \$800,000. Additionally CBSWCG received technical assistance from the Belize Tourism Board, Agriculture Department, Fisheries Department, BELTRADE, Ministry of Rural Development, Forestry, and the Evangel Credit Union and Ministry of Works.

The daily management activities of the CBSWCG are carried out by a team of 9 staff members that includes two Project Coordinators, (1 full time and 1 part time), a receptionist, an Assistant Administrator/Finance Officer, 1 janitor, 1 maintenance person, and three on-site tour guides.

Project Proposal:

The project calls for the implementation of an integrated tourism project that will utilize resources in all the eight communities. Visitor activities and experiences will be distributed across the entire eight communities.

PROJECT OBJECTIVES

- Create viable and sustainable employment opportunities that will restore families, enhance education, and improve livelihoods for residents of the Belize River Valley through the employment of eco-tourism, while improving the conservation of the natural resources of the area.
- halt the reliance on unsustainable practices such as clearing forest cover for agricultural purposes and unsustainable hunting and fishing for livelihood.

PROJECT ACTIVITIES

The project proposes to undertake the following:

- a) Training:
 - i) in tour guiding and the care and maintenance of the horses and tack, bikes and canoes/kayaks, from each of the 7 communities;
 - ii) in food & beverage management, handicraft, hospitality and house-keeping, food-handling and sanitation, safe water management, and Social Media marketing.
- b) Development of Tourism Infrastructure:
 - i) Design and construct hiking, biking, and/or horse trails for tourism purposes in the appropriate communities;
 - ii) Construct towers and boardwalks along Mussel Creek and Spanish Creek for bird watching and recreational fishing;
 - iii) Construct boat landing/docks in St. Paul's Bank, Flowers Bank and Rancho Dolores
 - iv) Establish a butterfly farm in Bermudian Landing;
 - v) Refurbish the CBS visitors' center, renovate the Natural History Museum and central gift shop, and construct 5 handicraft stalls for the sale of river valley.
 - vi) Construct a small Riverside Park with pavilion in Flowers Bank to promote and preserve the history of the Flowers Bank 16;
 - vii) Purchase of horses and tack, mountain bikes, kayaks/canoes, skiffs, and pontoon boats for use in all 7 communities;
 - viii) Purchase of trailer to transport pontoon boats, skiffs, and canoes/kayaks;
 - ix) Acquire Tour Operator License for CBSWCG
 - x) Payment for membership in BTIA and BHA
 - xi) Publish relevant information and promotional material such as Visitors Guides, Trail maps, Posters and Brochures, Advertisements, Newsletters, etc
 - xii) Events promotion
 - xiii) Signage
- c) Marketing and Promotion
- d) Project Coordination

EXPECTED RESULTS

The expected results include:

- a) Increased and improved communication with eight communities, particularly Rancho Dolores, St. Paul's Bank and Flowers Bank;
- b) Increased tourism activity along the corridor;
- c) increase in household incomes for those groups participating in the project; and
- d) It is expected that each community involved in the project will be able to provide an eco-tourism experience complete with accommodation, food, and at least one activity or attraction that can be marketed individually or in conjunction with a localized network;
- e) It is also expected that at least 80 persons would be directly employed and generating income for such activities with an additional 20 persons. being employed on a part time basis during project implementation
- f) At least 50 families benefiting from the eco-tourism activities and from training in the various entrepreneurial and livelihood adaptation and enhancement skills and home improvements;
- g) At least 100 persons would have received some form of training to make themselves more marketable and able to provide the adequate tourism experience to guest.
- h) Level of awareness and appreciation for biodiversity conservation and sustainability would be increased in the targeted area which will be monitored at commencement and ending of the project.
- i) Tourism stakeholders will acknowledge and utilize the Community Baboon Sanctuary and its Belize River Valley Network for more cruise and overnight tourism tour options.
- j) The preservation and regeneration of the ecosystem resulting in the sustainable use of forest products such as palm leaves for roof thatching, medicinal herbs, poles and vines for local construction, and for the maintaining of biodiversity for tourism and research purposes;
- k) A reversal in the unsustainable forest clearing as participants help to conserve forest cover and replant trees near river side.

EXPECTED IMPACTS

The expected impacts of the project are:

- Those related to recreational use of aquatic, riparian and terrestrial natural resources;and
- Those related to boating activities.

In regards to the recreational use of aquatic and riparian resources, the potential negative environmental impacts would result from:

- i. Issues of carrying capacity and limits of acceptable change associated with increased visitation rates,
- ii. pressure on limited local resources and increased invasion of natural areas,
- iii. loss of natural habitat,
- iv. Altered or distressed animal behaviour,
- v. Erosion,
- vi. introduction of non-indigenous species,
- vii. and illegal fishing.

In general terms, land degradation and land-use change, as well as habitat loss and adverse impacts on biodiversity result directly from the construction of tourist facilities and infrastructure through the clearing of wetlands and the extraction of building materials. There is also the impact of constant use in a particular area.

The potential negative environmental impacts of boating activities include:

- i. Release of Hydrocarbon and other substances, in the form of unburnt or incompletely burnt fuel, particulates and traces of oil, into the environment by the engines of recreational and commercial small crafts, particularly outboard engines. While it is estimated that this represents only a small share (2%) of overall hydrocarbon releases from land-based activities, it needs to be taken into consideration and adequately addressed.
- ii. Noise pollution, particularly for aquatic animals. In accordance with standards, the authorized level of noise emitted by new engines has been limited since 2006. However, when operated at speed close to the shore, engine noise is perceived as a nuisance in sensitive areas such as beaches or natural protected areas.
- iii. Solid waste disposal into aquatic habitats.

MITIGATION MEASURES

- Ensuring that visitors are briefed when entering sensitive areas and that there is an emergency response in place.
- Where possible ensure that visitors are accompanied by a guide.
- Limit the number of visitors per visitation per site or trail. Studies have shown that
- Purchase and make proper use of appropriate equipment. It has been shown that 50% of the potential problems are mitigated by having and using the right equipment.
- Ensuring that guides are properly trained and follow a checklist of best practices.
- Ensure that visitors are thoroughly briefed before entering sensitive areas
- Strategically place appropriate garbage containers throughout the visitation sites and inform visitors as to their location.

- To date no official numbers (or standards) have been developed for the recreational sector so the precautionary principle will be applied when deciding how many persons can visit a site at the same time.

MONITORING PROGRAM

The monitoring programme will be anchored by (i) the visitation logs for the center and (ii) the ticket sales and number of tours sold. The CBS has in place a visitors log and survey form. It also has a log for all the tours sold and the referrals made. This information will be collated and reviewed on a monthly basis.

LINES OF RESPONSIBILITY

Tour guides and CBS staff are the first persons who have responsibility to ensure that visitors to the area are made aware of the rules and that all the necessary requirements are in place on the ground. The tour guides and vendors are responsible to the staff of the visitors' center who are in turn responsible to the person coordinating the project. This may also be the person that is the manager of the visitors' center. The person coordinating the project is responsible to the Board of Directors for the Community Baboon Sanctuary Women Conservation Group. Because the CBSWCG is comprised of representatives from the various communities, these representatives are responsible for getting information back to the communities.

COST ESTIMATES AND SOURCES OF FUNDS

The cost of putting in place the mitigation measures is already built into the budget so there is no need for additional budgeting for these activities.

1) <u>TOURISM FRAMEWORK</u>	unit cost	# units	total-Bz\$	total-US\$	JSDf - US\$	Beneficiary Contribution US\$
a) <u>Training:</u>						
ii) Implement training programs and/or workshops for Handicraft, Customer Service Relations and Social Media marketing; <i>includes Cost for Consultant/Trainer to conduct Handicraft, Customer Service Relations, and Social Media Marketing for 25 persons, Refreshment for training.</i>	400	25	10,000	5,000	0	5,000
b) <u>Tourism Infrastructure Platform:</u>						
(i) Establishment of approximately quarter mile of hiking and biking trails, and half mile of horse trails for tourism purposes in relevant CBS communities; <i>includes Stones for trail development; Construction material for retaining sidings, signs, bridges, and observation decks; Construction equipment such as shovels, spades and wheel barrows; paint.</i>	7,500	3	22,500	11,250	11,250	0

(ii) Labour cost for underbrush clearing and for mapping quarter mile of hiking trail and half mile of horse trail (includes labour costs of 4 men @ \$50 per day x 3 Trails x 5 days)	600	5	3,000	1,500	0	1,500
(iii) Construction of 20'x40' shaded "Welcome Area" with seating for visitors (offsite - Butterfly Garden) and stage for cultural performance	10,000	1	10,000	5,000	5,000	0
(iv) Cost of Contractor and Skilled Labour to undertake Construction at (iii)	4,000	1	4,000	2,000	2,000	0
(v) Construction of 2 bird towers and connecting board walk in Scotland Half-moon Mussel Creek and Rancho Dolores near the Spanish Creek where there is a high concentration of birds; includes Construction material for 2 wooden (treated wood) structures measuring 10x15 complete with railings and steps and construction material for a boardwalk measuring approximately 500 ft.	15,000	2	30,000	15,000	15,000	0
(vi) Labour cost for underbrush clearing for mapping board walk (includes labour costs of 4 men @ \$50 per day x 3 days)	200	3	600	300	0	300
(vii) Cost of Contractor and Skilled Labour to undertake construction at (v)	3,500	2	7,000	3,500	3,500	0
viii) Establishment of dock-landing (floating) sites for the canoes/kayaks and skiffs in Rancho Dolores, St. Paul's Bank and Flowers's Bank communities; includes Construction material for wooden (treated wood) structure measuring 18x24 complete with railings and cement pillars and steps,	7,500	3	22,500	11,250	11,250	0
(ix) Cost of Contractor and Skilled Labour to undertake Construction at(viii)	3,000	3	9,000	4,500	4,500	0
2) TOURISM SERVICE						
a) Tourism Attractions						
(i) Construction of a butterfly farm, which will include a butterfly house, nursery, caterpillar house, and a butterfly garden in Willows Bank; includes cost of purchasing existing structures and butterflies from a closing facility, cost of facilitator for training of management and operation of butterfly farming, and cost of plants.	30,000	1	30,000	15,000	15,000	0
(ii) Labour cost for underbrush clearing area for butterfly farm (includes labour costs of 4 men @ \$50 per day x 2 days)	200	2	400	200	0	200
ii) Reconstruction of the Natural History Museum which also houses the central gift shop measuring approximately 30'x40' (includes construction of cement, wood and zinc roofing)	60,000	1	60,000	30,000	30,000	0
(iii) Cost of Contractor and Skilled Labour to undertake reconstruction at ii)	35,000	1	35,000	17,500	17,500	0
(iv) Restocking of Giftshop with items for sale	5,000	1	5,000	2,500	0	2,500

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(iv) Expansion to Education Center measuring 10'x 20' to include a break room and renovation of restroom facilities	8,000	1	8,000	4,000	4,000	0
(v) Cost of Contractor and Skilled Labour to undertake refurbishments and Renovations at iv)	5,000	1	5,000	2,500	2,500	0
(vi) Renovation of Thatched seating structure near to Education Center	3,500	1	3,500	1,750	0	1,750
(vi) Construction Materials for circular thatched structure with a diameter of 22 feet to house 4 stalls and the CBS giftshop.	18,000	1	18,000	9,000	9,000	0
(vii) Cost of Contractor and Skilled Labour to undertake construction of thatched structure at vi)	3,500	1	3,500	1,750	1,750	0
b) Tourism Activities						
(i) Purchase of horses and tack, for use on terrestrial nature trails in 2 communities; includes cost of horses, equipment and materials for horse care	3,500	12	42,000	21,000	21,000	0
(ii) Construction of secure enclosure for horses	2,000	1	2,000	1,000	0	1,000
(iii) Purchase of bikes, helmets and safety equipment for use on terrestrial nature trails; includes mountain bikes, helmets, elbow and knee pads, light, bell, and locks.	800	25	20,000	10,000	10,000	0
(iv) Construction of secure shed and storage facility for bicycles and kayaks	1,000	1	1,000	500	0	500
(v) Purchase of kayaks/canoes and lifejackets for use on aquatic nature trails	2,800	12	33,600	16,800	16,800	0
(vi) Purchase of 60 life vests and 3 first aid kits	60	60	3,600	1,800	1,800	0
(vii) Purchase of trailer to transport pontoon boats;	10,000	1	10,000	5,000	5,000	0
(viii) Purchase of trailer to transport canoes/kayaks;	5,000	1	5,000	2,500	2,500	0
(ix) Construction of 3 pontoon boats to conduct water tours in the Spanish Creek Wildlife Sanctuary of Rancho Dolores community (1) and Mussel Creek at Scotland Halfmoon (2); includes pantoon boat, and safety equipment	28,000	3	84,000	42,000	42,000	0
3) MARKETING AND PROMOTION:						
a) Licenses						
i) Tour Operator License for CBSWCG	2,500	1	2,500	1,250	1,250	0
ii) Registering CBS Trademark and LOGO	1,500	1	1,500	750	750	0
b) Membership						
i) BTIA	1,500	1	1,500	750	0	750
ii) BHA	1,000	1	1,000	500	0	500
c) Publications						

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i) Visitors Guide (500 copies for distribution)	5	500	2,500	1,250	1,250	0
ii) Map of Trails (500 copies of each of 4 trails)	4	2000	8,000	4,000	4,000	0
(iii) Brochures	2.5	1000	2,500	2,500	2,500	0
(iv) Advertisements - Print Ads in nationwide newspaper to advertise local festivals (1 per festival, plus CBS Eco-Tourism and Commerce EXPO)	650	9	5,850	2,925	0	2,925
(v) Radio Ads - to advertise the festivals of the area	350	9	3,150	1,575	1,575	0
d) Events & Promotion						
i) Project Launch (<i>to promote the launch of the Project includes transportation, refreshments, banners, and handouts</i>)	3,000	1	3,000	1,500	1,500	0
ii) Eco-Tourism EXPO (<i>to promote the Project and attractions, and activities in the community</i>)	10,000	1	10,000	5,000	2,500	2,500
iii) Community Festivals or Activity in each of the communities to spur tourism visitations (<i>includes a Grant of \$1,000.00 and a soft loan of up to \$2,500.00 for logistical support (repayable) for Communities to initiate festivals</i>)	3,500	8	28,000	14,000	14,000	0
iv) Attendance at Trade Shows (<i>promotional items and toward defraying cost of transportation and logistics for attending Trade Shows to promote the CBS and neighbouring communities, ie National Agriculture and Trade Show - May, Spanish Lookout Expo - July, BCCI Expo - Sept.</i>)	2,570	3	7,710	3,855	3,375	480
v) Promotional Items (<i>Promo Items to promote the project and the CBS including Tshirts (training participants), Banners, Water Bottles, Key Chain, Pencils, and Tote Bags</i>)	7,000	1	7,000	3,500	3,500	0
e) Signage (<i>signs at the tourism attractions, trail entrance, distance to next attraction etc.</i>)	250	50	12,500	6,250	5,000	1,250
4) PROJECT COORDINATION:						
a) Personnel (<i>includes partial payment towards qualified Tourism Development Officer</i>)	3,500	12	42,000	21,000	9,000	12,000
b) Personnel (<i>Administrative Officer</i>)	1,000	12	12,000	6,000	3,000	3,000
c) Personnel (Community Development/Outreach Officer - Japan Overseas Cooperation Volunteer)	2,000	12	24,000	12,000	0	12,000
d) Telecommunications (<i>includes telephone and internet allowance</i>)	250	12	3,000	1,500	1,500	0
e) Office Supplies and Stationeries	2,000	2	4,000	2,000	1,000	1,000
f) Meetings (Quarterly) (<i>includes cost of transportation/fuel reimbursement, refreshments for quarterly meetings of Board</i>)	600	4	2,400	1,200	0	1,200

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g) Equipment (<i>includes a laser printer, toner, standalone scanner, laptop, and filing cabinet</i>)	6,000	1	6,000	3,000	2,500	500
h) Office Rental and utilities	1,000	12	12,000	6,000	0	6,000
			Bz\$			
			690,310	346,405	289,550	56,855

ADDITIONAL INFORMATION

All activities associated with this project will fall within the following legislative frameworks:

- Belize Port Authority Act – Chapter 233 and 233S
- Belize Tourism Board Act - Chapter 275 and 275S
- National Institute Of Culture and History Act - Chapter 331 and 331S