THE BRITAIN-CAMEROON
SMALL GRANTS SCHEME (SGS)

Your ref: 24.03.06

Final report

I - Project background and Brief description – max 4 pages

For many centuries, communities adjacent to the forest in Cameroon, like elsewhere in the tropics, have relied on forest resources for their livelihoods. Undeniably, the dependence has led to the development of cultural values with very strong affinities to the forest, which over the many generations, have effectively regulated access to essential natural resources. But today the communities face the challenges of globalization and the associated collapse of traditional social structures. Respect for the forest and other natural resources have plummeted and unsustainable harvesting of forest products is spreading fast, as people struggle to meet their growing livelihood needs. The Kilum-Ijim forest is no exception to prevailing trends.

Located between latitudes 6º 05' and longitudes 6º 20' N and 10º 20' and 10º 34' E, in the Bamenda Highlands of north western Cameroon, the forest spans an altitudinal range of 1,600 m to 3,011 m. The total area enclosed by the forest boundaries is about 17,323 ha, about half of which is montane forest and the rest montane grasslands, various types of scrubland, and a small area of afro-subalpine grassland at the summit. The forest has a long wet season and a short dry season, with an average of 2,427 mm of rain falling annually at Kilum and 2,242 mm at Ijim[1]. The rains often start after mid-March and continue until November, with a strong peak in July-August, and sometimes in September. The months of December, January and February have little or no rain. Temperature ranges between about 10º and 25º- 28ºC, and the widest range between the 24-hour maximum and minimum occurs between November and March.

The Kilum-Ijim forest is an excellent example of the ornithological riches of the Cameroon montane forest biome. The Important Bird Area (IBA) program of BirdLife International[2] lists six bird species in IBA category A1 (Species of Conservation Concern).Category A2 (Species of Restricted Range) has the six of category A1 plus a further eight species. The IBA category A3 (Biome Restricted Assemblage) of the Afrotropical Highlands[3] (Fishpool 1997) lists 43 birds for Cameroon, of which 31 species have been recorded in the Kilum-Ijim forest. Of the 31 species, two are endemic to the

---

[1] Forboseh, P.F. and Ikfuingei, R. N. (2001). Estimating the population densities of Tauraco bannermani in the Kilum-Ijim forest, northwestern Cameroon. *Ostrich Supplement No. 15:114-118.*

[2] BirdLife International. (2000*). Threatened birds of the world.* Barcelona and Cambridge. UK: Lynx Edicions and BirdLife International.

[3] Fishpool, L.D.C. (1997) *Important Bird Areas in Africa. IBA Criteria: Categories, species lists and population thresholds*. BirdLife International.

Bamenda Highlands: Bannerman's Turaco *Tauraco bannermani* and Banded Wattle-Eye *Platysteira laticincta,* for which the Kilum-Ijim forest is arguably the last stronghold[1] *IBAs are sites of global biodiversity conservation importance, chosen using internationally agreed, objective, quantitative and scientifically defensible criteria*[4].

Over 200,000 people live within a day's walk of the Kilum-Ijim forest. For a vast majority of the people, forest resources represent the only option to supplement already low incomes.They depend on the forest for food, water, firewood, medicines, meat and increasingly, income from tourism. The most serious anthropogenic influences are fires and the use of forest for grazing domestic animals, especially goats, which browse on regenerating trees. As a result of human influences, the forest has lost its mega-fauna, including notable species such as leopards, elephants, buffaloes, and antelopes. Remaining large mammal populations are severely depressed and close to regional extinction. Uncontrolled anthropogenic influences clearly threatens populations of the 15 restricted range species and other biodiversity.

Government attempts to regulate access to forests have been mixed, ranging from the reservation of state forests to the introduction of community forestry. Under the 1994 Forestry, Wildlife and Fisheries Law, its Decree of Application and the Community Forest Manual, which outline the administrative and legal provisions for the acquisition and management of community forests, the state devolves management authority over small portions of forests to adjacent communities.

Between 1994 and 2003, the Kilum-Ijim Forest Projects (KIFP) of BirdLife International (UK) and the Ministry of Forestry and Wildlife of Cameroon (then Ministry of the Environment and Forestry) facilitated the legal acquisition of community forests in the North West region. Three years after closure of KIFP, there was need to assess the effectiveness of the community-centred forest management system at Kilum-Ijim and identify actions needed to solidify conservation. This was especially relevant as the Cameroon Mountains Conservation Foundation had just been set-up to support long-term conservation. Moreover the community-centred approach pre-supposes that local communities will ensure the regenerative capacity of valuable resources for economic development thereby promoting biodiversity conservation. There is growing recognition of the need to continually verify this fundamental assumption and in the process guide strategic and operation management.

The project aimed to:

- Assess the effectiveness of the community-centred system of management set up by the Kilum-Ijim Forest Project, three years after the project ended.
- Make recommendations as to what interventions are needed to improve and consolidate the system.

[4] Bennun, L.A. (2002). Monitoring Important Bird Areas in Africa: A regional framework. BirdLife International. 102p.

- Design cost-effective long-term monitoring system that could be supported by organizations like CAMCOF, in order to supply one of the essential elements of forest management that is now missing.

The project verifies the assumption that community management actually works for conservation and therefore has great importance for nature conservation beyond the Kilum-Ijim forest context. The project also inform the conservation community and other stakeholders about what is happening to the forest and whether urgent action is needed

II - Project implementation (max. 4 pages)

Bird survey

Between March and December 2007, we conducted bird counts at 125 locations in the Kilum-Ijim forest. Two teams, one at Ijim and the other at Kilum, carried out the bird counts using the point count method[5],[6]. A team comprised an observer, who identified the species and estimated observer-bird distances, and a recorder, who recorded the data onto the appropriate check sheet. The teams were supervised by an ecologist.

During counting observers recorded all birds seen or heard within a radius of 200 m, together with their visually estimated distance from the point (the observers have received training and have had much practice on visual distance estimation). For flocks, the number in the group was recorded. Birds flying over the point were not recorded to minimise the possibilities of double counting highly mobile species. Counts were conducted between 07h00 and 11h00 and lasted for 30 minutes per visit at each point. This time was divided into three periods of 5, 10 and 15 minutes. During the first period, the observers counted all Bannerman's Turacos detected but allowed other birds to settle from any disturbance caused by their arrival. In the second period, they recorded all birds (including Bannerman's Turacos) detected. During the third period, the team recorded only Bannerman's Turacos. The species calls intermittently and the duration between calls can be a long as 30 minutes, hence the need to count for a much longer period. Thus, the point count protocol involves a 30-minute count for Bannerman's Turaco. Within the 30-minute is nested a 5-minute settling-down period, a 10-minute conventional point count for other species. Bird census stations were visited three times from March to June and November to December. The order of plot visits was reversed during the second and third counts in order to minimise systematic bias relating to when counting was done in the different habitats.These periods correspond with the breeding period of most species in the Kilum-Ijim forest[7]. Full analysis of the data will be reported

[5] Bibby, C.J., Burgess, N.D. and Hill, D.A. (1992). *Bird Census Techniques*. BTO/RSPB. Academic Press: London. 257pp.

[6] Buckland, S.T., Anderson, D.R., Burnham, K.P. and Laake, J.L. (1993*). Distance Sampling: Estimating Abundance of Biological Populations*. Chapman and Hall: London and New York.

[7] Fotso, R.C. and Parrot, J.R. (1991). Ecology and breeding biology of Bannerman's Turaco *Tauraco bannermani*. *Bird Conservation International 1:171-177*

in a separate publication that will establish the trends in the Kilum-Ijim bird population from 1997 to 2007.

Re-survey vegetation
Between November 2006 and February 2007, the bird count team re-sampled vegetation in 32 20 x 20m plots, each randomly sited within a major vegetation type in Ijim[8]. Trees with minimum breast height diameter of 10 cm were identified and measured, ingrowths and tree condition noted, and forest structure assessed using standard forestry techniques.The has beeh subjected to prelimanry analyses for changes in species composition, diversity, structure, recruitment, growth and mortality compared to the 1999 baseline[9].

Design a cost-effective long-term monitoring and evaluating system
Between November 2006 and June 2007, I conducted key informant interviews on the 18 FMI at Kilum-Ijim and review of the status of implementation approved forest management plans as prelude to designing a monitoring and evaluation framework.

III - Conclusion (max. 3 pages)

By 2003 when KIFP closed, about 50% of the Kilum-Ijim forest was under decentralized community management with a further 45% at various stages of the legal community forest attribution process. A Forest Management Institution (FMI) managed each community forest on behalf of one or more communities. There were 18 FMI, each representing one or more communities adjacent the Kilum-Ijim forest. Another key element of post-KIFP sustainability of forest management was CAMCOF - Cameroon Mountains Conservation Foundation – a financing mechanism that KIFP and the former Mount Cameroon Project (Limbe) set-up to finance FMIs and other pro-conservation groups in managing forest in the western highlands of Cameroon. KIFP also provided grants to FMIs for micro-enterprise development in support of their forest management activities in the period leading up to full functionality of CAMCOF.

Today, neither the FMIs nor CAMCOF are active. Unregulated harvest of forest products, especially *Prunus Africana* bark has accelerated and calls into question the fundamental assumption that community management actually works for conservation in the case of Kilum-Ijim. It became evident during data gathering that the FMIs were not sufficiently equipped with institutional capacity and the necessary skills and knowledge for responsible forest management.There has been very limited support from the local forestry administration (Divisional delegations and forestry posts).

Recent advancement in decentralization provides ample opportunity to implement a forest governance program at Kilum-Ijim with local councils as key players. Law n° 2004/017 of 22 July 2004 on the orientation of decentralisation defines a council as a basic decentralised local authority (the basic local government unit in Cameroon) with the general mission of promoting local development, improving the living condition of

[8] Plot markers (1.3 m metal rod painted white and buried 0.3 m into the ground at a corner) and tree tags had been removed from 58 plots on the Kilum side rendering plot re-demarcation impossible
[9] Manuscript in preparation

their inhabitants and ensuring environmental protection. Fostering partnerships between the FMIs, councils and the local forestry administration and strengthening their respective institutional and technical capacities for participatory natural resource management would be a logical starting point for rekindling conservation action at kilum-ijim.

Table 1 summarises the extent to which project objectives have been achieved. Overall, two of three projects objectives were largely achieved. The team leader disposes of vegetation and bird data which are the basis of two prospective publications on the ecological status of the kilum-ijim forest. In the interim, it clear that the community-centred forest management system has not worked well in kilum-ijim and recommendations have been made to re-activate the system. Designing the cost-effective monitoring and evaluation system for kilum-ijim pegged on the existence of a management structure. This objective became redundant as the FMIs became inactive.

The main implementation problem encountered relates to the project cost estimate. First, we incurred an unbudgeted bank charge for the transfer of cash from the UK to Cameroon that compromised our ability to carried assessment of changes in surface area of forest habitats. Moreover, consultants demanded more than we could afford within the available budget for acquisition and analysis of a recent satelite image of the forest. We also failed to obtain field equipement from a third party as previewed and had to rent them. Furthermore, the monitoring system set-up by KIFP included a staff of six persons. Our attempt to reduce it to the staff to three met with implementation challenges. This was most evident during bird count when we noticed many errors associated with one person detecting and recording birds following our protocol. We had budgeted for three persons, but were obliged to bring in three others in keeping with the original KIFP design.

The target beneficiary communities participated in project as respondents in key informant interviews. Greater participation was limited by the inactivity of the FMIs.

A key element of the project sustainability was the institutionalisation of the action-research in the *Centre for Environmental Management & Monitoring (CEMMON)*. Like the FMIs, CEMMON became inactive and has obliged to scout for another local NGO. One of the local NGOs under consideration is Community Initiative for Sustainable Development (COMINSUD). While pursuing publication of data collected within the framework of the current project, I will engage negotiations with COMINSUD to develop a project proposal based on the recommendations of the current project.

Table 1 summarises the extent to which project objectives have been achieved

Objective	Activities	Achievement	Explanation of variance
Assess the effectiveness of the community-centred system of management set up by the Kilum-Ijim Forest Project, three years after the project ended	Bird survey – bird count at 90 locations using the point count method	Bird survey – bird count at 125 locations using the point count method	The original design of the bird survey had 120 locations
	Vegetation re-sampling in 90 20 x 20m plots	Vegetation re-sampling in 32 20 x 20m plots	Plot markers (1.3 m metal rod painted white and buried 0.3 m into the ground at a corner) and tree tags had been removed from 58 plots on the Kilum side rendering plot re-demarcation impossible. Data collected is sufficient to estimate forest-wide demographic parameters – tree recruitment, mortality, growth & turnover.
	Assess changes in surface area of forest habitats	Not done	Budget limitation
	Institutional assessment of FMIs	Done	This element was not included in the proposal but its necessity became evident during project implementation
Make recommendations as to what interventions are needed to improve and consolidate the system.	Desk work	done	
Design cost-effective long-term monitoring system that could be supported by organizations like CAMCOF, in order to supply one of the essential elements of forest management that is now missing	Desk review	Done	
	Stakeholder workshop	Not done	Key stakeholders FMIs became inactive

IV – Financial Report (max 3 page)

The total project cost for 12 months is £ 5062.50. Of this amount, £ 5000 was charged to the SGS and the balance to the project team leader (see Table 1). Eighty-seven percent of the total project cost was spent on direct implementation and 13 % on administration, mainly on cash transfer charges between the UK and Cameroon. The direct implementation cost include allowances to 5 field assistants, renting of field equipment (GPS, binoculars, metre tapes,…) and the team leaders cost.

Table 1. Project expenditure								
BUDGET ITEM	**Unit**	**No. Of units**	**Unit Price**	**Total in local currency (FCFA)**	**Total in £sterling**	**Rufford £**	**Other financing £**	**Self-financing £**
IMPLEMENTATION COSTS								
Re-survey vegetation & bird count								
Technician 1	Months	9	75000	675000	675.00	675.00	0.00	0.00
Technician 2	Months	9	75000	675000	675.00	675.00	0.00	0.00
Technician 3	Months	6	75000	450000	450.00	450.00	0.00	0.00
Technician 4	Months	6	75000	450000	450.00	450.00	0.00	0.00
Ecologist	Months	9	125000	1125000	1125.00	1125.00	0.00	0.00
Transport costs	km	3500	25	87500	87.50	87.50	0.00	0.00
Field Equipment	Units	1	450000	450000	450.00	450.00	0.00	0.00
Design of monitoring system								
Team Leader	Perdiem	60	7500	450000	450.00	450.00	0.00	0.00
Transport costs	km	1500	25	37500	37.50	37.50	0.00	0.00
Total implementation cost				4400000	4400.00			
ADMINISTRATION COSTS								
Currency transfer bank charges		1	542497	542497	542.50	542.50	0.00	
Communication	Months	12	5000	60000	60.00	57.50	0.00	2.50
Stationery	Months	12	5000	60000	60.00	0.00	0.00	60.00
Total administration costs				662497	662.50	0.00	0.00	

GRAND TOTAL				5062497	5062.50	5000.00	0.00	62.50
Applied exchange rate:	£1=	1000						

If you require any further information or clarifications please contact:

The Projects Officer
British High Commission
B.P. 547 Yaoundé
Tel: 22 05 45/222 07 96
Fax: 22 01 48
E-mail: Enow.Etta@fco.gov.uk