

Institute of Tropical Forest Conservation **2013 Annual Report**

1. General Institutes achievements

The Institute of Tropical Forest Conservation (ITFC) has been in existence as a postgraduate research institute of Mbarara University of Science and Technology (MUST) since 1991. Based at Ruhija in Bwindi Impenetrable National Park, ITFC's mission is: *to lead in the implementation of biological and social research and training that furthers conservation and management of Albertine Rift forests and biodiversity*. Indeed ITFC has supported several researchers (both Ugandans and others) to undertake Ecological and sociological research and monitoring in tropical forest ecology. Over 60 masters and Phd students have been supported by ITFC to undertake their research since its existence. ITFC has recently started reviewing its Strategic Plan (SP) and this is being facilitated by the MUST's Institute of Management Sciences (IMS).

2. ITFC Staff

Beginning July 2013, Dr Robert Bitariho who was the acting Director was confirmed as the Director and he subsequently took over ITFC leadership. During this year, ITFC has been working with a team of 3 project staff (Badru Mugerwa, Fredrick Ssali and Medard Twinamatsiko), 3 administrative staff (Desi Tibamanya, Clemencia Akankwasa and Florence Tukamushaba), 1 herbarium technician, 2 junior research officers and 26 field assistants. Several research volunteers have contributed to ITFC activities. There are several activities that need staff at ITFC but due to financial constraints, we have had to augment them through recruiting research volunteers. All ITFC project and Junior staff (not on MUST payroll) are working on one year contract that is renewable when the projects are still funded by donors.

3. Students achievements

During this reporting year 2013, ITFC supported 1 MSc student from MUST (biology department- Mr Nkurunziza Nelson), two MA students from Imperial College, United Kingdom (Mariel Harrison and Mahboobeh Shirkhorshidi) and one Phd Student from the University of Massachusetts Amherst, USA (Dennis Babaasa). Unlike last year when ITFC supported 7 students, this year due to financial constraints and unwillingness by donors to release funds, ITFC has supported only few students. We have provided financial support to only one MSc student (Mr Nelson Nkurunziza) while the others have been facilitated by providing them with accommodation, field assistant hire, library use and supervision.

4. Successful projects and funding situation

ITFC has been experiencing decline in donor support for its long term research projects as reported last year. ITFC is now depending on the short term small projects and two projects with funding from the Darwin Initiative (UK) in collaboration with Flora and Fauna International, TEAM project funded by Conservation International (CI) and MUST.

This year, ITFC wrote several project proposals. Some were successful while others were not. The successful projects were:

- ***A Survey of hydrological systems in the Great Virunga Landscape: Water demand and supply in and around Mgahinga Gorilla National Park and Echuya Central Forest Reserve Landscape.*** The project will begin in late December 2013. Funding for this project is to be provided by the Greater Virunga Transboundary Collaborative Secretariat (GVTCS) that is based in Kigali, Rwanda to a tune of **120,000usds** (including purchase of equipments). The project will assess the water quality and quantity in the region and map out soil erosion hazard areas. The aim of the project is to achieve the MDG 7 of provision of sustainable safe drinking water by 2015 to the local people around the Greater Virunga Landscape. ***ITFC competed with several other organisations and won the grant.***
- ***A simple monitoring tool for local community use in Bwindi's multiple use zones, S.W Uganda.*** This project is ongoing and is funded by the Bwindi Mgahinga Conservation Trust to a tune of **25 million UGX**. The aim of the project is to develop simple method for plant resource harvest impact monitoring by the local people in Bwindi National Park. There is a dire need of plant resource monitoring methods that engage the local people in both data collection and analysis in a bottom-up approach. This project will be completed next year in April.
- ***An assessment of local communities' indigenous knowledge and cultural values towards the promotion of sustainable natural resource management in Bwindi and Mgahinga Conservation Area.*** This project is ongoing and is funded by the Bwindi Mgahinga Conservation Trust to a tune of **20 million UGX**. The aim of the project is to investigate and advise park management on how to directly involve local institutions and indigenous knowledge as a yardstick of successful conservation of Bwindi and Mgahinga National park. Partnerships with local and indigenous groups offer opportunities for strengthening conservation both within and outside protected areas.
- ***The status and distribution of montane bamboo in Echuya Central Forest Reserve, S.W. Uganda.*** This project was completed and was funded by NatureUganda to a tune of **9.5 million UGX**. The aim of the project was to investigate the status of bamboo in Echuya and the possible threats that have caused its decline within Echuya Central Forest. A report is already out.

Other project proposals written during this academic year and awaiting communications from the donors are;

- ***Assessing and evaluating the effectiveness of Nkuringo buffer zone (in Bwindi Impenetrable National Park) in addressing the Human-Wildlife Conflict.*** The International Gorilla Conservation Program (IGCP) has agreed to fund this proposal and the proposal is being developed by ITFC
- A proposal for a study that aims at maintaining the already established long-term monitoring plots (Permanent Sample Plots-PSPs) by ITFC in the multiple

use zones (areas in the Bwindi National Park where plant harvesting by local people occurs) was submitted to BMCT in June 2013. The BMCT board agreed to support the study and the contractual agreement with ITFC is due for signing early next year. The project will be funded to a tune of **25 million** per year by the BMCT

- In order to continue the activities of the Tropical Ecology Assessment and Monitoring (TEAM) Network project currently run by ITFC, ITFC together with Dr Alastair McNeilage and Dr Tim O'Brien (all from WCS) have written a proposal to the Buffet foundation for other funds for the continued running of the project for the next 3 years. It is hoped when this proposal is successful we will be able to run TEAM project successfully.
- ***The hunger stories; merging science with winning experiences to solve chronic nutritional inadequacy.*** This project proposal was written jointly by a team from Kachwekano Zonal Agricultural Research and Development Institute (KAZARDI), ITFC, Institute of Management Sciences (all MUST institute) and Global Givings. These were, Dr Imelda Kashaija, Dr Robert Bitariho, Bernard Kakuhikire and Moses Kigozi. This project is part of a wider project proposal coordinated by CultiAf project development by Dr Tim Lynam. The proposal was submitted to the Canadian CIDA and Australian Governments call for proposals. We await their communications.
- ITFC together with MUST's department of Pharmacology have just finalised a ***project proposal on: Biodiversity Conservation Through research training and Drug discovery; the establishment of an "International Cooperative Biodiversity Groups" (ICBG) consortium to address the interdependence of biodiversity conservation and its exploration for potential health applications.*** The Project proposal is being coordinated by Dr Ghee Tan from the University of Hawaii at Hilo (UHH), USA and has Dr Robert Bitariho (ITFC), Dr Duncan Sesaazi (MUST Pharmacology department) and Dr Eunice Olet (Biology department) as collaborators and partners on the project. The aim of the project is four fold; ***biodiversity conservation, drug discovery, research training and economic development*** using local traditional knowledge (ethnopharmacology) from traditional healers around Bwindi and Rwenzori National Parks. The proposal has been completed and submitted and awaits communications from the donors.

3.1 Visitors to ITFC

ITFC from time to time gets visitors and researchers who use our facilities and pay for them and other services. These include accommodation, food, transport hire and use of staff to help with their research. Such visitors include:

- 30 teachers from different schools around Kisoro and Kabale districts belonging to the Wildlife Clubs of Uganda that visited ITFC between the 22nd and 25th July 2013. The teachers were being trained in forest ecology and wildlife management. ITFC facilitated some of the training sessions.
- 35 protected area managers from Democratic Republic of Congo, Rwanda and Uganda attended a workshop facilitated by the International Gorilla

Conservation Program (IGCP) at ITFC station (Ruhija) from the 12th to 13th September 2013. The aim of the workshop was to bring together all protected area managers from the Great Lakes region that are involved in ranger based monitoring programs (such as illegal activity monitoring, fauna monitoring etc) share and compare results.

- 20 students and 3 lecturers from Kitabi College of Conservation and Environmental Management (KCCEM) from Rwanda were hosted by ITFC from the 12th to the 14th of November 2013. The KCCEM group was on an orientation trip to ITFC to familiarise themselves on how ITFC carries out its research activities and fundraisings.
- 35 students and lecturers from Germany, Rwanda, Democratic Republic of Congo and Tanzania were hosted by ITFC from 1st to 9th December 2013. The group were for a field training school in freshwater ecology as the basis for sustainable ecosystem management and was coordinated by Dr Casim Umba Tolo (MUST biology department) and Dr. Stefan Schmid (Centre for Interdisciplinary African Studies, Frankfurt, Germany). This was the first field school of this kind to be hosted by ITFC and Bwindi. We hope to host such field schools such as Tropical Biology Assessment others in future. The aim of such field schools is to train students, young carrier research scientists in the basics of biodiversity data collection, data analysis and report writing. One ITFC staff (Fredrick Ssali) participated in the field school training.

5. Workshops/conferences hosted and facilitated by ITFC

- A workshop on capacity building on policy and research update for the Uganda Poverty and Conservation Learning Group (UPCLG) was organised by ITFC together with Advocates Coalition for Development and Environment (ACODE) and the International Institute for Environment and Development (IIED) on 20th to 22nd February 2013) at Silver Springs, Bugolobi- Kampala. This workshop was organised for the U-PCLG members to learn and acquire skills on how to become an effective policy advocacy network and for journalists to learn how to report on poverty and biodiversity conservation. ITFC's staffs Dr Robert Bitariho and Medard Twinamatsiko are members of the U-PCLG and were actively involved in this workshop.
- The ITFC advisory board meeting was organised in Kampala at the Uganda Wildlife Authority (UWA) headquarters in Kampala on the 22nd March 2013. This board is chaired by the MUST Vice chancellor and was attended by all institutional representatives that sit on the board. These were Wildlife Conservation Society (WCS), UWA, International Gorilla Conservation Program (IGCP), Bwindi Mgahinga Conservation trust, Makerere University, Dean Faculty of Science-MUST, Senior Assistant Registrar-MUST, Director-ITFC and the Finance and Administration Officer-ITFC. The board meeting had taken long to sit as pointed out by the VC and it was long overdue. The

board meeting gives a chance for ITFC to interact with stakeholders and to showcase its work but more importantly to get advice from the stakeholders.

- From the 6th to 17th June 2013, ITFC together with the Uganda Wildlife Authority (UWA) organised an annual researcher's information sharing and dissemination workshop at the UWA park headquarters in Buhoma, Bwindi Impenetrable National Park. This is part of the workshops that ITFC has been organising the past 4 years. Since ITFC had limited funding, the workshop involved a small group of stakeholders from UWA, International Gorilla Conservation Program (IGCP), CARE and ITFC researchers and each organisation catered for its own participants. In the workshop, ITFC together with other partners disseminated research results from staff and students sponsored by ITFC to the Bwindi and Mgahinga National Park's stakeholders. This workshop was attended by all staff of ITFC. See, <https://www.facebook.com/pages/Institute-of-Tropical-Forest-Conservation-ITFC/170477986336910?ref=hl> for more information about the workshop.
- Final research workshop for Conservation through Poverty Alleviation (CTPA) Capacity Building on Policy and Research Update for the Uganda Poverty and Conservation Learning Group (UPCLG) was organised by ITFC together with ACODE from the 17th to 18th September 2013) at Metropole Hotel in Kampala. The aim of the workshop was to present research results of the CTPA project to partners and making a follow-up for the policy reviews leading to poverty alleviation among rural poor people living around Bwindi. Dr Robert Bitariho and Medard Twinamatsiko were actively involved in the organisation of the workshop and attended it.
- Batwa Cultural Values and Conservation Project seminar was organized by ITFC together with Fauna and Flora International and Uganda Wildlife Authority at Ndere Cultural Centre, Kampala on the 16th October 2013. The aim of the workshop was to present research results of the Batwa Cultural Values Project (BCVP) to partners. This workshop was attended by Dr Robert Bitariho and Medard Twinamatsiko.
- National stakeholders' workshop on Uganda's accession to UNEP/Gorilla agreement and draft CITES and Lusaka agreement domestication orders, at Grand Imperial Hotel, Kampala on the 17th October 2013. This workshop was organised by the Ministry of Wildlife and Antiquities and attended by Dr Robert Bitariho who also chaired one of the workshop sessions.
- Dr Robert Bitariho continues to sit on several boards and steering committees concerned with biodiversity conservation and training. These include; the Bwindi Mgahinga Conservation Trust management board (*sat 4 times this year*), Technical Supervisory Committee of the Ministry of Wildlife and Antiquities training institute (*sat twice this year*) and Technical advisory committee of NatureUganda's project-Echuya Forest Conservation Project (*sat twice this year*). Dr Bitariho is a member of the MUST senate and also sits on various committees of MUST such as the Quality assurance committee, Grant office committee and the income generating committee.

Other workshops attended by ITFC staff include:

- A Regional Mountain Gorilla Tourism Policy Guidelines facilitated by the International Gorilla Conservation Programme (IGCP) in Musanze, Rwanda (March 27, 2013) attended by Fredrick Ssali
- A workshop on the transboundary Reduced Emissions from Deforestation and forest Degradation (REDD+) action plan for the Greater Virunga Landscape organized by the Wildlife Conservation Society (WCS) in Kabale (April 7, 2013) attended by Fredrick Ssali
- The 6th Annual Meeting for the Regional Network for Conservation Educators in the Albertine Rift (RNCEAR) and a Social Science Research Methods Workshop Organized by the Biology Department, Faculty of Sciences, University of Burundi in Bujumbura, Burundi (August 5-10, 2013) attended by Fredrick Ssali
- A workshop on the African maiden student conference on conservation science in Nairobi. Travel and participation at the conference was fully paid by the Tropical Biology Association (TBA). (July 2013), attended by Badru Mugerwa
- Training workshop in tropical rainforest biodiversity: field and GIS tools for assessing, monitoring and mapping at Udzungwa Mountains National Park, Tanzania. Travel and participation at the summer school was paid for by Conservation International, Trento Museum and Trento University. (August 2013), attended by Badru Mugerwa.
- A biometrics-training workshop at the Islamic University in Uganda (IUIU). Travel and participation at the workshop was paid for by the IUIU, University of Cape town and University of Reading. (September 2013) attended by Badru Mugerwa

6. Publications written in a scholarly manner

The following list includes publications by ITFC staff (**in bold**) together with partners during this financial year 20012/2013 other publications not shown here are in press:

- Baker, J, **Bitariho, R**, Gordon-Maclean, A, Kasoma, P, Roe, D, Sheil, D, **Twinamatsiko, M**, Tumushabe, G, van Heist, M & M. Weiland, 2013. Linking Protected Area Conservation with Poverty Alleviation in Uganda: Integrated conservation and Development at Bwindi Impenetrable National Park, Nova Science Publishers, Inc, New York
- Kasangaki, A and **Bitariho, R**, (2013). Review of Benefit Sharing and Community Conservation Approaches in the Albertine Rift Region: in Albertine Rift Conservation report, Kanyamibwa, S (ed), Albertine Rift Conservation Series No. 1, Arcos network
- Kasangaki, A, **Bitariho, R**, Shaw, P, Robbins, M & McNeilage, A (2012). Long-term ecological and socio-economic changes in and around Bwindi Impenetrable National Park, south-western Uganda: in the ecological Impact of long-term

changes in Africa's Rift Valley, Plumptre, A (ed) Nova Science Publishers, Inc, New York.

- **Mugerwa, B.** (2013) First photographic record of the Serval cat (*Leptailurus serval*) in Bwindi Impenetrable National Park, southwestern Uganda. A short communication submitted to the Cat News.
- Sheil, D. & **Mugerwa, B.** (2013) First pictures of hunting African golden cat. CAT News 58 Spring 2013.
- Sheil, D., **Mugerwa, B.** & Fegraus, H. E. (2013) African golden cats (*Caracal aurata*), citizen science, and serendipity: tapping the camera trap revolution. South African Journal of Wildlife Research 43, 74-78.
- **Mugerwa, B.**, Sheil, D., Ssekiranda, P., Heist, V.M. & Ezuma, P. (2013). A camera trap assessment of terrestrial vertebrates in Bwindi Impenetrable National Park, Uganda. *Afr. J. Ecol.* **51**, 21–31. doi: 10.1111/aje.12004

7. Conclusion

Financial sustainability for long term research and monitoring activities is a big challenge at ITFC. Much of the funds from donors have declined and ITFC is now depending on three small projects and the some funds from MUST to sustain its activities. ITFC hopes to get more funds from MUST in order to run its field activities. Much effort will be needed to raise funds for the institute's survival and growth. All project/field staff at ITFC are being encouraged to write project proposals and fundraise in order to sustain the ITFC research activities.

“SUCCEED WE MUST”

Sincerely

Dr Robert Bitariho (PhD)
Director, ITFC