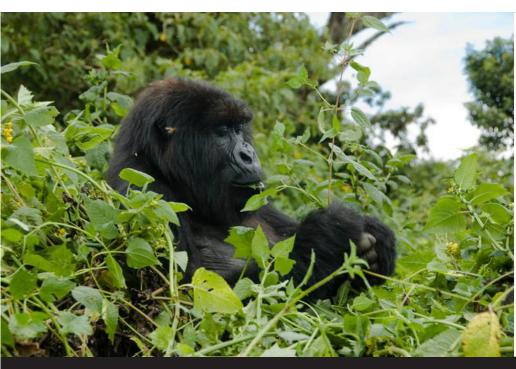




# **STRATEGIC PLAN** 2017 - 2022









Local solutions with a global perspective

**JUNE 2017** 

Ruhija, Bwindi Impenetrable National Park, S.W Uganda

# Acknowledgements

This strategic plan (SP) was developed by the staff of the Institute of Tropical Forest Conservation (ITFC) under facilitation initially of Beda Mwebesa (consultant). The SP was developed in order to maintain and improve the institute's comparative advantage in biodiversity conservation research and to further strengthen the human and financial resources of ITFC over the next five years. Dr. Dennis Babaasa, a Senior Research Fellow, later on led and facilitated the strategic planning process to compilation and completion. Associate Professor Robert Bitariho, director, ITFC, did the final editing to this plan. Funding for the process of this strategic plan was provided by the Mbarara University of Science and Technology's annual release to ITFC for the FY 2016/17.

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# List of acronyms used

Annual Operations Plan (for park management, UWA)

AfDB African Development Bank

BMCA
BMCT

Bwindi Mgahinga Conservation Area

Bwindi Mgahinga Conservation Trust

Conservation International

CTPH Conservation Through Public Health

EIA Environmental Impact Assessment

FFI Fauna and Floral International

FIS Faculty of Interdisciplinary Studies

GoU Government of Uganda
GVL Greater Virunga Landscape

GIS

**GVTC** Greater Virunga Transboundary Core Secretariat

Geographic Information Systems

**HWC** Human-Wildlife Conflict

ICD Integrated Conservation and Development
IFCP Impenetrable Forest Conservation Project

International Gorilla Conservation Programme

International Institute of Environment and Development

Institute of Tropical Forest Conservation

MGVP Mountain Gorilla Veterinary Program (Gorilla doctors)

**MoU** Memoranda of Understanding

MRV
MUBFS
Must
Must
Must
Must
Measurement, Reporting and Verification
Makerere University Biological Field Station
Must
Must
Must

**NFA**National Forestry Authority

PA Protected Area

**PPP** Public Private Partnerships

**PSFU** Private Sector Foundation Uganda

**REDD+** Reducing (greenhouse gases) Emissions from Deforestation and (forest) Degradation

**SWOT** Strengths, Weaknesses, Opportunities and Threats

TEAM Tropical Ecology Assessment and Monitoring

UNESCO United Nations Educational Scientific and Cultural Organisation

USAID
United States Agency for International Development
UOBDU
United organisation of Batwa Development in Uganda

WCS
Wildlife Conservation Society
WWF
World Wildlife Fund for Nature

### **Foreword**

The Institute of Tropical Forest Conservation (ITFC) is one of the eight academic units of Mbarara University of Science and Technology (MUST) that strives to achieve academic excellence. With its core mandate of conducting research, monitoring and training in the fields of forest ecology and socioeconomics in and around the Albertine Rift protected areas. ITFC's contribution to biodiversity conservation

efforts in Uganda is in line with MUST's goal of community outreach and engagements. ITFC has attained a high reputation in research excellence in the region. Since its establishment in 1991, ITFC has disseminated most of its research findings to a wider national and international audience in forms of publications (over 300) and annual workshops. Some prominent ITFC

publications have been showcased in high impact journals such as Science, Biotropica, Conservation Biology, Forest Ecology etc. These have greatly contributed to MUST's rankings in Africa and the world as one of the best Universities to go to. ITFC contributes invaluable evidence based and timely research guidance to Uganda Wildlife Authority (UWA) and the National Forest Authority (NFA) for the better management of their protected areas.

The ITFC Strategic Plan is first and foremost in line with the wider MUST Strategic Plan therefore, and is in particularly geared towards strengthening and enhancing ITFC as a leading Ugandan Research Institution in biodiversity conservation and natural resource management. Using the flagship theme 'local solutions with a global perspective", this strategic plan aligns ITFC in addressing new emerging conservation issues such as climate change impacts, invasive species and zoonotic diseases from a global perspective. Therefore, the research activities in this strategic plan have been tailored to providing local solutions with a global perspective. In the coming five years, ITFC intends to capitalize on its strengths and opportunities while addressing the weaknesses and threats that were identified in this strategic plan to achieve its mandate and to lift MUST to a high academic excellence. This will only be achieved with the involvement of all stakeholders (local and international) and in particular with full support from the University Management.

"SUCCEED WE MUST"

Professor Celestino Obua

Vice Chancellor, MUST

### **Executive Summary**

The Institute of Tropical Forest Conservation (ITFC) is a leading Ugandan research institution working primarily for biodiversity conservation and the sustainable management of natural resources in and around the protected areas of the Albertine Rift ecoregion – a global biodiversity hotspot. It was established in 1991 as a semi-autonomous research institution and field station of Mbarara University of Science and Technology (MUST) to carry out ecological and sociological research, monitoring and training. The institute is located at the eastern border of Bwindi Impenetrable National Park in Ruhija, Kitojo Parish, Ruhija Sub-county, Rubanda District in southwestern Uganda. The institute's main functions are to initiate and implement research and monitoring projects and programmes, train graduate students, researchers and conservationists/practitioners, offer scientific advice and expertise to conservation agencies, and provide a base and research facilities for independent researchers.

Since its establishment in 1991, ITFC has fulfilled a variety of vital biodiversity and ecosystem research and monitoring functions and has built a highly creditable track record of conservation achievements. Because of the importance of the areas in which ITFC is working, these successes are of global as well as national and local significance. ITFC has a number of loyal and committed local and international backers and stakeholders who recognise its value and some depend on the institute's outputs. Growing human pressures on the natural resources of the Albertine Rift ecoregion has only served to enhance further the value of ITFC's work. The institute also has a significant, if not fully realised, role as an educational facility for MUST's and Makerere University's biology graduate students. Indeed some of ITFC's Alumni are now based in universities, Uganda Wildlife Authority (UWA), National Forestry Authority (NFA) and National Environment Authority (NEMA) and are able to influence national conservation policies in Uganda.

Despite these achievement records, ITFC is now at a defining moment. Globally, research is taking new directions addressing emerging issues and conservation challenges that the institute must align with as a forward-moving institution. Our external donors and international bodies are shifting their funding priorities and geographic area of focus and the grants in the environment sector have become highly competitive. However, the growing demand for data and information in response to the ever changing natural resource management challenges hints at the value and enduring need for ITFC's research and services. This five-year strategic plan (June 2017 to June 2022), therefore, aligns the institute's research priorities to emerging areas of conservation research as well as meeting the requirements and services expected by our primary stakeholders.

In order for ITFC to set up its direction and paths for the successful progression over the next five years, furthermore, the need to establish ITFC's research priorities and effective use of natural resources that meet the requirements and services expected of a reputable research institution and its stakeholders, the ITFC staff conducted strategic planning processes that started in May 2016 and ended May 2017. This involved visioning interviews and/or sessions with current and former staff/students, partners and stakeholders through emails and face-to-face interviews. This five-year strategic plan identified factors necessary for conducting conservation research and monitoring at the scope, scale, and quality required to produce relevant, efficient and effective outputs to address the needs of ITFC, its stakeholders and partners.

### Specifically, this plan:

- o assesses the institute's strengths, weaknesses, uniqueness, and value to those who utilize and benefit from its research results and services;
- o identifies threats, opportunities, and trends related to the institute's ability to carry out its mission now and in the future:
- o ascertains the emerging conservation issues and challenges which the institute should address and the key success factors required to meet the challenges;
- o specifies an integrated key implementation actions that address opportunities and deficits that need to be addressed during the next five years all organized into six overarching strategic objectives that encompass the institute's outputs and operations. These are:
  - Knowledge of species and habitats increased
  - Graduate students and conservation practitioners trained
  - Institute's staff, facilities and equipment sufficiency ensured
  - Information to support decision-making provided
  - Institute's visibility increased
  - Institute's sustainable funding secured;
- o establishes a monitoring and evaluation plan for assessing the progress in the implementation of the plan as well as the timelines, responsibilities and budget estimates for sustaining plan actions and processes.

Implementation of this strategic plan will be a concerted effort across institute management and research staff. To be fully realized, strong support from MUST and donors is needed.

### 1.0 Introduction and background

#### 1.1 An overview of ITFC

The Institute of Tropical Forest Conservation (ITFC) is a leading Ugandan research institution working primarily for biodiversity conservation and the sustainable management of natural resources in the Bwindi Mgahinga Conservation Area (BMCA) and Echuya Central Forest Reserve in southwestern Uganda. Of recent, the institute has expanded its area of operation to include other conservation areas in the Greater Virunga Landscape (GVL) and the Albertine Rift ecoregion – a global biodiversity hotspot. The institute was established in 1991 as a semi-autonomous research institute and field station of Mbarara University of Science and Technology (MUST).

### ITFC's activities are grouped into four main roles:

- 1. initiating and implementing research and monitoring projects and programmes in collaboration with the Uganda Wildlife Authority (UWA), National Forestry Authority (NFA) and other partners according to protected area management priorities and needs;
- 2. training students, researchers and conservationists/practitioners through field supervision and logistical support;
- 3. offering scientific advice and expertise to conservation agencies and partners in the region; and
- **4.** providing a base and research facilities for both national and international independent researchers.

ITFC is located at Ruhija, Kitojo Parish, at the northern extreme corner of Rubanda District where the district borders with Kanungu District in SW Uganda. The institute is at one end of the eastern border of Bwindi Impenetrable National Park.

### 1.2 When was ITFC formed and why?

The genesis of ITFC dates as far back as 1983 when an ecological survey of the then Impenetrable Central Forest Reserve was carried out by Dr. Thomas M Butynski, funded by the New York Zoological Society (now Wildlife Conservation Society). Butynski's findings indicated that the forest was in dire stress and the mountain gorillas were severely threatened by the high level of human activities. Pitsawing (both legal and illegal), gold mining, beekeeping, and hunting were out of control. There was therefore need for immediate conservation efforts in and around the forest. This sparked the interest of the World Wide Fund for Nature (WWF) to promote the conservation of the mountain gorillas and their habitats in southwestern Uganda. In August 1986, the Impenetrable Forest Conservation

Project (IFCP) started, with support from WWF. The project's mission was to protect last remaining Afro-montane forests of southwest Uganda (Bwindi Impenetrable, Mgahinga and Echuya). IFCP established a conservation and research station at Ruhija, on the edge of the Impenetrable Forest, and lobbied successfully the Government of Uganda to upgrade both the Bwindi Impenetrable and Mgahinga montane forests from the status of Central Forest Reserves to National Parks.

In 1991, the Institute of Tropical Forest Conservation (ITFC) was established as a semiautonomous research Institution of MUST to ensure IFCP's successful conservation gains; research and training activities were sustainable in the long-term. ITFC is a major partner in the conservation of biodiversity in the Greater Virunga Landscape and the Albertine Rift ecoregion.

#### 1.3 What led to formation of ITFC?

ITFC arose out of a necessity by tropical rain forest conservationists for a permanent research station in the Afro-montane forest ecoregion, which is considered to be the rarest vegetation type on the continent but is little studied. At the time the institute was created, there was only one research station conducting ecological studies in Uganda's rain forests: the Kibale Forest Project's research station (now Makerere University Biological Field Station [MUBFS]) located in Kibale Central Forest Reserve - now Kibale National Park) - a medium altitude rain forest. A permanent field station in Bwindi would yield data on little known montane forest types. Having a longer-term presence would be an advantage in that it allows data collection over time so that a long-term database can be established. The long-term data sets are what make established research stations very valuable places.

### 1.4 Recent key changes at ITFC

The most important changes that have occurred since ITFC was established 26 years ago include:

- i. the institute is now run wholly by highly experienced Ugandan researchers;
- ii. recruitment of a senior scientist to increase the capacity of the institute to undertake research activities;
- iii. research issues have been diversified from purely forest ecology/biodiversity studies to include socio-economic investigations;
- iv. expanding its footprint beyond Southwestern Uganda (Bwindi, Mgahinga and Echuya montane forests) to other protected areas in the GVL and the Albertine Rift ecoregion in general;

- v. there has been physical infrastructure development in office, accommodation, library, and herbarium space. All the buildings are installed with a strong solar power system and have large capacity rainwater harvesting tanks;
- vi. acquisition of cutting-edge scientific field equipment and technologies as well as launching and maintaining an institute website and blog site;
- vii.use of computerized accounting and electronic banking systems in financial management systems;
- viii. possess 24.6 hectares of land located in Buhoma that hosts some income generating projects with others planned for the remaining part of the land; and
- ix. the ethno-botanical garden at Ruhija station has been refurbished to serve as a scientific research and tourism attraction center on indigenous botanical knowledge as well as an indigenous tree nursery to avail the seedlings to the local communities for on-farm planting.

### 1.5 Recent research grants attained by ITFC

For the first two decades of ITFC existence, the institute enjoyed core financial support mainly from World Wide Fund for Nature (WWF) and United States Agency for International Development (USAID). However, due to changes in donor funding priorities/interests, shifting geographic area of focus or donor fatigue, ITFC no longer receives such long-term support from those donors. Currently, ITFC depends entirely on conditional grants to run specific research activities as agreed upon with the donors. This has had an adverse effect on some of the core activities of ITFC and long-term research and monitoring projects due to shortfalls in funding. Some of the most important, large, and/or medium-term grants ITFC has received in the passage of five years (2012 - 2016) are shown in the Table 1. In addition to these grants, ITFC has also received some modest, short-term, one-off research project grants from other sources including Bwindi Mgahinga Conservation Trust, Nature Uganda, International Foundation for Science, British Ecological Society, Mohammed bin Zayed Species Conservation Fund, Birdlife International, African Development Bank among others. The institute's substantial research grants are a relatively unique funding stream within MUST.

### 1.6 Need for a strategic plan for ITFC

Despite the sound and steady growth of scientific research and physical infrastructure, ITFC is now at a defining moment. Globally, research is taking new directions addressing emerging issues and conservation challenges, which the institute must align with as a forward-moving institution. Our external donors and international bodies are shifting their funding priorities and geographic area of focus and grants in the environment sector have become highly competitive. The sustainability of monitoring programs has always been a worry to ITFC

as few donors have interest supporting such activities, as results may not be forthcoming within the time span of most grants. However, the growing demand for data and information in response to the ever changing natural resource management challenges hints at the value and enduring need for ITFC's research and services. Even though ITFC's research activities are majorly in the conservation areas of Southwestern Uganda, their successes and lessons learned have a wider significance and therefore contribute to the widespread recognition of the institute. Such recognition is necessary to ensure the maintenance of a broad base of supporters that will be needed to ensure ITFC's long-term financial viability. For ITFC to remain relevant, efficient and generating effective conservation outputs, it must address the changing global and local conservation challenges. This five-year strategic plan (June 2017 to June 2022) therefore aligns research priorities and the human and financial resources to emerging areas of conservation research as well as meeting the requirements and services expected by our primary stakeholders.

### 1.7 The strategic planning process

From mid-2016, ITFC embarked on a strategic planning process to set overall directions for the institute for the next five years and beyond. The process represented a wide range of functions, research areas and stakeholder interests and consisted of two stages.

The first stage involved information gathering and analysis, which included external and internal assessments. This was achieved as follows:

- a. Desk documentation review of annual reports, past and current grant proposals, action plans, administration and finance manuals, grant completion reports, technical reports and publications, among others;
- b. Key informant interviews a list of key informants to interview was developed during an inception meeting. These included current and former staff members and graduate students, and our primary stakeholders. A cover letter and survey questions were developed and mailed to the key informants:

### Key guiding questions were:

- o What are the key strengths of ITFC?
- o What are the real or perceived weaknesses or things that need to be changed?
- o What are the emerging issues or conservation challenges on the horizon that the institute should prepare to address? What do we do to prepare?
- o What are the top three to five priorities among these issues?
- o What key success factors are required to meet these challenges?
- o What factors could make these challenges and issues difficult to address? and
- o What other opportunities do you see for ITFC?;

c. An analysis and completion of summary report of interview findings and assessment was done.

The second stage involved a strategic planning workshop building on the information gathered and analyzed in the first stage of the planning process, a workshop of current staff members and selected representatives of our primary stakeholders was held and facilitated using a mixture of participatory methods and techniques including critical review and visioning.

The workshop participants were engaged on the following:

- a. Identification of critical issues and choices facing ITFC;
- b. Development of strategic vision statement that sets the future direction for ITFC by considering the visioning question: "What do you expect to be able to tell the World Conservation Congress in the year 2022 about ITFC and its major achievements?"
- c. Mission statement review considered the following questions: **Orientation** what is our area of concern? **Target groups** who are we trying to reach? **Mission** what are we trying to achieve?
- d. Development of strategic objectives;
- e. Formulation of key actions to achieve the strategic objectives;
- f. Identification of collaborative partnerships that would enable the fulfillment of the vision, mission, strategic objectives and key actions of the plan.



# 2.0 Legal status, management and facilities

### 2.1 General

ITFC is one of the eight academic units of MUST established by the Universities and other Tertiary Institutions Act 2003 (revised 2006). These academic units include six faculties and two institutes: the Faculties of Medicine, Science, Applied Science and Technology, Computing and Informatics Sciences, Business and Management Sciences, Interdisciplinary Studies, Maternal New Born and Child Health and Institute of Tropical Forest Conservation (see www.must.ac.ug). Unlike the other seven academic units of MUST, ITFC was established as a semi-autonomous postgraduate field station and research institute of MUST. The Director of ITFC represents ITFC in MUST senate meetings.

### 2.2 Operational level

Day-to-day activities of ITFC are undertaken by three kinds of staff:

- a. Permanent staff appointed by MUST and are subject to the terms and conditions of service of MUST. There are currently five staff members in this category who include the Director, Research Fellow, Finance and Administration Officer, Herbarium Technician, and an Administrative Assistant.
- b. Contractual staff hired/seconded to ITFC depending on the nature of donor funded projects/programmes being run by ITFC and whose contractual terms are determined by ITFC. Their numbers vary depending on the projects being run by ITFC at a time. Currently we have a Tropical Ecology Assessment and Monitoring (TEAM) Network Project Site Manager, two Junior Research Officers and three consultants. Sometimes, there are volunteers and student interns giving a hand on various field projects.
- c. Support staff employees hired by ITFC directly and they include junior cadre staff engaged in support services of the institute. They are close to 25 in number and majority have served the institute for more than 15 years and therefore have a strong institutional memory.

There is a strong need to fill the vacant positions of Research Fellow to head the social-economic research programme, Communications Officer, Fundraising/Grants Officer, Ecological Research Officer and Accounts Clerk for smooth running of the institute.

### 2.3 Governance level

The supreme decision making body of ITFC is the MUST Council that is responsible for the policy guidance of all MUST's eight academic units. MUST top management is responsible for the administrative guidance of all MUST's academic units. The Director of ITFC reports to MUST Vice Chancellor and is in-charge of day-to-day activities of ITFC. ITFC also has

an Advisory Board that is chaired by the MUST's Vice Chancellor and meets annually. The board guides on important and long-term policy decisions and provides advice on matters it deems necessary to improve on the financial sustainability of ITFC's research activities. The Advisory Board consists of people who head and/or represent disciplines/agencies relevant to the objectives of the institute, and with whom the institute expects to have extensive interactions. The current composition of the board is as follows:

- o Vice Chancellor MUST
- o Academic Registrar MUST
- o Dean Faculty of Science MUST
- Trust Administrator BMCT
- o Country Director IGCP
- o Country Director WCS Uganda
- o Executive Director UWA
- o Conservation Area Manager BMCA
- Representative from the College of Agricultural and Environmental Sciences Makerere University

Establishment of an international advisory panel would add more value to ITFC by assisting in fund raising and constantly promoting institute's research to a global audience.

### 2.4 Physical facilities

Over years, ITFC has developed an impressive collection of buildings with support of a variety of donors, particularly WWF and USAID. The floor space available is regarded as sufficient for the current level of operations with perhaps some more room for limited expansion. Table 2 shows current buildings, their use and donor.

The institute has five field 4WD vehicles but which are now ageing and therefore very expensive to maintain. ITFC also has field equipment for camping and basic instruments for field data collection with some requiring replacement, as they are old and some outdated. ITFC operates cutting edge field technology in form of an automated climate station at near the Ruhija station and camera traps that are used to record presence and distribution of large vertebrates. Because of the accuracy of the weather station, the data collected could be of importance in national, regional and international climate data analyses. The camera traps have significantly contributed to our ecological knowledge of Bwindi by having long-term datasets and being able to detect highly elusive and/or nocturnal mammals that are ordinarily hard to find using other ecological field methods.

# 3.0 Situational Analysis

### 3.1 Strengths, Weaknesses, Opportunities and Threats Analysis

Informed by the current and former staff and our primary stakeholders visioning process, we developed a "SWOT Analysis" summarizing the strengths, weaknesses, opportunities, and threats to ITFC from within (internal) and from without (external) and key success factors required to address the conservation challenges. Summaries appearing in the Table 3 and 4 were used to develop and shape the strategic objectives and key actions of the institute for the next five years by:

- a. maximizing the opportunities
- b. mitigating the threats
- c. enhancing the institute's competencies
- d. managing organizational shortcomings
- e. adopting the key success factors
- f. laying a basis for future competitive advantages
- g. counteracting concerns eroding current competitive position

The activities will provide the basis for the individual work plans of ITFC's departments and professional staff, a framework for monitoring the institute's progress, as well as a foundation for the development of specific project proposals to be submitted to donors for funding. The whole planning process presumed that ITFC will maintain a modest, realistic form, commensurate with its functions and financial limitations. Because it is intended to be a practical guide for ITFC's managers, the strategic plan is limited to a 5-year period, since concrete actions cannot realistically be planned for longer than this.

### 3.2 Emerging issues and conservation challenges

Also, the stakeholders and the visioning sessions raised conservation challenges and emerging issues that ITFC could address through research:

- o Climate change and its impacts on species range shifts and resultant changes in ecosystem health and human well-being
- Threatened loss of species and ecological function
- o Gender issues and concerns in conservation and use of biodiversity resources
- o Effectiveness of conservation/management strategies and initiatives

- o Human-Wildlife Conflict impacts, uptake, sustainability and effectiveness of mitigation measures
- o Risks of disease transmission at the human-livestock-wildlife interface
- o Impacts of natural resource extraction (oil and gas, minerals, poaching, water) and physical infrastructure (e.g., roads, footpaths, buildings) on biodiversity in and around protected areas

### 3.3 Priority issues

The outcome of the issues, challenges and opportunities analyses carried out indicate that ITFC's stakeholders believe that the primary role of the institute should be applied research into problems underlying the above conservation challenges and issues. In particular, stakeholders believed that ITFC's products and services should focus on:

- o monitoring general ecosystem health, as well as the health of individual ecosystem components
- o improving understanding of ecosystem function, in particular in relation to sustainable use of natural resources and other human impacts
- o contributing improvement of natural resource management practices, in particular by enhancing cooperation between protected area management and local communities

This stakeholder analysis of priority issues for ITFC was an important input into the development of ITFC's vision and mission of its institutional role and niche, and specifically the key actions to achieve the strategic objectives.

### 3.4 Stakeholders and Participation Analysis

A review of key stakeholder roles and functions, interests, expectations and contributions/ outputs was used in aligning the strategic objectives to meet the expectations of ITFC's stakeholders as summarized in the Table 5. Understanding the needs of ITFC's stakeholders and partners and developing and delivering products and services that address these needs represent a proactive approach to developing ITFC's product and service portfolio, including where appropriate, an element of risk-taking, especially in pursuit of new ideas and initiatives. Also important is recognition of the importance of building and fostering strategic partnerships with a range of other organizations both nationally and internationally that share ITFC's objectives and can help the institute achieve its mission

### 4.0 Organisational tenets

### 4.1 Our Vision

The vision of ITFC is:

"The Conservation of Albertine Rift protected areas and welfare of neighbouring local communities enhanced"

#### 4.2 Our Mission

The mission of ITFC is:

"To be a leading institution that supports ecological and sociological research, monitoring and training in the Albertine Rift ecoregion"

### 4.3 Our Values

The core values or principles of ITFC are:

- o **Innovative** generate new knowledge and ideas as well as better ways of undertaking conservation practice and identify funding mechanisms that ensure financial sustainability
- o **Excellence** deliver highest quality, timely, evidence-based results in all our research endeavors and provide effective human resource capacity building
- Service be service oriented and demand driven serving our primary stakeholders by mainstreaming research results into practical conservation management
- o **Integrity** carry out field and laboratory research and monitoring with the highest level of objectivity, responsibility and accountability

This mission will be achieved in particular by forging strong national and international partnerships to ensure quality, applicability and relevance of ITFC's research and monitoring work. ITFC will develop strong research programmes in GVL and Albertine Rift ecoregion in general on important issues for the management of protected areas therein. Key research topics will include interactions between local communities and the protected areas, wildlife and their habitats, the effectiveness of management strategies, ecological dynamics of isolated/fragmented protected areas and impacts of climate change on ecosystems and their components. Unique and treasured species like mountain gorillas will receive special attention. Strong links with global research community will ensure that ITFC's work is of high calibre and up-to-date. Close collaboration with protected area authorities and conservation agencies will ensure that ITFC's work responds to conservation challenges and is integral to the design and implementation of management policies and actions. ITFC's affiliation with MUST will ensure that its work contributes to the development of national professional capacity. ITFC's strategic plan implementation map is shown in Figure 1.

# 5.0 Strategic plan implementation

### 5.1 Strategic objectives and actions

ITFC shall strive to increase understanding of the conservation and development linkages that underpin effective conservation and will ensure that reliable information on effectiveness and impacts is used to inform all protected area management decisions. Under this strategic plan, ITFC will put increased emphasis on strengthening the interface between research and practical conservation management (as summarized in Figure 1). ITFC shall also continue to improve its capacity to address social and development aspects of conservation and to engage more directly with local stakeholders.

ITFC will develop and improve capacity to identify and assess issues of conservation concern in the GVL and the Albertine Rift ecoregion at large while building on ITFC's past research work. The research agenda will still be guided by the needs of conservation managers for information, advice and skills training. Lessons learned will be shared in local and international research and conservation networks, through workshops, meetings and consultations, presentations, publications, documents and our website.

ITFC's strategic objectives and key actions are grouped under six linked themes (see Figure 1 also).

### 5.1.1 Strategic Objective 1: Knowledge of species and habitats enhanced

### 1.1 Understanding the ecology and conservation needs of species and habitat assessment

Well-developed protected area management plans must be based on sound basic knowledge regarding the population ecology of the species being managed. Protected areas are usually zoned to spatially define different management activities within delimited areas of a PA. Key species can be used as criteria for prioritization of the relative value of areas located across the PA to allow conservation managers to make informed decisions about where different management activities should be developed within the PA and have minimal impact on the habitats and their wildlife. The taxa chosen for study – mammals, bird and tree species - are primarily based on the ease of identification using existing taxonomic keys. By choosing very different taxa, it is hoped that the analysis of all the different taxa combined will allow these taxa to act as 'umbrellas' for the weighting of sites for other unsurveyed taxa. In addition, knowledge on the distribution of key species can help determine where tourism sites should be located within the PA so that tourists are able to view a variety of species without visiting and negatively impacting the most important sites for conservation. Changes in habitat conditions due to past and present human and climate change impacts also need to be monitored so that sites that are degraded or deteriorating are restored. Our key actions are grouped under four issues reflecting conditions when specific biological populations or communities become a focus of management.

### **Key Actions**

### a) on populations that are of conservation concern (limited numbers and distribution):

- o continue organizing, coordinating and participating in the regular five year mountain gorilla censuses in the Bwindi-Virunga landscape
- o continue studying gorilla behavioral ecology, population dynamics and the impacts of ecotourism on gorilla behavior
- o continue collecting and analyzing the Tropical Ecology Assessment and Monitoring (TEAM) project camera trap network data on large terrestrial vertebrate species collected on 30 sites since 2010 in Bwindi, especially, the Handsome francolin, Crested guinea fowl, Side-striped jackal, Golden cat, Black-fronted duiker, Weyns's duiker, Bush pig, Mountain gorilla, and Elephant
- o continue collecting and analyzing Tropical Ecology Assessment and Monitoring (TEAM) project data from the Vegetation PSPs to document diversity and composition, growth, mortality, regeneration and dynamics of forest trees
- o expand the current Tropical Ecology Assessment and Monitoring (TEAM) project camera trap network for large terrestrial vertebrate species and vegetation PSPs monitoring to other elevation zones areas of Bwindi not currently sampled
- o design studies on the distribution and habitat associations of restricted range species, particularly data deficient Albertine Rift endemics

### b) on plant species that are important for their commercial or cultural values:

- o continue monitoring harvested plant species vulnerable to overexploitation in the multiple-use areas of Bwindi
- o Assist UWA with the implementation of the local community plant harvest monitoring tool

# c) on species that act as pest or disease organisms or invade and displace indigenous species:

- o design studies to understand the status of invasive species in BMCA
- o design studies to understand transmission of zoonotic diseases

### d) on climate and landscape change that have important effects on biotic communities:

o continue collecting and analyzing the daily weather data (temperature, relative humidity, rainfall, and solar radiation) being collected by the automated weather station established near Ruhija, Bwindi, since 2010

- o continue collecting and analyzing Tropical Ecology Assessment and Monitoring (TEAM) project data from the Vegetation PSPs to estimate the carbon density changes since 2010 as a contribution to REDD+ (Reducing [greenhouse gas] Emissions from Deforestation and [forest] Degradation) Measurement, Reporting and Verification (MRV) national reporting requirements
- o design a study on tree phenology and dynamics of the understory vegetation (herbs and climbers) in response to climate change
- o evaluate climate change adaptation impacts of and responses to societal demands for water, energy, land, and other infrastructure; shifts in agricultural production; and changes to terrestrial and aquatic habitat for fish and wildlife
- o study the impact of human activities (physical infrastructure, mineral and oil exploration and extraction, hydropower projects, tourism, poaching) within the protected areas of GVL on 'key' taxa plants, birds, small and large mammals and ecological processes and functions
- o monitor changes in habitat conditions using water quality properties of major rivers draining the protected areas of GVL using macro-invertebrates and physical-chemical characteristics of water as indicators
- o monitor wild fire outbreak incidences, causes and extent of damage in BMCA
- o monitor changes in land-use practices outside the protected areas in GVL and impacts of the use of agrochemicals on the natural ecosystems especially pollinator species

# 1.2 Understanding of the human dimensions in biodiversity conservation and protected area management

ITFC is well-regarded as a hub of knowledge on biodiversity conservation. In addition to strengths in the ecological aspects of conservation, we address the interface between people and ecosystems. Through our research, we address the "human dimensions" of biodiversity conservation and have sought to understand how local people and policy influence conservation outcomes, what motivates people in their environmentally-related actions, how conflict is dealt with, and what kinds of policies, decision-making and institutions lead to (or inhibit) effective conservation. Human behavior (values, conflicts, engagement) and environmental governance and institutions (policy, law, regulation, decision-making), play an important role in the biodiversity conservation outcomes. This objective reflects ongoing ITFC work, notably under the social/community livelihoods research programme where integrated conservation and development projects are being evaluated on their impacts especially on disadvantaged members of the local communities.

### **Key Actions**

- o continue collecting data on changes in community attitudes, behavior, livelihoods and expectations for individual Integrated Conservation and Development (ICD) projects with particular emphasis on minority, marginalized, and vulnerable groups
- o continue collecting data and analyzing of trends in distribution and levels of illegal use of protected area resources in relation to community support programs
- o water management spatial and seasonal distribution of sources, accessibility, supply and quality, as well as flooding and soil erosion, climate change impacts, aquatic invasive species, river ecology, sedimentation, water treatment technologies and practices in and around the protected areas of GVL
- o in collaboration with the local communities, develop low cost sustainable interventions against Human-Wildlife Conflict (HWC) in the GVL
- o determine the impacts of HWC on food security and the economic livelihoods in the GVL
- o impact of national and local government policies on protected area management and biodiversity conservation
- o design studies on the economic valuation and distribution of costs and benefits of biodiversity and protected area conservation

# 1.3 Assessing gender mainstreaming and equality in natural resources conservation and management

Women and men play different roles in natural resources management: possess knowledge about different things, and have different skills in using and protection of natural resources. Women's contributions to conserving and managing natural resources, however, are seldom acknowledged, and their capacity to do so remains unrecognized. This challenge has significant gender dimensions because women, who are increasingly playing an important role in natural resource management, are among the poorest and most disempowered people. One of the reasons for this is the lack of gender-differentiated perspectives in natural resource research and documentation. Research concerned with the equitable and sustainable use of natural resources needs to identify and redress the inequities between women and men to ensure better conservation of natural resources.

- o identify the gender roles, responsibilities, and knowledge in managing natural resources
- o documenting gender differences in rights and access to natural resources
- o determine gender differences in access to new technology, information and training related to natural resources management

- o determine how degradation of natural resources base influences cooperation, conflict or controversy between men and women
- o determine women participation in natural resource related decision making processes at different levels
- o determine the impact of national policies on women participation in natural resources conservation initiatives
- o measure indicators for tracking gender integration and equality in natural resources conservation

### 1.4 Data integration

We will develop the infrastructure or platform that allows integrated analysis of large biological, hydrological, climatological, historical, and socio-economic data sets.

### 5.1.2 Strategic Objective 2: Graduate students and conservation practitioners trained

Human capacity is essential to effective conservation. One of ITFC's main objectives is the capacity training of conservation researchers and managers. Activities to be undertaken under this objective include the development of a specific conservation management training programmes designed to facilitate practical training opportunities by strengthening and supporting ITFC and MUST's Biology Department and Faculty of Interdisciplinary Studies (FIS) training capacity and providing a bursary scheme to support graduate-level participation in the programme. It is anticipated that that the conservation management training programs will be a collaborative venture between ITFC and some other universities. However, ITFC most important training opportunity is likely to lie in actively involving students in the graduate field research programme. Students then gain from individual supervision and the experience of being involved in real-life conservation research.

- o coordinate with UWA and NFA to conduct a training needs assessment for conservation managers and practitioners
- o identify, develop, and implement field training courses appropriate for ITFC implementation and on demand
- o develop collaboration with MUST where junior ITFC staff can easily access scholarships or tuition wavier for graduate studies and other trainings
- o initiate practical graduate level conservation management training programme for joint implementation by ITFC and MUST's Biology Department and the Faculty of Interdisciplinary Studies (FIS) and other national and regional universities

- o provide more opportunities and support to students to conduct MSc- and PhD-level dissertation/research projects and encourage them to address priority questions
- o senior research staff to act as supervisors/advisors/mentors/examiners to graduate students
- o increase student employment opportunities by providing more opportunities for internships and volunteering that provide basic and applied research experiences
- o create opportunities for postdoctoral positions and research stays for university academics and scientists
- o attract Ugandan and international researchers and students by advertising available opportunities for research
- o build strategic partnerships with key national and international academic, research and conservation organisations to run joint projects/programmes
- o design projects and seek funding for graduate scholarships
- o link with successful alumni for mentoring of potential and current students

### 5.1.3 Strategic Objective 3: Staff, facilities and equipment sufficiency ensured

This objective reflects the need to strengthen ITFC's management and administration and improve on the facilities (such as laboratory) and field equipment that are necessary to support and manage strong research programmes. Due to the scale of the numerous conservation challenges, and the many unknowns involved, additional conservation research expertise will be needed and capacity building remains a major work in progress.

### **Key Actions**

### 1.1 Human resource

- o establish an international advisory panel for ITFC
- o fill the vacant positions of Research Fellow in-charge of the social sciences research programme, Communications Officer, Accounts Clerk, Fundraising/Grants Officer and Ecological Research Officer on MUST terms and conditions of service
- o assess ITFC's internal capacity, structure and processes to ascertain whether they can sustain the plan
- o maintain and motivate current management and research staff

### 5.2 Facilities and equipment

- o modernize field equipment and appliances by replacing the old and outdated items as well as acquiring new cutting edge technology
- o procure two new field vehicles to replace the old and aging fleet
- o set up a laboratory with equipment for animal specimen preparation and testing of water, soil and sediment properties
- o develop a strong GIS and remote sensing lab that can serve GVL stakeholders
- o procure more camera traps to cater for areas not currently being studied
- o procure new field camping equipment
- o refurbish and develop the physical infrastructure
- o maintain and repair current vehicle fleet

### 5.1.4 Strategic Objective 4: Information to support decision-making provided

ITFC responds to needs expressed by our stakeholders, in particular conservation area managers to ensure that information generated by ITFC have a real impact it is essential that results are shared and understood by decision makers. ITFC is already involved in this process. ITFC is recognized as a key local partner and advisor in conservation research and natural resource management by many local actors. Virtually all consultants, professionals and students concerned with practical conservation questions in BMCA make a point of visiting ITFC to consult with the staff and to access its library and herbarium. Under this objective, ITFC will be seeking to produce relevant information to PA management and ensure that it is available to the appropriate stakeholders.

- o carry out an annual assessment of conservation area management priorities and related research and monitoring requirements in line with PA Annual Operations Plans (AOP) for joint implementation with UWA and ITFC
- o write joint proposals with UWA and other key partners for management-oriented research
- o develop appropriate information products tailored to the needs of our diverse stakeholders
- o increase the accessibility of institute data and herbarium collections through digitization, web-based and mobile technology, and other data stewardship initiatives

- o participate in preparation of conservation area management plans
- o participate in the design and evaluation of community conservation initiatives/ strategies
- o formalize relationships with relevant key partners concerning areas of mutual interest and potential cooperation
- o provide technical expertise services in form of biometrics and Geographic Information Systems (GIS) to UWA and other partners in GVL
- o enrich, update and better publicize the library, database and herbarium. Summaries, and where possible digital versions, of ITFC related theses, reports and publications will continue be made available online
- o conduct Environmental Impact Assessments (EIAs) on human developments that are likely to significantly impact on biodiversity as well as ecological functions and processes
- o contribute to the development natural resource conservation professional capacity through trainings

### 5.1.5 Strategic Objective 5: Institute visibility increased

Central to ITFC's success will be the ability to attract support for its programs. Activities under this objective are designed both to obtain donor support for specific projects and to promote ITFC to wider audience (e.g., researchers and students), in order to maintain existing supporters and partners and attract new potential ones by making the institute and its work more visible and better understood. Also, ITFC needs to be recognized as a strategic asset to MUST, Uganda and in Albertine Rift ecoregion.

- o develop appropriate information products tailored to the needs of our diverse stakeholders
- o continue convening annual *Research Dissemination and Information Sharing Workshops* in collaboration with UWA and attend those of our partners
- informal consultations and meetings with partners will continue to be a core part of ITFC day-to-day activities
- o produce *Policy Briefings* for policy makers
- o contribute to the *Annual Conservation Status Report* of GVL
- o increase publication of research and monitoring results in popular media and peer reviewed/refereed international journals

- o present research and monitoring results at national and international fora and to conservation bodies
- o take a more proactive role in partnering with faculty from outside universities and researchers from other organizations in related fields
- o maintain and improve ITFC website making it easier for project staff to update their information and making it more attractive and interactive. Also link the website to sites of national, regional and international partners and additionally get engaged on the digital social networks Instagram, Twitter, Facebook, and Whatsapp. Resume and strengthen the blogging which had started in 2011
- o engagement with national and international media will be sought to highlight local needs and ITFC's research achievements. In this context, journalists will be invited and hosted at ITFC
- o use the strategic plan as a promotional tool with potential new partners and donors
- o develop a strategic communications and marketing plan for the institute

### 5.1.6 Strategic Objective 6: Sustainable funding secured

Due to changes in donor funding priorities/interests, shifting geographic area of focus coupled with donor fatigue, ITFC no longer receive financial support for its core activities. Since mid-2012, the institute has been depending on conditional grants to run specific research activities as agreed upon with the donors. These project-based grants are financially unsustainable in the long-term and have led to the suspension of some important research and monitoring projects. There is an urgent need to identify mechanisms and sources that can sustainably fund ITFC to enable it fully implement its core functions.

- o maintain the current funding from MUST/GoU but lobby for a gradual annual increase on the subvention
- o respond to calls for proposals from donors, foundations and other agencies
- o increase efforts to identify and target undersubscribed or less well-known funding programs and sources
- o undertake consultancies for local, regional and international partners and other organizations
- o improve the quality and success rate of funding applications from the institute by:
  - holding/attending research proposal training workshops

- engaging strategically with consultant proposal writers
- promote mentoring by experienced investigators to younger researchers
- o develop joint project proposals with local, regional and international partners to support management-oriented research and training
- o write research project proposals that have "wider" implications on major conservation challenges and issues
- o attract external researchers with their own funding from key scientific partners
- o explore possibilities for long-term funding mechanisms including an ITFC endowment or being supported by a foundation
- o identify ways to exploit Bwindi Imponderable's status as a World Heritage site and as a habitat for half the world's population of critically endangered mountain gorillas as well as other high profile species
- o pursue income generating projects for the institute:
  - implement the new MoU with Buhoma Community Campsite and Lodge that has been renting ITFC land in Buhoma since 1996
  - refurbish the ethnobotany garden at Ruhija as a nursery for indigenous tree seedlings for sale to local communities and as a tourists/researcher's learning experience using funds from AfDB with technical support from PSFU
  - develop the Buhoma Forest Gorilla Trekking Camp using funds from AfDB
  - plant tea on part of ITFC land in Buhoma in partnership with the private sector under the Public Private Partnerships (PPP)
  - identify and advertise short field conservation training courses on demand to appropriate interested parties
  - advertise facilities for holding short field training programmes and workshops to appropriate interested parties
  - explore the possibility of investing in government securities (treasury bills and bonds) issued by Bank of Uganda

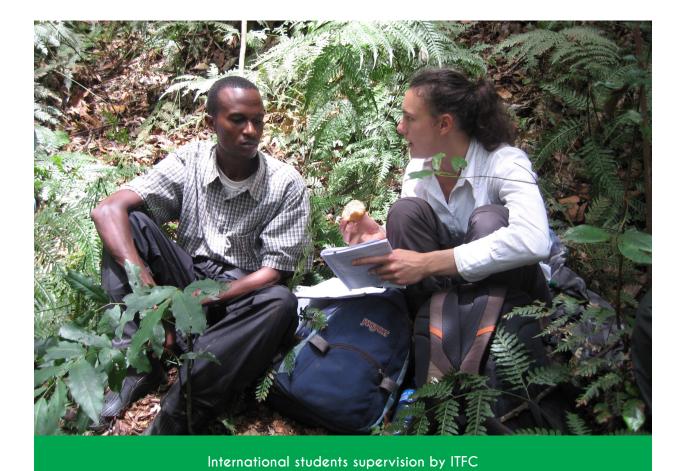
# 6.0 Monitoring and evaluation

Monitoring and evaluating the performance of ITFC activities will tell whether the institute is achieving its objectives. Measuring performance is also essential for clearly communicating ITFC accomplishments to external audiences including MUST, local communities, conservation partners and donors, so that they are aware of the institute's achievements and contributions and appreciate its impact on conservation. ITFC's six strategic objectives represent the commitment to making a difference in the GVL over the course of the plan and beyond. A system of measuring performance will be through a set of performance indicators directly linked to what ITFC wants to accomplish. Specific measurable indicators that will provide an insight of success are shown in Table 6. The indicators will be regularly updated and measured annually to assess progress towards achieving our objectives.



# 7.0 Budget

Budget estimates for this strategic plan are projected from expenditure records of past large and relatively medium-term grants that have been received by ITFC. These include those from the Netherlands Government, USAID, John D. and Catherine MacArthur Foundation, Buffet Foundation, Gordon and Betty Moore Foundation and others. A more refined and detailed budget for the key actions is presented in the action plans and as represented in Table 7.



# 8.0 Implementation

Implementation of this strategic plan will be a concerted effort across institute management and research staff (summarized in Table 7). It will require additional details, timelines, milestones, assignments, and oversight. It will need to be a priority for all in order to be accomplished in a timely manner. Once the strategic plan is agreed upon, an institute-wide implementation plan will be set with action plans for specific strategies and activities. An implementation team will be established for development and oversight. For the plan to be fully realized strong support from MUST is needed and new grants and other sources of funding must be secured.

Table 1 Important research grants ITFC has attained since 2012

Project	Period	Amount	Donor
Batwa cultural values	Apr 2012 - Mar 2015	UGX 114 million	Darwin Initiative through Flora and Fauna International
Linking conservation, equity, and poverty alleviation	Apr 2012 - Mar 2015	GBP 67,741	Darwin Initiative through International Institute of Environment and Development
Tropical Ecology Assessment and Monitoring (TEAM) Network	2009 - 2013	USD 270,402	Gordon and Betty Moore Foundation/ Conservation International through Wildlife Conservation Society
Tropical Ecology Assessment and Monitoring (TEAM) Network	2014 - 2017	USD 236,128	Buffet Foundation/Conservation International through Wildlife Conservation Society
Mitigation of human-wildlife conflict in Nkuringo Buffer Zone, BINP	Dec 2013 – Dec 2014	USD 31,072	International Gorilla Conservation Programme
Hydrological systems in the Great Virunga Landscape: water demand and supply in and around Mgahinga and Echuya Landscapes	2014 – 2015	USD 100,000	Greater Virunga Transboundary Collaboration – Executive Secretariat
Hydrological Systems in the Lake Edward Basin of Queen Elizabeth and Bwindi National Parks	Mar 2016 – Mar 2017	USD 90,000	Greater Virunga Transboundary Collaboration - Executive Secretariat
Building capacity of the Batwa for sustainable income generating enterprises project	Dec 2015 – Jun 2017	USD 39,000	Indigenous Peoples Assistance Facility through the Kivulini Trust
Great ape conservation and revenue sharing program	Aug 2015 – Jul 2016	USD 22,618	Great Apes Survival Project through the International Institute for Environment and Development
Local economic development through "pro-poor" gorilla tourism approach in Uganda	May 2016 – Mar 2019	GBP 59,856	Darwin Initiative through International Institute of Environment and Development
Mountain gorilla behavioural ecology research and monitoring	Annual	USD 35,000	Max Planck Institute of Evolutionary Anthropology
Core running costs	Annual	UGX 100 million	Mbarara University of Science and Technology/Government of Uganda

Table 2 ITFC buildings, their use and donor

Building Name	Function	Funder
Director's House	Director's residence	USAID
Conservation Resource Centre	Reception/Secretary Office Library Herbarium 1 room for animal specimen preparation, water quality and soil properties analysis 3 office rooms	The Maria Gans Norbury Fund for Animals
Office Block	Common area     4 office rooms	WWF
Student Dormitory	3 bedrooms, common area	USAID
Rock House	Accommodation of 2 bedrooms	USAID
Store	Storage	USAID
Researcher's House	Accommodation with three semi-detached, 2 roomed houses each, all share a common area and 1 visitor bedroom	USAID
Ekiiko House	Accommodation of 2 bedrooms	USAID
Conservation Education Centre	Accommodation of 3 bedrooms, 1 common area	USAID/Canada
CEC Annex	Accommodation of 1 bedroom	USAID
Gorilla House	Accommodation of 2 bedrooms	Max Planck Institute of Evolutionary Anthropology
3 Unihuts	Storage	

Table 3 SWOT analysis of ITFC

Internal strengths	External strengths
Long, creditable track record for conducting applied research	Strong support from national, regional and
• Permanent, research and field research station of a university	global conservation agencies
Technical expertise in conservation research and monitoring	Recognized role as an educational facility especially for graduate students
Stable, knowledgeable, field assistants with a strong institutional memory	of environmental and natural resources conservation
Contributes to the development of national professional staff	
<ul> <li>Established strong relationships with national and regional conservation and development organizations</li> </ul>	
Demand driven approach to research to address "real-world" conservation management challenges	
• Facilities for research – field equipment and instruments, vehicles, library, herbarium, accommodation, internet	
Extensive data and information on conservation	
• Established human resource, financial/accounting management systems	
Having an Advisory Board	
Semi-autonomous status	
Multiple funding sources	

#### Internal weaknesses

- Poor visibility and lack of a marketing strategy for products and services
- · Unsustainable funding
- Lack of laboratory equipment for animal specimen preparation and analysis of water, soil and sediment properties
- High turnover/poor retention/short contract/insufficient research staff due to short-term funding resulting in loss of institutional memory
- Weak linkages with international academic and research institutions
- Small size limits research and training programmes that can be undertaken
- Ageing and inadequate vehicle fleet and field and scientific equipment with high maintenance costs

#### External weaknesses

- Remote location makes it less attractive to professional staff, particularly women, and hosting of field training programs
- Field station at Ruhija is space-constrained limited land for future expansion

### Internal opportunities

- Availability of research results for publication and use in practical conservation
- Establishment of more full time senior research staff positions
- Land in Buhoma that could be used for income generation activities and/or expansion of research facilities

#### External opportunities

- Demand for research information to address natural resource management challenges
- Demand for graduate training in conservation and natural resource management
- Conservation challenges/Emerging issues for research
- Location in UNESCO World Heritage Site and global biodiversity hotspot region with high profile iconic species
- New funding sources and programs particularly the undersubscribed or less well-known
- Increasing demand for utilization of the databases, library, laboratory and herbarium services
- Partnerships with external universities to offer summer and field school services
- Partnerships with national and international academic/research institutions in form of collaborative projects/programmes

### Internal threats/challenges

- Heavy reliance on external donor funds
- Financial fragility and vulnerability

### External threats/challenges

- Highly competitive/decreased funding for environment sector
- Changing donor funding priorities/interests, shifting geographic area of focus and donor fatigue
- Modest funding from government/MUST due to national budget issues

### Table 4. Key success factors

### Research and monitoring

- . Strive to be an international centre of excellence in research into the conservation of Albertine Rift PAs
- Strive to become a leading institute in developing and running long-term ecological and socio-economic monitoring programmes and databases with respect to Albertine Rift ecoregion conservation and dynamics
- Undertake research and monitoring programmes aimed at integrating conservation with human development and at achieving sustainable use of PA resources, building on knowledge of indigenous resource use practises
- · Strive to integrate the research efforts with practical protected area management efforts
- Continue to play a major role in human capacity building for conservation research and practical management, both in Uganda and internationally

### Management

- Be service oriented and demand driven serving the stakeholders including UWA, NFA, other conservation organisations, and local communities
- Use a variety of traditional and innovative funding mechanisms in order to achieve financial sustainability
- Build a strong management and research team that ensures that management is sound, transparent and efficient
- Build strategic partnerships with key national and international academic, research and conservation organisations
- International and national promotion, for example through the website and participation in international conservation bodies and forums
- Maintain a modest, realistic form, commensurate with function and financial constraints

### Table 5 Analysis of ITFC key stakeholders

	MUST-ITFC	Researchers	UWA/NFA
• Roles & functions	MUST supports ITFC     Contributes to development of management plans     Training of scientists     Supporting research projects     Carrying out research that enables effective and management     Networking – responding to research needs of conservation partners	Contribute to conservation policy formulation     Undertake high quality research     Provision of advice and expertise     Undertake management-oriented research     Furthering understanding of species and natural ecosystems	Development of conservation policy     Implement conservation policy     Custodian of protected areas     Coordinate and lead conservation action and players     Identify research and monitoring needs
Interests	BMCA, GVL and Albertine Rift conservation     Long-term research	<ul> <li>Ecosystem ecology</li> <li>Endangered species</li> <li>Socio-economic research</li> <li>Pure and applied research</li> <li>Short-and long-term research</li> </ul>	Maintain biodiversity and integrity of PAs     Revenue generation     Mainstream local communities in PA management

Expectations	Research results valued and used	Research results valued and used	<ul> <li>Sustainable management of PAs</li> </ul>
	Recognition and credibility     Continued donor support	Recognition and credibility     Continued donor support	<ul> <li>Support from local communities, general public and international community</li> <li>Increased revenue generation</li> </ul>
Contribution/ Output	<ul> <li>Presence of researchers deters illegal activities</li> <li>Capacity building</li> <li>Information for conservation</li> <li>Capacity building</li> </ul>	<ul> <li>Presence of researchers deters illegal activities</li> <li>Capacity building</li> <li>Information for conservation</li> <li>Transfer of expertise</li> </ul>	Prime implementers and lead players in conservation

	Local Governments and Local communities	Donors	Conservation and Development Organizations (BMCT, IIED, FFI, CI, CTPH, MPI, MGVP, Nature Uganda, IGCP, GVTC, UOBDU, WCS & others )
Roles & functions	<ul> <li>Custodians of natural resources outside PAs</li> <li>Support UWA/NFA to conserve PAs</li> <li>Negotiate and enforce PA resource use agreements</li> </ul>	<ul> <li>Provide funding</li> <li>Contribute to gov't and public goals</li> <li>Facilitate access to technical support</li> <li>International conservation advocacy</li> <li>Monitoring and evaluation of funded programs</li> </ul>	<ul> <li>Promoting and supporting appropriate conservation actions</li> <li>Support minority, marginalized, and vulnerable groups in conservation</li> <li>Conservation awareness</li> <li>Improvement in peoplepark relations</li> <li>Provide and facilitate funding for conservation</li> </ul>
Interests	<ul> <li>Use of PA resources</li> <li>Benefits from conservation</li> <li>Preserving indigenous traditions and skills</li> <li>Opportunities for alternative IGA</li> </ul>	<ul> <li>Conservation and sustainable development</li> <li>International and national recognition</li> <li>Influence environmental policy</li> </ul>	Conservation and sustainable development
Expectations	Recognition of their role and involvement in PA management  Direct benefits and revenue/income  Mitigate human-wildlife conflicts  Better social and physical infrastructure services  Employment	Sustainable institutional and human resource capacity     Transparent and accountable programmes/projects	Improvement in community livelihoods     Reduced dependence of local communities on PA resources     Improved PA management     Mainstream gender and minority groups in PA management
Contribution/ Output	<ul> <li>Primary partner to UWA/NFA</li> <li>Key implementer of conservation</li> <li>Indigenous knowledge for PA management</li> </ul>	<ul> <li>Funds</li> <li>International conservation networks</li> <li>Technical assistance</li> <li>Capacity building</li> </ul>	<ul> <li>Funds</li> <li>Coordinate conservation action</li> <li>Technical assistance</li> </ul>

Table 6 Monitoring and evaluation framework

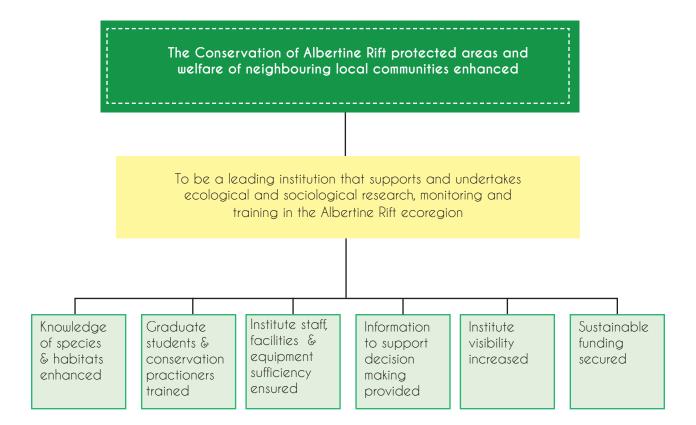
Objectives	Indicators	Means of verification
Strategic Plan Overall Goal	Impact indicator (that measure achievement of the Strategic Plan Goal, i.e. the higher impact of the plan)	
Conservation of Albertine Rift ecoregion protected areas and welfare of the neigbouring local communities enhanced	Levels of recognition for ITFC's products and services in research and training amongst donors, partners, local communities and global conservation community has increased      An independent external review expresses satisfaction with research programme outputs and management practiced by ITFC	
Strategic Plan Purpose	Impact/effect indicators (that measure achievement of the Strategic Plan Purpose i.e. the achievable outcome [impact or effect] of the plan that contributes significantly to the achievement of the Overall Goal)	
To be a leading institution that supports and undertakes ecological	Where appropriate, decisions of conservation agencies and other conservation partners are influenced by ITFC research and monitoring results and recommendations	Minutes of key partner management meetings, technical reports and papers submitted by ITFC to key partners
and sociological research, monitoring and training in the Albertine Rift ecoregion	ITFC Advisory Board and International Advisory Panel expresses satisfaction with overall performance in implementing the Strategic Plan	MUST and ITFC reports
Strategic objectives	Impact/effect indicators (that measure achievement of	
,	Results, i.e. the effect that the Plan must guarantee in order to fulfill the Plan Purpose)	
	Data is available on mountain gorilla population size, distribution and trends for the Bwindi-Virunga landscape	
Knowledge     of species     and habitats	Data is available on species richness, distribution, relative abundance, and occupancy dynamics of large vertebrate species of conservation concern for all the elevation zones of Bwindi	Gorilla Census reports
enhanced	Data is available on the diversity, composition, growth, mortality, regeneration and dynamics of forest trees in all the elevation zones of Bwindi	ITFC technical reports and publications
	Data is available on the distribution and habitat associations of data deficient Albertine Rift endemic birds of Bwindi	
	Findings on the effectiveness of ICD as a conservation strategy disseminated	
	Conclusions and recommendations on the conduct of gorilla tourism based on assessment of the impact of tourism on gorilla behavior are available	
	Support network established on gender mainstreaming and equality in biodiversity conservation including an internationally recognized expert	
	Preliminary findings on gender mainstreaming and equality in biodiversity conservation available and disseminated	

2.	Graduate students and conservation practitioners trained	Number of graduate students doing or have successfully completed their dissertation/thesis field research through opportunities provided by ITFC  Number of interns and volunteers who have completed their tenure with ITFC and attained employment elsewhere  Number of strategic partnerships and collaborations  Number of managers/practitioners trained in selection, design and execution of management-oriented research projects and monitoring systems	ITFC reports
	1 2 1 1 1		
3.	Institute staff, facilities and equipment sufficiency ensured	Proportion of vacant positions are filled by qualified staff     Staff are performing their jobs satisfactorily in accordance with standards specified in job descriptions	
		Number of new vehicles and field equipment procured	
		GIS & Biology/Chemistry laboratories set up & equipped	
		Housing and office space sufficient to adequately meet staff needs	
4.	Information to support decision- making provided	Research and monitoring activities incorporated into park's annual plan of operations for joint implementation by ITFC and UWA	ITFC reports
		Database established for BMCA and accessible by partners	
		Number of strategic partnerships and collaborations	
		Number of visitors to and using library, herbarium, and botanical garden	
		Number of visitors using online resources	
		MoU in place with UWA and at least other two other partner organisations	
		At least two project initiatives designed in collaboration with one or more of ITFC's key partner organisation	
5.	Institute visibility increased	Number of peer-reviewed/refereed publications in priority research areas	ITFC technical reports and publications
		Number of articles in popular media highlighting ITFC research work	
		Attendance of conferences on key areas of global concern	
		Number of people/organisations participating in ITFC workshops and meetings	
		Number of visitors to ITFC field station	
		Number of visitors using online resources	
		Number of people who have agreed to be members of the International Advisory Panel and have participated in guiding ITFC's research programmes	
6.	Sustainable funding secured	Amount of external funding from peer-reviewed research grants and contracts	ITFC reports
		Amount of funds from income generating projects	
		Amount of funds from other sources	

Table 7 Strategic Plan responsibilities, partners, timeframe, and budget estimates

No.	Strategic Objective	Responsibility	Partner(s)	2017	2018	2019	2020	2021	2022	Budget estimate (UGX)
1	Knowledge of species and habitats enhanced									()
1.1	Understanding the ecology and conservation needs of species and habitat assessment									
1.1a	populations of species of conservation concern	Research Fellow – Scientific research programme	UWA, MPI, IGCP, GVTC	X	X	X	X	X	×	1,662,500,000
1.1b	species that are important for their commercial or cultural values	Research Fellow – Scientific research programme	UWA			X				250,000,000
1.1c	species that act as pest or disease organisms or invade and displace indigenous species	Research Fellow – Scientific research programme	UWA, MGVP			X	X			330,000,000
1.1d	climate and landscape change that have important effects on biotic communities	Research Fellow – Scientific research programme	UWA, WCS, GVTC	X	Х	Х	х	Х	Х	872,500,000
1.2	Understanding of the human dimensions of biodiversity & PA management	Research Fellow – Social sciences research pro- gramme	UWA, BMCT, IGCP, Local Govt, IIED	X	X	X				315,000,000
1.3	Assessing gender mainstreaming in natural resources conservation	Research Fellow – Social sciences research programme	Consultant		X	X				175,000,000
1.4	Data integration	Research Fellows	Consultant			Х				105,000,000
2	Graduate students and conservation practitioners trained	Director/ Research Fellows	Universities		X	X	X	X	X	700,000,000
3	Institute staff, facilities and equipment sufficiency ensured	Director/ Finance & Admin Officer	MUST	X	X	X				3,655,750,000
4	Information to support decision- making provided	Director/ Research Fellows	UWA		X	X	X	X	X	70,000,000
5	Institute visibility increased	Director/Re- search Fellows	UWA	X	X	X	X	X	X	140,000,000
6	Sustainable funding secured	Director	MUST	Х	Х	Х	Х	Х	Х	70,000,000
	TOTAL									8,345,750,000

Figure 1 ITFC Strategic Plan map





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