

AFRICA

Promoting Environmental Security and Poverty Alleviation in Virunga-Bwindi, Great Lakes - Africa

IES EnviroSecurity Assessments

A major proportion of the world's ecosystems and the services they perform for society and nature is being degraded or used unsustainably. This process affects human wellbeing in several ways. The growing scarcity of natural resources creates a growing risk for human and political conflicts and hinders sustainable development and the poverty alleviation that depends on it. Situations involving resource abundance can also be related to serious environmental degradation, increased community health risks, crime and corruption, threats to human rights and violent conflicts – in short, to a decrease of security.

The overall objective of IES EnviroSecurity Assessments is to secure the natural resource livelihood basis on the local, regional and international level. IES pursues this objective along the following mutually related lines: (1) the conservation of ecosystems and their related services, (2) the implementation of the international legal order, (3) the provision of economic incentives for maintenance of ecosystem services, and (4) empowerment of relevant actors and dissemination of results.



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The Institute for Environmental Security (IES) is an international non-profit non-governmental organisation established in 2002 in The Hague, The Netherlands with liaison offices in Brussels, London and Washington, D.C.

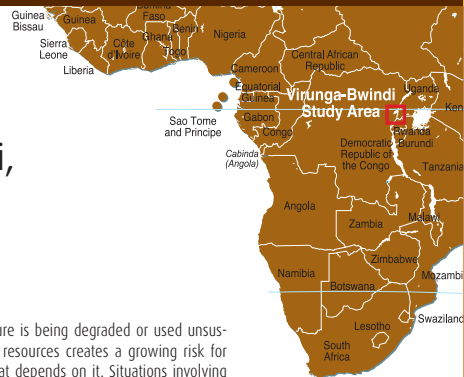
The Institute's mission is: "To advance global environmental security by promoting the maintenance of the regenerative capacity of life-supporting eco-systems."

Our multidisciplinary work programme - Horizon 21 - integrates the fields of science, diplomacy, law, finance and education and is designed to provide policy-makers with a methodology to tackle environmental security risks in time, in order to safeguard essential conditions for sustainable development.

Key objectives of the Horizon 21 programme are:

- **SCIENCE:** Create enhanced decision tools for foreign policy makers, donors and their target groups on regional, national and local levels;
- **DIPLOMACY:** Promote effective linkages between environment, security and sustainable development policies;
- **LAW:** Contribute to the development of a more effective system of international law and governance;
- **FINANCE:** Introduce new and innovative financial mechanisms for the maintenance of the globe's life supporting ecosystems;
- **EDUCATION:** Build the environmental knowledge capital of people and organisations.

Our mission and programme should be seen in the context of promoting international sustainable development goals and as a contribution toward long-term poverty alleviation.



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Produced by the Institute for Environmental Security in association with the International Gorilla Conservation Programme, Rwanda, Uganda and the DRC with the support of The Netherlands Ministry of Foreign Affairs.

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/ Printed in Belgium on environmentally friendly and recycled paper



Recommendations from the Virunga-Bwindi region Case Study

A. ON MAPPING AND MONITORING

1. While the focus of these recommendations is to strengthen the peace park functions of especially the tri-national Virunga parks complex, the first recommendation is to have a full analysis of all ecological values of the region and to determine the whole set of ecosystem services (as defined by the Millennium Ecosystem Assessment) which the region is providing to its immediate surroundings, the wider region and river basins, and the global community. The area is important as the habitat for the last population of mountain gorillas, for other unique biodiversity, and for the strategic hydrological role of the Virunga Massive. The analysis of the USDA Forest Service and of the GEF-funded Global International Waters Assessment (and any others) should be continued, also with special attention to the relevance for the Nile Basin Initiative.
2. The threats to the maintenance and delivery of ecosystem services should be identified on the various levels: local (e.g. population pressure); regional (violent conflicts, migration, etc.); international (mining and logging for export markets); and global (impact of climate change is highest in Africa "where poverty limits options for adaptation.")
3. Ecological assets and threats should be laid down on maps so as to give policy-makers on the various levels a direct and integrated view of the issues to be addressed.
4. A system of continuous monitoring of the ecology (and the threats there-to), based upon (radar) remote sensing with systematic ground-truthing by local

C. ON FINANCE AND ECONOMICS

8. Adequate, long term financing for monitoring and management is an absolute requirement for the Virunga-Bwindi area to be successful as a peace park, as habitat for unique biodiversity and as "water tower" for the surrounding regions and the connected river basins. It is therefore recommended to critically review the performance of the Mghinga and Bwindi Impenetrable Forest Conservation Trust Fund (MBIFCT) and to design a mechanism which would also include the Rwandan and DRC parts of the peace park area, looking at all ecological values. A model for a new multi-donor trust fund construction can be found in the World Bank/GEF trust fund construction for the protected areas in Colombia.
9. To lessen pressure on the Virunga region and on the ecology in general, the highest priority has to be given to generate sources of income and employment outside the subsistence agriculture in which 90% of the population is working. Support for small to medium industries and to the ICT sector, and energy (in the form of electricity) is an absolute requirement. A country like Rwanda faces a dilemma, when water for hydropower is diverted towards agriculture, thus increasing the need to use "dirty diesel" to produce electricity and decreasing the options to earn income from producing carbon credits under the Clean Development Mechanism (CDM) of the Kyoto Protocol. Building on existing (UNIDO/GEF) initiatives, Dutch development cooperation through its bilateral and multilateral channels should strongly support a clean energy strategy for the countries sharing the Virunga Massive, including creating options for CDM projects. Reforestation to prevent erosion and sedimentation of water bodies suitable for hydropower could at the same time qualify for the CDM. The Dutch CDM office at the ministry of VROM should be consulted to see whether now or in the future the obligatory Dutch greenhouse gas emission reductions via the CDM could be realized, for example, through energy and/or forestry projects in Rwanda.

B. ON DIPLOMACY AND LAW

5. Informal channels of communication should be established with MONUC to prevent invasions of the parks or using them as shelter and to strengthen park protection if needed. (See also the recommendations by the International Crisis Group of 14 September and 19 October 2005.)
6. The pertinent international legal regimes should be identified so as to define the responsibilities, obligations and rights of the various actors in and relevant for the region. It is recommended strongly to take the responsibilities and obligations of the countries in the Virunga-Bwindi region under the international environmental conventions seriously and work together as Parties to these binding law agreements. There is great need for adequate capacity to translate the international obligations into national, enforceable, law and to fully participate in the meetings of the international conventions. The IUCN Environmental Law Centre in Bonn should carry out a needs assessment of the countries in relation to the implementation of these conventions on the national, regional and international level.
7. Tripartite consultations among Virunga Massive rangers and (park) authorities facilitated by the IGCP may benefit from updated remote sensing monitoring reports. The Trilateral Declaration on the Transboundary Resources Management between the three States of October 2005 could be upgraded to a "Legal Framework for a Transboundary Area" implying a binding treaty between the three states. The steps towards such an arrangement should be very carefully planned and built upon concrete progress of the on-going consultations between the three park authorities.

D. ON EMPOWERMENT AND TRAINING

11. After demobilisation and repatriation, the rebels, militias and refugees need to be trained in skills outside subsistence agriculture, such as for example environmental restoration and protection, wildlife and park management and as tourist guides, managers of lodges, etc. The international donor community should assist with providing incentives and training modules.
12. Empowerment of women is key to the necessary demographic transition. To provisions like in Rwanda where a minimum percentage of civil servants should consist of women, the promotion of educational, health and credit facilities relevant for women in the rural areas should be added.



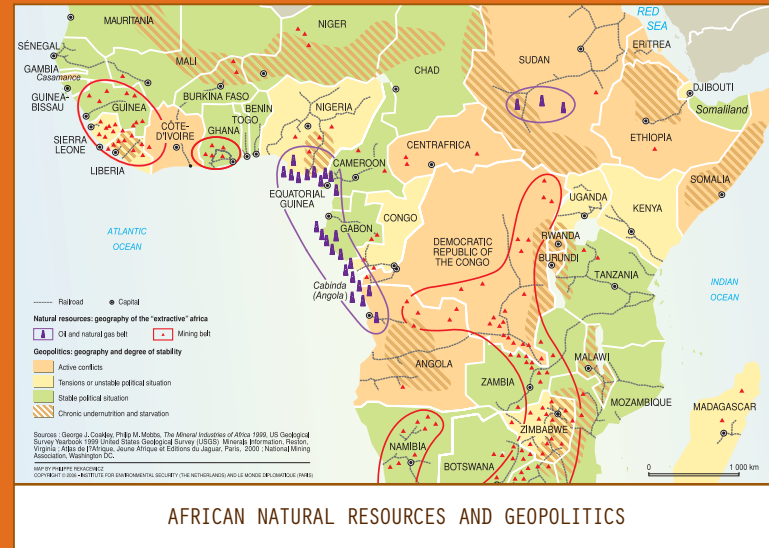
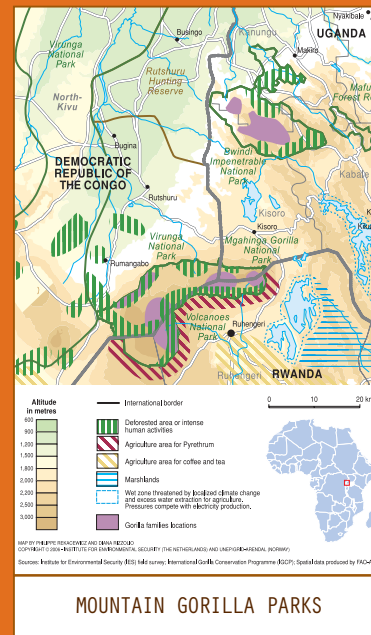
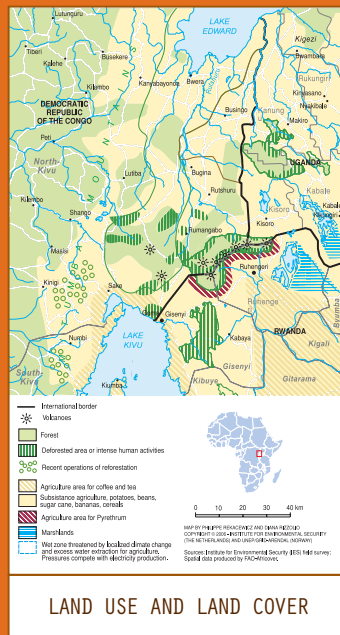
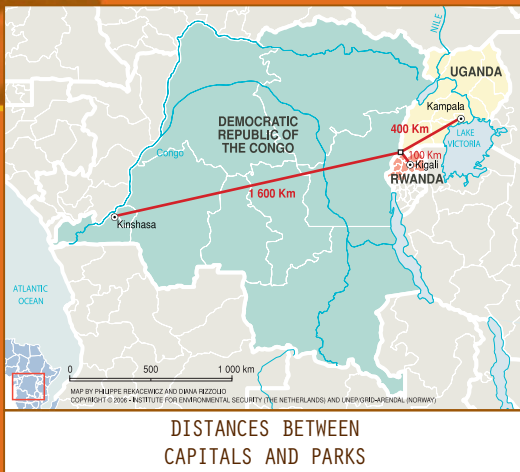
Virunga-Bwindi - AFRICA

The **Great Lakes region** in Africa is a war zone where tribal conflicts mix with the aftermath of the Rwandan genocide, power struggles in the Eastern part of the Democratic Republic of Congo, the control over precious and strategic minerals, such as diamonds, gold, coltan and the illegal trade in timber and protected species. Many other African countries and their armies were involved and the humanitarian consequences are dramatic.

The war, both directly and indirectly (by causing refugee streams) caused widespread environmental destruction and so does the mining, logging and poaching. The protection of mountain gorillas in the border area of Rwanda, Uganda and the DRC, however, brings the three countries together, by creating employment, income, and basic health and education services for the local communities out of tourist revenues, creating incentives for co-operative protection.

The challenge now for these countries is to alleviate poverty; complement traditional forms of livelihood with sustainable alternatives; raise park management to the next level by establishing transboundary collaboration at the higher levels of administration in the 3 countries; explore and develop clean and safe alternative sources of energy in addition to hydro-electricity; assist families with education for children; provide equal opportunities to all; and install basic facilities in communities, for instance, access to water, sanitation, health care, schools and electricity. These countries have signed and ratified all the major environmental related conventions and they have recognised the crucial role environmental conservation plays in the rest of the economy and the improvement of civil society. What the countries need first is that potential and current donors also recognise the importance of long term environmental conservation and start funding those needs.

Virunga-Bwindi



Population Pressures

The areas surrounding the afromontane and medium altitude forests shared by Rwanda, Uganda and the DRC are densely populated. Rural population densities average 300 persons per km². Around the protected areas, due to rich natural resources and soil, these population densities are even higher (Lanjouw et al., 2004). The need for fertile agricultural land pushes farmers to encroach the protected areas. Within a few weeks in 2004, Rwandan settlers invaded the national parks and converted 15 km² of the mountain gorilla habitat in the DRC for agricultural purposes (UNEP 2004). Deforestation, causing landslides and severe soil degradation, severely threatens the livelihood basis of subsistence farmers. Moreover, the competition for resources strongly contributes to tensions and conflicts in this region.

