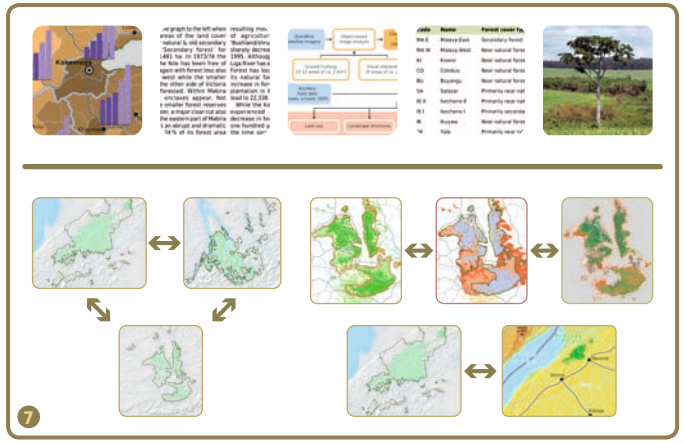
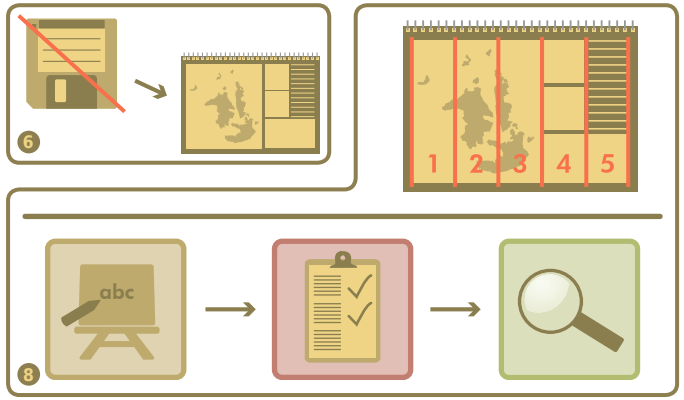
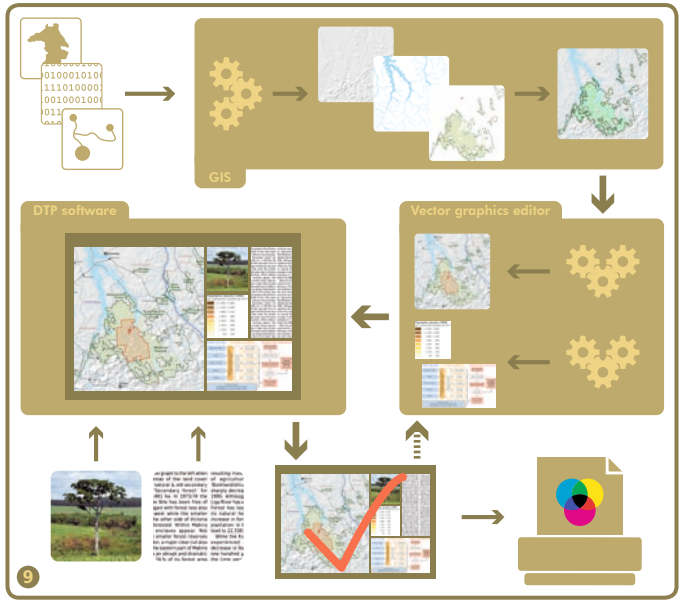
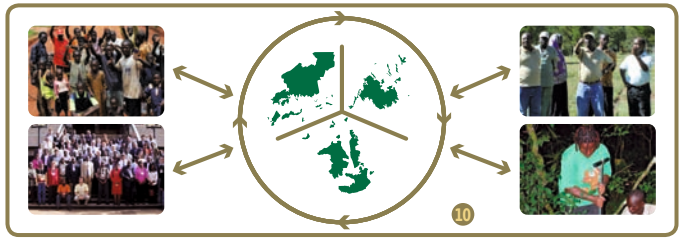








The BIOTA East Africa Atlas

Rainforest Change over Time

Three rainforests.
Two countries.
One atlas.

The medium. 6
A printed publication has been preferred to a digital one as it is a time-honoured format and due to the continuing difficulty in deploying digital media in Africa. As the atlas should be easy-to-handle the A4 landscape format has been chosen with a wire-O-binding along its longer side.

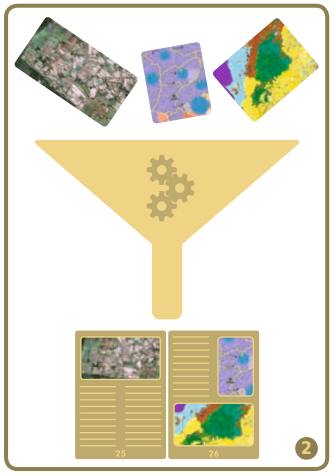
The concept. 7
Since the contents of the atlas should enable quick and easy acquisition of information for both casual reading and detailed study, five basic content elements are used: maps, textual explanations, graphs, tables, and photographs.
The three sections *Education, Decision making,* and *Research* follow each other in the atlas and thus create an increasing level of complexity. The accompanying texts are written in distinct styles to draw the reader's attention in different ways. Maps can be found for all the three investigated forest areas. For demonstrating their spatial context a few maps cover an according region of East Africa, or Kenya or Uganda. Due to the differing degrees of research performed not every topic can be displayed for all three forest areas. Opportunities for comparison are nevertheless provided in many instances, both between the forests and by applying varying visualisation methods.

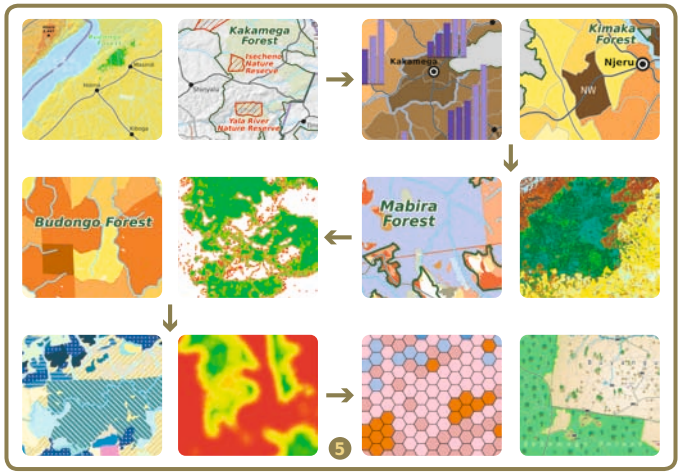
The layout. 8
To achieve a congruent overall design a five-column page layout was chosen with generally three columns for the maps and two columns for other content elements.
In order to guide the reader visually, a colour code is assigned to each of the three sections.

The making. 9
The atlas was created in four major steps:
1 editing geodata and composing maps in a GIS,
2 refining maps and creating graphs in a vector graphics editor,
3 combining all content elements in a DTP software,
4 proof-reading and printing.

The vision. 10
Once distributed in Kenya and Uganda this regional thematic atlas on Rainforest Change over Time may:
- contribute information needed in environmental education,
- serve as a decision guide for sustainable forest management,
- provide valuable information to scientists on the transformation of forests over the last century, and
- serve as a momento for all BIOTA East Africa project members.

Facts and figures.
- 100 pages
- 84 maps
- 47 photographs, 18 graphs, 12 tables
- useful in Education (26), Decision making (32), and Research (24 pages)
- joint Kenyan–Ugandan–German effort





The BIOTA East Africa Atlas. Rainforest Change over Time

ISBN 978-3-89063-406-7

Edited by Gertrud Schaab, Beatrice Khayota, Gerald Eilu, and J. Wolfgang Wägele

In collaboration with seven people from Kenya, eight from Uganda, and fifteen from Germany

Published by Karlsruhe University of Applied Sciences, Faculty of Geomatics, Germany. *http://www.g.hs-karlsruhe.de*

About the atlas.
The rather small rainforest remnants in East Africa are at risk but are also of high value. Within the BIOTA East Africa project, three such forest areas in Kenya and Uganda have been intensively studied resulting in valuable information on the environmental transformations that have occurred within the last century.
Within its sections on *Education, Decision making,* and *Research,* three main user groups are addressed by one atlas with each section tailored to meet their specific needs and abilities. This atlas therefore contributes to making research outcomes widely visible and to a comprehensive set of information needed in environmental education and for informing policies.

The background. 1
BIOTA East Africa was a research project aiming at recommendations towards a sustainable use and conservation of rainforest biodiversity. This goal has been most closely achieved for Kakamega Forest in western Kenya, which together with the Nandi Forests formed the focus area of research. The two Ugandan forest areas of Mabira and Budongo Forests were also investigated, although to a lesser extent, in order to compare influences of different levels of disturbances, fragmentation, and human use in East African rainforests.

The motivation. 2
Since a vast amount of geodata (based on all kinds of maps, satellite imagery, and scientific field data) has been accumulated in the course of the project, the wish arose to combine all spatially presentable BIOTA East Africa research results in one representative volume – a cartographic atlas.

The objectives. 3
This atlas is based on four main objectives:
- to provide an overview of the three investigated rainforest areas,
- to give insight into research results and their causal relations,
- to tackle many of the examined subject areas, and
- to enable conclusions for actions, thus meeting the project goals.

The users. 4
To achieve these objectives the atlas addresses three user groups: the local people next to the forests, decision makers, and scientists. Consequently the atlas is subdivided into three sections, *Education, Decision making,* and *Research,* each of which is tailored to the different needs and abilities of its user group. However, the users are by no means restricted to their specific section.
Providing adequately prepared information to people of such diverse educational background within one single atlas presents a challenge: local people require more easy-to-comprehend information, decision makers should be supported to draw conclusions from the contents, and scientists expect a high level of detail and thematic depth.

The topics. 5
The contents of The BIOTA East Africa Atlas are assigned to six main topics and thus draw a line from general overview aspects via population, forest cover change, and forest fragmentation and disturbance, to fauna and flora as well as livelihood. Depending on its level of complexity a certain topic can be mainly found in one section or in all three.

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