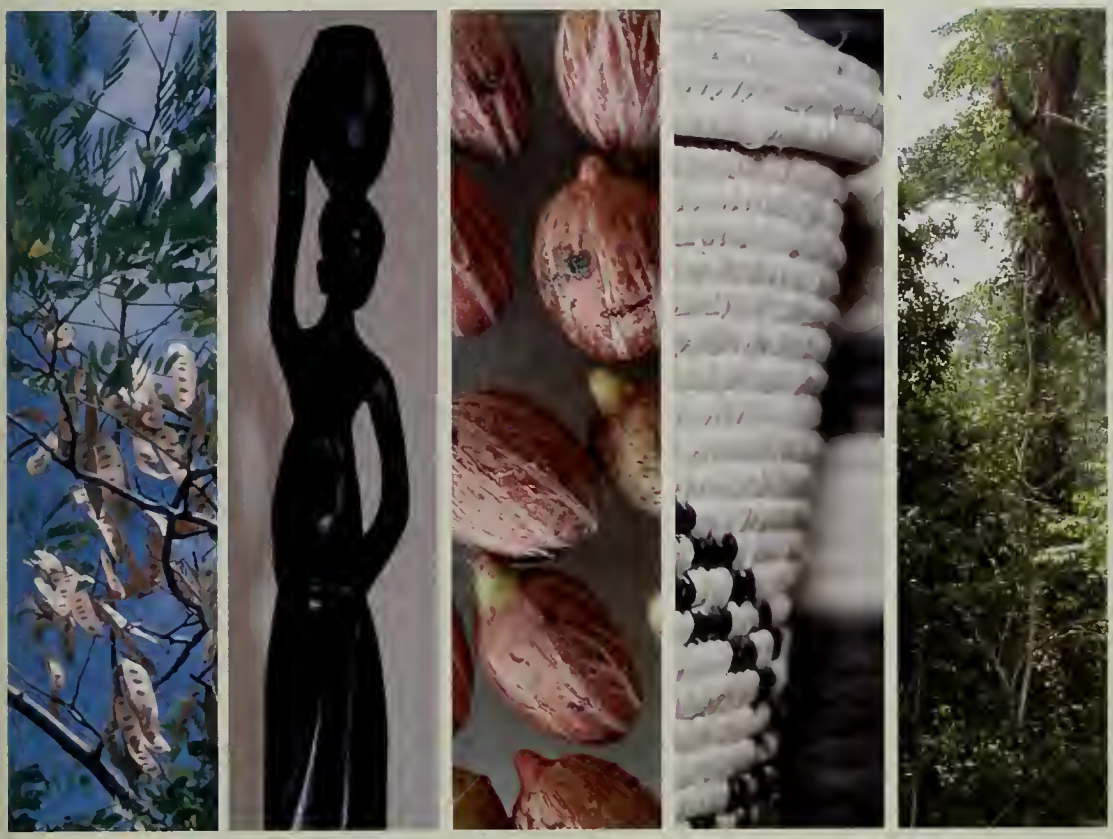
Non-timber **forest** products in **Uganda**



Spatial tools supporting sustainable development

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UNEP WCMC

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Preface

Human wellbeing relies on our ability to exploit our diverse and often fragile natural environment sustainably and into the far distant future. If there is no such thing as environmentally neutral economic growth, there is certainly an increasing number of options for sustainable human and social development. Such new approaches are essential to the achievement of the United Nations Millennium Development Goals.

Non-timber forest products (NTFPs) have been a particular focus of development interest in recent years. The hope is that forest-dependent people can gain new income-generating opportunities with minimal environmental costs. Fruit, basketry, honey and medicinal plants are just a few examples of economically and socially valuable products that can be produced from a sustainably managed natural resource base.

To offer a long-term source of income, NTFP production will still require careful planning, management and monitoring. Ideally, NTFP commercialization should raise the standard of living for the poorest communities whilst protecting vulnerable ecosystems and their biodiversity. Spatial analysis can support these dual objectives by informing locational decisions, directing external support to areas with the greatest prospect of success.

This project demonstrates that powerful spatial analysis tools now allow the combination of relevant social, economic and environmental data into a common analytical framework. The results offer a strong indication of the most appropriate sites for the sustainable development of NTFP harvesting and commercialization. Such 'expert systems' can be made accessible to any number of stakeholders, providing a truly participatory and inclusive tool for the sound management of our common natural heritage.

Jon Hutton
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Introduction and scope

The importance of natural resources in supporting rural livelihoods is increasingly being recognized in national and international policy. For example, achievement of all the Millennium Development Goals will depend on maintaining the environmental goods and services that are key to human productivity. Approaches to development are therefore required that enable incomes to be derived from natural resources, while supporting the effective conservation of these resources.

Non-timber forest products (NTFPs) offer an important example of how such goals may be achieved in practice. Many rural livelihoods are based on the collection and sale of products derived from forest resources, including fruits, nuts, fibre and resins. Trade in NTFPs can act as an incentive for forest conservation by providing a source of income from resources that might otherwise appear to have little financial value. In addition, the environmental impact of harvesting NTFPs is generally much lower than typically results from timber harvesting. As a consequence, many rural development initiatives are now supporting the commercialization of NTFP resources.

Rural communities often require external financial and technical support for successful commercialization of NTFP resources. Some national governments, aid agencies and non-governmental organizations are providing such support, to assist with the process of rural development and environmental conservation. However, exploiting NTFP resources may not be an appropriate option for sustainable development in all areas, as some rural communities are located far from potential markets, or do not have access to appropriate forest resources. Tools are therefore needed that could be used to direct external support to those areas with the highest potential for success.

This report describes an approach to define where NTFP resources offer an appropriate option for sustainable development. This is achieved using Uganda as a case study. Uganda's rich natural heritage and its position as one of the most rapidly growing economies in Africa serve to highlight the conflict between national development efforts and the need for a globally responsible approach to natural resource conservation.

The report addresses the following questions:

- How can NTFP commercialization contribute both to rural poverty eradication and forest conservation in Uganda?
- How do spatial factors affect these two goals?
- Based on currently available information, where do specific NTFPs have the highest chances of being successfully developed and commercialized in an economically and environmentally sustainable way?
- How can this spatial analysis be refined in the future to give a more complete picture?

Research into NTFP commercialization is still relatively recent and many of the datasets necessary for a thorough analysis of these questions are still lacking. However, sufficient information was available to build a demonstration model using geographic information systems (GIS), providing a useful preview of the benefits of such an approach.

Figure 1: Forest cover and environmentally vulnerable areas in Uganda