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## Auctions of Forest User Rights and Conservation Performance Payment Schemes of Non-timber Forest Products of Kakamega Forest, Kenya

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### Abstract

Participatory forest management (PFM) is often advocated as an instrument that can overcome excessive extraction of non-timber forest products by local communities and resultant forest degradation. We test an innovative PFM design attempting to combine market forces with PFM in field pilots around Kakamega forest, Western Kenya, by auctioning area-specific user permits to individuals and by establishing a communal monitoring system. Kakamega forest is a biodiversity-rich remnant of tropical rain forest located in a densely populated area inhabited by poor farming communities that heavily utilise non-timber forest products from Kakamega forest. The Kenya Forest Service currently employs a forest management system of issuing permits for the extraction of forest products. The permit system attempts to charge forest users directly for the external costs they impose on society. Yet, the appropriate price per permit is not known and the system is subject to exploitation due to monitoring difficulties. Recent legislation by the Kenyan government encourages local communities to participate more actively in the forest's management. The objective of the field pilots is to examine whether auctions are an effective instrument for the allocation of user rights within PFM schemes in developing countries and how flexibility in scheme design, extracted product and community characteristics affect PFM outcome. The auctions are expected to help determine competitive market prices and sanctioning can lead to the individual's loss of user rights and the community's loss of auction income thus providing incentives to comply with rules of sustainable resource use. The pilots are implemented in three communities which differ in degrees of flexibility in scheme design, auctioned forest products (firewood, grazing, grass cutting) and community characteristics. Preliminary results show that the community is willing to pay for exclusive rights in extraction of non-timber forest products and offer monitoring services so long as Kenya Forest Service ploughs back some of the paid revenue for improvement of their livelihood. Part of the revenue generated from the above auction of forest user rights was used for reforestation through conservation performance payment contracts and improvement of livelihood.

**Keywords:** Allocation efficiency, cost minimisation, forest conservation, participatory forest management

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