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Allanblackia floribunda

Tree domestication

spares forests and increases farmer income

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Domestication of valuable wild fruit and nut trees, has resulted in significant improvements in incomes, diets and in rural business development in the Congo Basin. The World Agroforestry Centre (ICRAF) has set up rural resource centres managed by local communities which train farmers in how to propagate and manage trees and which facilitate them in many ways.

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The Congo Basin forests are inhabited by 30-70 million people, many of whom are dependent upon forests for a range of ecosystem products and environmental services (wood, medicines, fruits and spices). The rural populations that reside in the area are characterised by widespread poverty, low agricultural productivity partly associated with degrading the natural resource base, poor access to markets, and limited formal access to the forest and its derived products which tend to be controlled by the state for central government benefits.

Agricultural land is difficult to define in the area, where local people have practised shifting cultivation for many centuries. The traditional smallholder agriculture is based on shifting cultivation, primarily of root crops such as cassava, yams, and cocoyam, trees of banana (plantain), and occasionally groundnuts (Arachis hypogaea). Traditionally, farmers cleared an area of forest, cultivated this during 2 years, allowed a fallow period of 5-20 years, depending on soil conditions, land availability, and various other factors, and returned to clearing and cultivating again. In the meantime these farmers may have cleared and cultivated other areas of forest, moving on from one spot to another.

SECONDARY FOREST Secondary forest is often dominated by regrowth of species such as Musanga cecropiodes (morphologically similar to the Cecropia pioneer trees of the Amazon Basin); shifting cultivation often targets these secondary forests because they are easier to clear than mature forest. More recently, an increasing population size and development have encouraged more sedentary settlements and necessarily shorter fallow periods, without full restoration of soil fertility.

Forest clearing for agriculture does not only include slash-and-burn shifting cultivation, which has been recognised as the key driver of deforestation in the Congo Basin, but also for cash crops such as cocoa (Theobroma cacao). With the current trend in the global market, most governments in central Africa have encouraged the increase of cocoa production, however this has been achieved at the expense of forest clearance.

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In spite of the recognised importance of forest products, tree cultivation is constrained by the limited knowledge of farmers of tree propagation techniques and incompatibility with other land uses. In addition, farmers cannot reap full benefits, because of marketing constraints such as seasonality of products, weak infrastructure, limited market knowledge, lack of networks and associations and inadequate processing and storage methods. Agroforestry practices such as tree domestication have the potential to ensure rural livelihoods, reducing pressure on the forest resources and encouraging farmers to integrate more trees in landscapes, while maintaining forest cover and biodiversity. In order to overcome these constraints, the World Agroforestry Centre (ICRAF) has been implementing a participatory tree domestication programme in Central Africa that is built on three pillars: (1) development of vegetative propagation techniques, (2) increasing economic

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The World Agroforestry Centre (ICRAF) is a CGIAR Consortium Research Centre. ICRAF's headquarters are in Nairobi, Kenya, with six regional offices located in Cameroon, China, India, Indonesia, Kenya and Peru. ICRAF generates science-based knowledge about the diverse benefits – both direct and indirect – of agroforestry, or trees in farming systems and agricultural landscapes, and disseminates this knowledge to develop policy options and promote practices that improve livelihoods and benefit the environment.
Source: www.worldagroforestry.org