

Conservation efforts needed to save the potential FGR of *Prunus africana*

Prunus africana, commonly known as red stinkwood is an evergreen tree native to the montane regions of sub-Saharan Africa, and the islands of Madagascar, Sao Tomé and Grande Comore. The species forms a major component of humid and semi-humid highland forests and occurs in a wide range of altitude from 900 to 3400 m above mean sea level. It is a strong light-demander, most preferring the forest gaps. Usually the tree bears heavy foliage and in areas of natural distribution, it can reach up to 35 m height.

Apart from the ecological significance, the tree has tremendous other uses. Bark is exported dried, chipped or powdered to USA and Europe to produce an extract used to treat benign prostrate hyperplasia. The extract is also a raw material for the burgeoning health, bio-product, diet supplement and pharmaceutical industry. The bark extract is also used as a purgative for cattle. It should be noted that not only the bark is highly valued, but the tree also produces a highly durable, straight-grained, strong timber which is used for heavy construction work, furniture and flooring. Further, the tree leaves are used as an inhalant for fever or the leaf extract is drunk as an infusion to improve appetite. Being a major source of income, the bark of the tree has been subjected to international trade for more than five decades and harvesting of barks forms one of the major income sources for forest based communities. Due to the restriction imposed by CITES (The Convention on International Trade in Endangered Species of Wild Fauna and Flora) on bark export from Burundi, Kenya and Madagascar, Cameroon's share of the global bark trade has risen to 659 metric tons (72%) during the year 2012. In total, Cameroon is worst affected in case of bark extraction from wild.



Unsustainable harvest of *P. africana* bark from the wild

Despite the need to conserve genetically and chemically diverse *P. Africana*, wild populations are exploited and face threatens even in some 'protected forest areas' of Burundi, Cameroon, Democratic Republic of Congo and Madagascar. Reports suggest that several trees have died as a result of girdling caused by peeling of barks. But studies conducted on sustainable

harvesting of *P. africana* bark have clearly indicated that if the bark is partially stripped according to the norms, in trees aged 12-15 years, the bark will regenerate and can be exploited at between 5-10 years gap without causing harmful to trees. Moreover, in contrast to lucrative exports of barks, the benefits to the livelihood and financial returns to local harvesters from wild are extremely low.

Besides the unsustainable harvesting practices, bushfires associated with herders and farming activities annually devastates hectares of forest, which *P. africana* seedlings and mature trees cannot tolerate, leading to very low levels of natural regeneration. In addition, grazing by cattle and especially goats, also results in almost zero natural regeneration in some locations. IUCN has stated that a great deal of attention and funding has been paid by International Conservation organizations to investigate and address this harvest and perhaps for this reason the species has received a high conservation rating.

Complete lack of knowledge of the state and total amount of the resource of *Prunus* available both in the wild and domesticated, in any given year and its location is considered as a major bottleneck in drafting appropriate conservation measures. Hence, sustainable management of wild, forest-based *P. africana* is possible only through identification of a national inventory of stands, implementation of regeneration measures and ensuring organized sustainable harvest methods.

Meeting CITES requirements to ensure continued exports from Cameroon so that the sector does not collapse in the short term, with consequences for the all producers and exporters in the chain as well as revenues for Cameroon government and further implications for consumers and possible development of alternative products and/or sources of *Prunus*.

Equal attention should be given to on-farm production of *P. africana*, which would benefit thousands of small-scale farmers who rely on the species, including local women, for whom wild harvesting forms a difficult task. Lack of market information and its dissemination is yet major constraint acting on the species. So, the market chain must be enhanced through small, medium-sized enterprises and community forests to operate more efficiently, which would facilitate the smooth functioning of product marketing.

Source:

<http://www.fao.org/forestry/13008-031d7c29d2ea155ae24eafffaedb07b7a.pdf>

http://www.worldagroforestry.org/treedb/AFTPDFS/Prunus_africana.PDF