Abstract

Many rural households rely on indigenous fruit trees as sources of cash and subsistence in the Southern Africa Development Community (SADC), but until recently there has been little effort to cultivate, improve or add value to these fruits. Since 1989 the International Centre for Research in Agroforestry (ICRAF: now the World Agroforestry Centre) initiated research-and-development work on more than 20 priority indigenous fruit trees in five SADC countries aimed at improving income in rural communities. A participatory approach was used in all stages of their domestication, product development and commercialization. Country-specific priority species were identified in five countries based on discussions with a wide range of users. These species have now become the focus of a regional tree domestication programme. An impact analysis indicates that a robust domestication programme will create incentives for farmer-led investment in the cultivation of indigenous fruit trees, as an alternative to wild fruit collection, especially where there is a decrease in fruit abundance. In Zimbabwe, the returns to family labour of collecting wild fruits are two to three times greater than other farming activities. These returns will be further increased by domestication.

Progress in the domestication of four priority fruit tree species *Uapaca kirkiana*, *Strychnos cocculoides*, *Parinari curatellifolia* and *Sclerocarya birrea* from the miombo woodlands in southern Africa is reviewed. Preliminary results indicate that the long juvenile phase of *Uapaca kirkiana* can be shortened from 12–16 years to less than four years, using vegetative propagation methods.

On-going multidisciplinary tree crop domestication research includes molecular genetic analyses, tissue culture, post-harvest storage, production economics, nutritional analyses, market and supply chain surveys, processing and feasibility assessments of pilot enterprises. Holistic plans are needed to promote cultivation and ensure product quality on farms and to maximize competitiveness at the farm gate and throughout the supply chain.