



Mpingo 99 Summary Report

Mpingo 99, the third expedition from the Mpingo Conservation Project, conducted six weeks of field investigations in Nachingwea District, southern Tanzania. The expedition studied local uses of and attitudes towards the East African Blackwood tree (scientific name: *Dalbergia melanoxylon*, local name: mpingo). Despite being a protected species its abundance is believed to be in decline. This is primarily due to its commercial value from the exportation of processed billets for the manufacture of woodwind instruments. The aim was to evaluate the extent to which mpingo has an economic, practical and social function, for the villagers in an area where it is found and logged, commensurable with the perceived ecological value defined by the conservationists and the use value attached to it by the woodwind industry. This raises the question of how to promote the conservation of a single species when such a species does not dominate rural livelihoods. There is a basic assumption that unless a tree is a local priority it will not be conserved. Conservationists concern with mpingo must therefore embrace and understand the broader social and economic context into which the tree fits.

General Uses of Mpingo

Carving

Mpingo is traditionally used for carving by several tribes in East Africa, especially the Makonde people whose tribal land straddles the Tanzania-Mozambique border. Increasing tourist trade has encouraged carving in the last two decades and many co-operatives have been started. Mpingo carvings are also available in ethnic craft shops in many European and North American cities. Skilled carvers incorporate the natural twists, turns and faults of mpingo into their work and use a much broader range of mpingo wood than the music trade.

Export for the music trade

Mpingo is the preferred wood of the musical instrument trade for woodwind instruments, particularly clarinets. One cubic metre of processed mpingo blocks is worth up to US\$18,000.

Tanzania only allows the export of processed timber and mpingo is exported as either processed billets for the music industry or as carvings. According to official figures the average amount exported as processed billets between 1992-1999 was 76 cubic metres per year. There has however been an increase since 1997 and in 1998-99 122 cubic metres were exported. Mpingo exported as processed billets and carving earns Tanzania foreign exchange and is a substantial contribution to the total sales of forest crops to foreign countries. Between 1993 and 1999 mpingo represented an average of 23% of all forest sales to foreign countries. In the year 1998-99 this figure was 39%, amounting to US\$ 2,112,000.

Village Use

Mpingo is used by the local people in areas where it grows due to the durability and sheer hardness of the heartwood. It is used for building, charcoal, firewood, medicine and the making of household implements.

The Place

The study was undertaken in four villages in Nachingwea District: Mtua, Chimbendenga, Nangoi and Garibovu. The latter two are home to mpingo carving co-operatives, and were visited for this reason only. The main study concentrated on Mtua and Chimbendenga.

Mtua is about 10 miles or some 50 minutes drive west from Nachingwea town, and was recommended to us as somewhere mpingo wood is used for a number of social and economic functions. Total

population is estimated to be 2400 people, living in 466 households. Chimbendenga village, which is another 10 miles further west, is surrounded by both public forest and the Lyonja Forest reserve. It has a total population of 1359, with 309 households. Both villages are in an area of miombo woodland and a household may have as many acres as they want for land is abundant. It is normal to cultivate a plot of land for 3 years before moving on to a new site. The law requires that when land is cleared farmers leave those trees which belong to the government and require licences; these are then available to loggers from outside if they buy a licence.

Village life revolves around the productive agricultural conditions created through the conversion of the public forest to managed environments; the main village income derives from cashew nuts and sesame. The centrality of agriculture to local social and economic life is indisputable. This study however demonstrates that villagers also make extensive use of the forest to meet their subsistence needs. Villagers in the group discussions broadly categorised forest products as firewood, building materials, logging, charcoal and medicine. There are multiple trees with multiple uses and although there was a lack of consensus concerning which trees were best for specific uses certain species did predominate for a given requirement.

Villagers' Opinions of Mpingo

Mpingo was seen to be a preferred species for firewood but there are many substitutes and women commonly use alternative woods, such as *Julbernardia globiflora*, which are easier to find. Mpingo burns for a very long time, even through the night and is thus economical and easy to start the fire again in the morning from hot embers. It lights even when wet due to a 'sap like petrol'. It burns very hot, sometimes too hot and some women prefer not to use it as the flame damages the cooking pots. For building mpingo was often noted as being the best for the central pole in a house. It is hard and strong and long-lasting, and not threatened by termites. However, once again there are substitutes which are readily used if mpingo cannot be found.

Charcoal making, utilising wood from the forest, is a means to make money additional to that of farming. The earnings from charcoal making, although they may be substantial for the individual charcoal maker, do not benefit the majority in the village with only a few people involved in this occupation. Mpingo was not identified as a species of particular importance as a large number of more widely available trees can be used. This usage therefore does not make mpingo a priority species for villagers, although it does make good charcoal.

Mpingo logging is also an income earning activity, supplementary to farming, that is reliant on the forest. However, only a few male villagers have the opportunity to benefit financially from this activity. Most of the loggers do regard mpingo as a good source of income although some say the work is hard and, as there are no fixed contracts of employment they cannot rely on it. Logging of *Pterocarpus angolensis* logging is commoner, and thus more, reliable, but mpingo logging is a bigger earner. Nevertheless, mpingo logging is desired as it brings wealth to a proportion of young fit men, who in turn aid their families (though not always). It is a big enough earner to make it worth a young man's while to leave his plantation for several weeks per year to do the hard work of the logging. The problem is the employers give a very low pay relative to the income they gain. Also some women, who commonly overestimated the amount a logger could earn, do not perceive it as advantageous. They claim the money is spent on alcohol and cigarettes and does not contribute to household finances. Only a minority of people within the community therefore gain direct economic benefits from mpingo, although other villagers, not involved in logging or charcoal production, often perceive those in it to benefit more than they in fact do.

However, this analysis ignores the indirect benefits to the local economy which accrue from only those sections of the community gaining direct financial reward from mpingo. For example, loggers buying cigarettes and alcohol will benefit local businesses and village mechanics obtain work when the lorry transporting the logs needs to be repaired (which it frequently does). Whilst the villagers may not realise the contribution mpingo makes through such means they may be significant.

There is some resentment towards the logging companies, particularly as some villagers are beginning to realise the value of mpingo and some of the women felt mpingo was now more difficult to find for firewood, building and medicine due to logging. Mpingo was believed by villagers to be scarcer than in previous years.

For its medicinal uses mpingo is well known and cures a wide range of illness. It is particularly significant with regard to child birth and therefore has an important cultural value. However there is no perceived threat to this use as young and poorer quality trees, which have been rejected by loggers, can provide the leaves and bark necessary to make the medicines.

For carvers mpingo wood is an essential component of their occupation and cannot easily be substituted due to its unique colouring, density and texture. Although some attempts have been made to use other woods they are not easy to sell. The Makonde people attach a great deal of importance to the tradition of mpingo carving and for them it is of great economic and cultural significance.

Policy Implications

Mpingo has the potential to contribute to the cash economy of rural households due to its high value on the international market. However little effort has been directed towards ensuring the sustainable use of this tree. Sustainable management of mpingo is particularly problematic due to the long time it takes for the tree to reach a harvestable age. The primary concern of villagers is day to day living and in reality it is unlikely they would be willing to sacrifice time and energy to plant trees, which are not a priority to them, if there are no immediate tangible benefits. They need to benefit directly from the license fees and logging contracts. The financial benefits must then be used to improve the village infrastructure. This would increase the likely long term success of the project as they would be more likely to play a greater role in preventing illegal harvesting. However with uncertainties in demand, no fixed contracts and weak institutional administration it would seem unlikely they would be willing to protect or plant a species which, up to the present time, does not dominate their livelihood strategies.

In terms of logging there are weak controls and few actual penalties for logging without a license. The bulk of logging is carried out by sawmill owners, i.e. those who process and export the mpingo for western markets, and they far exceed local carvers in the number of trees logged. Thus the main problem for mpingo in this area lies with the sawmill logging. This is an area of profit for very few people, an activity from which most of those interviewed receive little benefit. This differs from other uses of mpingo, which commonly benefit many sections of the local community. The most damage to mpingo stocks is being done by a small number of outsiders and it is on this group that attention should be focused when trying to lower mpingo usage. There is a need for tighter controls on the number of trees logged and on the amount of wastage left.

However there are grounds for optimism. During a discussion, the chairman and secretary of Mtua village said that mpingo had the greatest economic value over all other trees, and emphasised its pre-eminence for a number of uses. They would like to see a management plan to plant and conserve mpingo and would use their positions to implement the programme, but have neither the know-how or the financial resources. They believe the villagers do not see the potential of their trees and would like to see a programme where the villagers are educated on this matter.

Conclusions

In summary, mpingo is seen as valuable but its values are often not received. It is important in medicine, as firewood, and also in building. It is mentioned as the most useful or one of the five most useful trees in nearly every discussion on every type of use. But it gives no real economic benefit. These villages have major problems in their development and currently mpingo is not particularly helping them out – just in certain areas. Crops are more financially viable. But mpingo has the potential to bring wealth to this area, and when it is sold it can potentially bring far greater profits than cashew or sesame. There needs to be greater awareness of its economic potential within a management framework and greater controls on the traders to pay a better price for it to the villagers: pay more community tax on it and increase the wages to those involved in the logging.

The Team

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