The Cane Bridges of the Takamanda Region, Cameroon

TERRY C.H. SUNDERLAND, MICHAEL P.B. BALINGA *African Rattan Research Programme c/o Limbe Botanic Garden P.O. Box 437 Limbe, Cameroon*

AND

JACQUELINE L. GROVES Takamanda Forest Surveys Project c/o Limbe Botanic Garden P.O. Box 437 Limbe, Cameroon

In common with their Asian relatives, rattan canes throughout the rain forest zone of West and Central Africa play an integral role in the livelihoods of local people. Nowhere is this more so than the Takamanda region of SW Cameroon, where rattan is used for a wide range of local products. Most impressive of these is the use of cane for the construction of "hammock" bridges.

The Takamanda area, with the Takamanda Forest Reserve at its centre, is accessed predominantly by footpath, as there are no motorable roads to within 7km of the reserve itself. Indeed, some of the enclaved villages within the reserve are up to 40km from a motorable road. The area is part of the extensive Cross River valley and is bisected by an extensive network of rivers and streams. With an annual rainfall of up to 5,000mm (or just over 16 feet!), much of which falling between the months of July to September, many of these waterways become impossible to cross either by traditional fords, or by canoes. To prevent their communities being cut-off from the outside world during the rainy season, local people have devised techniques of constructing temporary wide-span cane bridges that often provide the only means of access to the area.

Although some community members insist that the cane bridges were the idea of the colonising

"white man", there is strong anecdotal evidence to contradict this, particularly among the village elders. In this regard, it is likely that the fabrication of these bridges was common prior to the exploration and colonisation of the area. Interestingly, the knowledge to construct these cane bridges is seemingly restricted to this small area of SW Province of Cameroon and the extreme SE of Nigeria, and they are not commonly found in neighbouring countries within the region. However, as with many other local traditions, the construction of cane bridges is becoming less common as development reaches the most inaccessible areas of Cameroon often accompanied by roads and concrete bridges.

In order to exhibit the natural beauty of these bridges, as well as to understand the technology and skills needed to construct one, members of the Nyang community, a village on the border of the Takamanda Forest Reserve, were invited to build



a wide-span cane bridge in the Limbe Botanic Garden. During the course of several days, detailed notes on the manufacture of the bridge were made, as was a photographic record of its construction. As it was explained to the authors, the construction of these cane bridges relies on two main construction methods: the "snake" and "spider" systems.

The first stage in the construction of the bridge relies on the choosing of a suitable site where the river is relatively narrow and, on either bank, stout trees are present from which the bridge can be hung. The next stage consists of selecting and harvesting mature stems of the small-diameter cane *Eremospatha macrocarpa* (or "echié" the local name in Denya). Although stems of this species often reach 100m in length, most often only smaller lengths are available and these are tied together end to end in order to provide 5-10 strands, each up to 200m in length, depending on the desired span.

The first strand to go across the river is carried across by the strongest swimmer in the group. This centre strand would then serve as a means of conveying the other strands and materials to be transported across the river during the rest of the bridge construction. The ends of 3-5 further strands would then be transported across to the lone weaver on the opposite bank using a running loop attached to the main strand. These would then be tied to form the handrails of the bridge to form a V-shaped frame. The tying of this framework is called the "snake system."

Once this framework is in place, the remaining members of the bridge construction team then climb up on to the main strand and begin to weave shorter vertical lengths of cane along the entire length of the bridge, forming a net-like structure. Due to its resemblance to the webs of forest spiders, often seen laden with dew at the first rays of sunlight, this weaving technique is referred to as the "spider system."

Building these bridges takes place at the beginning of the rainy season, when the rivers are not yet too full, and hence too dangerous, to swim across. Routine maintenance work is carried out about every four months. This consists of replacing any rotten or broken strands of rattan, as well as reinforcing any weakening knots and joints. One of the drawbacks of using cane as the raw material for construction is that is has a relatively short life span; usually around 2-3 years. To get around this, in some more isolated areas, such as the village of Ekong-Anaku in Cross River State, Nigeria, the cane itself has been replaced by galvanised wire strands. Although, in this case, the raw material has been replaced, the indigenous technology to construct the bridge itself remains.

The cane bridge in the Limbe Botanic Garden remains a popular exhibit for visitors to the Garden and, accompanied by interpretative information, provides a unique educational resource highlighting the importance of rattan cane to local communities in Cameroon.

Acknowledgments

The African Rattan Research Programme is funded by the United Kingdom Department for International Development (DFID) for the benefit of developing countries (R7636 Forestry Research Programme). The views expressed are not necessarily those of DFID. The Takamanda Forest Surveys Project is funded by the Wildlife Conservation Society (WCS).