

# The importance of non-timber forest products in rural livelihood security and as safety nets: a review of evidence from South Africa

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We review and synthesize recent South African work that examines the role and importance of non-timber forest products (NTFPs) in the daily lives of rural people in South Africa. The most commonly used such products are wild spinaches, fuelwood, wooden utensils edible fruits, grass hand-brushes, and twig hand-brushes, used by 85% or more of households. More than half the households investigated also make use of edible insects, wood for construction, bushmeat, wild honey and reeds for weaving. Individual households may exploit dozens of animal and plant species. The range in annual, direct-use values is large, from less than R1000 per household per year to over R12 000. The value to rural households is manifest through a daily net function which represents a cost saving to the families involved and to the state, as well as through an emergency net, which serves as an insurance in times of misfortune, such as drought, disease, and unexpected economic hardship. The emergency net function has hardly been quantified in South Africa and internationally. *Ad hoc* trade in NTFPs is a common emergency net, which in some instances evolves into a permanent way of life. Financial returns from trade are variable, depending on resource type and hours worked, but are typically low. Despite the small cash incomes from trade, they provide an important contribution that complement the diverse livelihood strategies within a household, especially for the poorer sectors of rural society. Moreover, there are non-financial benefits of NTFP trade that are commonly overlooked.

## Introduction

Millions of people throughout the world make extensive use of biological products from the wild.<sup>1,2</sup> These items, commonly termed non-timber forest products (NTFPs), are harvested for both subsistence and commercial use, either regularly or as a fall-back during times of need. They add to peoples' livelihood security, especially for rural dwellers. NTFPs may also have marked cultural significance and value.<sup>3,4</sup>

Despite the growing international appreciation of the role of NTFPs in rural subsistence and development, many uncertainties remain — particularly for the drier and densely settled savannas of South and southern Africa,<sup>5,6</sup> in contrast to the literature on the value of these products in more tropical areas. This paper attempts to address these uncertainties through a review of data and information from rural South Africa on the extent of use and value of NTFPs at a broad scale, in tandem with analysis of three case studies to illustrate parallels and differences in the commercialization of these products and their role as a safety net. Our approach was to summarize, interpret and review recent data and findings from both published and unpublished sources. We focused on those studies that attempted to include a full inventory of NTFPs used by households, rather than simply

one or two. We use the term NTFP in its broadest sense to include any biological resource collected from the wild by rural people for direct consumption or income generation on a small scale. In particular, we draw heavily upon the study of three villages by Shackleton *et al.*,<sup>8,9</sup> and four subsequent studies, spanning 10 villages in three provinces,<sup>10-13</sup> that used the same interview schedule as Shackleton *et al.*,<sup>8</sup> and summarized by Shackleton and Shackleton.<sup>14</sup> In all instances, 30 or more households were sampled per village, complemented by interviews with key informants and group participatory rural appraisal exercises. In most of the studies reviewed the gross direct-use values were calculated as quantity used multiplied by closest available local price. In a few instances where NTFPs were not traded locally, replacement values were used (see original references for details). The same sources were reviewed regarding the patterns and extent of commercialization. Additionally, results from three case studies are reviewed, one on wood carvers, one on sellers of marula beer, and one on vendors of palm brushes. These studies involved direct surveys and market chain analysis with role players in each case.

## NTFPs for direct household provisioning in South Africa

Typically, South African rural households use several different NTFPs to meet their everyday needs. The most commonly used products are wild spinaches, fuelwood, wooden utensils, grass hand-brushes, edible fruits, and twig hand-brushes (Table 1), used by 85% or more of households. More than half the households surveyed also make use of edible insects, wood for construction, bushmeat, wild honey and reeds for weaving. From direct interviews, we are aware that the proportion of households acknowledging the use of bushmeat and medicinal plants are underestimates owing to fear of religious or legal sanction in some areas.

For any particular NTFP, such as fuelwood or weaving materials, several plant species are used. Indeed, communities in the savannas of the northern provinces of South Africa regularly use up to 200–300 plant species.<sup>8,11</sup> Fewer appear to be exploited in the Eastern Cape province,<sup>12,15</sup> possibly reflecting lower species diversity, especially in terms of woody plants for timber, fuelwood and wild fruits. Individual households may use dozens of plant and animal species.<sup>14</sup> From those studies with comparable data (Table 2), it is evident that users extract large volumes of NTFPs annually, amounting to (per household on average) approximately 5.3 tonnes of fuelwood, 58 kg of wild spinaches, 104 kg of edible fruits and 185 large poles for fencing, kraals and houses. Other than wild spinaches and poles for housing, the standard errors are approximately 20% or less of the mean, indicating relatively consistent usage across a wide range of socio-economic conditions and environments.

## Annual direct-use value

The range in gross, annual, direct-use values averaged across all households within the communities sampled is large, from

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less than R1000 per household per year to over R12 000 (Table 3). This is a reflection of differences in both the quantities consumed as well as unit prices.<sup>9</sup> The range in prices between studies of some commonly used resources is larger than the range in quantities consumed, and thus unit price has a greater influence on the relative direct-use values between studies. The mean gross, direct-use value attached to the use of savanna products across the 14 South African studies was R3854 ± 786 per household per year, which is of the same order of magnitude as results from Zimbabwe.<sup>17,18</sup> In most situations input costs are low, other than labour and in some instances transport. Shackleton *et al.*<sup>12</sup> found that opportunity costs of labour represented between 14% and 61% of the gross value, with a mean of 37%, whereas Dovie *et al.*<sup>11</sup> reported that labour opportunity costs represented only 9.0 ± 2.6% of gross, annual, direct-use value across seven NTFPs.

### How NTFPs contribute to livelihood security

NTFPs provide livelihood benefits at two levels. The first is the role of these products in assisting households to cope in times of adversity manifested as sudden changes in the economic, social or bio-physical environments in which households exist and function. This includes events such as a death or retrenchment of the head of the household or breadwinner, droughts, floods, frosts or disease leading to crop failure or death of live-stock, major economic structural adjustment, or unanticipated and large increases in costs of staple foods and goods. During such times it is common for rural households to turn to NTFPs to tide them over what they perceive is a temporary setback. This may take three forms:

- (i) Types or species of NTFPs not often used by that household, e.g. wooden poles collected from the surroundings for building purposes rather than the purchase of commercial poles or cement blocks.
- (ii) Increased consumption (either relatively or absolutely) of products already part of their livelihood. Typically, this involves substituting purchased commodities with harvested ones, e.g. increased use of wild spinaches, or a decline in consumption of paraffin in favour of fuelwood.
- (iii) Temporary sale of NTFPs on local and regional markets, including within communities and between neighbouring households, e.g. roadside fuelwood sellers, reed mat vendors or wood-carvers.

In these situations the changed or increased use of NTFPs is typically a coping strategy, with the products providing a 'safety' or 'emergency' net. The direct-use value of the products used during such times of adversity does not adequately reflect their true value, because it does not account for the emergency insurance component of use during these times of hardship. An additional measure of value is required, equivalent to the option value assigned by resource economists to natural habitats.

In contrast, there are the livelihood benefits of the ordinary daily use of NTFPs as an integral aspect of direct household provisioning as presented above, which we term the 'daily net'.

**Table 1.** Prevalence of use (mean ± s.e.) of different savanna resources used by more than one third of rural households (includes both purchased and self-collected use).<sup>14</sup>

Resource	Mean % of households	Range (%)	No. of villages in sample
Wild spinaches	95.6 ± 1.3	86.0–100.0	14
Fuelwood	95.5 ± 1.9	75.4–100.0	14
Wooden utensils	95.1 ± 1.9	80.0–100.0	13
Grass hand-brushes	90.7 ± 4.6	40.7–100.0	13
Wild fruits	88.2 ± 4.0	48.0–100.0	14
Twig hand-brushes	87.1 ± 5.1	47.5–100.0	12
Wood for fences or kraals	62.0 ± 5.5	33.0–92.1	14
Weaving materials (reeds, grass, palm leaves)	55.4 ± 9.6	0–100.0	14
Edible insects	53.5 ± 9.5	0–97.2	14
Bushmeat	51.6 ± 8.4	0–100.0	13
Wild honey	50.5 ± 10.6	0–96.7	10
Medicinal plants	49.4 ± 7.5	9.2–100.0	14
Wood for housing poles	49.0 ± 8.1	0–96.7	14
Thatch grass	48.8 ± 9.0	2.6–96.7	14

(Sources: refs 9–13, 33)

**Table 2.** Mean (± s.e.) amounts of products used per household.

Product	Units	Amount used	Range	No. of villages in sample
Wild spinaches	kg/yr	58.2 ± 26.3	12.8–198.4	7
Fuelwood	kg/day	14.2 ± 1.5	8.2–23.2	12
Grass hand brushes	no./yr	4.2 ± 0.5	1.9–8.6	12
Wild fruits	kg/yr	104.2 ± 15.6	19.4–165.1	10
Twig hand brushes	no./yr	4.6 ± 0.3	4.0–5.6	6
Wooden poles for fences & kraals (excluding brush wood)	no./hh	136.9 ± 28.9	33.1–273.0	12
Wooden poles for housing (excluding laths and brush wood)	no./hh	43.2 ± 11.8	0–113.3	10

(Sources: refs 8, 11–13, 16)  
hh, household.

The livelihood security aspects are manifest primarily as a direct cost saving to rural households, as most have limited access to cash incomes. Being able to collect and use NTFPs to meet daily needs for energy, shelter, food and medicine allows scarce cash resources to be used to secure other household needs and to attempt to accumulate the necessary asset base for a more secure

**Table 3.** Gross annual direct-use values across all households (users and non-users) for selected sites in South Africa.

Province	Site	Annual gross direct-use value (R)	Reference
Eastern Cape	Ntubeni	12 462	16
	Cwebe	4 488	16
	Few households per site from many widespread sites	2 811*	15
	Fairbairn	2 526	12
	Ntilini	1 645	12
Limpopo	Tidbury	1 607	12
	Mogano	7 238	8
	Mametja	4 807	13
	Ha-Gondo	3 619	11
KwaZulu-Natal	Thorndale	3 435	8
	Bushbuckridge	2 218	20
	30 households scattered across three widespread sites	3 375*	32
	KwaJobe	2 819	8
	Mtubatuba	900	10
Mean (±s.e.)		3854 ± 786	

\*Original research did not include all NTFPs. Therefore, direct-use value conservatively adjusted to include a value for the missing NTFPs by taking 50% of the mean value for the missing products from other studies.

livelihood, for example, the education of children, investment in agricultural tools, or capital for activities that generate income. Such a cost saving would best be reflected by replacement values of the goods that the NTFPs substitute, rather than direct-use value based on farm-gate prices. The relative magnitude of the cost saving is greater for poorer households than for the wealthier by virtue of the reduced incomes and sizes of poor households.<sup>19</sup> Moreover, the cost saving has benefits not only at the household level, but also the national level. The daily net role of NTFPs in the provision of energy, food, medicine and shelter to the rural poor alleviates some of the costs (several billions of rands annually) that the government would incur had it to provide these services in rural areas. Thus, government has a vested interest in ensuring environmental integrity to secure a sustainable supply and use of these resources until it is capable of providing such services.

Additionally, the real cash cost of replacing a locally harvested NTFP with an alternative from the nearest urban centre is far higher (both for the good and for the transport) than the labour opportunity cost. Thus, although the local harvesting and consumption may have a negative net annual value, people have limited options, since the alternative requires ready cash, which may not be available, and at a cash cost higher than they can harvest an equivalent good locally.

### The levels of trade

Commercialization is a growing livelihood option in South Africa.<sup>20-22</sup> For example, until 1998 no local markets existed for marula beer in the Bushbuckridge lowveld of Limpopo province due to cultural taboos. In 2000 there were only 15 sellers. By 2002 there were approximately ten times this, over 200. Similar trends have been reported from Zimbabwe for other NTFPs.<sup>18,23</sup> The proportion of households selling NTFPs within villages is small (Table 4), and for many it is on an *ad hoc* basis driven by a shortage of cash at the time. Yet there seems to be a ready market with a large proportion of local rural households purchasing NTFPs either regularly or at times when they could not harvest their own. In the Kat River area of the Eastern Cape, a greater proportion of poor households (>30%) were found to engage in selling NTFPs as a means of cash generation than more wealthy households. Additionally, poor households also sell a greater variety of types of NTFPs, and the income earned represents a greater contribution to total household incomes than it does for the few (<10%) wealthy households that sell.<sup>24</sup>

### Case study comparisons

The three case studies reviewed here deal with self-initiated 'commodification' of NTFPs in response to economic need and hardship. Some target their products at local, domestic consumers within their own villages (e.g. brush vendors), others in nearby local urban centres (e.g. beer sellers and brush vendors), and still others to tourist markets and retailers (e.g. woodcarvers). The market chains tend to be simple with, in most cases, the same individuals harvesting the resource, processing it and selling it. In all the cases the opportunity to harvest natural resources and convert them into a commercial product has been an important safety net for the people involved. The studies include: i) a survey of brush sellers in the King William's Town area of the Eastern Cape;<sup>25</sup> ii) a survey of marula (*Sclerocarya*

**Table 4.** The proportion of user households that buy or sell that specific NTFP, based on a random household survey of three rural villages.

Resources	Mogano (Limpopo)		Ha-Gondo (Limpopo)		KwaJobe (KwaZulu-Natal)	
	Buying	Selling	Buying	Selling	Buying	Selling
Fuelwood	34.7	4.1	17.6	3.9	0	0
Housing poles	n/a*	n/a	7.4	3.7	42	13
Wood for fences/kraals	17.4	3.6	6.8	3.3	15	8.6
Wooden utensils	67.3	1.7	66.7	3.7	64.5	3.2
Wooden furniture	0	0	0	0	0	3.2
Wood carvings	n/a	n/a	0	0	0	3.2
Edible herbs	12.3	3.1	0	0	0	3.2
Edible fruits	13.3	2.1	0	0	0	0
Mushrooms	0	0	0	0	0	3.2
Honey	5.6	5.6	n/a	n/a	15	6.4
Insects	82.4	0	76	4	0	0
Bushmeat	5	5	n/a	n/a	0	0
Medicinal plants	100	0	100	0	9.7	3.2
Thatch grass	30	0	44.2	0	57.12	0
Construction reeds	n/a	n/a	40	0	32.3	6.5
Weaving reeds	33.3	0	n/a	n/a	41.4	16.7
Grass hand-brushes	72.6	1.6	59.1	0	81.5	14.8
Twig hand-brushes	40	2.2	73.9	0	0	0
Fish	n/a	n/a	n/a	n/a	80.8	0

\*n/a, resource not used in village.

*birrea*) beer traders in the Bushbuckridge district, Limpopo,<sup>26</sup> and iii) an investigation of the woodcarving industry in the lowveld region of Limpopo and Mpumalanga provinces.<sup>27-29</sup> In reviewing these three studies, we attempt to answer the following questions: who is involved in the trade, what are the livelihood benefits and returns, and what are the opportunities and constraints associated with the trade as far as livelihood benefits and enhancement is concerned? A brief description of each case is provided before we look in more detail at the safety net and livelihood benefits of trading in the products concerned.

### Brush industry

The survey<sup>25</sup> included 38 producers and sellers of brushes in and around King William's Town (population approximately 100 000) in the Eastern Cape. This was close to a 100% sample in that area. The brushes are made from fronds of the palm *Phoenix reclinata*, which is harvested locally from municipal commonage and communal lands under traditional authorities. Some sellers also trade in brushes made from a Cape reed (*Cannamois* species) of the Restionaceae family. Demand for palm fronds exceeds supply, but there are several physical and cultural refugia that ensure maintenance of the resource. All traders are women who reside in the rural villages around the town. Most of the brushes are sold in the regional urban centres to local buyers, although some are sold within the rural villages. Most sellers had participated in the trade for less than six years, although some had been active for two decades. There was a wide range in incomes earned, since some vendors participated only occasionally, whereas for others it was their primary source of livelihood.

### Marula beer trade

Marula beer is made from fermented juice of the fruits of *Sclerocarya birrea* subsp. *caffra*. It has long been brewed by rural households and is associated with a number of cultural traditions. Until 1998, it was seldom sold, but rather shared at neighbourhood festivities or given away. Since then, a growing number of people have participated in informal marketing of marula beer in local urban centres of the Bushbuckridge lowveld area (2940 km<sup>2</sup>). Selling remains taboo within the rural villages where it is brewed. A survey of 51 sellers,<sup>26</sup> constituting an approximate 25% sample, was conducted during 2002. The beer is marketed

Table 5. Trader profiles and benefits.

	Brush producers/ traders		Marula beer producers/traders		Woodcarvers	
	Female	Male	Female (with one male trader)	Male	Hardwoods	Softwoods
Gender	Female	Male	Female (with one male trader)	Male		
Mean age (years)	33 (over 70% of traders were 35 years or younger)	33 (39% of traders were 30 years or younger, 35% were between 30 and 45, and 25% were older than 45)	33 (39% of traders were 30 years or younger, 35% were between 30 and 45, and 25% were older than 45)	55		35 (23 for part-time carvers)
Average length of time in trade (years)	8.9	1.2	1.2	22.4		11.5
Average number of years of schooling	7.3	5.9	5.9	No education or only a few years		5.3 (6.5 for part-time carvers)
Percentage of trading households with no members in formal employment or with alternative income	32	47	47	95 (the carvers were the only income earners in their households)		Majority – 'the families participating in the industry can be assumed to be highly dependent on the proceedings' (Steenkamp 1999)
Mean annual income from trade (R )	5688	687	687	7602		10 486
Gross	4272	500	500	3603		9838
Net	25	27	27	53		6
Costs as a fraction of gross income (%)	<R2400–12 000+	R89–2299	R89–2299	R2584–16 928		Not available
Average percentage contribution of income from trade to total household income	Not determined, although over 50% of traders rated this activity as either the first or second most important source of income	10	10	79		Not determined, but the carvers appeared to be the primary income earners in most households
Returns to labour	Reasonable	Reasonable	Reasonable	Poor		Poor
Other benefits	Craft skills, marketing skills, new social networks, independent income	Seasonal income at a critical time of year when school fees due, maintenance of traditional skills, marketing skills applied to other products, new social networks, independent income	Seasonal income at a critical time of year when school fees due, maintenance of traditional skills, marketing skills applied to other products, new social networks, independent income	Carving skills, some business skills, work from home instead of being migrant labourers, new institutions, flexibility, 'own boss' networks		Carving skills, some business skills, stop gap or fall-back option when no employment, new networks

by producer households, usually the same individuals who brew it. Incomes are modest, highly seasonal and variable across traders. Importantly, the income comes at a time of year where there is a high demand for cash for school fees, books and uniforms but when cash reserves are low following the Christmas season. There seems to be sufficient supplies of the marula fruits to meet both domestic and commercial demand.

### Woodcraft industry

There is a long-established woodcraft industry in the Bushbuckridge lowveld, manufacturing furniture and utilitarian items such as bowls, spoons, trays and walking-sticks.<sup>27–29</sup> It involves between 100 and 200 households. While 17 different species are used, the bulk of the timber harvested is from *Pterocarpus angolensis*, *Dalbergia melanoxylon*, *Spirostachys africana* and *Berchemia discolor*. There has been a noticeable decline in wood stocks in recent years. Permission is required from local conservation agents to harvest timber species, and a small fee is payable, proportional to the amount of timber felled. These home-centred enterprises are largely family based, although may include assistants or apprentices. Marketing is largely in regional urban centres and at key tourist destinations to informal traders or retailers. Most participants have been in the industry for a considerable period.

In the late 1980s, another group of carvers became operational, selling animal figurines to tourists. These are manufactured in roadside stalls from species with softer wood, such as *Sclerocarya birrea* subsp. *caffra*, and *Erythrina* species. No permission is sought to fell the timber, although it should be provided by the traditional authorities. The producers sell directly to tourists. Most carvers have been in the business for a limited period and tend to view carving as a temporary occupation until they find formal employment.

### Characteristics of producers and producer households

Women are the primary producers and traders of brushes and marula beer. In contrast, all the wood carvers are men, although female family members play an important role in the finishing of goods for the market. These examples support the general observation that women tend to trade in non-wood NTFPs (foods, crafts), whereas men are more involved in selling wood products including fuelwood, poles, furniture and carvings.<sup>23</sup>

The beer and brush traders were relatively young (less than 35 years), although some older women were involved (Table 5). More than half the traders had some secondary education (more than seven years) and, amongst the marula beer traders, 18% had a school-leaving certificate and one a tertiary diploma. This suggests that a lack of employment opportunities rather than poor education and skills has forced these women into selling NTFPs for income. The markets for both brushes and marula beer are relatively recent and have demonstrated rapid growth. Over 44% of brush sellers had been trading

for five years or less, and 80% of beer traders began selling beer in 2001 or 2002. In the brush trade, net annual profits correlated with length of time in business, indicating that the more full-time sellers tended to be those that had been involved in the trade the longest and had turned it into their primary livelihood activity.

The home carvers are older men (mostly in their fifties and sixties), who have been producing carvings for 20–30 years<sup>27</sup> (Table 5). The roadside carver vendors are mainly young men, and this industry has only really grown in the last 10 years<sup>26</sup> (Table 5). There also tends to be a high turnover of producers within this woodcarving category as they move back and forth between carving and wage employment.<sup>28</sup>

Participants in all the trades tended to represent the poorest sector of the community. Over 47% of beer trading households had no regular source of income, with self-employment being their most important source of cash. The equivalent figure for brush traders was 32%. Almost half the beer traders were from female-headed households — usually recognized as amongst the most vulnerable of rural society. Average household income was less than R500 per month for 60% of beer trading households, well below the poverty line. The number of formal jobs and pensions per household was significantly less than found in a random household survey within the region from which the beer traders came. Steenkamp<sup>28</sup> showed that the poorest sections of the local community participate in the woodcarving industry, with the households involved being highly dependent on the proceeds. Many of the young men engaging in the trade were unable to find any other form of employment. Similarly, hardwood carvers also had few other sources of income, with all of them turning to the trade in their late thirties and forties after retrenchment from formal jobs in other primary sectors.<sup>27</sup>

#### Income and livelihood benefits

Incomes derived from the sales of NTFPs are variable both across case studies and between trading households. Average, net, annual income was within the same range for hardwood carvers and brush traders (R3000–R4000), but higher for carvers in softwood (R9000) (Table 5). In contrast, the income from the sales of marula beer was low at R500 per annum. This is because sales are limited to only two months of the year. However, the timing of the income is critical and the cash earned is important for paying school costs. One of the traders we interviewed mentioned that she had already paid her elder child's high school fees from her earnings, and would continue to sell beer until she had paid her younger child's primary school fees, and then stop. Another young seller was doing so to pay her own school fees. Other uses of the proceeds from beer selling included reinvestment into alternative income generating opportunities such as sewing and shoe mending, and/or the purchase of goods for resale. Some households mentioned that they were using the cash to purchase food. For most of the households involved, the beer trade forms but one of many sources of livelihood.

Carving and brush production are less seasonally constrained and hence incomes are higher. However, the market for carvings fluctuates widely in accordance with tourist demand. The lean months tend to be difficult for carvers, and they can experience extended periods in which they earn little money. On average, hardwood carvers earn R300 per month, and softwood carvers more than double this at R800. The difference is largely a reflection of the lower costs experienced by the latter (Table 5). Hardwood carvers have more difficulty sourcing wood, plus they pay for their materials, which softwood carvers do not. Softwood

carvers also save costs, mainly in transport, by working and selling at the roadside, and they need fewer sophisticated tools since the wood they use is easier to work. Brush traders earn approximately R356 per month. The income earned by hardwood carvers and brush traders is below the minimum living level.

Income for all the producers is highly variable from one producer to the next. Amongst brush sellers, gross income varied from a minimum of R30 to a maximum of R1100 per month. This was because for some brush sellers it was their only means of livelihood and therefore more time was dedicated to manufacturing and selling, whereas for others it was only a part-time activity to supplement income. Those participating in manufacture or selling on a daily basis earned more than double those who participated on an *ad hoc* basis, that is, at weekends only.<sup>25</sup> Similarly, part-time softwood carvers earned only half that of full-time carvers.<sup>29</sup> All the hardwood carvers worked full-time. The variation in income between these producers is a function of production levels as influenced by effort expended, access to power tools, products made and availability of additional sources of income, such as pensions, that can be reinvested in their carving businesses or used to hire assistants.

Unlike marula beer, the trade in carvings and brushes forms the main livelihood option for participants and has been their primary source of income for some years<sup>29</sup> (Table 5), thus moving beyond just a safety net function or a source of supplementary income. However, these occupations, except for the minority, can rarely be said to provide a 'sustainable' livelihood or a way out of poverty. All households engaging in these trades remain poor, have limited assets and are unable to meet all their aspirations. Most live on a day-to-day subsistence basis and continue to be vulnerable. They are 'price takers' and often have to accept unrealistic prices for their goods to pay their taxi fares home and bring some cash into the household. Increasingly, scarcity of resources is becoming a major problem for hardwood carvers (and to some extent the brush vendors also), sometimes preventing them from working at full capacity.<sup>29</sup> Nevertheless, it is important to recognize that these traders, from amongst the poorest members of society, have managed to secure a living for themselves, albeit marginal, with little external support or cost to the state. They have been able to look after their families and meet their basic needs. They represent a few hundred people who would not otherwise have a job. For this reason it is important not to underestimate the role that NTFPs can play in easing poverty and providing additional options for income generation or in meeting specific cash needs such as school fees. The people involved in the NTFP trade have an independent source of income, they have their pride and dignity in being able to provide for themselves and their families, they can be flexible in their hours and undertake much of their production at or near home, they are directly rewarded for the effort they put in, and they have developed skills (such as carving, brewing, weaving) that command the respect of others, that perpetuate tradition and that can be applied in other areas of their lives (such as business skills). These non-material benefits are important and contribute to a healthy family life and society. The challenge is whether these activities can be made to contribute more and create more sustainable opportunities.

#### Opportunities and constraints of the NTFP trade

Until recently, the NTFP sector in South Africa received little support from or acknowledgment by government or rural development agencies. The situation has improved in the last few years, with growing recognition of the importance of the

informal sector in job creation, poverty alleviation and handicraft opportunities linked to increasing tourism.<sup>30</sup> It is unlikely that any of the NTFP trades described will be able to grow and develop without at least some external intervention. The producers themselves do not have the technology, resources, access to credit, contacts or skills to develop their businesses much beyond what they currently are today.

Producers face many constraints, some of which are universal to all NTFPs<sup>31</sup> and some specific to the product they are selling. One major limitation is that small rural producers in the informal sector do not have access to credit facilities, which is crucial if they wish to expand their businesses. Woodcarvers, for instance, often find themselves unable to accept bulk orders as they do not have the cash to finance all their input requirements and pay assistants. Another problem is insufficient raw material to meet production demands, as is the case for woodcarvers and to a lesser extent brush vendors. Resource supply and sustainability are often overlooked in policies and projects to stimulate small enterprises, usually coming as an afterthought. Industries that require the destructive harvesting of slow-growing species are always going to present a major challenge in terms of sustainability. Marula traders are affected by the seasonality of the resource, and only development of new, long-lasting products can address this, which will also diversify markets and income sources, such as marula oil products. The saturation of limited local markets is a potential problem, with producers having little ability and know-how or time to seek new outlets, in particular wider national and international markets. Thus, even where potential does exist, these opportunities are often not exploited and are unlikely to be without some external assistance. In the case of craft items, poor quality, an inability to deliver on schedule, a low level of supply, limited product range and a lack of individuality, innovation and creativity have been identified as constraints on the industry by buyers and other external parties. Informal traders often face problems establishing themselves in the marketplace despite an easing of local by-laws. Both the marula beer traders and brush traders complained about being driven from the places where they sold their goods by adjoining shop owners, security personnel at shopping complexes and the police. The intolerance to and vulnerability of these women in the marketplace is something that could be addressed relatively easily by local municipal authorities.

## Conclusions

Several conclusions and policy implications can be identified from the above. First, NTFPs are widely used by rural households in South Africa for both direct household provisioning and income generation, with poorer households using and benefiting more from these products than do the wealthier. The use of these products adds a crucial dimension to a diversified livelihood base of most rural households, little appreciated by planners and decision-makers.<sup>32</sup> The direct-use value of regular domestic use of NTFPs is the same order of magnitude as cash incomes from trade.

Second, the concept of a safety net role of NTFPs needs to differentiate between a 'daily net' and an 'emergency net'. People enter the NTFP trade because of a lack of alternative income-earning opportunities, retrenchment, poverty, and the need for cash income. The chance to gather free resources and convert them into saleable products provides an important safety net for many households. For the people involved it is often not a matter of choice but of necessity a coping strategy. It frequently starts as an emergency net and evolves into a permanent livelihood option.

Third, trade may be orientated at local village markets, neighbouring urban markets, or tourist markets, with seemingly similar returns. Trade in NTFPs is growing both within rural communities and in external, regional markets. People are taking advantage of the opportunity this presents under increasingly harsh economic conditions. (For example, the price of the staple food, maize meal, in South Africa has more than doubled in the last two years and many women indicated that they had to find means of earning additional cash to pay for their basic food needs.)

Fourth, the benefits of trading in NTFPs are variable and modest, particularly for seasonal resources like marula beer. However, these sales can provide cash at important times of the year, help ease cash flow problems and contribute to the amelioration of rural poverty. Local level trade in NTFPs does not alleviate poverty substantially for many reasons including a lack of markets, market saturation, low-priced products, resource scarcity, and the sheer density of people in the communal areas limiting the numbers that the resource base can support. The cash benefits resulting from trade are variable across households and are directly related to the degree of effort expended. Thus, whilst it may be modest for many, for some it is their main livelihood activity and generates incomes well above the poverty line. Although the cash earned may be small for many, participation in trade is an important source of self-esteem, pride and independence, especially for women.

What can be done in the circumstances? At a macro-level, the role and value of the daily net and emergency net needs to be communicated to planners and decision-makers. Whilst appreciated by a few (principally donors and the research fraternity), it still has not been recognized in local, provincial nor national policies. The non-governmental sector is involved, but largely in promoting markets and skills for NTFP products traded in national and international markets. The daily net receives no attention. Not only does the value need to be reinforced amongst government departments and NGOs, but so too the crucial component these products play in the diversification of rural livelihoods. Rural livelihoods in South Africa are not just about arable crops, nor livestock husbandry, nor NTFPs, but an interplay of all three within the matrix of wage labour, remittances, state grants and pensions and self-employment, the relative proportions of which are in flux as households seek to optimize livelihoods, respond to changing circumstances, spread risks and overcome challenges.<sup>32</sup> Thus, policies and projects need to build upon this diversity of livelihood strategies and the abilities of rural households to move between them, so that they can benefit from opportunities that arise. A multi-sectoral and integrative approach is required. Government supports an agricultural extension service for arable crops and for livestock husbandry, but there is no such service for NTFPs. This is required, within a broader policy of improved natural resource management that includes all dimensions of land-based livelihoods.<sup>32</sup> Resource assessment and sustainability is a key ingredient.

In terms of NTFPs specifically, it needs to be recognized that whilst trade can generate cash income for rural households, for the majority it does no more than ease rural poverty, or acts as an emergency net. But the importance of this should not be ignored nor underestimated, nor should the minority of households for whom NTFP trade is their primary livelihood and which keeps them out of poverty be overlooked. The loss of NTFPs to rural households through excessive harvesting, land transformation, land resettlement or rezoning can have dire consequences, especially for the very poorest in society.

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