

Chapter 5

Cultural Importance of Non-timber Forest Products: Opportunities they Pose for Bio-Cultural Diversity in Dynamic Societies

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Abstract There is an increasing awareness that monetary value does not fully represent the complete value and significance of NTFPs. Consequently, there is growing interest in the cultural dimensions of biodiversity and the role that it plays in human well-being. This chapter presents two case studies, one on traditional brooms in South Africa, and the other on *amate* paper in Mexico, to demonstrate the importance of cultural values on driving demand for NTFPs. Because cultural values are so deeply embedded, the demand for culturally valued NTFPs continue across the rural urban divide, and are maintained even by modernising urban communities. This poses particular challenges, not only for conservation of the NTFPs, but also to sustain cultural diversity in a rapidly changing world.

5.1 Introduction

In the late twentieth century most tropical forest resources were conventionally divided into two main groups: timber resources and non wood or minor forest products, most commonly called non-timber forest products (NTFPs). Chambers and Leach (1987) were among the first to recognise the importance of NTFPs for

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their contribution to rural livelihoods in the form of either a source of cash and/or as a form of savings and assets. Peters et al. (1989) highlighted the potential monetary significance of NTFPs by providing evidence that they potentially yielded higher net revenues per hectare than tropical timber and that the former could also be harvested with considerably less negative impact on the forest. Since then, much attention was given to the contribution of NTFPs to rural livelihoods through food production and household welfare (Hladik et al. 1993; Wollenberg and Ingles 1998). Consequently, wild harvested plant products were classified as having either a subsistence value or a commercial value (Goebel et al. 2000; Campbell and Luckert 2002).

Most of the available NTFP guidelines and evaluation methods have largely focussed on the ecological and economic aspects of NTFPs (e.g., Peters 1996; Campbell et al. 1997; Wong 2000; Campbell and Luckert 2002; Shackleton et al. 2007; Burgener and Walter 2007). This led to a proliferation of scholars from a range of disciplines attempting to document the various contributions of natural resources to peoples' livelihoods (Kepe 2008).

While most of these studies provided some expression of economic value of NTFPs and greatly improved understanding in this regard, there is an increasing awareness that monetary value alone does not fully represent the complete value and significance of NTFPs (Sheil and Wunder 2002; Cocks and Dold 2004; Cocks et al. 2006; Kepe 2008). For example, Sheil and Wunder (2002) note that forest products are often deeply embedded in the political, institutional, and cultural life of the people who are involved in their collection and consumption, and therefore question whether everything that people "value" in the broader sense can, or should, be "priced" in the narrow quantitative sense. As argued by Alexiades and Shanley (2004) "the multidimensionality of NTFPs is evident in the myriad of processes, actors, and factors that shape their management, processing, and commercialisation, and therefore, forest products often have distinct, long and complex, historical trajectories" (see Box 5.1). To date, however, within the multidisciplinary literature on NTFPs the cultural dimension is the less studied and seldom understood (Alexiades and Shanley 2004; Kepe 2008).

Cultural values of natural resources has been given some attention within the disciplines of anthropology, ethnoecology and ethnobotany (Toledo 2002; Alexiades 2003; Cocks 2006b), but for the most part have been ignored in valuation studies of NTFPs. There is however, a growing interest in the cultural dimensions of biodiversity, and the role that it plays in human well-being. Consequently, greater attention is now directed towards the relationship between biodiversity and human diversity. The Declaration of Belem (in Posey 1988) describes this relationship as an "inextricable link" between biological and cultural diversity (Posey 1999). The notion of the inextricable link implies not only that biological and cultural diversity are linked to a wide range of human–nature interactions, but that they are co-evolved, interdependent, and mutually reinforcing. In this context, novel approaches to sustainable natural resource management have been suggested by researchers and conservation bodies. For example, sacred sites are especially valued since these areas often represent the oldest form of habitat protection and still constitute a large and mainly

Box 5.1 Public Access Rights in Sweden: A Demonstration of Cultural Importance of Forest and Their Products

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The use of NTFPs has mainly been described for developing countries, which is not unexpected since people living in these regions often depend heavily on these products for livelihood security. However, NTFPs can also be important to the well-being of many in developed countries, albeit seldom crucial from a livelihood perspective. While the harvesting of NTFPs can bring material benefits in such settings, the cultural and recreational values are generally of higher importance. I will argue that not only do specific NTFPs have a cultural value, but that the right of access to the land and NTFP resources is in itself an indicator of cultural importance.

In the Nordic countries of Sweden, Finland and Norway a custom of public rights of access to the countryside exists that includes the rights to harvest NTFPs. ‘Allemansrätten’, as this is called, can be described as a code of conduct that secures the right of the public to move freely about the countryside, irrespective of land ownership, provided one does not cause disturbance or damage. This freedom of movement also applies to rivers, lakes and sea, and includes the right to camp and light a fire, and to collect NTFPs of low economic value, such as mushrooms, berries and flowers (Sandell 2006).

In Sweden aspects of this right are traceable back to the Middle Ages. Reasons behind the early development of Allemansrätten are varied, and include historical traditions of common property regimes. The later development of Allemansrätten can be linked to the transformation of social and political identities in Sweden in the first half of the 20th century. National identity became coupled to a growing interest in ‘the Swedish landscape and nature’ and to the perception of the ‘nature loving Swedes’. Rapid urbanization and industrialization resulted in a growing interest in physical leisure activities, and the time and money needed to engage in outdoor recreation was assured through an overall increase in welfare. The tradition of public right of access facilitated these developments and was in turn strengthened by them. Allemansrätten became regarded as a concept in legislation after the 2nd World War, and incorporated in the Swedish constitution in 1994. However, in spite of this the right of public access is not defined in law, except in legislation concerning where and when it does *not* apply. Allemansrätten can thus be described as the free space between different restrictions related to: 1) economic interests such as timber and crops; 2) people’s privacy; 3) conservation interests; and 4) ongoing land use activities. Today, in spite of an increasing range of organised forms of outdoor recreation and access to foreign tourism destinations the right of public access to the countryside
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holds a very strong position in Sweden (Dahlberg et al. forthcoming, Fredman et al. 2008).

Both urban and rural dwellers engage in a wide range of activities made possible through the existence of public access. These take many forms, from more ambitious and adventurous hiking, canoeing and skiing trips, to the Sunday afternoon stroll through the nearby forest. In the summer people wander through forests and meadows to pick flowers or berries, such as raspberries and blueberries, which are used to make jam and juice. During late summer and autumn many different species of mushrooms are harvested. Other NTFPs, such as cones, lichen and mosses, are sometimes collected for crafts and decorations for traditional events. The species and amounts harvested vary between years due to natural fluctuations in abundance, between regions due to availability and traditions, and between people due to knowledge, time and interest. Overall, the total number of species utilised is high and for certain popular species the amounts harvested substantial. As described in detail by Dahl (1998), many utilised species have a cultural significance, which is illustrated through the numerous references found in Swedish songs, films, books, and commercial advertisements.

That the public right of access in itself has a cultural dimension can be illustrated and discussed from different perspectives. Dahl (1998) describes how both official documentation as well as private individuals argue in favour of Allemansrätten based on its perceived antiquity (in a Swedish context) and on its uniqueness, i.e., as something uniquely Swedish. Although both these arguments can be contested – especially the latter – their perceived validity illustrates how important Allemansrätten is as a cultural symbol. Colby (1988) argues that the long tradition of various forms of access rights has resulted in a land ethic where an established morale defines rights and determines behaviour. He illustrates this through interviews with Swedish landowners who have noted a difference in the behaviour of Swedish and foreign visitors on their land. Where most Swedes intuitively know, and respect, what is allowed within the public access rights, many foreigners find the concept strange and often misinterpret it as ‘everything is allowed’. However, as pointed out by both Colby Colby (1988) and Dahl (1998), although Allemansrätten causes conflicts when misused by tourists, it is also seen and used as a means to attract tourists. Allemansrätten can thus be described as part of Swedish identity. This is not to say that all Swedes know or follow the code of behaviour inherent in Allemansrätten and some complain that urban dwellers do so less than rural people. On the other hand, to many people living in urban areas the links to the countryside are very important, and they may at times value the rights provided by Allemansrätten higher than rural people. To urban people, the right of public access is one means of maintaining cultural and historical links to their rural roots in

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pre-industrial Sweden. Furthermore, a positive awareness of *Allemansrätten* is commonly found also among people who very seldom utilise this right – to them it is a cultural symbol and inherent in Swedish identity.

Through *Allemansrätten* the concepts of nature and culture are linked in intricate ways, both materially and immaterially. The right of public access, in Sweden and elsewhere, has a cultural value that exists independently of the areas and resources that may be accessed. Or as stated by Dahl (1998: 296) “*Being allowed to pick berries, mushrooms and wild flowers stands as a metaphor for ‘having access to Nature’*”. That is, the right to harvest material NTFPs can be seen as a metaphor for the right to access nature, seen as part of Sweden’s national (or human) identity.

unrecognised network of sanctuaries around the world (Secretariat of the Convention on Biological Diversity 2004). A number of guidelines, such as those of Oviedo and Maffi (2000) and Dudley et al. (2005), have been produced to inform environmental practitioners of the value of associating traditional cultural practices and spiritual meanings to biodiversity conservation. In 2004, the Secretariat of the Convention on Biological Diversity proposed ways to incorporate cultural, environmental, and social considerations of indigenous and local communities into new or existing environmental impact-assessment procedures. In line with these proposals, other initiatives have aimed to develop cultural indicators to assess indigenous peoples’ food and agro-ecological systems, which are also closely related to use of forest resources and NTFPs (Woodley et al. 2008).

It is important to recognise that most indigenous communities no longer represent homogenous linguistic groups, but are increasingly becoming more plural, in response to changing socio-economic and political influences, such as formal and mainly western-shaped education systems, the globalisation of economic relationships, migration, and processes of secularisation (Cocks 2006b; Mathez-Stiefel et al. 2007). To date, the majority of case studies selected to illustrate the link between biodiversity and cultural diversity have largely focussed on “exotic” communities which, by their nature, are remote and isolated (Cocks 2006a). However, the exchange of knowledge, ideas, and products form an intrinsic part of the history of all civilisations across the globe (Alexiades and Shanley 2004), including of increasing exchange along the rural–urban continuum over the last century (Padoch et al. 2008).

Despite this growing exchange along the rural–urban continuum several anthropological studies have shown that people frequently continue to maintain their links with their place of origin while moving to different settings, and as such have become multi-local households or transnational communities. Historical and ongoing processes of internationalization and transnationalization demonstrate that social, cultural, and economic actions are not defined only at national levels anymore, but are rather embedded in complex layers of transnational, national, and sub-national institutional frames revealing the emergence of new networks and

patterns that cross over multiple boundaries (Appadurai 1996). For example, in recent years, medicinal plant products are becoming increasingly traded through formal markets such as pharmacies, internet-based marketing and mail-order systems, and international markets (Mander and Le Breton 2006). The nature of the international trade in medicinal plants makes it difficult to obtain precise information about its structure and scale but a report given by the International Trade Centre, stated that eight countries belonging to the EEC in Europe imported 80,738 tonnes of plant material from Africa (Hamilton 1992). It is estimated that there are more than 2,000 herbal medical companies operating in Europe and more than 22,000 in the USA; with Germany representing the largest market in the world for herbal medicines, boasting annual sales of approximately USD 1.2 billion (Hamilton 1992). This trade is estimated to be escalating between 12% and 15% per year in the UK, USA, and Italy (Hamilton 1992), largely because of the greater than ever popularity for natural-based, environmental friendly products.

Other commercially traded NTFP's form part of what is being referred to as the "nostalgic market". For example, Gockowski et al. (2003) describe how the introduction of exotic agricultural crops appears to have had little effect on the sales and consumption of traditional leafy vegetables in Cameroon. Similarly Cocks et al. (in press) have reported that the consumption of wild leafy' vegetables remains stable across peri-urban areas and urban centres within the Eastern Cape province of South Africa, as has many wild foods in Europe (Box 5.2). The authors therefore argue that there is a need to study the consumption of food as a bio-cultural phenomenon, and not simply from a nutritional understanding or as a poverty relief strategy, as the preparation and consumption of these dishes is predominantly done by women and children as a social pastime with family and friends (Cocks et al. in press). It has therefore been recommended that in studying communities' food habits, one needs to "invite the curious eyes of historians, geographers, sociologists, and folklorists" into the analysis (Fieldhouse 1998).

On the other hand, local NTFPs have been internationalised by their commercialisation in markets around the world. For example, the *uxi* fruit (*Endopleura uchi*) growing in the states of Pará and Amazonas, once considered the fruit of the poor, is today sold in many cities of Brazil in different presentations such as a flavouring in ice cream (Shanley and Gaia 2004). Another example constitutes the fruits from *shea* trees (*Vitellaria paradoxa*) in southern Sahel and Sudan zones of Africa, traditionally consumed as a nutritious snack, prepared as soap, and as cooking fat. Today, it is sold internationally as a key ingredient in natural cosmetic products (Schreckenber 2004). A liquor flavoured with the pulp of marula (*Sclerocarya birrea* subsp. *caffra*) from South Africa is exported to dozens of countries worldwide (Shackleton et al. 2009b).

In view of the developments outlined above, this chapter demonstrates, through selected cases (traditional grass brooms to South Africa and *amate* paper in Mexico), the cultural and evolving value of NTFPs. The implications for bio-cultural diversity conservation are raised and discussed.

Box 5.2 Cultural Significance of Berries and Mushrooms in Northern Europe: NTFPs Between Tradition and Acculturation

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While the cultural significance of NTFPs in the context of development among mostly rural societies has received increasing attention in the past years, the role of NTFPs in industrialised, developed societies is still rather unexplored. Although the sheer economic need to rely on wild natural resources for subsistence is significantly less accentuated in Europe, their cultural significance is still surprisingly high. Traditions related to gathering and processing NTFPs are either an uncontested part of cultural heritage, are being re-discovered or, as described below, even transferred to regions/countries where a specific NTFP was formerly less or not at all considered.

In Northern European countries such as Finland, Norway, or Sweden, there is a long tradition of gathering berries that is considered to be of nationwide significance. In the first place, blueberry (*Vaccinium myrtillus*), lingonberry (*Vaccinium vitis-idea*), cloudberry (*Rubus chamaemorus*), and raspberry (*Rubus idaeus*) are collected mainly for domestic consumption. The custom of gathering berries more than just collecting them to eat, represents a culturally embedded tradition, and has developed into one of Sweden's major recreational activities. It is considered to be an enjoyable and satisfying activity, providing a diverse range of health and educational benefits. By strengthening links between people and the environment, it is regarded as helping to foster appreciation of the natural world and to sustain a connection with the countries' cultural heritages. Similar results have been reported from Switzerland (Kilchling et al. 2009). Consequently, gathering berries such as blueberries and lingonberries from the woods is not only a popular pastime in Scandinavian countries, but is even supported by the educational system, when school children are at times allowed time off from school specifically for gathering wild berries (Kangas and Markkanen 2001; Kardell 1980).

The cultural connotations and significance of another widely occurring NTFP – wild edible mushrooms – clearly manifests in its spatial distribution. Although trends may vary among countries, in Northern and Central Europe (the Germanic, so-called “mycophobic” populations), mushrooms have traditionally been mistrusted and excluded from the diet. Other countries, especially Eastern European ones and some in Southern Europe (so-called “mycophilic” countries, inhabited by Slavs and Romans) have a strong tradition of collecting and eating wild edible mushrooms and have developed a robust marketing network to satisfy the high domestic demand. The frontier regions between “mycophobic” and “mycophilic” countries display interesting examples of acculturation of NTFPs. In Sweden, where collecting mushrooms is highly popular today, the custom of eating fungi was imported from France, and was initially exclusively adopted by the nobility. Even the years

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of near-famine in the nineteenth century could not change the adverse attitude of the general public towards mushrooms, despite considerable official effort and propaganda. It was, eventually, the migration to the cities in the twentieth century, and the related awareness of other eating habits that brought the Swedish to consider wild fungi to be worth harvesting and eating (Kardell 1980).

A similar pattern of initial reluctance can be found in Finland. Through France and Sweden, the old Roman mushroom tradition, favouring chanterelles (*Cantharellus cibarius*) and cep/porcini (*Boletus edulis*), came to the educated, mostly Swedish speaking people of southwest Finland. In the eastern part of the country, the ordinary country folk diffidently adopted a second mushroom tradition that came from the east via Karelia favouring acrid milk caps, the *Lactarius* species. However, it was only after the famines in the 1860s and World War II that the attitude of the Fins towards mushrooms started to change fundamentally. Unlike in Sweden, it was not the urban life style that set the impulse to broaden the local diet, but the immigration of 400,000 evacuees after the war from the part of Karelia conquered by the Soviet Union. The Karelians were resettled among farming families all over Finland, and seemed to have been successful in integrating their mushroom preferences into the Finnish diet. Even today, the majority of marketed mushrooms come from Eastern Finland with the *Lactarius tivialis* species still being the favourite choice (Haerkoenen 1998).

5.2 Case Study: Traditional Grass Brooms in an Urban Context

The purpose of the following case study is to demonstrate the reciprocal interaction between urban and rural communities regarding the use and trade of traditional grass brooms in the Eastern Cape province of South Africa. Information pertaining to the urban use of grass brooms was collected from Nelson Mandela Metropole (NMM) (Fig. 5.1). NMM is home to 775,255 people, of whom 56% are black Africans (Statistics South Africa 1996), and represents the largest urban centre in the province. The grass brooms used in NMM are mostly produced in Mxhalanga, a village in the former Ciskei homeland of the Eastern Cape. The homelands are the result of racially based policies implemented by the former apartheid government, and are characterised by poor infrastructure, high population densities, and high poverty levels (Viljoen 1994). A large proportion of the population of Mxhalanga is unemployed, and relies on government welfare payments, or on urban earnings, rather than on subsistence based economies (Cocks and Dold 2004).

Two types of grass brooms are made in Mxhalanga and are sold within the NMM, these being large wooden handled brooms (*umtshayelo wentonga*) and small

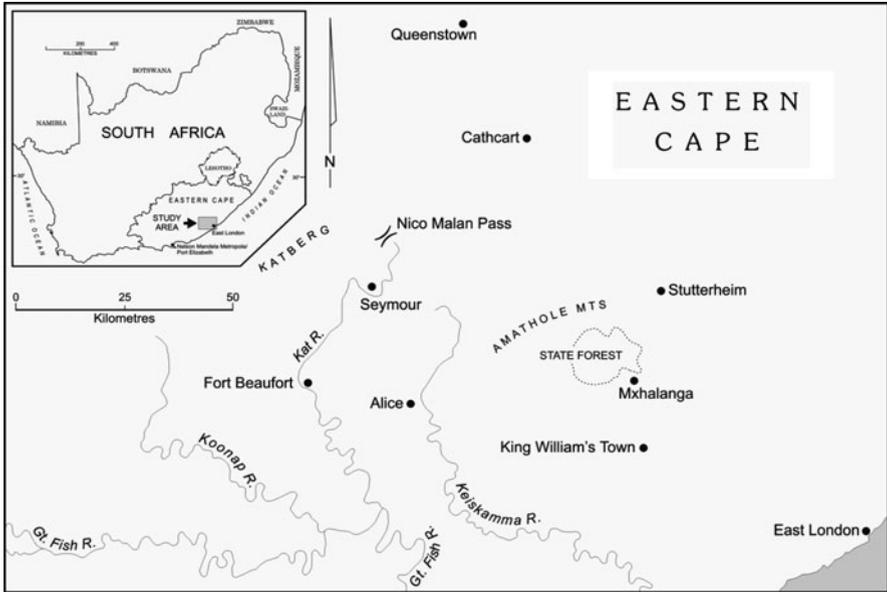


Fig. 5.1 Eastern Cape Province with detail of the grass broom production area

grass brooms (*umtshayelo wesandle*) (Fig. 5.2). The producers consider the smaller – *umtshayelo wesandle* – to be of traditional Xhosa origin, a sentiment supported by early historical records (McLaren 1919). The long-handled broom is made in the same way, but a wooden handle is attached. According to Shaw and Van Warmelo (1981) this type of broom was originally copied from a European broom, but has been in existence for more than a century. The grass hand-brooms are made from turpentine grass (*Cymbopogon validus* (Stapf) Stapf ex Burt Davy), an aromatic tufted perennial reaching 2.4 m tall that is widespread and common throughout the eastern regions of South Africa (Van Oudtshoorn 1992). The Xhosa name for this species is *irwashu*. The grass is steam-bent into the desired shape (Fig. 5.3).

Interviews were conducted with 204 broom buyers while they were purchasing brooms in NMM. Questions asked in the interview included demographic profiles of the broom buyers, who the broom was being purchased for, and the intended use of the broom. Fifty percent ($n = 31$) of all the broom producers in the broader Mxhalanga district were interviewed. Demographic profile and household socio-economic status were recorded together with particulars regarding broom making, such as their production and marketing activities.

5.2.1 Who Buys Grass Brooms and Why?

Two methods of sale are employed in NMM; sellers may sell from door to door in residential areas, or they may set up an informal roadside stall near taxi ranks and

Fig. 5.2 Hand made grass brooms from Mxhalanga: (a) *umtshayelo wentonga*, (b) *umtshayelo wesandle*. Scale bar 300 mm. Illustrations A.P. Dold

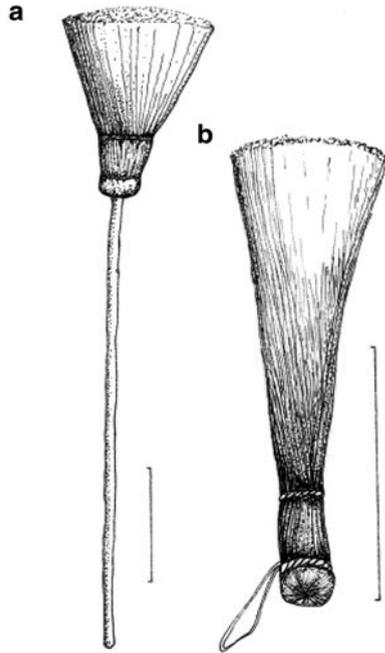


Fig. 5.3 Manufacturing grass brooms from *Cymbopogon* leaves in the Eastern Cape, South Africa (photo: Tony Dold)

bus stations where commuters are targeted as potential customers. No advertisement or discourse other than simply displaying the brooms is employed during the selling process.

Eighty-four percent of grass broom buyers were female, while only 16% were male. Seventy-five percent of the buyers purchased the grass broom for themselves, 19% purchased it for their mothers, and 6% for their wives. The reasons for purchasing a broom varied, with 59% purchasing a broom for cultural purposes. The remaining 41% indicated that they used the grass broom for cleaning purposes only as it was considered to be more effective than a commercially available broom. The three main cultural uses of grass brooms were the following:

- *As a traditional wedding gift.* As many as ten grass hand-brooms, together with sedge mats (*amakhukho*), are presented as a traditional wedding gift from a mother to her daughter a few weeks after the wedding ceremony. The traditional ceremonial presentation of the broom is called *ukutyiswa amasi* (literally to present a gift of sour milk) (Hunter 1936). The broom is symbolic of traditional Xhosa culture and symbolises respect to the ancestral faith in the newlyweds' home, irrespective of religious affiliation, economic status, and geographical location. These brooms are later used for daily sweeping and are replaced when necessary.
- *As a protective talisman against lightning.* A broom purchased for this purpose is not used for cleaning at all, but is hung on the wall next to the main entrance door of the home as a talisman. The presence of a hand-broom in the home is also believed to protect the inhabitants from lightning, often attributed to sorcery (Soga 1931; Hunter 1936).
- *As an implement for the application of traditional protective medicine.* The ritual in which an infusion of various plant medicines is splashed or sprayed on the floor, walls, and roof is called *ukutshiza* (Dold and Cocks 2002). This ritual cleansing and purification ensures the good health and prosperity of the inhabitants (Soga 1931; Hunter 1936; Cocks and Møller 2002). The broom used in this ritual is also not used for cleaning.

The urban survey revealed that almost all the urban buyers were middle-aged to elderly women who had bought brooms for *amasiko* (Xhosa customs). Several socio-economic factors influenced the use of grass brooms in the study site. The most significant of these was level of education, family origin, followed by economic status and age. The cultural importance of grass brooms decreased with an increase in education level. Economic status (expressed by means of housing type) was significant, showing that people from lower economic groups were more likely to purchase a grass broom for cultural purposes. Older people also tended to buy brooms more for cultural purposes than for cleaning. It was found that the length of the period of urban living of households was not significant (Cocks and Dold 2004).

5.2.2 *Broom Makers and Sellers*

The grass hand-broom makers are predominantly middle-aged women from disadvantaged backgrounds with little or no formal education who are also often the sole

income earners in their households. The skill to make brooms is traditionally learnt from mothers and grandmothers. Material to produce brooms is harvested on a privately owned farm on the Nico Malan Pass in the Seymour district (Fig. 5.1) as the grass is not located near the village of Mxhalanga. This equates to a 260 km return trip for the grass broom producers each season. Shackleton (1990) showed that harvesting of the *C. validus* grass promotes annual growth, and observations in the production area indicated that *C. validus* is a sustainable resource for Mxhalanga broom producers at the current level of harvesting. Both types of broom are produced at Mxhalanga but seldom sold within Mxhalanga; the producers travel extensively to sell them. Sale localities include Alice, Cathcart, East London, King William's Town, NMM, Queenstown, and Stutterheim (Fig. 5.1). Approximately 7,200 large brooms and 1,400 small brooms are produced in Mxhalanga per year.

This case study reveals that traditional Xhosa cultural practices are still significant even in highly urbanised contemporary settings, and the materials needed to perform these are sourced from the rural resource base and accessed via trade links. This has been made possible by the ever increasing linkages between rural and urban areas. Today rural communities which may be geographically isolated are no longer isolated in economic and social terms as cash, goods, and remittances flow from urban to rural areas, and rural goods and culture to urban areas (Wiersum and Shackleton 2005). The grass broom trade also provides an opportunity for disadvantaged rural people to earn an income. Their involvement in the trade is often of necessity and a coping strategy (Shackleton and

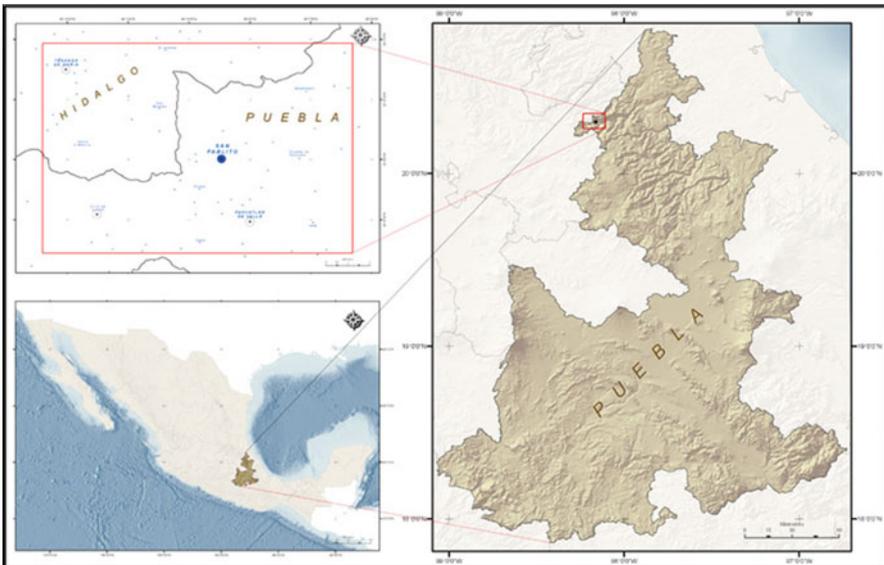


Fig. 5.4

Campbell 2007; Shackleton et al. 2008). Similar socio-economic circumstances have been recorded amongst broom makers from other regions of the Eastern Cape, including those using palm leaves (Gyan and Shackleton 2005), and those using forest restios as raw materials (Shackleton et al. 2009a, b). Broom producers in the northern region of the country, in the Bushbuckridge district, similarly represent the poorest households and their engagement in the trade offers them a vital safety net, particularly for those households impacted by HIV/AIDS, for widows, and so-called “granny”-headed households (Shackleton and Campbell 2007) (Fig. 5.4).

5.3 Case Study: *Amate* Paper in Mexico

Amate is an indigenous paper made from bark fibres of tropical trees since pre-Hispanic times. Although there is no certainty about the time or place of origin of bark paper, Lenz (1973) and Von Hagen (1945) argue that evidence of the manufacture of bark paper dates from as early as 300 A.D. and this indicates the manufacture and use of bark clothing by Mayan people. The period in which bark paper was most intensively used corresponds to the beginning of the XVI century, when the Aztecs dominated most of Mesoamerican territory. Mesoamerica stretched from central Mexico to northern Honduras, and was populated by related language groups that achieved a high level of social, political and economic life. Bark paper was bestowed with sacred and commercial values and was used profusely in form of Codexes, offerings and clothing among other uses (Lenz 1973; Seeman 1990).

During the Spanish colonization it was banned due to its use being linked with native gods, beliefs and political institutions. Despite this prohibition, clandestine production of *amate* persisted among a few indigenous groups in scattered villages along the Huasteca and the Sierra Norte de Puebla. According to Lenz (1973) and Galinier (1987), the inaccessibility of this region and the distance from centres of dominion contributed to the survival of this pre-Hispanic tradition. Among the few indigenous groups who have maintained the production of this paper are the Ñahñu of San Pablito village in the Sierra Norte de Puebla (Fig. 5.4).

The production of *amate* paper as a commercial handicraft started in the 1960s, when tourism increased in Mexico and also as a result of the institutional interest in popular art and handicrafts (Amith 1995). From the start, *amate* paper got attention and nowadays it is one of the most versatile and widely distributed Mexican handicrafts in national and international markets (Torres 1982; Amith 1995). A great variety of products are manufactured, including lamps, notebooks, and decorative wallpaper. *Amate* is also produced in plain, coloured, or painted form. It is sold by artisans and intermediaries in streets, open markets, or plazas in most touristic cities, or through a long chain of mediators in handicraft markets, stores, and art galleries (Fig. 5.5).

Fig. 5.5



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5.3.1 *New Sources of Raw Material*

During fieldwork (1999 and 2009) it has been observed that demand for *amate* is constantly increasing; therefore harvesting pressure on trees for bark production is high. To satisfy this demand, the bark extraction area has expanded, and artisans are constantly experimenting with new trees for use of their bark. In order to investigate which species are used for *amate* production (López 2003), their respective fibre qualities (Quintanar et al. 2004) and bark harvest strategies, a survey was carried out during 1999–2000 and updated during 2009 in San Pablito and at several bark harvest sites. A combination of methods derived from ethnography, ethnobotany and forest sampling techniques were applied.

A total of 15 plant species have been identified, including the traditional species mainly belonging to the *Ficus* genus and new species adopted over the last 30 years belonging different plant families (Moraceae, Ulmaceae, Euphorbiaceae, Urticaceae). According to the field survey results, the new species *Trema micrantha* L. (Blume) is the most intensively used. This is the only tree that can be harvested throughout the year. It is a pioneer plant, has a wide distribution, with high germination rates (Vázquez-Yanes 1998), and is commonly used to provide shade to coffee plants in the plantations of Sierra Norte de Puebla. The use of the bark from *Trema micrantha* constitutes the base of the current production of *amate* for the market (López 2003)

5.3.2 *Ritual Use of Amate Paper*

For the Ñahñu of San Pablito, *amate* paper has two values and uses; it is traditionally a ritual product and, more recently, a commercial product. While for commercial paper *Trema micrantha* trees are mainly used, for ritual purposes the traditional

species (*Ficus* sp) are preferred. *Amate* paper is traditionally used to make cut-out figures representing fruits and grains, men, women, and children, and also diverse gods, such as the God of the Mountain, or the God of the Earth.

The principle behind this use of paper figures is animistic. The Ñahñu believe that all beings, human and super-human, have a living animating force, which they call *nzahki*. It is the Otomi version of a basic Mesoamerican Indian soul concept. Within this conception trees are a symbol of potency. *Za* -derived from the term *nzahki*- refers to the vital energy situated in the stomach, the centre of the body (López-Austin 1994). Thus, according to Galinier (1990), the bark paper becomes the upholder of this force. People, plants and animals have reciprocal relations and the shamans can influence them. With their word and through the cut-out technique, shamans gain power over the motivations of the being represented by the figure and become a mediator between deities, the sick person and his or her family (Dow 1984; Galinier 1987).

Paper figures are always cut out and used in groups symbolizing social restructuring. Galinier (1987) mentions that cures are the process of restoring equilibrium to household groups; they guarantee the return of the cured person to the community and allow the reconciliation of the healing body with ancestors and divinities. *Amate* figures were used for the petition for good crops, cleaning ceremonies, and healing. However as today, most agricultural activities have been abandoned, and artisan work is combined with migration (Censo Programa IMSS 1999), and most rituals are performed to help people to re-adapt after working outside San Pablito (López 2003).

This case is an example to show that regardless of the type of tree used as source for bark, both the ritual and commercial paper are part of the identity of the Ñahñu of San Pablito (López 2003) and how – as Appadurai (1997) and Kopytoff (1997) argue – cultural products will persist whenever the practices surrounding them persist and adapt in a practical and meaningful way.

5.4 Discussion and Conclusion

The examples of grass brooms and *amate* paper case studies demonstrate that the use of wild plant products is not restricted to rural utilitarian use, but constitutes an important element in the performance and conservation of cultural practices and traditions. For example, in the case of the traditional broom, 59% of the buyers in the urban centre bought brooms for cultural purposes. This indicates that many households living in urban centres still adhere to their cultural norms and practices, and rely to some degree, on NTFPs to fulfil these functions. With regard to the commercialisation of the *amate* bark paper, commercial and sacred uses and values co-exist, as all the *amate* paper produced by artisans is sold commercially, but the paper used for rituals acquires a sacred value when shamans confer strength through the technique of cut-outs and their Word (Galinier 1990). These developments can be understood by recognising that culture is not static, but adapts to modern times through the re-articulation of tradition (Canclini 1995). This is made possible on the premise that culture is a selective force which is illustrated through the following example,

A Cherokee Indian medicine woman who lives in a solidly middle-class suburban community in Washington, DC has worked off and on in administrative jobs within the US Air Force, and has a growing clientele of mostly White Anglo patients with various physical and mental ailments. She heals by invoking spirit forces from the Cherokee pantheon, and serving as a medium for their healing powers, as her grandmother had taught her (Groenfeldt 2003, p. 921).

This example shows that the Cherokee Indian medicine woman's religious worldview is highly traditional, while her social and material cultural context is basically that of a mainstream American. Therefore, there is a deliberate choosing from the cultural assemblage at her disposal (Groenfeldt 2003). This approach to the concept of culture as a selective force has particular merit when trying to explain the phenomena that occur within societies, where lifestyles have been affected and transformed by global processes, and where livelihood strategies of communities have become diversified. As Groenfeldt (2003) observes, peoples' worldviews are maintained to a large extent, but their day-to-day lives are radically transformed. This process has been identified as "truncated innovation," as it is not a retreat into cultural essentialism, but rather one that involves the creation of subtle crisscrossing links between different cultural orientations and experiences that have been mediated by the re-articulation of tradition (Canclini 1995) as demonstrated by the use of *amate* paper by Ñañihu in rituals. For example, the *amate* paper is used ritualistically to re-adapt those who return home after working outside their community as migrant labour to the United States. The extent to which urban people in the case of the broom study still adhere to their cultural practices is complex and appears to be influenced by variables such as family origin, economic status, level of education, and age. However both these case studies present clear examples of the continuities in cultural practices and cultural resilience in spite of increasing commercial changes occurring in each of the locations they are situated within in.

Moreover, one does not have to live geographically close to the natural environment for it to hold spiritual, social, and cultural values for its users (Cocks 2006a). Authors have described how families who have migrated to urban, industrialised, or other contexts in southern Africa return to their ancestral lands to partake in cultural festivities and ceremonies featuring NTFPs (Shackleton et al. 2002; Wiersum and Shackleton 2005; Cocks 2006b). This is made possible by a number of interrelating factors, firstly, the increase in the diversification in rural livelihoods and increased mobility, as well as the incorporation of rural areas into commercial trade networks (Wiersum and Shackleton 2005). Secondly, by the ruralisation of cities as discussed by Padoch et al. (2008) whereby rural lifestyles, attitudes, and occupations continue to persist despite ones' physical relocation to an urban city. This is because many new urban households are multi-sited with families maintaining houses and economic activities in both urban and rural areas (Krüger 1998). This has been facilitated by the improvements in communication and transportation. These linkages ensure multi-functional networks of support and interactions with rural kin (Padoch et al. 2008). It is these very processes, in the case of the broom study, which have encouraged women to sell cultural artefacts in the form of traditional brooms in urban areas.

These changes have, however, resulted in the increased demand for NTFPs (Campbell et al. 2001; Sunderland and Ndoye 2004; Wiersum and Shackleton 2005) as the selling of NTFPs is often one of the primary means for rural households to cope with their economic hardship. The processing and the sale of natural products offers a low barrier to entry into the market and generates cash income (Shackleton and Shackleton 2004; Shackleton et al. 2008). Such strategies could be enhanced by the implementation of local NTFP initiatives which carefully consider the social-cultural aspects within which they operate. Such endeavours could revitalise traditions, reinforcing people and community pride, securing intergenerational transmission of knowledge and skills. For example, marginalised communities within the mountainous area of Guerrero, Mexico, use the leaves of the palm (*Brahea dulcis*) for local and domestic artefacts. New productive projects have been initiated in the area to improve the production of palm handicrafts for external markets. It has been found that the acquisition of knowledge for managing and for producing traditional and new products has assisted the local women in not only valuing their own work more, but that their skills have also become valued by the rest of the community members (Martha Miranda, Grupo Autónomo para la Investigación Ambiental A.C. personal communication 2009). As shown in this chapter, cultural context implies the traditional use, management, perception of natural resources, from extraction and processing techniques to the symbolic aspects of the resources and practices around them. Compared to the evaluation of other NTFPs aspects, such as the ecological, legal-institutional, or market ones, the documentation and interpretation of the cultural context imposes more difficulties and requires considerably more time to fully understand. However, in many cases the cultural context constitutes the main reason of failure or success of the expansion of use of NTFPs.

The degree to which biological diversity is linked to cultural diversity is only beginning to be understood, but, despite these recent advances these complex systems are under threat (Pretty et al. 2009). Despite the emerging acknowledgement of the need for an integrated approach to the conservation of biological and cultural diversity for ensuring sustainable development (for example, the Millennium Development Goals), policy responses to this integrated paradigm have been slow to emerge and be instituted. While this integrated paradigm presents unique challenges, it is considered crucial that more serious attention be paid to the cultural context of NTFPs, to not only ensure that appropriate strategies are adopted to manage NTFPs and ecosystems, but to also encourage the survival of cultural diversity in a rapidly changing world.

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