

## CHAPTER THREE

*Changing Gender Relationships  
and Forest Use*

## A Case Study from Komassi, Cameroon

Katrina Brown and Sandrine Lapuyade

The primary focus of this chapter is intragenerational aspects of access to resources and how they change over time with respect to changing gender relationships. Intragenerational issues concern the differences between people of the same generation at one point in time, whereas intergenerational analysis examines differences between past, present, and future access. Our analysis centers on the changes or dynamics of intragenerational access, particularly in terms of gender differences, but captures some aspects of intergenerational dimensions as we discuss how access has changed over time.

In attempting to reflect the dynamics of social relationships alongside environmental and economic changes, we focus on the gender relationships affecting change in forest cover and livelihoods. We first discuss the context of the study in southern Cameroon: the characteristics of the region and the research site. Next, we examine how men and women perceive change differently, the implications for changing gender relationships and livelihoods, and access to forest and other natural resources. Then, we explore the use of forest products and their contributions to livelihoods and welfare, how this is differentiated by gender and other social characteristics, and how access has changed over time. In the conclusion, we discuss the implications of the findings for the well-being of men and women and for forest management.

**The Research Context**

The research was undertaken in the village of Komassi in southern Cameroon (see Figure A2 in the Introduction). In collecting data on livelihood strategies, group meetings and in-depth conversations with individuals were emphasized. Participatory rural appraisal techniques (such as wealth ranking, village transects, mapping, and matrix ranking) were used together with direct observation. The transects used followed the main foresters' track, which is used daily by men and women to access some of their cultivated land and the forest.

Because the village is quite small (32 households), a village census identified the head of each household and his or her spouse or siblings. This census gave us an opportunity to explain the research aims clearly and to become familiar with the people and their household structures. Two large group meetings were held with men and women separately to identify major issues regarding their changing circumstances and to discuss natural resources management issues. Subsequent meetings were held with focus groups to discuss specific issues, such as the changing use of forest products or income opportunities. Semistructured interviews were conducted with 26 individuals (men and women) chosen through judgement sampling. We also held in-depth conversations with informants selected according to their place in the household structure (wife, co-wife, widow, widower, unmarried sister) or their



Economic and environmental pressures affect access to and use of forest resources, and these dynamics affect men and women quite differently over time. Women are especially dependent on nontimber forest products (NTFPs), but the role of these products has changed markedly. All forest products harvested are now commercially traded in much of Cameroon, compared with only a decade ago, when few products had commercial value. Whereas men have been able to diversify their livelihood strategies, women have less room to maneuver and increasingly rely on diminishing forest resources. This situation has profound impacts on the way women and men perceive change as well as on the current and future management of forest resources.

Not all of the characteristics that influence social change are fully investigated in this study; our focus is on the dynamics of change, and identifying and separating those factors that are experienced differently by men and women within the same community. The analysis is therefore informed by the work of social anthropologists such as Guyer (1984), Leach (1994), and Goheen (1996). We espouse a political ecology approach that considers how local livelihood systems are shaped by wide political or economic factors occurring on a broad scale. Our approach also acknowledges the interaction of gender with social, political, cultural, and ecological factors (for example, see Rocheleau and others [1996] on feminist political ecology).

**Table 3-1. Perceptions of Events that Have Changed the Lives of People in Komassi, Cameroon**

<i>Events mentioned by both men and women</i>	
<i>Men's comments</i>	<i>Women's comments</i>
<b>1973:</b> Opening of the village health center	
<b>1997:</b> The health center expanded to Integrated Health Center	"The health center is a good thing but medicine used to be free, and now we have to pay."
<b>1980:</b> Building of the road to Dzeng	
"The road makes it easier to go to Yaounde to sell and buy food crops and medicine. It also makes it easier for the governor to come and visit the village." "The negative effects of the road are negligible."	"They say that the road has brought development but the crisis came with the road. We were better off without." "The road is dangerous for women when they go to sell their crop in Yaounde, There are many accidents,"
<b>1987:</b> Building of the water tower to provide village with communal tap water "Wells were dug in the village well before. Families who had enough money would have a well dug and make water available for free to other villagers."	"Since the system was put in place by Scan, water has broken down, people from neighboring villages complain they do not have access to water anymore, but in Komassi we have easy access to water because wells were dug in the village."

*continued on next page*

Although men express interest in events that have affected domestic life, such as the opening of the health center and the provision of water, they put more emphasis on the ways in which those changes have had an impact on the status and prestige of the village (Table 3-1). The presence of more services and institutions, such as the training center, the market, and the "House of the Party" (local representation of the political party currently in power), has turned Komassi from a little hamlet into an important village with a central role for many people in the district. These aspects of change were not highlighted by women.

Men did not discuss agricultural issues, which were central to women's concerns. Although men have turned to the cultivation of food crops in recent years, their livelihood strategies are not yet so closely dependent on food crops as are those of women. Women are still predominantly responsible for the cultivation of food crops, and their livelihood strategies are mainly based on the commercialization and consumption of these crops. More important, women's crops are used to feed their families, and the surplus that is sold is devoted to the basic welfare of all household members, including

Table 3-1. *Continued*

<i>Events mentioned by men only</i>
1965: Building of corrugated roofs
1970s: Opening of the agricultural extension service
1980: Building of a bigger church and subsequent development of the market "The market is our pride."
1995: Opening of the training center for brick laying and joinery "This improved the atmosphere in the village as more people came to live here. Moreover, students make furniture for people in the village who can buy them without having to pay for transport."
1996: Electricity is brought to the village "People can have radios and TVs," "When women come back home late they can still work." "We can drink fresh beer." "Electricity is less expensive than petrol and does not have to be paid as often."
Opening of the logging tracks "In making the fields more accessible, the tracks have increased the enthusiasm of cultivators."
Opening of the "House of the Party" "If you are a member, they can find a place for you."
<i>Events mentioned by women only</i>
The price of food crops has decreased.
Cocoa plantations had to be abandoned.
Cassava suffers from an unknown disease.
Crops are eaten by animals (mainly hedgehogs).
The price of consumer goods has increased.
The price of transport has increased dramatically.
The clearing of fields is more difficult because hiring a chainsaw is more expensive.

their husbands. On the other hand, when they are growing food crops, men have discretionary power to decide how to use their production. Men's crops therefore do not necessarily contribute to household welfare.

Men's opinions that life is easier now than a few decades ago are supported by apparent trends in their incomes. Men claim that they earn more now than in 1980 or in 1988 (Table 3-2). Although the information does not reveal exact figures, it is possible to conclude that their incomes have increased by about one-third since 1980. On the other hand, women per-

## GENDER AND DIVERSITY IN FOREST MANAGEMENT

Over the past ten years, food crops have become the main source of income for men (Table 3-2). This trend also has been observed at the national level (Sunderlin and Pokam 1998; see also Chapter 2). The shift from cocoa to food crops as the main cash earner in Cameroon has not occurred as a direct result of any single factor and was predicted by some observers well before the economic crisis based on the assumption that increased urbanization would lead to a higher demand for processed and staple foods: "In the mid- and late 1970s N'Sangou argued that a high proportion of Yaounde's food still came from the immediate hinterland. In fact he predicted that by 1990 Eton peasants would get most of their income from traditional food for the market rather than cocoa" (Guyer 1984, 62).

In addition to the shift toward food crops, men's sources of income seem to have diversified. A few households have started coffee plantations to replace cocoa. The craft industry is another source of income that men have developed since the late 1980s. Services such as repairing shoes, tires, or electrical devices have become a central element of some men's livelihoods. (Komassi benefits from the presence of a high proportion of civil servants who work in the school and the training center. The so-called external elite, who have comparatively high purchasing power, have encouraged the development of these service activities.) The increasing number of cars that drive between Komassi and Yaounde provide some business for the mechanics and the *docteur its roues* who repairs tires. Men with good connections or relatives in urban areas also earn income from renting houses they own in the village or in Yaoundé.

It is not so much diversification but a shift in the relative importance of the products as cash earners that characterizes changes in women's sources of income. Although they were not listed as main sources of income, other activities have been developed by women over the past couple of years. One of them is collecting sand from the Komo riverbed to sell to building entrepreneurs. However, women's sources of income are still mainly from agriculture. Opportunities outside the food crop sector are limited and increasingly difficult to access. The few women who have nonagricultural sources of income are struggling to maintain them. This is the case for women trading beer or sugar as well as for the village dressmaker.

Our findings suggest that men have diversified more successfully than women; they have sources of income such as pensions and crafts. Almost no new sources of income for women have developed (Table 3-3), and individual interviews revealed that women who used to sell beer, sugar, rice, smoked fish, and other goods can no longer afford to engage in this trade because of prohibitive costs and capital requirements.

Increasing demands for cash in a context where some men have lost their financial power leads to shifts in responsibilities; the roles of men and women are being redefined as circumstances change. Women are increasingly responsible for paying school fees and for medicine, whereas men increasingly use

the hoe to cultivate food crops. Although men still explain that using the hoe and leaning over the earth is bad for them and that women are naturally better suited for the job, some also admit that it is necessary to make a living. The division of labor and responsibilities varies between households, depending on other income opportunities, the internal structure of the household, and the availability of labor. Interviews with women often suggested that things had changed to their disadvantage:

- "Before when a man asked his wife what she did with the money, she could answer it did not come from his work. Many men did not even look at their wives' fields; they did not put a foot in them. They had their cacao plantations that earned them good money."
- "Young men are getting worse. Women have two fields and men have only one. They want the money."

Our data suggest that, although an increasing number of men are turning to food crops, a minority of them actually use the hoe, as the majority of men plant plantain rather than groundnut or cassava. Furthermore, when men decide to grow groundnut and cassava, women often provide most of the labor required on those fields, whereas "men work when they want; they are not obliged." Women's workload has increased over the past two decades as a result of this shift as well as increased cash demands, worsening terms of trade for their major crops, decreasing fertility of the soil, and, for some, reduced male earning ability. Although women's income may be crucial as the last buffer against dwindling financial resources, their power to renegotiate their roles and responsibilities seems to be limited. For example, one woman said, "When you get married, you know that your husband has to look after the children. Before we had children he gave me money, but now that I have children he knows I am not going to leave; he does not need to give me anything. Even school fees have been split and sometimes I have to pay for them on my own. I often think I have become the man of the family. I have to pay for everything."

### Importance of NTFPs in Livelihoods

An important feature of the livelihood systems of rural dwellers in the humid forest zone is their reliance on forest products. Ndoye and others (1997/98) document the extensive use of NTFPs, highlighting the interdependence of farm and forest in rural livelihoods. A wide range of products is used, and NTFPs have become increasingly commercialized in recent years. There are important differences between households and also within households. Cash income from the sale of forest products (honey, medicinal plants, vegetables, and fruits) is especially vital for women (Watts and Akogo 1994; Ndoye and others 1997/98). In addition, findings from several sources indicate that:

Over the past ten years, food crops have become the main source of income for men (Table 3-2). This trend also has been observed at the national level (Sunderlin and Pokam 1998; see also Chapter 2). The shift from cocoa to food crops as the main cash earner in Cameroon has not occurred as a direct result of any single factor and was predicted by some observers well before the economic crisis based on the assumption that increased urbanization would lead to a higher demand for processed and staple foods: "In the mid- and late 1970s N'Sangou argued that a high proportion of Yaounde's food still came from the immediate hinterland. In fact he predicted that by 1990 Eton peasants would get most of their income from traditional food for the market rather than cocoa" (Guyer 1984, 62).

In addition to the shift toward food crops, men's sources of income seem to have diversified. A few households have started coffee plantations to replace cocoa. The craft industry is another source of income that men have developed since the late 1980s. Services such as repairing shoes, tires, or electrical devices have become a central element of some men's livelihoods. (Komassi benefits from the presence of a high proportion of civil servants who work in the school and the training center. The so-called external elite, who have comparatively high purchasing power, have encouraged the development of these service activities.) The increasing number of cars that drive between Komassi and Yaounde provide some business for the mechanics and the *docteur des roues* who repairs tires. Men with good connections or relatives in urban areas also earn income from renting houses they own in the village or in Yaoundé.

It is not so much diversification but a shift in the relative importance of the products as cash earners that characterizes changes in women's sources of income. Although they were not listed as main sources of income, other activities have been developed by women over the past couple of years. One of them is collecting sand from the Komo riverbed to sell to building entrepreneurs. However, women's sources of income are still mainly from agriculture. Opportunities outside the food crop sector are limited and increasingly difficult to access. The few women who have nonagricultural sources of income are struggling to maintain them. This is the case for women trading beer or sugar as well as for the village dressmaker.

Our findings suggest that men have diversified more successfully than women; they have sources of income such as pensions and crafts. Almost no new sources of income for women have developed (Table 3-3), and individual interviews revealed that women who used to sell beer, sugar, rice, smoked fish, and other goods can no longer afford to engage in this trade because of prohibitive costs and capital requirements.

Increasing demands for cash in a context where some men have lost their financial power leads to shifts in responsibilities; the roles of men and women are being redefined as circumstances change. Women are increasingly responsible for paying school fees and for medicine, whereas men increasingly use

the hoe to cultivate food crops. Although men still explain that using the hoe and leaning over the earth is bad for them and that women are naturally better suited for the job, some also admit that it is necessary to make a living. The division of labor and responsibilities varies between households, depending on other income opportunities, the internal structure of the household, and the availability of labor. Interviews with women often suggested that things had changed to their disadvantage:

- "Before when a man asked his wife what she did with the money, she could answer it did not come from his work. Many men did not even look at their wives' fields; they did not put a foot in them. They had their cacao plantations that earned them good money."
- "Young men are getting worse. Women have two fields and men have only one. They want the money."

Our data suggest that, although an increasing number of men are turning to food crops, a minority of them actually use the hoe, as the majority of men plant plantain rather than groundnut or cassava. Furthermore, when men decide to grow groundnut and cassava, women often provide most of the labor required on those fields, whereas "men work when they want; they are not obliged." Women's workload has increased over the past two decades as a result of this shift as well as increased cash demands, worsening terms of trade for their major crops, decreasing fertility of the soil, and, for some, reduced male earning ability. Although women's income may be crucial as the last buffer against dwindling financial resources, their power to renegotiate their roles and responsibilities seems to be limited. For example, one woman said, "When you get married, you know that your husband has to look after the children. Before we had children he gave me money, but now that I have children he knows I am not going to leave; he does not need to give me anything. Even school fees have been split and sometimes I have to pay for them on my own. I often think I have become the man of the family. I have to pay for everything."

### Importance of NTFPs in Livelihoods

An important feature of the livelihood systems of rural dwellers in the humid forest zone is their reliance on forest products. Ndoye and others (1997/98) document the extensive use of NTFPs, highlighting the interdependence of farm and forest in rural livelihoods. A wide range of products is used, and NTFPs have become increasingly commercialized in recent years. There are important differences between households and also within households. Cash income from the sale of forest products (honey, medicinal plants, vegetables, and fruits) is especially vital for women (Watts and Akogo 1994; Ndoye and others 1997/98). In addition, findings from several sources indicate that

## GENDER AND DIVERSITY IN FOREST MANAGEMENT

NTFPs may be particularly important as a source of both subsistence and marketed products for poorer households (Ruitenbeek 1996).

The forest not only is at the center of fanning systems in this part of Cameroon but also provides men and women with a range of products that are both culturally and economically valuable. The role of the forest is evolving as the social and ecological environment changes, and it is evolving differently for men and women.

*Intragenerational Access to NTFPs*

Men refer to hunting as the most important activity related to NTFPs, even though game meat does not represent one of the major sources of income for them (Table 3-2). Fishing is second most important, whereas gathering fruit, nuts, and mushrooms is considered to be strictly the women's responsibility. When a man finds a tree bearing fruit or nuts, he may eat some on the spot but he does not get involved in gathering them. He returns home to tell the women and children in his household where they can find the tree and leaves them to deal with the collection. This behavior reflects the cultural preferences of precolonial times, when "food eaten raw, such as fruit, was associated with women and children" (Guyer 1984, 28).

When asked about forest products, men speak more spontaneously of wild game than of palm trees. This response is surprising, because palm wine has been a more important source of income than game for at least the past two decades. Three main factors explain their response. First, palm trees can be grown and may not be seen strictly as a forest product that you can find only in the wild. Second, NTFPs generally are not considered a main source of income. Because palm wine is a main source of income, it falls into a different category of product. Finally, hunting is seen as a "noble" activity strongly related to male status. In the same way that men are/were planters (not cultivators),<sup>2</sup> they also are hunters (not gatherers). Hunting is part of their social identity, which partly explains their willingness to speak about it first.

Men rank boas high on the list of animals that they hunt (Table 3-4). Boas are sought for their flesh as well as their skin and are said to sell for a good price. However, killing a boa is a rare occurrence, so although the revenue from a boa is high, it is not a reliable source of income. Even so, men insist that a boa is the most important prey when hunting. Traditionally, only the old and spiritually strong are allowed to eat the meat of certain snakes (Guyer 1984, 29); this special feature adds to the importance of hunting as a status activity for men. Indeed, social values appear to be important in motivating hunting activities. In addition to highly valued but rare species, such as boas, more common animal species also provide men with cash and food. The next most important species after boa are deer, porcupines, hares, wildcats, a few others, and then pangolin, which is sought for the flavor of its meat.

Table 3-4. *Animals Hunted by Men and Their Relative Importance*

Name	To eat	To sell	To make other products	To cure	Rank
Boa	.....	.....	.....	.....	1
Deer	.....	.....	.		2
Porcupine	.....	.....			3
Hare	.....	.....	.		4
Wildcat	.....	.....			5
Wild boar	.....	.....			6
Tortoise	....	....		..	6
Monkey	.....	.....			6
Viper	.....		....		7
Antelope	....	....	.		7
Pangolin	....	....			8
Salamander	....	....			8
Xerus ( <i>rat palmiste</i> )	.....	..			9
Caiman	....	..			9
Crocodile	....	..			10
Bird	..	..			11
Hedgehog	..	.			12
Grass snake	....				12
Chimpanzee <sup>a</sup>					
Gorilla <sup>a</sup>					

Note: The matrix was produced by men using stones to express the relative importance of the different species hunted.

<sup>a</sup> Although these species were clearly hunted, men decided not to rank them as part of the matrix because hunting these species is illegal.

Women use a wide range of NTFPs. During group meetings, women insisted on listing no fewer than 18 products, arguing that they were all very important. Because of the many products identified (Table 3-5), it was difficult to compare products effectively. During individual conversations, wild mango (*Irvingia gabonensis*) and *njansang* (*Ricinodendron heudelotii*) were the two products mentioned most often by women as sources of food and income. Over the past 20 years, processed NTFPs have become twice as important a source of income for women. However, none of the NTFPs identified as important (Table 3-5) was spontaneously identified as a major source of income (Table 3-3). This discrepancy highlights the significance of nonfinancial values of NTFPs for women.

Although NTFPs are increasingly used as a source of income, their value may be defined by two other main criteria: versatility and substitution (for

Table 3-5. Women's Use of Non timber Forest Products

Ewondo	Product name		Uses				Rank
	English	Scientific name	To eat	To sell	To cure	To build	
	Papaya	<i>Carica papaya</i>	.....	.....	.....		1
Ofum be	Lemon		.....	.....	.....		2
Adjap	Moabi	<i>Baillonella toxisperma</i>	.....	.....	.....	.....	3
Ibauma	Guava	<i>Psidium guajava</i>	.....	.....	.....		4
Tom		<i>Pachypodium staudtii</i>	.....	.....	.....		5
Mvut		<i>Trichoscypha acuminata</i>	.....	.....	.....		6
Njansang		<i>Ricinodendron heudelotii</i>	.....	.....	.....		6
Ekong		<i>Trichoscypha arborea</i>	.....	.....	.....		6
Biton	Palm nut		.....	.....	.....		6
Abel	Cola	<i>Elaeis guineensis</i>	.....	.....	.....		7
Essok		<i>Cola spp.</i>	.....	.....	.....		8
Assa	Plums-safoutier	<i>Garcinia lucida</i>	.....	.....	.....		8
Ofumbi	Oranges	<i>Dacryodes edulis</i>	.....	.....	.....		8

	Liana		.....	.....	.....	.....	9
Fia	Avocado	<i>Persea americana</i>	.....	.....	.....	.....	9
	Grasshopper		.....	.....	.....		10
	Larvae		.....	.....	.....		11
	Fish		.....	.....	.....		11
Ekouam		<i>Cola pachycarpa (Ekom)</i>	.....	.....	.....		11
Angongi		<i>Antrocaryon klaineianum</i>	.....	.....	.....		11
Ndo'o	Wild mango	<i>Irvingia spp.</i>	.....	.....	.....		12
Evoué		<i>Cola lepidota</i>	.....	.....	.....		12
Mvonde	Coconut	<i>Cocos nucifera</i>	.....	.....	.....		12
	Caterpillar		.....	.....	.....		13
	Snail	<i>Achatin sp.</i>	.....	.....	.....		13
Ezeng		<i>Leea guineensis (essong)</i>	.....	.....	.....		13
Evoula		<i>Vitex sp.</i>	.....	.....	.....		14
	Straw					.....	15

Note: The matrix was produced by women using stones to express the relative importance of the different forest products they gather according to different uses.

## GENDER AND DIVERSITY IN FOREST MANAGEMENT

groundnuts). First, it is important for a product to have multiple uses. For example, the products used for medicinal purposes as well as for food and income are ranked higher than those that have no medicinal use (Table 3-5). Second, if a product can replace groundnut as a key ingredient for food, it is considered to be more useful. Groundnut plays a central role in the diet, and in times of shortage, products such as *njansang* (*Ridnodendron heudeleotii*) and wild mango (*Irvingia gabonensis*) can replace groundnut in cooking.

Although NTFPs may constitute an important source of supplementary income, their economic value is reduced by the seasonality of their production. An elderly woman noted, "all these products help a lot, but you don't find them all the time." The importance of NTFPs in children's diets was often emphasized by women, but their value as cash earners seems secondary. Women are very enthusiastic about explaining the different uses of forest products; they seem eager to share their knowledge and to list as many products as possible. However, knowledge regarding the properties of these products for medicine is kept secret and is not shared between individuals. The various medicinal uses of NTFPs were not explored as part of this study.

*Changes in the Use of NTFPs over Time*

Two major interrelated changes have affected the use of NTFPs by the people of Komassi. First, the increasing need for cash has led to the marketing of a greater proportion of these products. Second, many of the products mentioned by the people of Komassi are increasingly difficult to find. NTFPs are sold more often, but whereas women's incomes depend increasingly on processed NTFPs, men generally rely less heavily on NTFPs than 20 years ago. Many men and women stated that fishing is no longer worth the effort and that hunting is increasingly difficult.

This trend is clearly attributed to the economic situation of Komassi:

- "The crisis has fallen on the rivers and on the trees."
- "As soon as we realize that we can make money with some forest products, they stop growing."
- "Because life is difficult, people cultivate anywhere. We burn the forest and the trees disappear."
- "Since people are now eager to sell *torn* (*Pachypodentium staudtit*) because it earns cash, they cut the tree to access the fruit. You do not find much of it anymore."

Although hunting is thought to be a more lucrative activity than producing palm "wine, the relative importance of hunting as a cash earner (Table 3-2) has decreased markedly over the past 20 years. The most significant change is the shift from selling raw meat to selling it cooked. Since the early 1990s, women have started selling more meat dishes in an attempt to compensate for the loss of income from their food crops. Men confirmed that the num-

ber of hunted species has decreased over the past ten years. They see the presence of too many hunters as one of the major causes for this decline. The noise made by loggers and the felling of trees are two other main reasons given. Loggers are thought to be damaging the forest. In addition, logging tracks are said to have facilitated access to the forest by poachers (see also Chapter 9). The proximity of Yaoundé and improved access to Komassi are also believed to contribute to increased poaching.

Since the 1970s, the availability, collection, and use of NTFPs has changed considerably (Table 3-6). Men and women cite three reasons for the growing difficulty of finding some NTFPs: the need to cultivate larger areas of land (and consequent reduction in forest area); increased harvest due to commercialization, which results from an increased need for cash; and logging activities. Access to and use of forest for cultivation also has changed. We find that although the land closest to houses, *nkoa'nfo*, is still being cultivated by some, a growing number of people now have fields deeper in the forest, *nko'o*. Fields were open in *nko'o* for the first time around 1978. Reasons given for this recent cultivation of forest land farther into *nko'o* are the construction of logging roads, the decreased fertility of land closer to the village, and increased damage from domestic animals close to the village.

The uncultivated area of *nko'o* is thought to be larger than the area already opened up for agriculture. Therefore, the local people do not perceive any scarcity of land and believe that in ten years time it will be possible for the Komassi residents to cultivate land closer to the village again. Meanwhile, the expansion into the forest is encouraged by the need to cultivate larger areas as a result of (not ranked)

- increased need for cash,
- widespread pest damage to crops,
- population growth in Komassi,
- declining fertility of the land (except on newly cleared forest land), and
- a greater number of men cultivating food crops.

Although no evidence links diseases that attack fruit and weeds that invade the forest to forest clearing, they are identified as important causes of the disappearance of NTFPs used by women.

The decreasing availability of NTFPs from the Komassi forest as a result of these various factors and their concomitant growing value as sources of income have brought about some changes in the management of tree resources. Women stressed the increasing need to ask for authorization to gather fruit such as papaya<sup>3</sup> and wild mango on other people's fields. For example, in interviews women observed, "Before you could pick papaya without asking. Now one has to ask for permission because we know it can be sold." The same is true of other forest products, such as cane. The village chief explained, "In some villages they have cane furniture workshops, but

Table 3-6. Long-Term Changes in the Use of Forest Products by Women

Name	1970s		Changes and comments	1998	
	Gathered	Sold		Gathered	Sold
Cola nut	***		"Started decreasing about ten years ago. You can sell a lot if you know how to keep it in the ground. Sells very well during the dry season."	**	**
Ekoam	*****		"Seldom sold because it is very hard. It is only because of the crisis that we sell it but we should keep it for children."	*****	*
Ekoang	***		"If you do not fell the tree you cannot pick the fruit unless you are very brave. This is why there are fewer now."	**	**
Esok	*		"Does not grow here naturally. Children go and get it elsewhere so that we can use it in making palm wine. Otherwise many people come to sell it here because they know we do not have any."	*	
Evoué			"Does not grow in this area. It is like okok (eru)."		
Guava	*****		"Although it does not suffer from a disease, it is disappearing—but we plant it."	**	**
Kornen	*****		"Now we do not give them away anymore. Only if you are a fool!"	****	****
Lemon	****		"There were a lot in the old days; now they are very rare."	**	**

continued on next page

not here in Komassi. However, cane comes from Komassi's forest. Before they could come and take it, now they have to ask for authorisation."

The growing trade in NTFPs is partially seen as a negative change that affects the lives of women and children. Some women complain that NTFPs should not be sold but kept for feeding children. Forty years ago, papaya fruit was eaten only by children, completely disregarded by adults. When school attendance became more widespread, papaya became increasingly valuable as food for children who had to spend most of their day at school. Although it still plays an important role as food for children, today it is listed among the most important cash-earning fruits. An elderly Komassi resident reflected,

Table 3-6. Continued

Name	1970s		Changes and comments	1998	
	Gathered	Sold		Gathered	Sold
Mboal	**		"Prepared with smoked fish."	**	*
Moabi	*****		"We used to find many of them but they have been logged. With the fruit we make oil that is much more expensive than palm oil."	*	*
Mvut	*****		"Before we could pick so much we did not know what to do with it."	***	***
Njansang	*		"It is when men started to marry Eton women that we started using it. Here women do not know how to prepare it but when you know, it earns a lot of money."	*****	*****
Palm nut	*****		"This is the most important of all because we use oil for everything."	*****	*****
Papaya	***		"We started selling them about five years ago."	*****	*****
Plums	*****		"We used to share them with people; now there is a disease."	***	***
Tom	**		"If you have a tree in your field, you are rich."	*	**
Wild garlic	*****		"Now we sell it because the Bamileke like it very much, but the weeds kill it."	**	**
Wild mango	*****		"It is about five years ago that we started selling it."	****	****

"Before we could bring back baskets full of fruit, and children could eat. Now, we sell everything. Money has spoiled everything."

Thus, monetization of NTFPs has impacts on several members of the community, but women in Komassi generally see these changes as having negative effects on their well-being and that of their children.

### Implications for Well-Being and Forest Management

The analysis of changes in livelihoods and in the use of forest products highlights several different aspects of intra- and intergenerational well-being. The

way that men and women *perceive* and articulate changes in their lives over the past 20 years is strikingly different. The differences can best be expressed in the concluding statements of the focus group meetings. Men believed that "our standard of living is improving constantly. Death is the only thing that makes life hard, but it is natural." Women, on the other hand, were unanimous that the quality of life had declined and agreed that "we sell less than we used to, but we have to work more because of the diseases and all the other problems. Maybe this is the end of the world." These perceptions point to intragenerational and, specifically, gender inequities in terms of well-being.

We have highlighted some significant changes and differences in livelihood patterns that relate to and strongly influence these disparities in well-being. Although many people have been adversely affected by the economic crisis and other economic and social changes, evidence indicates that women generally have borne the brunt of the costs of adjustment (Due and Gladwin 1991; Afshar and Dennis 1992; Sparr 1994; Elson 1995). In Komassi, men appear to have diversified their sources of livelihood. They earn a living from shifting patterns of crops grown<sup>^</sup> (particularly from commodity to food crops for cash), have access to nonfarm income, develop small trade and craft businesses, and have access to pensions and remittances. In contrast, women appear to have less room to maneuver and depend increasingly on selling food crops (with declining terms of trade) and on NTFPs, adding value where they can by processing food and other products. In short, men have the means to diversify in several ways, whereas women are forced to rely more on natural resources for their livelihoods.

Forest management also has been affected by change. The scarcity of NTFPs has been noted by women in the village, possibly caused by overexploitation, conflicts with competing uses (especially logging), and difficulties over access. Women are increasingly dependent on forest resources for their livelihoods, but every product they collect is now sold for cash, whereas 20 years ago, NTFPs were used for subsistence needs and given as gifts. Everything in the forest now has a commercial value, and monetization is beginning to change the way villagers view the forest. It is now a potential commercial resource that outsiders seek to exploit (Brown and Ekoko 2000). The commodification of these products is not seen as necessarily beneficial. Women feel that in general, life was easier when their livelihoods depended less on earning cash and their natural environment could provide them with most of their subsistence needs.

## Conclusions

Our study seeks to capture and explain the dynamics of changing gender relationships and forest use over time. We used participatory rural appraisal methods to explore perceptions of change and the values of different prod-

ucts in the livelihoods of different actors. They provide qualitative insights into the changes and the differences, which can complement insights provided by other studies and more quantitative analyses. Importantly, they highlight the way in which change is significantly differentiated—in our case, the difference between men and women is striking.

The intergenerational dimension of gender power relationships also is a focus of this study. Women have been important cash earners in southern Cameroon for more than three decades (Guyer 1984), but their success has not eliminated unequal power relationships between men and women. In some households, the woman has become "the man of the family" in the sense that her wages must replace the man's declining income, so she has become the more important wage earner.

The power that women have gained in decisionmaking within the household is still limited. Even if some women feel that they are playing a man's role, they have not acquired the decisionmaking power of men. This study shows that power relationships, although constantly renegotiated, are still shaped by "women's weaker bargaining strength within the family" (Agarwal 1990, 228). Additional study of the intergenerational dimension of well-being should focus on analyzing the ability of younger women to renegotiate gender roles within the household and gain greater opportunities to respond positively to the pressures of rapid change and development. Investigation of these intergenerational differences would enhance our understanding of the rapidly shifting dynamics of social and forest relationships.

## Acknowledgements

We thank Dr. Ousseynou Ndoye, Dr. François Ekoko, and Florence Munoh (Center for International Forestry Research [CIFOR], Cameroon) for their kind help in Cameroon. We are especially grateful for the time, patience, and support of all the villagers in Komassi who participated in our research efforts. Carol Colfer and Ousseynou Ndoye made extremely helpful comments on earlier drafts of this chapter.

This research was undertaken through a collaborative research project with CIFOR, funded by the U.K. Department for International Development (DFID). The views expressed here are those of the authors, and all errors remain ours. Our views do not necessarily reflect the views of DFID or CIFOR.

## Endnotes

1. Our matrix ranking method is similar to CIFOR's pebble-sorting method described in the Introduction (see also Chapters 2, 7, and 11).



2. From the end of colonization until recently, men were viewed as planters (of cacao) and women as cultivators. Although the shift toward food crops has turned some men into cultivators, men are referred to as planters more often than as cultivators. This situation may have encouraged men to maintain some kind of plantation on their land and to choose to grow perennial crops such as plantain rather than groundnut when turning to food crops. Tree crop plantations are also a way to gain permanent customary rights.

3. Strictly speaking, papaya is not an NTFP because it is an introduced species that does not grow in the wild. However, it is often planted in fallow land, and during group meetings women listed it as a forest product.

4. Although the terms of trade have declined for food crops, those for cocoa and other commodities have fallen even more drastically. Combined with the increasing urban markets, the low prices for cash crops have provided incentive for men to shift to food crops.