

CHAPTER SIX

Women in Campo-Ma'an National Park

Uncertainties and Adaptations in Cameroon

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LOCAL COMMUNITIES GENERALLY perceive forest management as a public affair. And yet, as shown by Kanji and Menon-Sen (2001) concerning “spending priorities” or Brown and Lapuyade (2001) about the “separate spheres of action for men and women” in the household, the public domain and investment fall within the competence of men, since women are responsible for “private,” domestic business. Vabi and others (2001) assert that men and women not only play different roles in society, with distinct levels of resource control, but also have different needs and interests. Because of their deciding role in household food security, women are most affected by disruptions in the availability of and access to resources.

Drawing inspiration from Bisilliat’s assertion (1992) that “information about women is necessarily information concerning men,” this chapter aims to show how international and national environmental policies may affect local communities by affecting the women of two villages adjacent to the Campo-Ma’an National Park in Cameroon. Following descriptions of the two villages, the stakeholders involved in resource management, and the economic livelihoods and strategies of adaptation they pursue, we analyze the situation of women in light of constraints imposed on them by the proximity of the national park. Some lines of reflection and action are proposed for ameliorating the differences of opinion between the park’s managers and local communities, for effective conservation and sustainable local development.

Site and Context

The Campo-Ma’an forest, located in the southwestern part of Cameroon, borders Equatorial Guinea and is endowed with an almost unique wealth of flora and fauna.

The modern history of the area began with the creation in 1932 of the game reserve. In 1945, the first logging company—*La forestière de Campo*, now part of the Bollere Group—settled in the region. This company is the main economic actor in the whole southern part of the area. Later on, large agroindustrial plantations developed in the northern part: HEVECAM, a rubber company created in 1975, and SOCAPALM, a palm oil company installed in 1980. These economic drivers led to extraordinary demographic and urban development in the area formerly occupied by small lineages of 10–50 people spread throughout the forest. In 1999, the Cameroonian government upgraded this forest to a Technical Operational Unit (TOU) of 771,000 ha, with the aim of preserving and developing the forest's economic, ecological, scientific, and cultural values in an integrated manner. The Campo-Ma'an TOU has a land allocation plan comprising protected areas and forest (260,830 ha), forest management units for timber production (235,485 ha), a state maritime estate (320 ha), and a multiple-use agroforestry area (275,033 ha) mainly devoted to human activities. The TOU is under the control of the Campo-Ma'an Project (PCM). This project has three institutional components: the Ministry of Environment and Forestry (MINEF), which is responsible for conservation and deploys forest police known as ecoguards in the field; the SNV (Netherlands Development Organization), which is responsible for local development; and Tropenbos International, which is responsible for research and drafting of the park's management plan.¹

In 2000, the protected areas and protected forest became a national park, in compensation for foreseeable environmental damages along the Chad-Cameroon pipeline. This 1,090-km long pipeline opens onto Kribi, some 80 km to the north of Campo-Ma'an. All the communities situated along this pipeline have been compensated (Ravignan 2000). However, the Campo-Ma'an communities whose forests were confiscated were not taken into account.

In September 2001, the Campo-Ma'an Project requested the support of the Center for International Forestry Research (CIFOR) in studying the park's impact on the socioeconomic activities of communities adjoining the park, in order to make management proposals that effectively integrate community perspectives. The research reported in this chapter was conducted within this framework.

Among the more than 116 villages and hamlets surrounding the national park, 9 were selected for study. Major criteria of selection included proximity to the park, pre-existing rights in the land occupied by the park, and dependency on the resources of the park. This chapter concerns two of these nine villages: Bifa and Ebianemeyong.

Among Cameroon's forest populations, discussions about the management of the forest are first and foremost the business of men. If the creation of the national park affects all the surrounding communities because it takes away a great part of "their forest," it should in principle affect men especially and directly, since it is their hunting territory that has been drastically reduced. Women's economic territory, in contrast, is close to the villages and should probably not be very much affected by the park's limits. Thus, it was not surprising that the men mobilized themselves for meetings related to the management of the national park. In seven out of the nine villages, few women attended the meetings. Those who were present seemed to be observers more than actors.

We were surprised therefore by the strong mobilization of women in Bifa for the community meetings we organized: In attendance were 17 women and 35 men in Bifa and 18 women and 30 men in Oveng, as compared with 1 woman and 17 men in Mabiogo and no women and 23 men in Messama I, II, and III. Bifa was especially noteworthy. From the first meeting, many women were present. From the determination they displayed, it was evident that they had something particular that they were eager to share, or at least, to express. But what? The aggressiveness with which they reacted when we introduced the topic of the national park for discussion showed that they were strongly affected by its presence. But how? This is what we tried to understand during our stay in these two villages.

We initiated community discussion sessions that revealed the content, frequency, and quality of the relations and interactions between the various stakeholders, between the social groups, especially men and women, and between each social group and its environment. Games borrowed from participatory rural appraisal and social science methods developed by CIFOR helped facilitate discussions and the exchange of ideas within separate male and female subgroups (Colfer et al. 1999a; Colfer et al. 1999b).

Below, we first discuss the two villages, Bifa and Ebianemeyong. We then compare our findings from the two communities and draw some conclusions about and policy implications for people's interactions with protected areas. .

Stakeholders and Livelihoods in Bifa

Bifa is a village of 306 inhabitants, situated to the northwest of the Campo-Ma'an TOU. It is jammed between the national park and HEVECAM, an agro-industrial complex made up of vast rubber plantations, factories, and workers' camps with approximately 18,216 inhabitants (ERE Développement 2001). The local communities are Bulu, an ethnic group that settled in Bifa around 1860 and is part of the large Fang-Beti ethnic complex, formed by Fang, Fon, Mvae, Ntumu, Zaman, and Bulu ethnic groups (Diaw and Njomkap 1998). They have or keep preferential and complex relationships with their neighbors and brothers of Nzingui.ⁱⁱ

As in neighboring villages, the people of Bifa have experienced external influences over the years, which have gradually modified their way of life. The most recent event was the creation in 1975 of HEVECAM. HEVECAM's rubber plantation took away part of the village land and caused great changes within the local communities, including:

- exacerbation of inter- and intracommunity conflict for the remaining land-competition between Bifa and Nzingui, the neighboring village, for the remaining resources
- destruction of large areas of forest and reduction in resources and incomes influx of strangers into the area in search of jobs
- increased poaching and illegal occupation of land by plantation laborers and their families.

HEVECAM also represented an opportunity for local communities, not only because it provided jobs but, above all, because it created an important and easily accessible market.

Given this context, we felt that a full understanding of the roles of the various stakeholders, from the perspective of local populations, was critical. We held a series of community meetings to determine community members' views of other forest resource users, stakeholders' interactions with each other, and local perceptions of concepts such as equity, well-being, and sustainable management. The results, summarized in Table 6-1, represent consensual community perceptions.

Economic Activities, Resources, and Gender in Bifa

Like some 80% of the populations who inhabit the forest zones of Equatorial Africa (Bahuchet 1993), the men and women of Bifa carry out all of the following traditional activities: agriculture, hunting, gathering and harvesting of non-timber forest products, fishing, small-scale poultry keeping, and breeding of small ruminants. This way of life is found elsewhere among the peoples of the great Amazonian forest (cf. Pinton 1992). Even though agriculture remains the major activity, people do not hesitate to proclaim that their main source of income is

Table 6-1. Community Perceptions of Stakeholders in the Management of Forests in Bifa

<i>Stakeholder</i>	<i>Position and Impact on Well-being</i>	<i>Impact on Resources</i>
Local population	(+) Is an eligible party	(-) Exerts pressure on resources, especially on wildlife
HEVECAM	(+) Provides jobs for Bifa youth (+) Provides market for food crops and game	(-) Allows illegal occupation of land by workers (-) Allows poaching by workers, mostly nonnative (-) Exerts enormous pressure on resources because of high population density
Zingui (neighboring village)	(+) Carries out common socioeconomic activities with the people of Bifa (community forestry)	(-) Has dormant conflicts with Bifa over hunting territory or grounds and other forest resources, which speeds up degradation
Campo-Ma'an Project	(-) Deprives the local population of traditional hunting and fishing grounds and cultural sites (-) Is indifferent to local concerns; is located far away (head office in Kribi) (-) Has conflicts with local populations caused by harassment of ecoguards	(+) Preserves the forest by reducing poaching

Note: Perceptions were derived from a sample of 35 men and 17 women interviewed in Bifa in September 2001. (+) indicates positive impact; (-) indicates negative impact.

hunting and other activities are subsidiary. Each of these economic activities is described briefly below:

Agriculture. The main agricultural products are food crops. In order of importance, both of consumption and cash income, women prioritize food crops as follows: cucumbers, cassava, plantains, groundnuts, corn, yams, potatoes, and peppers. Food crop farming is principally for household consumption. Any surplus is then sold in the HEVECAM markets located some 10 km from Bifa.

The main crops grown by men are plantains and fruit trees. These have a high market value. Cocoa crops are of little importance in Bifa. Since the selling price of cocoa fell in 1987, and since the government has adopted a hands-off attitude regarding subsidies for agricultural inputs, most cocoa farmers have abandoned their farms. However, they did not destroy them, hoping for better days ahead. They have now turned to caring for the fruit trees found on the farms.

Hunting. There are 68 hunters in the village. The most common hunting method is trapping. There are between 86 and 130 traps per hunter with three animals caught, or approximately 12.4 kg of bushmeat, per hunter per week. The hunting area is 580 km², and the maximum distance of penetration is 30 km from the village (Ngueguim and Ohanda 2001). Camps are set up when the hunting area falls within a 5-km radius. The game is then smoked on the spot, and the hunters' family members carry it from the camp to the village.

In Bifa, hunting is mainly a commercial activity. According to Ngueguim and Ohanda (2001), 78.6% of the captured game is sold elsewhere, for example, in Nzingui or in HEVECAM. Of the game harvested with guns, 87.5% is sold, while only 60.6% of the game caught in traps is sold. This difference is explained by the fact that a hunter with a gun has to buy ammunition and pay "rent" for the gun.

The most commonly trapped animals are hares (*Cephalophus monticola*), antelopes (*C. dorsalis*, *C. sylvicultor*), porcupines (*Thrionomys swindarianus*), monkeys, moles (*Cricetomys emini*), hedgehogs (*Atherurus africanus*), and civet cats (*Viverra civetta*). Occasionally, hunters catch pangolins (*Manis spp.*), reptiles, and buffaloes, and exceptionally, black tigers and panthers.

Women hunt by setting traps around farms. They do this in order to protect their crops, and the activity provides some meat for the family. The animals caught in this way are mainly rodents, hares, and sometimes antelopes and black snakes. Women also help the men smoke the game and, together with children, transport the smoked meat from the camp to the village. They are also responsible for selling these products.

Fishing. Fishing is a minor activity in Bifa. The men fish using nets on the Nyete River and in big streams flowing some 8 km away from the village, where they set up camps. These camps serve as places for processing and storing hunting and fishery products. Unlike the men, who sell part of their catch, women catch fish and freshwater crabs exclusively for food. In the dry season, women also do dam-fishing in small streams found near villages.

Gathering. Non-timber forest products are also secondary resources for Bifa's residents. The men are involved in exploiting a very limited number of such prod-

ucts: palm or raffia wine; fuelwood; and tree barks. Women gather fruits and seeds: *andok* (*Irvingia gabonensis*); *Fan*; *Adzap* (*Baillonelle toxisperma*); nuts (*coula edulis*); *Mvout* (*tricoscypha spp.*); *Djansang* (*Ricinodendron heudelotii*); mushrooms; caterpillars; tree barks; fuelwood; and broad leaves for wrapping food stuffs. The women maintain that fruit-bearing by wild trees has become low and irregular, although the women cannot explain why. For instance, wild mangoes (*Irvingia gabonensis*) normally have a biennial cycle. For nearly a decade now, they have borne fruit only every four to five years.

Small-scale animal husbandry. Women are responsible for poultry farming, while men rear sheep and goats. These products are meant neither for daily consumption nor for sale. They are kept as a sort of social security, to take care of unforeseen contingencies (receiving guests) or for exceptional festive occasions (weddings, dowries, and funerals). However, some of these products are sold within the village during periods of scarcity or to cope with cash needs, such as school fees or health expenses.

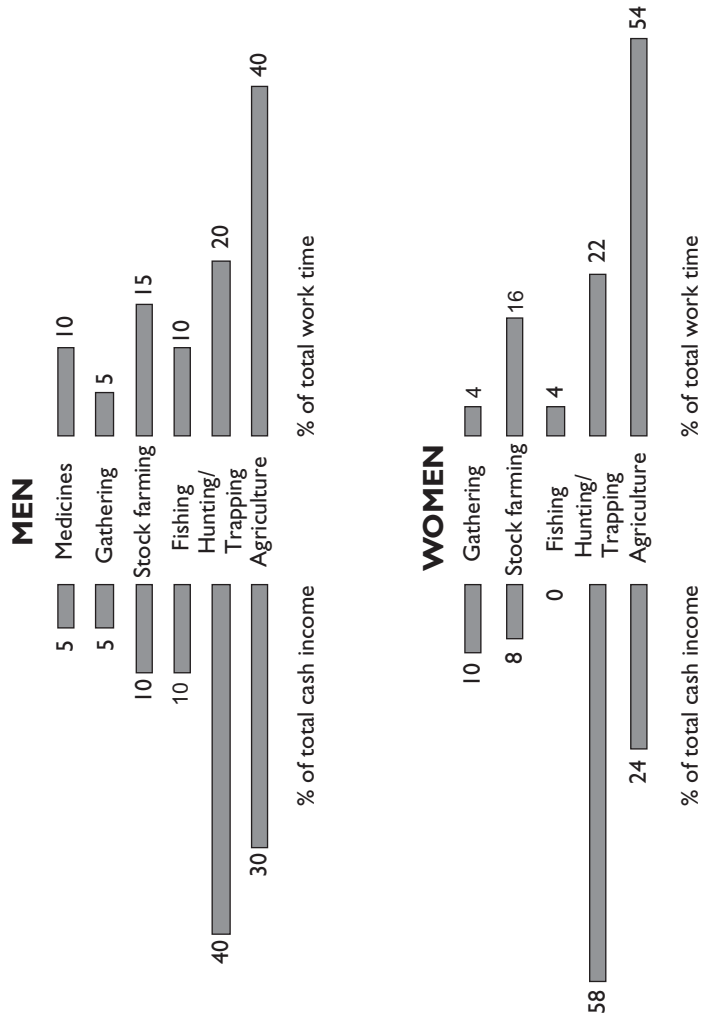
Market activities. In Bifa women usually sell agricultural products, smoked game, and fish. Two times a month, they carry all the family's production destined for sale to the HEVECAM market located about 10 km from the village. These market days correspond to the period when the HEVECAM laborers receive their fortnight's pay.ⁱⁱⁱ It is for this reason that hunting, though mainly undertaken by men, seems to be beneficial to women who do the selling.

The high demand for consumer products in Bifa's large neighboring towns (HEVECAM and, to a lesser extent, Nzingui) stimulates the population to produce for sale. This is seen in the case of hunting, where only 33% of the total game biomass caught is consumed or sold in the village, even though bushmeat is the only regular source of animal protein in the diet. The staple foodstuffs are plantains and cassava, which are the most important sources of energy.

Gender differences. Studying time allocation in Ntumu ethnic group^{iv} in Campo-Ma'an region, Annaud and Carrière (2000) found that both men and women spend the same amount of time on livelihood activities (about 4.5 hours per day). The daily trekking for livelihood activities concerns both men and women and takes about 2.5 hours per day. The gender difference appears when considering the management of "free time."^v

An exercise intended to measure the relative importance of each activity, according to time invested and income generated, was done with 35 men and 8 women separately. We asked villagers to distribute 100 pebbles, representing either the total time worked or income derived, among as many plates as there were activities listed (see Figure 6–1). This figure shows that hunting is the most profitable activity in Bifa. Hunting occupies 20% of the men's time, and it accounts for 40% of their cash revenue. Women also spend about 22% of their time on game-related activities, which account for 58% of their revenue. The cash income women get from these activities is twice what they get from agriculture (58% of their time and 24% of their revenue). Their fishery products are all for home consumption. Women maintained that they kept account of the family's money and were involved in deciding how to spend it.

Figure 6-1. Relative distribution of time spent and cash income generated per activities in Bifa



Note: Perceptions were derived from a sample of 35 men and 8 women interviewed separately in Bifa in September 2001

With their dual role as product sellers and family bread-winners, the women play a central role in their households and in their community. They collect all the resources and redistribute them for purchases, sales, gifts, and various social exchanges. Women also control the income from the sale of the products.

The National Park and Bifa's Population: Constraints and Adaptations

Local populations gradually adapted their way of life to cope with the changes induced by external factors over the years. In the process, women initially got the lion's share by positioning themselves as the salespeople of the family products, notably game caught by the men.

The creation of the national park led to new disturbances, which have disrupted the very basis of village economic life and put in question the achievements of all the local communities, especially women. The women accuse ecoguards, who have been present in the area since the creation of the park in 2000, of failure to demarcate the park clearly and to spell out the rules and regulations governing hunting, in a bid to seize any game found with the women in the market or in the village.

Although the national park has been demarcated on the map, it has no real existence on the ground because its boundaries have not been marked out. Beyond the areas with natural boundaries, none of the partners in the park's management seems to know the real boundaries. Therefore, it is not easy to prove whether the traps set by villagers in a particular place are in or out of the national park. Likewise, it is not easy to prove that the game sold on the local market or carried by a villager was captured in or out of the park.

The women complain of being harassed by the ecoguards, who do not hesitate to "enter into kitchens to examine the contents of pots" or to "seize our game anywhere and anytime. Be it for a smoked porcupine, hare, or antelope being sold in the HEVECAM market, or two moles carried by a man returning from visiting his traps, or in kitchens, the ecoguards will search pots."^{vi}

Ignorance by the local communities of the rules and regulations governing hunting exacerbates misunderstandings between the parties. The population accuses the ecoguards of keeping the information close to their chests and deliberately leaving the people in ignorance so as to better dominate them.

Without clear and convincing arguments, ecoguards will find it difficult to make the population understand the validity of their control and conservation actions. This argument is supported by the fact that the population does not know what becomes of the game seized by ecoguards.

A stranger who arrives in any village around Campo-Ma'an National Park is immediately suspected by the villagers of being an ecoguard in disguise. The women will say, when offering food, that the whole village is now made up of vegetarians because hunting is forbidden. Any signs of the existence of game in the village are quickly hidden away from newcomers (Nasi et al. 2001; Tiani et al. 2001). A few days later, once the stranger has been accepted by the community and has proved that he or she is not opposed to game consumption, it becomes clear that bushmeat is eaten on a daily basis, fresh or smoked. Hiding meat from strangers is a reaction stemming from the strained relationship between the population and the ecoguards.

Local men have put in place a new system of selling game and smoked fish that eliminates the women's role. Customers no longer wait for these products in the HEVECAM market. Rather "the buyer comes to the seller" (Dounias 1993). However, these buyers do not come to get the game from the village, as noted by Dounias, but go directly to the camps set up deep in the forest. Women, who derived their income from the sale of these products, are thus sidelined. Since the sale of game was the main source of income for Bifa's women, they have become increasingly poor, unable to work out adaptation strategies in time like the men. The women see their incomes dwindling while the problem of poaching still exists. This has had a negative impact on the equilibrium between men and women.

Beyond these constraints, villagers' discussions show signs of hope for the future—hope of seeing animal life reconstituted, as abundant as in the past and their livelihoods improved thanks to the alternative solutions that usually come with the creation of protected areas.

Stakeholders and Livelihoods in Ebianemeyong

Ebianemeyong is a village of 103 inhabitants situated in an enclave on the south-east edge of the national park. It is made up of many hamlets, one of which is Ovang where the chief's compound is found. The people of this village all belong to the Mvae ethnic group^{vii} and to different clans, settled along the road intended to link Campo in the west to Ma'an in the east. Based on the people's comments and discussions with resource persons of the village, it was possible to determine the stakeholders and their characteristics (see Table 6-2).

Economic Activities, Resources, and Gender in Ebianemeyong

Like the people of Bifa, the population of Ebianemeyong are traditional farmers, who make their living by practicing agriculture, hunting, collecting nontimber forest products, and fishing. Differences among these activities are related to the scale of the activities and the resources generated.

Men are involved in cocoa farming, but are moving increasingly into food crop cultivation, especially cucumbers and plantains for both consumption and sale. They hunt by setting lines of traps in the forest, near or around farms. Some men hunt with guns. Generally, as noted by Annaud and Carrière (2000), men have two houses: one in the village and another that is used seasonally as a trapping and fishing camp. The most commonly captured animals are antelopes, hares, hedgehogs, porcupines, monkeys, civet cats, and pangolins. Men also collect forest products, such as palm wine, fuelwood, tree barks, and creepers. They fish with nets on the big rivers, such as the Ntem, Djo'oh, and Biwome. Men also domesticate fowl, pigs, and some ruminants, which are used as food during visits by important guests, at funerals, or for dowry elements.

Women are engaged principally in food-crop farming and increasingly in the cultivation of fruit trees. Agricultural products are diversified and include cassava, plantains, cocoyam, groundnuts, cucumbers, corn, potatoes, green amaranthus, okra,

Table 6-2. Community Perceptions of Actors and Stakeholders in the Management of Forests in Ebianemeyong

Stakeholder	Characteristics
Local population	Beneficiaries. Found in an enclave in the national park. Totally dependent on the forest.
Campo Ma'an Project	Distant institutional managers. Headquarters in Kribi.
World Bank	Threat to the population.
Ecoguards	Protection of the national park. Lukewarm relations with the population.
HFC, also known as <i>La Foresterie de Campo</i>	Logging company considered by the population as a necessary evil, because it destroys the forest while providing for nearly all the socioeconomic needs of the people and the council.
Nkoelon (neighboring village)	Has a clan relation with the population of the area. It is the nearest village to the west coast of the national park. Some disagreement with the people of the area as to the control of the Nkoelon gate. ^a
Poachers	Absent, but very present through their activity and its impact on the ecosystem and the daily lives of the population.

Note: Perceptions were derived from a sample of 30 men and 18 women interviewed in Ebianemeyong in September 2001.

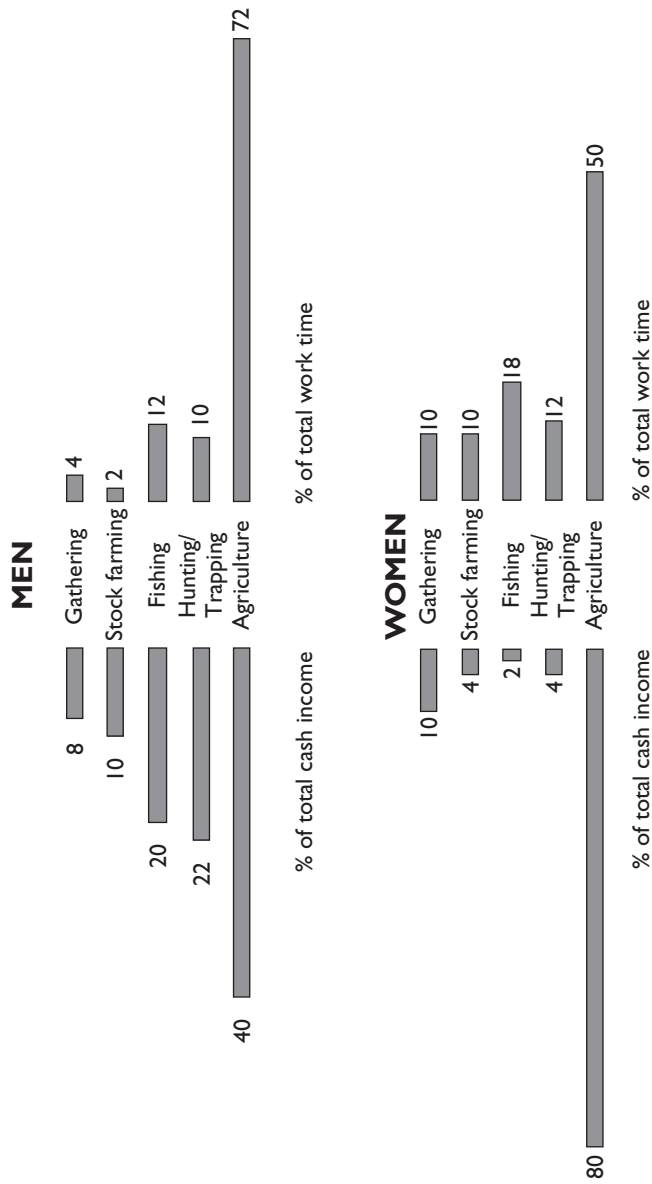
a. A control gate erected by the Nkoelon peasants at the western entrance of the national park has been operational for some 20 years. From time to time, these peasants clash with their neighbors and brothers from Ebianemeyong on the origin of the game they transport. In fact, it was difficult to prove that the game being transported was captured in the park or not, given that the eastern entrance of the park is open. This problem has today been solved with the setting up of a control post and a radio station at the eastern entrance of the park.

and yams, among others. The orchards behind the houses contain pear, mango, guava, palm, plum (*Dacriodes spp.*), citrus fruit, and bush mango trees (*Spondias cytherea*). In the dry season, women fish for crabs, silurids, and small fish with dams on small streams found near the village. Like in Bifa, they also set traps around farms and collect forest products, such as different types of fruits, broad leaves, mushrooms, and caterpillars. Some women are also involved in handicrafts, particularly basket-making.

As in Bifa, we assessed the relative importance of each activity by gender, in terms of time spent and income generated. Villagers were asked to distribute 100 pebbles representing the total time worked or income earned into as many plates as there were activities (see Figure 6–2). Both men and women reported devoting more than half of their time to agricultural activities. In Ebianemeyong, women's activities are more diversified than men's, for whom the collection of fruits and other nontimber forest products are minor activities. Women's cash incomes essentially come from agriculture and to a lesser extent from non-timber forest products. Fishery and hunting products are used for household consumption. Men have additional sources of income because their hunting and fishery products are also sold.

Finally, women work mainly to feed the family, while men's activities are geared toward earning an income. This relationship establishes an equilibrium in the house-

Figure 6-2. Relative distribution of time spent and cash income generated per activity in Ebianemeyong



Note: Perceptions were derived from a sample of 30 men and 19 women interviewed separately in Ebianemeyong in September 2001.

hold and shows the division of responsibilities between the sexes: women feed the family, and men take care of actions that require a certain amount of money, particularly the education of children and health care. Apart from cocoa, all products are primarily for home consumption. Only the surplus is marketed. Activities typically undertaken by men are financially profitable to them. Women's activities, in contrast, are more focused on meeting the household's subsistence needs; only agriculture and to a lesser extent harvesting bring in cash income.

The Road and Poaching: Controversial Topics in Ebianemeyong

The road linking Campo to Ma'an was started in 1941 by the French Administration and was built in fits and starts. The section connecting Ma'an to Nyabizan was constructed in 1941 by the French Administration; the Nyabizan to Ebianemeyong section was added in 1959 by the Cameroonian government; and finally, the Ebianemeyong-Campo section was completed in 1998 by the most important forest company in the region, La Forestière de Campo (HFC).

The route connecting Campo to Ma'an is not continuous. It is interrupted for 2 km between Nyabizan and Ebianemeyong, so that for populations of Ebianemeyong Campo remains the unique opening to the exterior and the point of access to the market, the hospital, etc. In 2000, with the establishment of Campo-Ma'an National Park, use and maintenance of the Ebianemeyong-Campo route were suspended at the request of the World Bank, which financially supports the Campo Ma'an Project. The people of Ebianemeyong were thus cut off from the rest of the world, without access to either Ma'an or Campo. The closing down and repeated reopening of this road are the only indicators local people have that negotiations are taking place between the more powerful belligerents. For these reasons, women said that the above-described economic activities do not really represent the current situation, but rather the situation before the closure of the road. They said that there is no way for women to earn money at the moment.

At first glance, a road that crosses a national park would appear to be a threat for wildlife. The Campo-Ma'an road, however, has had a very limited impact on poaching, based on testimonies collected from people we visited in various villages and from forest service officers. This information coincides with that of Nasi and others (2001). By reconstituting the various penetration routes used by hunters into the national park (Figure 6-3), we found that, indeed, poachers cross the entire forest. They settle in camps for several weeks and freely indulge in their hunting and fishing activities. Game and fish are smoked or dried in steam rooms and transported right to points of sale, without using the road. The road is considered unsafe, moreover, because the ecoguards use it regularly in their surveillance and monitoring of the park.

The closing down of the Campo-Ebianemeyong route to HFC timber trucks affected the entire population in the southeast part of the park. Women were especially affected, because they derive their financial income from the sale of agricultural products, which they convey to the Campo market, about 50 km from the village. These products, unlike game and smoked fish, are of low market value and

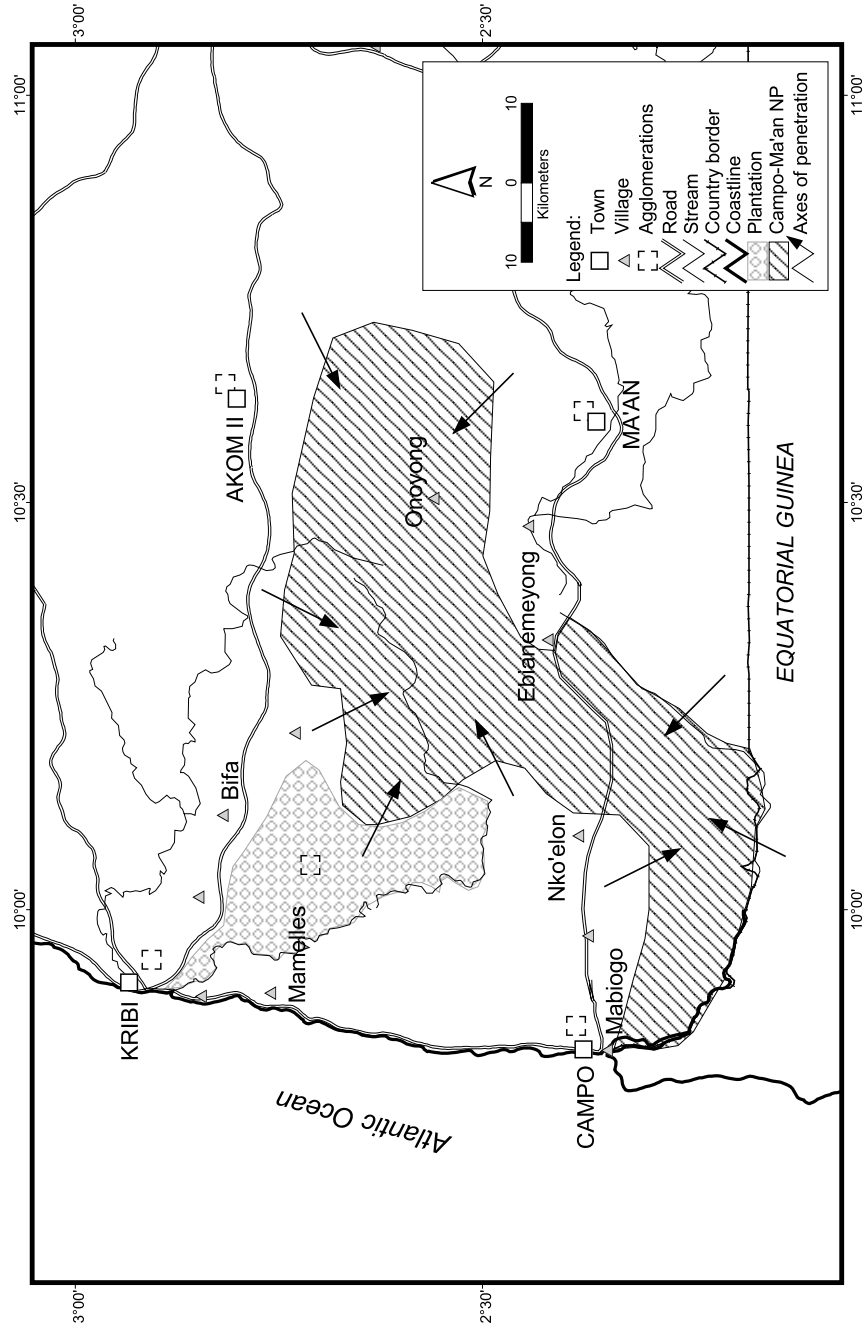


Figure 6-3. Map of the area and axes of penetration by poachers in the Campo-Ma'an National Park.

do not attract customers to the village. Therefore, the road closure affects the income of women more than it affects that of men.

Besides the enclavement, the distant conflict between the Campo-Ma'an Project and the World Bank, on the one hand, and HFC on the other, psychologically afflicts the local communities and is tantamount to "disempowering" them. Villagers participate passively in these events initiated and manipulated from outside, which nevertheless have profound effects on their lives. Their fate is decided elsewhere, without taking their opinions into account. People feel that they are less important than the animals that are being protected at their expense.

Under conditions of rapid change and increasing uncertainties, the weaker community members tend to develop a feeling of insecurity. The women of Ebianemeyong expressed this feeling in the following words: "Why are we hemmed in here as in a prison? That makes two days that you have been here. Have you heard the least sound of an engine? Why do you come to mock us? How do we evacuate or convey our sick ones to hospitals? The closest is in Campo. How are we going to survive?" (Tiani et al. 2001)

Comparative Analysis

Apart from the reduction of living space, which is a common problem to all communities living adjacent to the national park, the problems affecting women in Bifa and Ebianemeyong are specific to their own time and space. They concern conflicting relationships with the ecoguards in Bifa and the enclavement of Ebianemeyong.

The conflicts between the ecoguards and Bifa women are due to the authorities' failure to demarcate the national park and the communities' ignorance of the laws governing the possession and marketing of game. Meanwhile, the women of Ebianemeyong are victims of the misunderstanding (or disagreement) between two powerful external actors, the World Bank and a forestry company, HFC. The two villages present problems of various natures, with various causes, but the outcome for women is similar, namely their impoverishment and loss of status. Below, we emphasize several patterns and issues in the Campo Ma'an situation.

Specificity in Activities and Sources of Income

The comparative study of people's activities and sources of income in the two villages highlights the following differences: Bifa villagers devote more time to hunting or hunting-related activities (20% for men and 22% for women, compared with 10% for men and 12% for women in Ebianemeyong), while Ebianemeyong villagers practice more fishing (12% for men and 18% for women, compared with 10% for men and 4% for women in Bifa). Whereas the women of Bifa derive their greatest income from the sale of hunting products, the women of Ebianemeyong depend almost exclusively on the marketing of agricultural products. This means they are especially vulnerable to changes in the agricultural sector.

In Bifa, male activities are diversified, with agriculture and hunting the dominant activities (40% and 20% of their time, respectively). In Ebianemeyong, men are essentially farmers, devoting 72% of their time to agricultural activities. However, these male patterns involve opportunistic choices, inasmuch as the chosen activities of each village constitute its regular source of income. When all is said and done, the people of Bifa are farmer-hunters, while the people of Ebianemeyong are farmers. These data confirm the findings of Dounias (1993) and Annaud and Carrière (2000), which showed that the Mvae have a complex agrarian system, rich and adapted to the environment.

The fact that almost all peoples of the Cameroonian forest are subsistence farmers conceals specific community adaptations in their strategies for survival. Each of the many external interventions has induced different dynamics within the respective communities. In Bifa, the establishment of industrial plantations introduced a market economy within the local community. Women forged a place in the socio-economic circuit by constituting themselves as the agents for marketing household products, a strategic position that conferred on them some prerogatives and authority over household, indeed, community business. Since the creation of the national park, however, Bifa men have been trying to break away from the control women have over income by creating new marketing arrangements, benefiting in spite of themselves from the conflicts between the community and the ecoguards. This will alter the balance of power within the households and the community to the detriment of the women.

Vulnerability of Women in Periods of Uncertainty

In the face of changes, the women of Bifa and Ebianemeyong are experiencing more difficulties than the men in adapting to new circumstances. This is not an isolated case. Studies conducted in various areas have demonstrated the vulnerability of women in the face of externally induced upheavals (Brown and Lapuyade 2001; Pokam and Sunderlin 1999). This vulnerability is linked to several factors: the competing demands on women's time, the circumscribed scale of women's activities, the concentration or uniqueness of their income sources, and the low market value of products derived from their activities.

One reason women have less room to maneuver in times of uncertainty is the fact that they are daily overloaded with work. In addition to production activities (agriculture, hunting, fishing, harvesting, breeding, transportation, etc.), there are those of reproduction. These include all the various tasks such as fetching water, feeding the family, raising children, and managing the home. Already fully occupied with their roles as mothers and educators, women hardly have the time to organize themselves to adopt reasoned and common strategies in the face of adversity. Annaud and Carrière (2000) assert that for the Mvae of Campo, the time men and women allocate for all production activities is 4 hours and 3.6 hours per day, respectively. The time devoted to the food budget is 25% for men and 68% for women. These authors furthermore indicate that men allocate 60% of their waking time to discretionary activities and leisure, compared with only 28% for women.

Although the men and women in the Campo-Ma'an region seem to be undertaking the same activities, the scale of these activities is quite different. Men cultivate cash crops (cocoa, plantains, fruit trees, oil palm, etc.), which fetch them a comparatively good return. They fish with nets in the great waterways (Djo'oh, Biwome, Ntem). They hunt with guns and with snare cable traps in primary and secondary forests, as well as in fallows. They also raise sheep and goats. Women, in contrast, grow food crops largely for household consumption, set a few traps around their fields, fish in the dams of small waterways, and breed poultry. Consequently, the income of women is relatively low.

Women's income stems from hunting and agriculture in Bifa and agriculture alone in Ebianemeyong. In both cases, women are very dependent on agriculture, where the yield is subject to climatic fluctuations, soil fertility, and plant diseases and the overall return depends on changing market prices and accessibility. In Bifa, hunting has become an illegal activity, and selling bushmeat in the market has become very unstable because of the presence of game guards.

The vulnerability of women is also related to the types of resources that they produce, resources that are in turn linked to the nutritive role that is theirs within the society. Women cultivate, fish, or hunt primarily to feed their families. Only the surplus is available for trade or sale. These food products have less value than forest products that are hunted or harvested for sale. Because of their lower market value, women's products have to be transported to the market to sell them. The enclave's distance from the markets and poor transportation exacerbate the instability of women's income.

In short, the smallest disruption of the agricultural sector directly affects women's capacity to feed their families and deprives them of their main source of income. Even where women have succeeded in positioning themselves in the orbit of male activities to the point of earning substantial income, as in the case of Bifa, they are the first to be eliminated as soon as the least disruption occurs.

Recommendations and Conclusions

Since the Stockholm Conference in 1972, the spirit and the letter of international policy on the environment are unequivocal as regards their concern for both ecosystem conservation and the sustainable development of local populations dependent on these ecosystems for their survival. Principle 4 of the Rio Declaration (1992) established the inseparable nature of environmental protection and development. Since then, international decisions imposing restrictions on access to resources in inhabited areas are always accompanied by compensation and development alternatives. Thus the Campo Ma'an Project (in charge of the management of the Campo-Ma'an TOU), created in 1999, includes a component responsible for ecodevelopment. The role of the component is to promote local development and alleviate poverty, by supporting communities' efforts to establish economic alternatives to hunting in the national park. Yet even before the national park has been effectively demarcated, workers responsible for monitoring and protecting the park were already in office, while development efforts have remained timid. Compensa-

tion and other alternatives have been lacking. All these give the impression of a discriminatory application of texts.

The January 6, 2000, Decree that created Campo-Ma'an National Park stipulates in Articles 3, 4, and 5 that the management plan shall determine the users' rights of surrounding populations; that boundaries and conditions for managing buffer zones shall be established; and that indemnification shall be provided for people whose land has been expropriated or who have been occupying an internal portion of the park. But what is meant by the occupation of an internal portion of the national park? We know that in forest communities, the territory of a village or a hamlet spreads well beyond cultivated land (Bahuchet 1993). As shown by Joiris (1997) and Diaw and Njomkap (1998), traditional customary rights concern both agricultural land and village forest land on which many other subsistence activities are undertaken, such as hunting, fishing, and harvesting, and on which ancient villages or *bilik* are also situated. These customary rights conflict with modern rights, which specify the state as the sole owner of all forests found on the national estate.

The interpretation of texts thus depends on the interests or priorities of each user. Between designing conservation or development strategy and its implementation, there is a shift (whether intentional or not), depending on the interests of intermediaries, linked to the interpretation of texts and regulations. From there, information is hidden, biased or re-oriented, the most powerful parties confiscate authority, and conflict takes hold.

Solutions Proposed by Women: "Living Together with the National Park"

After hours of discussions, women in Bifa and Ebianemeyong recognized that the best strategy was to accept the national park as part of their existence and make a sustainable profit from it, if possible. They proposed three areas of focus to reduce the conflicts that set them against the workers in charge of protecting the park.

First, they recognized the need to collaborate with the other stakeholders to conserve the national park. They considered indicators of successful collaboration to include the frequency of encounters, the communities' contribution to the park's protection, and the sharing of information. Second, they wanted to improve transparency in the management of the national park. Suggested indicators include the demarcation of boundaries and the dissemination of rules and laws applying to hunting and the possession of game. Third, women agreed on the need to promote negotiation with park authorities with the objective of adopting Dounias' (1993) recommendation of demarcating the buffer zone and legalizing hunting for subsistence purposes. The latter should be oriented toward fauna of secondary forests, which have adapted to living with human beings.

In Ebianemeyong, women offered their services to check or control timber trucks at park entrances and exits and to report to the authorities the presence of poachers in the forest. They also offered to provide accommodation for the eco-guards. Their requests in return were for improvements to the communication infrastructure, efforts to create jobs for young people, assistance in developing alternative economic activities, extension of rural electrification, improvements in

the water supply, establishment of schools and health centers, and promotion of ecotourism.

- These proposals do not constitute a final solution to the problems arising from the national park. Nonetheless, they do have some advantages:
- They constitute a basis for discussion between the parties in conflict.
- They emanate from the persons concerned and are not imposed by other authorities.
- They may result in securing the national park at a lower cost.
- They could, if they are considered, give more authority and assurance to the local populations, more confidence in themselves as partners in forest management.
- They could contribute overall to linking conservation to development.

Recommendations of This Study

This study shows that the current mode of management of the Campo-Ma'an National Park may weaken women's stature because it affects their sources of income. The main constraints met by women in the two villages result from a shocking lack of collaboration among the stakeholders involved in forest management, both at the international and local levels.

Collaboration is a mutually beneficial relationship. To local communities it could bring training, access to useful information, development, and empowerment. In return, institutional administrators of the park would be able to reach their goals, namely, more efficient and less expensive protection and conservation of the national park. Collaboration would also make it possible to prevent and resolve conflicts among actors in a more lasting manner.

Avenues for collaboration already exist. The national policy of decentralization of forest management has been pursued for a decade now. The political will to enlist neighboring communities in managing Campo-Ma'an National Park has been explicitly included in the TOU master plan. Local populations have expressed their will to collaborate with other partners in managing the park. International and national partner organizations, such as CIFOR, are ready to provide methodological support to the process. Everything is in place to institute a frank dialogue between the parties for shared benefits. To go beyond the intent to collaborate, however, requires a formal or legal framework.

Our findings highlight the importance of pursuing concrete actions at different levels. At the policy level, these measures are needed:

- Policies need to be reformulated concerning protected area management to legalize and validate local communities's participation.
- Conservation and development initiatives must be harmonized and synchronized, so that local populations are not pushed into poverty and misery, which are problems that must be addressed.
- Negotiations must be undertaken with all stakeholders to obtain their support for conservation and development efforts. Stakeholders span all levels, including

the ministry in charge of forestry and its decentralized services, officials in charge of agricultural development, the territorial administration, the economic operators in the area, and the local communities and their councils.

- Women must be ensured an active and significant presence in decision-making bodies in connection with the park's management.

At the local level, the following measures are important:

- The park's management plan must be negotiated with local populations, so that they can identify with it and participate in its implementation.
- The mobilization capacity of women should be used to secure the park. The park's administrators should consider women's proposals to this end.
- The on-going demarcation of the area should also be negotiated, so that boundaries are known, accepted, and respected by all parties. Similarly, some compromise should be negotiated regarding village hunting and the conditions for possessing and marketing game near the park to avoid misunderstanding and conflict.
- A balance has to be found between satisfying the vital and immediate needs of local communities and global environmental needs

The culmination of these efforts should be that communities cease to consider themselves as "hostages of animals"^{viii} in Campo Ma'an.

Endnotes

The authors acknowledge the communities of Mabiogo, Messama 1, Messama 2, Messama 3, Bindem, Ebianemeyong and Bifa for their hospitality, especially the women of these last two villages for the interest and the commitment they expressed during CIFOR field work. Thanks to Abessolo Evina Isaie and the late Medjoto Martin for their precious support, and thanks to Carol Colfer for her maternal encouragement.

i. Tropenbos' management responsibilities for Campo Ma'an were terminated in late 2002, with future management arrangements in the hands of the Worldwide Fund for Nature (Nguiebouri 2001, 210).

ii. Nzingui is a neighboring village to Bifa. The population, which is estimated at 1,062 inhabitants, is also of the Bulu clan.

iii. Laborers are paid every 15 days.

iv. Ntumu, Mvae, and Bulu ethnic groups are close culturally, geographically, and linguistically.

v. Compulsory personal needs, such as eating, resting, and bathing, takes 3.4 hours per day for men and 2.8 hours per day for women. Social needs, such as moving, require 2 hours per day for men and 5 minutes per day for women, according to Congels and Pasquet (2000) cited by Annaud and Carrière (2000).

vi. Declaration of Bifa women's meeting in the community hall, September 24, 2001.

vii. As the Bulu ethnic group, the Mvae people belong to the Fang-Beti large ethnic group.

viii. Declaration of an Ebianemeyong woman, Septe