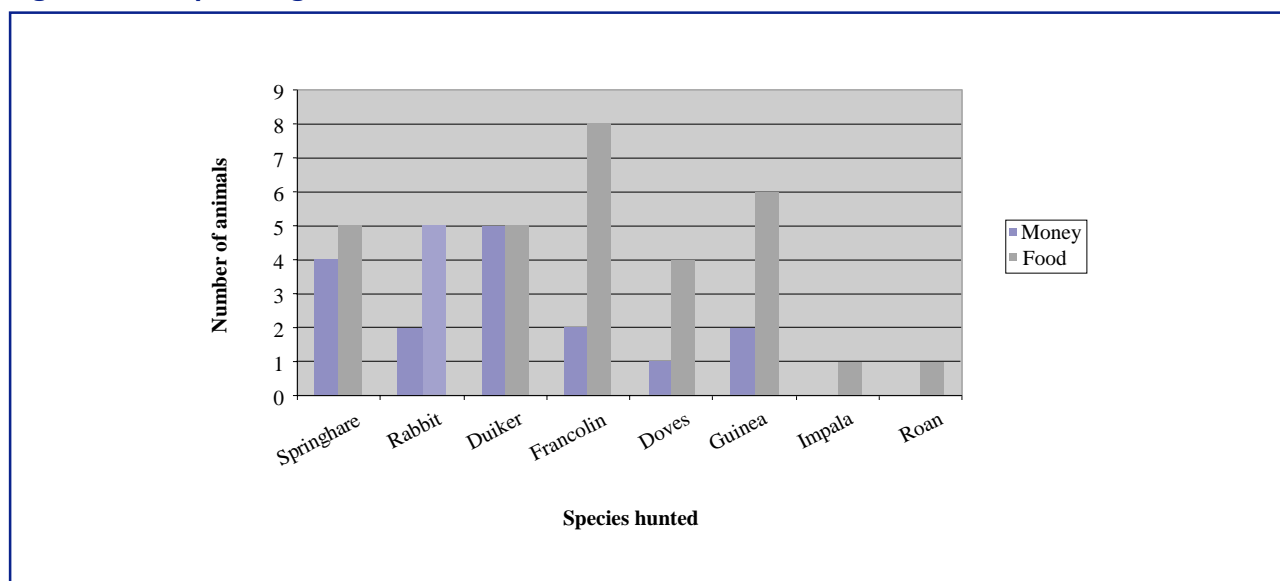




**Figure 23: Caprivi Region: Wildlife use as food and income**



by oryx, then springbok and springhares joint third. A range of other species were also ranked but to a lesser extent (including zebra, warthog, porcupine, antbear, jackal, and aardwolf, giraffe, rock hyrax and guinea fowl). In addition to the data provided, observations by researchers lend support to the fact that people could readily respond to the exercise and were clear in their deliberations. This suggests that wildlife are acknowledged and used by people as a safety net resource.

In Chapter 5, case study material illustrates the importance of natural resource sales for vulnerable households. During the period of this research the sales of resources like thatch grass (which for 2003 was estimated to be worth over N\$1 million to all conservancies) was limited in Caprivi due to the security situation and the lack of a secure market. During this period, wildlife is likely to have become more significant as a safety net, providing a food or income source. Research from elsewhere in Africa (see for example DFID’s study on wildlife and poverty 2002) suggests that wildlife is particularly important as a safety net during times of adversity or crisis. There is no reason to assume that this would be otherwise in the case of either Caprivi or Kunene. In both regions, then, wildlife is regarded as an important household livelihood resource.

**Issues relating to wealth and differentiation**

Data collected by WILD indicates that the use of wildlife is especially important for less well-resourced or poorer

households. The analysis of WILD/EEU survey data relating to the 180 households in Kunene and Erongo Regions who recorded wildlife as important to their livelihoods reveals how this group’s livelihood profiles compares with those who did not record wildlife as important to their livelihoods. Table 17 below presents the data for Kunene and Erongo Regions. Here the users and non-users of wildlife are compared in reference to key indicators of differentiation and wealth.

What is clear from this data is that there are a number of differences between the two groups. The wildlife user group differs from the non-user group in the following ways:

- Less incomes by 5.6%
- Less livestock by 19.5%
- Less likelihood of receiving a pension by 2.4%
- Less likely to receive remittances by 17.0%
- Less education by 3%

Based on these accepted indicators of wealth, users are less wealthy or secure than non-users. They are less well resourced (having fewer livestock) and are less well off (lower incomes, pensions and remittances) than the non-user group.

When we run the same analysis for the Caprivi Region’s data it reveals the following (see Table 18).

**Table 17: Kunene and Erongo Regions: Wildlife users and non-users’ livelihood profiles compared (n=619)**

	No. of hhs	Average of hh income (N\$)	Incidents of receiving pension	Incidents of receiving remittances	Livestock holding	Education
<b>Wildlife users</b>	180	7,764.33	0.40	0.20	12.78	1.96
<b>Wildlife non-users</b>	439	8,225.66	0.41	0.24	15.89	2.02



**Table 18: Caprivi Region: Wildlife users and non-users' livelihood profiles compared (n=496)**

	No. of hhs	Average of hh income (N\$)	Incidents of receiving pension	Incidents of receiving remittances	Livestock holding	Education
<b>Wildlife users</b>	127	7,704	0.85	0.20	9.54	2.2
<b>Wildlife non-users</b>	369	7,672	0.85	0.23	12.76	2.3

The wildlife user group differs from the non-user group in the following ways:

- Higher household income by 0.5%
- 1.3% less likely to receive remittances
- 25% less livestock
- 4% lower education

Comparing the profiles of the wildlife user group and the non-user group for Caprivi reveals that there are fewer differences and that in most cases these are slight, with one important exception – livestock holding. That 25% lower levels of livestock keeping were recorded for the user group is, however, a strong indication that the least well resourced and least secure of people are wildlife users. In Caprivi livestock (cattle) holding is an accepted indicator of wealth (see Chapter 5). Together with the data presented in Chapter 5, the above indicates that the wildlife users surveyed in study regions were less secure, or poorer than the non-users.

Based on data from the wild food use survey (see above and Annex 3, Table 1, Section A3.3.2) we can also provide a more detailed understanding of those who were actively involved in hunting. In Caprivi, 89% of the sample owned less than 30 cattle, with 46% not owning any cattle at all. In addition the majority of those sampled reported that their primary source of income were either the sales of natural resources (other than wildlife) or piecework. This data indicates that in Caprivi those surveyed were among the least secure or poorest group.

In Kunene, 72% of those sampled owned less than 50 goats, 32% owned cattle (the mean number of cattle owned being 22), and 30% owned no stock at all. In the Kunene sample, respondents were asked to rank their primary sources of income. Eighteen individuals or 48% ranked livestock sales first; seven individuals or 18% ranked full-time work first. The remainder ranked a variety of income sources first. These included piecework (two individuals), part-time jobs

(one individual), pensions (two individuals), providing services as livestock herders (three individuals), the sale of milk (one individual), the sale of craft (one individual) and the sale of wildlife (one individual). Taking livestock ownership and sources of income as wealth indicators, in Kunene the majority of those surveyed belonged to the least secure or poorest group.

In addition to the indicators discussed above, the extent to which various people utilise wildlife depends on a number of other factors. These factors include their ability to access supportive social networks (which act as a form of social security); their geographic location within conservancies; and proximity to the conservancy offices and jurisdiction. A person's relationship to the CGGs and other networks of power and influence also has a bearing on the extent to which they may successfully use wildlife (see below), as do people's own preferences for culturally important food (Mulonga 2003: 13, see also Schiffer forthcoming). The following statements from interviewees in Kunene support the findings of the survey research:

"I only hunt when there is no money, especially when we are desperately in need of food." (Farmer, ≠Khoadi //Hôas Conservancy)

"Those who still hunt are people from poorer households. These are the people with few or no livestock, who have no external support, have no money and are forced to poach due to hunger." (Senior Conservancy Committee member, Torra Conservancy (18/03/03), cited in Katjiua forthcoming)

"We (residents) are told that illegal hunting is against the law, but I will starve if I don't hunt, therefore I will continue with hunting even if it is illegal." (Young man, 22 years old, dependent on five goats, piecework and wildlife, ≠Khoadi //Hôas Conservancy)

Box 1 provides a description of the circumstances of one household in Kunene who typically uses wildlife as a supplement to their other livelihood activities.



#### **Box 1: Case study of Kunene wildlife user**

A young man, wife, two small children and elderly parents live in a remote corner of the conservancy high in the mountains and a full day's travel by donkey cart to the nearest services. They live on the wildlife frontline adjacent to the area that has been set aside as a core wildlife and tourism zone by the conservancy. A potential joint venture lodge site has been identified for the zone and put up for tender. The family regularly face high costs of living with wildlife including stock predation from jackals, hyenas and leopards and have previously suffered damage by elephants to their water point wind pump and tank – their only local source of water. They are infrequently visited by the conservancy and have never received meat or employment from trophy hunting activities in their vicinity. The family relies heavily on a single pension and their herd of 42 goats with which they support eight household members. To maintain livelihood security and recoup their stock losses caused by HWC, primarily jackals, they utilise wildlife. "I only hunt when there is no money, especially when we are desperately in need of food," recounts the young man. Increased local control by the formation of the conservancy and the CGG patrols has led to the hunter becoming secretive about his hunting tactics and he doesn't share them outside of the household. He hunts large mammals (kudu and oryx) using a spear and on foot; this requires a large amount of skill and effort. He stated that he does select the species, age and sex of the animal he hunts when possible, wishing to conserve for the future, and can do this because he is hunting with a spear rather than indiscriminate snares and traps. The meat from a large mammal supports the family for one and a half months and contributes significantly to their livelihood security. (Source: Katjua *et al.* forthcoming)

While the quantitative data from the survey respondents' statements suggests that it is the least secure or poor who are users of wildlife, the wealthier groups also use wildlife. For example, seven individuals or 24% of the wild food use sample had full-time jobs and should be considered in the wealthiest group. Qualitative materials (including two participatory workshops conducted in Kunene Region with CGGs and representatives from 14 conservancies (including Erongo Region conservancies); and in Caprivi a workshop held with Community Rangers) suggests that it is difficult to make a clear distinction between people of different status who use wildlife – and that both poor and rich people still hunt (see Vaughan *et al.* 2003c). In Kunene the issue of who is poor is complex, and it was stated by informants that being poor is not a constant, but that people may move in and out of being in the poor category for a variety of reasons. These include good fortune in relation to the breeding rates of stock, the opportunities that employment may offer and so forth. Conversely it is also easy to move into being in a less secure position. Being poor is a condition rather than a permanent state. The following three profiles of different hunters involved in the wild food use survey<sup>5</sup> in Torra and

≠Khoadi //Hôas illustrate the kinds of people involved. The data presented below is based on a compilation of field notes from interviews held with the respondents.

#### **Profile A: Subsistence user of wildlife with livestock**

A 59-year-old female livestock farmer with 61 goats and 49 cattle. She is a senior traditional authority councillor whose son hunts a range of wildlife for the household. The animals utilised by the household are kudu or oryx (hunted once a month), springbok (once or twice a year), warthog or aardvark (twice a month), duiker (three times a month) and springhare (five times a month). The mother shares the meat with her neighbours "to prevent more hunting" and because they "cooperate very well (with each other)". The mother is aware that it is illegal to hunt animals because of conservancy and MET rules that are in place to increase wildlife numbers. Therefore they have changed their hunting tactics to hunting mainly at night.

#### **Profile B: Subsistence and occasional commercial user of wildlife with no livestock**

A 28-year-old man (whose father is a senior traditional authority councillor and CGG) with no livestock, who relies on craft sales and uses wildlife regularly for subsistence. The animals used are kudu, oryx, or duiker (once a month), aardvark (twice a month), and springhare or jackal (three times a month). The man shares oryx, kudu and aardvark reciprocally with his family and neighbours. The other species he doesn't share, as there is not enough meat. He is aware that it is illegal to hunt animals (except for jackal) due to the conservancy rules to conserve the wildlife for future generations. He has changed his hunting tactics by hunting with his brother at night and admits the risk of being caught can be high due to the CGG patrols.

#### **Profile C: Commercial user of wildlife with no livestock**

A 50-year-old man with no livestock whose main income source is through game meat sales and who uses a wide range of wildlife. The animals used are kudu or oryx (once a month), springbok (twice a month), duiker, jackal and porcupines (once or twice a year). The man shares kudu, oryx and springbok with his neighbours as they also share with him, the other meat he doesn't share because there is not enough. The man sells the oryx and kudu meat to 'middlemen' for N\$30-40 for 5kg and jackal skins are sold for N\$25 to AGRA. The man is aware that it is illegal to hunt animals (except for jackal) due to conservancy rules that are in place to maintain and look after the wildlife. He has changed his hunting tactics by hunting at night now and admits the risks of getting caught are high due to CGG patrols.

<sup>5</sup> The frequency with which these hunters stated they hunted various species must be treated with caution, as these were estimates given by the informants themselves and not based on detailed records of harvesting efforts. A cautionary note is also advised since their harvesting efforts do not necessarily correspond with their success rates and do not therefore represent their off-takes.



Those who are the primary users of wildlife based on the above material are those who can be considered the least secure or poor. This is the case for both Caprivi and Kunene Regions, although it is not exclusively the poorest who are involved in hunting. The next section of this chapter discusses the types of wildlife used and the methods employed in hunting.

**Species utilised**

Individuals in Caprivi and Kunene hunt a variety of wildlife species including large and small mammals. The following list is a composite of all species mentioned by informants during research. To suggest that these are all hunted rather than huntable would be misleading. Nevertheless when the opportunity presents itself the indications given by informants was that they would hunt them.

<i>Aardvark</i>	<i>Scrub hare</i>	<i>Steenbok</i>
<i>Aardwolf</i>	<i>Springhare</i>	<i>Springbok</i>
<i>Duiker</i>	<i>Zebra</i>	<i>Buffalo</i>
<i>Jackal</i>	<i>Impala</i>	<i>Hippopotamus</i>
<i>Kudu</i>	<i>Roan</i>	<i>Reedbuck</i>
<i>Oryx</i>	<i>Sable</i>	<i>Warthog</i>
<i>Porcupine</i>	<i>Eland</i>	
<i>Rabbit</i>	<i>Bushpig</i>	

The species and methods of hunting differ from one household to the next depending on a number factors including their primary sources of income and food; whether or not the household possess a gun; and the locality of the village or post within the conservancy.

Mulonga (2003) reports for Caprivi that the commonly utilised species include small mammals and birds, such as guinea fowl, francolin, springhare, duiker and rabbits. Smaller species are less dangerous to hunt and more easily available, making them primary targets. Wildlife numbers (especially larger species) in Caprivi are much lower compared to the Kunene Region. Large game species such as impala, kudu, buffalo, hippo and roan/sable antelope are also utilised but on a smaller scale. The cross-border hunting of these species also takes place in areas near the Botswana-Namibia boundaries (for example, at Ngoma). Carnivores and reptiles are not commonly consumed. This is mostly

**Table 19: Commonly hunted species, as observed by Community Rangers**

Salambala	Kwandu	Mayuni
Duiker	Duiker	Duiker
Impala	Reedbuck	Springhare
Warthog	Lechwe	Guinea fowl
Reedbuck	-	Francolin

Source: Murphy and Mulonga 2003

due to the influence of the Seventh Day Adventist Church, which has a large following in the Caprivi Region.

In focus group discussions held in January 2003, Community Rangers from Salambala, Mashi and the emerging Nakabolelwa Conservancies reported that in their areas large game species were also killed. Community Rangers from Kwando, Mayuni and Wuparo said only small game species were killed by people in their areas (see Table 19) (Murphy and Mulonga 2003).

The wild food use survey involving questionnaires with active hunters in the Torra Conservancy (n=13 or 5% of the total male population over the age of 17) recorded springbok as the most frequently hunted (approximately once a month by 80% of these respondents), followed by oryx. In Torra Conservancy estimated numbers of these species (7,500 and 3,000 respectively, NRM working group 2002) would suggest that these species are plentiful enough for this to be feasible. The fact that these population numbers are high and widely distributed over the conservancy suggests that they are easy to access. Of those respondents from ≠Khoadi //Hôas Conservancy who were interviewed using the same questionnaire (n=24 or 3% of the total male population over the age of 17), springbok, oryx and kudu were the most frequently hunted species, with 62%, 61% and 60% of respondents stating they used these species once a month respectively (Katjiua forthcoming). In some cases, more than one large mammal was hunted. One interviewee stated, for example, that he hunted springbok twice a month and kudu and oryx once a month. Another respondent hunted springbok once a month, and kudu and oryx once a year (Katjiua forthcoming). Other commonly hunted species are springhare, francolin, guinea fowl, and duiker. Figure 24 below shows the most frequently pursued species in Torra and ≠Khoadi //Hôas Conservancies.