

INTRODUCTION

Developing countries, and Africa in particular, are not the only places where cooperative self-help organisations with the objective of sustainable management of natural resources can be found. The author of the main paper has been involved in such activities in his home village in Germany ever since he was a child (quite a considerable period of time!). The fact that he was able to apply the very principles gained through a lifetime of experience to the CBNRM programmes supported through official Tanzanian-German development cooperation was appreciated by his Tanzanian counterparts. As a result, some of his advisory contributions were actually considered as credible!

Professor Ostrom has analysed a variety of operational case studies of self-organised and self-governed common pool resource programmes from around the world, some of which have been in existence for centuries. She acknowledges that an extraordinarily rich case study literature exists and frequently has appeared in "obscure publications" (Ostrom 2008, p. xv). This is but another such case study in an admittedly "obscure publication."

THE SETTING

Gebhardshain is a village of about 1900 inhabitants situated in a forested low mountain range of the Westerwald (Western Forest), in the state of Rhineland-Palatinate between Frankfurt and Cologne. The nearby Sieg River drains this land into the Rhine, and gives the greater area the name "Siegerland".

In the late middle ages people eked out a meagre existence from subsistence agriculture, and poverty was widespread. This situation remained until the beginning of the previous century, and it is no coincidence that the German and subsequent international rural cooperative movement was started here. Friedrich Wilhelm Raiffeisen (1818 – 1888) created the first credit and savings societies. These self-help organisations were similar to those of Muhammad Yunus in Bangladesh, for which he was awarded the Nobel Peace Prize. Raiffeisen never achieved international celebrity status, but the global impact of his contributions was far greater over time until today.

The Siegerland has rich iron ore deposits coming up to the surface, and iron was processed here for tools and arms since about 2,500 BC. Great quantities of charcoal were needed for those primitive iron ore smelting technologies, and destruction of the forest dates back to those ancient times. The forests required hundreds of years to recover yet deforestation was repeated several times over up until the medieval times.

As the forest provided such a vital resource of common ownership, shortages that resulted from excessive use attracted a great deal of attention. This stimulated processes for development of strategies for sustainable use, and evolved into mechanisms that could overcome the "tragedy of the commons" through regulated community access to the forest resources. Once the authorities realised the public benefit of such an order they put it into law. Various decrees have legislated sustainable forestry procedures, first by the ruling gentry, the Dukes of Nassau and Sayn, in the mid 16th century and later by Imperial Prussian legislation in the 19th century. The legal basis for the cooperative described here (and still enforced in modern Germany) dates back to the imperial decree of April 9th, 1890 which starts with the words "We Wilhelm, by the grace of God, King of Prussia ..."

The villagers of Gebhardshain created three separate forestry cooperatives over the years, and they still exist today. They differ in legal status and some procedures, but the general principles are the same. I shall restrict this document to a simple description of the main cooperative, known as the Hauberg.

MANAGING THE HAUBERG FOREST COOPERATIVELY

Around the late 16th century 42 families of Gebhardshain, which were the majority of inhabitants, established the Hauberg cooperative for the purpose of utilising the forest in a mutually agreed upon manner. "Hauberg" literally means "the hill where you cut down trees". Each cooperative in the village had its own name, the two more recent ones were named after the areas they used, whereas the older one described here was simply called "Wald", meaning "forest". Each family (the subsequent head of that family is referred to as the member) received one 42th share of the forest as collective ownership, although nobody could lay claim to a specific piece of land. The regeneration cycle of the forest was set at 20 years, and the total Hauberg land was therefore divided in 20 parcels, with only one parcel of land used each year.



Every year each member received one share of forest within the parcel of land selected for use. The lots were distributed by a raffle, as the shares were naturally not equal. The drawing of lots was complicated but transparent, as the outcome should be a fair distribution that is acceptable to all members. The members and their families would cut the trees themselves, and in return were entitled to the wood and other by products.

The typical vegetation consisted of broad-leaved trees, such as oak and birch. The wood was used primarily for charcoal production (for iron ore smelting), but also for domestic energy such as for heating homes in the winter and for cooking purposes. The bark of oak trees was sold to tanneries or bartered for leather, which was then processed into shoes by the village shoemaker. Small branches were collected and woven into baskets and brooms. Brushwood was used for starting/heating the public ovens which were used to bake bread and cakes.

The trees were cut down with axes and a slasher tool typical for this area, similar to the African machetes or pangas. The trees would sprout more readily when cut with an axe rather than sawn off. In the first two to three years after cutting, the clear-cut land was planted with primitive types of grain, as due to poor soils and a harsh climate, the agricultural land did not produce enough to feed the large families. Thereafter the cut down piece of Hauberg was used as communal pasture for cows which served as draft animals, for milk and also for meat. As in Africa today, it was the work of the children to herd the cows in the Hauberg, and was amongst my father's duties as a child around 1920. The land was then left alone in about the tenth year after harvest so that the trees could grow until they reached a diameter sufficient for cutting and the whole cycle could start over again.

The shares of members were handed down, always to the child, who inherited the house, not necessarily the oldest boy. Shares could be sold, normally to a resident of the village, but could not be divided. The Hauberg cooperative is a legal entity and can thus conclude contracts and engage in business and economic transactions. All important policy and management decisions are taken by an annual general assembly. Membership elects a managing Board, and the Chairman of this board is the Manager of the Hauberg. The Board meets regularly to decide on management issues. The local Government forester renders professional advice, and the cooperative pays a prescribed fee, based on the number of hectares, for this service. The members have always managed

to keep public bodies out of the cooperative. The municipality would have liked to acquire shares in order to exert influence, but this was always prevented. This applies in the same way to the other two Hauberg cooperatives in the village. During the Nazi rule (1933 - 1945), for example, a part of the forest of one of these two cooperatives was expropriated by the fascist state and handed over to politically loyal farmers from outside in accordance with Nazi ideology. Members and the Board fought this, which at that time exposed them to great personal risk due to the terror regime in power. After the war the cooperative had to conduct a long lawsuit in order to receive its property back.

The Hauberg was of great economic importance at the time it was created. Charcoal production lost its prominence in the 19th century due to the availability of more efficient energies like coal and electricity that reduced the demand for charcoal. For the middle of the last century, the net profit of one hectare of the Hauberg per year can be estimated at about half a teacher's monthly salary. As every share was equal to about 0.7 hectares, the monetary value per family was not great, but it was nevertheless a contribution that supplemented other sources of income and subsistence, and it was consequently highly valued. Nowadays the economic importance is even less, as members may receive on an average €100 to €200 per year, however this small amount strengthens the personal bonds that members have with their cooperatives and it remains a highly treasured incentive. With the new high energy prices in recent years the Hauberg has increased in importance again, as many members have gone back to using firewood for heating purposes.

Over the years there have occasionally been conflicts, usually when members have behaved selfishly, but there have also been cases of bad Governance by the Board. It was normally the disciplinary force of the group and the need to find compromise required by the rules, which sorted these matters out.

HUNTING

The Hauberg is a member of the hunting cooperative which is in charge of the management of wildlife on village land according to law. The Hauberg's income from hunting is normally just enough to cover its administrative expenses. Wildlife is another common pool resource that is managed in Germany on a cooperative basis, except on larger private or Government properties of a minimum size, which can manage the wildlife on their own lands themselves.



Hunting and wildlife use in the middle ages was the privilege of the higher and lower gentry. Farmers had to pay the costs of living with wildlife in form of crop damage and labour to assist driven hunts. Human-wildlife conflict prevailed, and the right of the common man to hunt or kill wildlife has always been an important demand in all German social uprisings and revolts, as in the "Peasants' Wars" (1524–1526). After the German revolution (1848/49) hunting restrictions in some parts of Germany were either waived or not enforced, and game was eradicated there in a very short time. The tragedy of the commons had won again. Thereafter the hunting rights were connected to the ownership of land. This meant that the gentry could no longer hunt on the land of the peasants. At the same time minimum sizes of hunting areas were prescribed as a means of ensuring sustainability and safety for the hunters. This ultimately led to the development of our German hunting legislation, which takes into account the dangers of overexploitation of commons. It is generally recognised that this system is the reason why Germany, a densely populated and industrialised country has a sustainable annual off-take of 1.6 million hoofed animals (wild pigs, roe deer, red deer etc.) and 3.3 million others (hare, game birds, foxes etc.). The total wholesale value of venison is in the range of €180 million, while the monetary value of the hunting industry is estimated at around a billion Euro per year, not counting non-monetary inputs and outputs.

Game is classified as "res nullius" (nobody's thing), which means that it cannot be owned by anybody. People are not allowed to kill or take ownership of a live or dead wild animal or part thereof. The right to hunt lies with the landowner and is regulated by law as far as numbers, species and seasons are concerned. It is important to note that access is regulated by the minimum size a hunting area must cover. It must be at least 75 contiguous hectares when owned by one person. The owner then has the right to self-hunt the area provided he or she has the necessary qualifications, which are granted based on an examination and a licence, or to lease it to a similarly qualified person. For smaller properties, which are more frequently the case, the owners are required to pool their areas to reach a minimum size of 150 hectares and to create a hunting cooperative, which will then be allowed to lease out the hunting rights to a qualified person. Annual lease fees vary greatly, depending on the type of game and the general quality of hunting in the area, but range on average between €15 and €50 per hectare per year, exclusive of taxes and payments for crop-damage, which are the liability of the leaseholder.

In accordance with this system the Hauberg association is a member of the local hunting cooperative and receives the lease fee according to the size of its property. Hunting is fully sustainable and plays a major role in maintaining biodiversity in the region.



Mogolole weaving a tail of a Nyasa wildebeest during quota hunting in the Juktumu WMA north of the Selous Game Reserve in the year 1993