People of the River: Subsistence Economy of the Anywaa (Anuak) of Western Ethiopia

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People of the River: Subsistence Economy of the Anywaa (Anuak) of Western Ethiopia

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INTRODUCTION

The Anywaa (Anuak) are a Nilotic people who live in the lowlands of the Gambela Region (formerly an awraja, district, of Illubabor Province) in Ethiopia. They also live in the Upper Nile Province of the Sudan. Anywaaland is divided by the international border. They are a riverine people who live mainly along the tributaries of the Sobat river, which is itself a tributary of the White Nile. Neighboring the Anywaa to the north and the east are the Oromo who live on the highlands. Between the Anywaa and the Oromo live the Majangir. To the west live the Nuer. The Murle occupy the land to the south. Small populations of the Komo and Opuo live to the north of Anywaaland (Figure 1).

This paper is on the Anywaa subsistence economy, which is closely related to, and dependent on, the river. Agriculture on the riverbank provides a very stable and productive food supply. The river is also the place where fishing is conducted. Hunting is carried out in the dry season, when wild animals migrate to the riverine area in search of water and pasture. Cattle are transferred there in the dry season for the same reason. Many edible plants are also collected on the riverbank and riverine area. Although I deal only with the Ethiopian Anywaa, among whom I conducted field research, there seems to be no clear difference between the Ethiopian and Sudanese Anywaa in terms of subsistence economy.

It is difficult to figure out the exact Anywaa population, due to the unreliability of data. According to hand written reports kept at the Gambela office of the Ministry of Agriculture, to which I had access, the rural population in the Gambela Region (including Anywaa, Nuer and other minority ethnic groups) in 1992 was 70,178. The figure in 1989 was 106,850. The two figures are considerably different. A typed report kept at the Planning Bureau, Gambela, states that as of 1992 the rural population in the region was 112,688, while the urban population was 11,363. Two government censuses of the Gambela Region were conducted in the late 1960s, and the population figures also fluctuate between 95,865 and 44,323 (Ellman 1972: 9). More than fifty years ago Evans-Pritchard estimated the the Anywaa population on both sides of the border at between thirty and forty thousand (Evans-Pritchard 1940a: 7). It may be reasonable to assume that at
Figure 1. Map of Anywaaland

present the Anywa population as a whole may not exceed 100,000, with the majority living in Ethiopia.

Linguistically, Anywa belongs to the Lwo (Luo) group of the Western Nilotic languages, which are a part of the Eastern Sudanic sub-group of the Chari-Nile group of the Nilo-Saharan language family. Therefore, linguistically as well as historically and culturally, the Anywa are most closely related to the Pari, Shilluk, Luo (Jur Chol), and other Luo peoples in East Africa, and then to the Nuer and Dinka.
Unlike other Western Nilotic speakers such as the Nuer and Dinka, who are economically and culturally oriented to cattle pastoralism, the Anywaa do not have many domestic animals. In fact, in the eastern and middle part of Anywaaland, there is no domestic animal at all because of tsetse flies. For food they mostly depend on agriculture and then on fishing, hunting, and gathering. Most of the work in the subsistence economy is carried out by men. Women do all the gathering, part of the agricultural work, and a type of fishing using baskets. Unlike other African peoples, agricultural work is considered to be men's domain. All work in the field is done by men. After the harvest, processing of food crops is women's work. Women transport the crops home, thresh, grind, brew and cook them. Work in the garden in the village is women's work. A widow may cultivate the field left by her husband.

In a previous paper I called the subsistence economy of the Pari of southern Sudan a "multiple subsistence economy" (Kurimoto 1984). The Pari engage in agriculture, hunting, fishing, pastoralism and gathering. In this sense, the Anywaa subsistence economy is similar to that of the Pari, although the former is less diverse as pastoralism plays a much lesser role. It should be noted that the Pari language is almost identical to Anywaa.

This multiple subsistence economy seen among some Nilotic peoples, may seem exceptional and unusual, because the Nilotes in general have been considered typical African pastoralists. (Here are included not only Western Nilotic speakers but also Eastern Nilotic, such as the Maasai and Karimojong, and Southern Nilotic such as the Nandi.) Indeed, the image of the Nilotes as a people who live and die for cattle has become dominant through many classic ethnographies, such as The Nuer (Evans-Pritchard 1940b), Family Herds (the Jie and Turkana) (Gulliver 1955) and Karimojong Politics (Dyson-Hudson 1966).

However, a careful reading of ethnographies may reveal that these pastoral Nilotes are not "pure" pastoralists. They practice agriculture, fishing, hunting and gathering to obtain food, although the degree of dependence on each means differs from people to people and from year to year.

I am of the opinion that the multiple subsistence economy has been a persistent and common way of life among the Nilotes of the Nile basin, as it is sustainable and advantageous for survival. The purely "pastoral" Nilotes probably chose, or were forced to choose, exclusive pastoralism for one reason or another. The reasons may have been ecological conditions, inter-ethnic relations, or historical contacts with presumably more pastoral Cushitic peoples (Kurimoto 1993).

However, it is not my intention to argue this general issue here. In this paper I present a case study of the multiple subsistence economy of the Anywaa, a riverine Western Nilotic people. The main focus of the paper is the relation between their subsistence and the river. As the geographical distribution of Western Nilotic peoples suggests, they live along the White Nile and its tributaries, and the river plays a very significant role not only in their economy but also in cosmology (Burton 1981; Kurimoto 1992a). I will also argue at the end of paper that recent
socio-economic changes have profoundly transformed the Anywaa subsistence economy.

FOLK CLASSIFICATION OF THE ENVIRONMENT

Rivers and villages
Anywaaland lies at altitudes between 400 m and 500 m. Four major rivers (*naam*, pl. *nam*) flow westwards through Anywaaland. They are, from the north, the Baro (Upeeno in Anywaa), Giilo, Akobo and Oboth. They merge and become the Sobat River. Most of the villages are found along these rivers and the Aluoro, a tributary of the Baro. Many of them are located on the very bank of the river (Photo. 1). A sketch map by Evans-Pritchard clearly indicates the riverine location of villages (1947, between p. 84 and p. 85). 1: 50,000 scale maps printed for the Ethiopian Water Resources Development Authority by the Ethiopian government, which cover the entire Gambela Region, are very accurate, and every village with its rough number of huts is shown. We can also tell from these maps that most of the Anywaa live on the river banks.

Anywaaland might entirely fit into a 150 km square. In spite of its small size and altitude range, there is considerable ecological variation along the east-west axis. The eastern part of Anywaaland in covered with a dense forest, which marks the western edge of the forest extending from the highlands. The annual rainfall is

Photo. 1. A village on the Giilo river. This photograph was taken in the dry season, when the water level is the lowest.
Table 1. Vegetation and Subsistence economy along the Gilo river,

<table>
<thead>
<tr>
<th>Vegetation category</th>
<th>west, lower flat</th>
<th>wok (woodland, partly flooded)</th>
<th>east, upper hilly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-category [soil type]</td>
<td>bap [doodo] (hinterland)</td>
<td>bat-nam [apiina] (river bank)</td>
<td>lul [lwala] (forest)</td>
</tr>
<tr>
<td></td>
<td>bap [ukuur]</td>
<td>ruup [kwo] (hinterland)</td>
<td>wok or kang [lwala] (secondary vegetation, woodland)</td>
</tr>
<tr>
<td>Location of villages</td>
<td>on the ridge in doodo</td>
<td>on the riverbank</td>
<td>in the forest</td>
</tr>
<tr>
<td>Location of fields</td>
<td>doodo</td>
<td>bat-nam and doodo</td>
<td>bat-nam and ruup</td>
</tr>
<tr>
<td>Pastoralism</td>
<td>++</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Fishing</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Hunting</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Beekeeping</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

highest here. For instance, the town of Gambela, located at the foot of the Wellega highlands, annually receives 1,288 mm of rain (Ellmam 1972: 14). Going westwards the rainfall decreases gradually. The middle part of Anywaaland is savanna woodland and the western part is savanna grassland, subject to inundation during the rainy season. The Anywaa subsistence economy is deeply affected by this ecological variation.

**Bap, wok and lul**

The ecological variation in Anywaaland is recognized and expressed in Anywaa folk categories. The folk classification of the environment also corresponds to the combination of various types of subsistence. The Anywaa classify their natural environment into three major categories according to the vegetation. They are, from west to east, or from downstream to upstream, *bap* (grassland or seasonal swamp), *wok* (woodland) and *lul* (forest)². There is also a correspondence between these categories and soil types (Table 1).

*Bap*³, the western part of Anywaaland, is flat grassland savanna flooded
during the rainy season. Trees are scarce. The soil in *bap* is called *ukuur*. It is black clay soil or “cotton soil,” which becomes very muddy when wet but hard and cracked during the dry season. Slightly elevated land in *bap* which is not flooded is called *doodo*. It may also be called *thuurr* or *burr*. *Doodo* is also the name of its black clay soil. *Doodo* is similar to *ukuur*, but it dries sooner. Trees may be found in elevated places.

*Wok* (literally meaning “outside”) is savanna woodland. Only the riverine land becomes flooded during the rainy season. The ground is covered with tall grasses of the Poaceae (Gramineae) family, with scattered acacia thorn and other broad-leaved trees usually less than 10m high. *Wok* is further divided into four sub-categories: *bat-nam*, *bap*, *doodo* and *ruup*. The river bank is called *bat-nam*. Its soil is *apiina*, which is sandy with very fine particles. The outer side of the bank is a little lower and flooded during the rain. This area is *bap*. As one goes further from the river, the land is higher and wooded. This hinterland of the river is divided into *ruup* and *doodo*. The most common soil in *ruup* is *kwo*, which is sandy with rougher particles than *apiina*. In *ruup*, however, other types of soil like *ukuur* and *lwala* are also found. One finds more *ruup* as he goes further upstream. In *wok*, the denser the trees become the more eastwards or upstream one goes.

The eastern part of Anywaaland, *lul*, is covered in a dense forest. In *lul*, trees are sometimes more than 20m high. There are no acacia thorn trees or Poaceae grasses, which are distinctive features of *wok*. It is much cooler in *lul* than in *bap* and *wok*, although the difference in altitude is not great. This forest marks the western end of the great forest extending from the Ethiopian highlands. The soil of *lul* is *lwala*, which is red laterite.

It should be noted that *bap*, *wok* and *lul* are intermixed. As mentioned before, *bap* is also found in *wok*. *Doodo* is found both in *bap* and *wok*. In *lul*, abandoned cultivated fields eventually become *wok*. Therefore *lul* has patches of *wok*, the savanna woodland, around the villages and cultivated fields. The Anywaa say that *wok* will not return to *lul*, and that it will not be cultivated. In other words, once deforested the original vegetation will not be recovered.

In Anywaaland, *wok* is most densely populated. There are continuous villages along the river. Moreover, it is inhabited only by the Anywaa. *Lul* is occupied by both the Anywaa and the Majangir, who are the original inhabitants of the forest (Kurimoto 1994). In *bap* there are the Nuer who have been expanding their territory eastward. In the process, many Anywaa have been either pushed eastward or absorbed into the Nuer. This process may not reach the eastern half of the *wok* because of the presence of the tsetse fly. Therefore, it is natural that *wok* is considered the Anywaa’s real homeland. Not only is *wok* occupied only by them, but the subsistence economy and villages on the riverbank are very stable there, as will be discussed below.
NATURAL ENVIRONMENT AND VARIATION IN THE SUBSISTENCE ECONOMY

The patterns of Anywaa subsistence economy differ considerably in bap, wok and lul (Table 1). Bap is not very suitable for cultivation, as most of the land is subject to flooding for some months during the rainy season. Cultivated fields are found only in doodo, slightly elevated hinterland where homesteads are also constructed. Pastoralism, fishing and hunting are more important in bap than in any other area in Anywaaland. Cattle, goats and sheep are kept at villages during the rainy season and transferred to the riverine area in the dry season for water and pasture. Both fishing and hunting are dry season activities. Fish and larger wild animals are said to be abundant. The pattern of subsistence economy in bap is similar to that of the Nuer, who live under the same ecological conditions.

In wok, cultivated sites are found at two different places: riverbank (bat-nam) and hinterland (doodoo and ruup). The riverbank, where villages are located, is more suitable for cultivation due to the fertility of the soil and the constant supply of river water, which also renews soil every year by depositing organic matter. In hinterland, it is said that doodo is better for cultivation than ruup, because of its soil fertility. Agriculture is the most important means of food production, although fishing and hunting are carried out in the same way as in bap, but to a lesser extent. In the western part of wok, the Anywaa raise goats and sheep in addition to a small number of cattle. In the eastern part, very few domestic animals are found.

The subsistence activities in lul are unique in comparison to bap and wok. Agriculture provides most of the food; fishing and hunting are complementary. There are no domestic animals at all. Fields are prepared by slash-and-burn. The fields in lul yield one harvest a year, while on the riverbank in wok, two harvests, and in the hinterland of wok and bap, there may be two harvests if rain is adequate. The Anywaa say that lwala, the red soil of lul, is so fertile that it produces enough food for a year in one cultivation. Distinctive crops in lul are yam, sweet potato, groundnut and bambara groundnut. Cowpea and green gram, common in wok and bap, are not very much cultivated. Wild yams are also eaten.

In lul fishing is carried out in small streams but with little catch. There are wild animals like elephants and pigs in the forest, but the amount of game is small. Two types of traps are used in hunting in addition to spears and guns. Nilotes are, I suppose, hunters of the open land, not of the forest. On the other hand, beekeeping, practiced rarely in other areas, is very common in lul. Hollowed out logs (bongngo) are set on trees here and there for the bees to make hives. Honey is made into mead.

There is evidence to indicate that the Anywaa learned “the way of forest life” from the Majangir, including the names of forest trees, slash-and-burn cultivation, beekeeping, mead brewing, yam eating, and wild animal trapping (Photo. 2). In fact, much Anywaa vocabulary concerning these matters is borrowed from
Majangir. In other words, it seems highly probable that the cultural contacts with the Majangir enabled the Anywaa, a people of the savanna, to move into the forest (Kurimoto 1994).

FISHING, HUNTING AND GATHERING

Fishing

Both fishing and hunting are carried out in the dry season and are important means for supplying protein in the Anywaa diet.

In the dry season, when the water level decreases, fish return to the main stream from tributaries, flooded plains and pools. Anywaa fishing methods take advantage of this seasonal migration.

Weirs (keek) made of logs are constructed across the river in order to capture the fish returning to the main stream and downstream. Fish-baskets or traps (rwok and dipaw) are set in a weir. Sometimes a shelf is attached to the down stream side of a weir so that fish moving near the water surface may jump onto it. At the main streams of the Baro and Giilo Rivers, no weir is constructed because they are too wide. At the Baro, a horseshoe-shaped fence (diemma) is constructed in the river. It opens upstream. Many people participate in diemma fishing by beating the water surface with sticks to drive fish into the fence. Then fish are killed with fishing spears and sticks.

Mai is a collective fishing method in pools. Hundreds of men from nearby
villages take part with fishing-spears (bidhi), harpoons (aroc) and hand hooks (goolo). Women also join with conical shaped baskets (thwoid). There are two types of harpoons: one with a slightly curved shaft (aroc) and the other with a straight shaft (ubeec). Ubeec harpoons are used in individual fishing. Both the head of a harpoon and the hook of a hand hook are detachable and tied to shafts with rope. As a verb, mai means to search or grope for something in the dark. As the name suggests, in mai, men try to catch invisible fish in the water.

The fishing methods described above are done collectively. There are other individual methods. They are fishing by line and hook, net, and basket. A hook (ubith) and line is sometimes used without a rod. It is more a form of play for boys than a means of gathering food. A rectangular-shaped net (ajap) is set between two poles erected in the river near its bank. One I saw in the Giilo river was about 7 m long and 1.5m wide (Photo. 3). Hooks, thread for lines, and nets are bought in town. There are two types of baskets used by women to catch fish. One is ulitu, a flat basket or elliptical colander whose longer diameter is about 80 cm. It is put in water and then pulled out with both hands. The other type (thwoid) is either a conical or hemi spherical basket with both sides open. It is simply put in water in the hope that it will cover some fish. If fish are caught, they are taken out from the
upper smaller mouth. These baskets are used in pools.

In the river in Anywaa land, fish are abundant and it seems that the number of fish species is high. There is no fish, as far as I know, that is not edible. A type of swellfish (*Tetradon fahaka*, *apudo* in Anywaa) may be an exception, as some do not eat it. Some dislike *Hetero branchus bidorsalis* (*Cuuro* in Anywaa) because it smells bad. In a preliminary report on the fish fauna of Gambela by Russian researchers, eighty-six species are identified (Golubtsov et al. 1989)). Some of the common types of fish are as follows (names in Anywaa are shown in brackets):

- *Polypterus bichir* (*udwela*), *Heterotis niloticus* (*ulwak*), *Mormyrops anguilloides* (*doolo*), *Clarias sp.* (*agwila*), *Protopterus sp.* (*luth*), *Lates niloticus* (*guur*), *Oreochromis niloticus* (*urwedho*), *Bagrus bajar* (*udwara*), *Bagrus docmak* (*jari*), *Gymnarchus niloticus* (*with*).

A place for *mai, keek* or *diemma* used to be appropriated by a "father or owner of the land" (*wa-ngommi*). This title was patrilineally inherited, as the ancestor of a "father of the land" was deemed to be the first settler of the area. He initiated and organized fishing, and made an invocation (*lam*) so that many fish might be caught. He received a special share of the catch. This title no longer exists, as it was abolished during the socialist regime.

Surplus fish is dried and preserved. A piece of dried fish is called *peeto* and has a high trading value. They are taken to *lul* where fish is scarce and either exchanged for grain or sold. Smoked fish is sometimes made. There are two types. One is *ugana* which is smoked on a wooden shelf (*pem*). Smoked meat made in the same way is also called *ugana*. The other is *atolla*, which is simply smoked near the fire.

**Hunting and gathering**

Hunting in general is called *dwaar* and the Anywaa hunt and eat most wild animals. They hunt by spear, trap, and rifle. The mammals commonly eaten are buffalo, giraffe, hartebeest, topi, kudu, bush buck, water buck, reedbuck, white-ear kob, gazelle, duiker, warthog, bush-pig, and cane rat. Elephants hunted for ivory were not usually eaten by the Anywaa of the wok, but were eaten by those of the *lul*. Monkeys, foxes, hyenas, lions and leopards are not eaten. Some reptiles, such as water lizards and tortoises, are also eaten.

Most of the animals are hunted in the *wok* and *bap* during the dry season when grass is burnt and animals migrate to riverine areas. A large number of men with spears from various villages encircle a hunting ground, close in on the center, and throw spears at any game found.

Each hunting ground used to be appropriated by a "father of the land" as was the case with a collective fishing place. He initiated the hunt and made an invocation so that nobody might be hurt and many animals might be caught. This office was abolished during the socialist regime and collective hunts are no longer held.

Since the introduction of rifles to the Anywaa at the end of the nineteenth
People of the River

Photo. 4. Gravity trap (*akumma*).

...century, they have been used for hunting (Kurimoto 1992). They were used to kill elephants for ivory as well. Hunting by rifle is carried out both by individuals and small groups.

The Anywaa have two types of traps: snares (*abiep*) and gravity traps (*akumma* or *akupa*) (Photo. 4). Snares are set near a village to catch wild cats (not considered edible) that eat chickens, and in the fields to catch birds that eat grain. Gravity traps are more commonly set in *lul* to catch genets and mongooses. A Majangir man whom I interviewed said they had were introduced snares to the Anywaa. They are called *dep* in Majangir. Anywaa who were present agreed with this (Kurimoto 1994).

During the last ten years, the importance of hunting as a means of supplying meat has greatly decreased. This is because most populations of larger mammals were destroyed with automatic weapons by soldiers of the Sudan People’s Liberation Army (SPLA) when they set up headquarters and training camps in Anywaaland. They killed animals for food. Some Anywaa acquired smuggled rifles from SPLA soldiers or as government militiamen and shot animals. The once rich fauna of Anywaaland is now devastated.

Gathering edible wild plants still plays a significant role in Anywaa subsistence. Edible wild plants may be classified into three categories: (1) herbs and leaves cooked in soup, (2) fruits eaten as snacks by children, and (3) tubers, fruits and seeds cooked as a substitute for staple food. (For detailed information on edible and useful plants, see the Appendix.) During famine, more wild plants are collected and eaten.
Table 2. List of crops cultivated by the Anywaa.

<table>
<thead>
<tr>
<th>English name</th>
<th>local name sing.</th>
<th>local name pl.</th>
<th>remarks (*rare)</th>
</tr>
</thead>
<tbody>
<tr>
<td>food crops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sorghum</td>
<td>beelo</td>
<td>bel</td>
<td></td>
</tr>
<tr>
<td>maize</td>
<td>abac</td>
<td>abbai</td>
<td></td>
</tr>
<tr>
<td>taro</td>
<td>upeele</td>
<td>upeele</td>
<td></td>
</tr>
<tr>
<td>yam</td>
<td>badho</td>
<td>bath</td>
<td></td>
</tr>
<tr>
<td>yam</td>
<td>modo</td>
<td>mod</td>
<td></td>
</tr>
<tr>
<td>yam</td>
<td>ook</td>
<td>ooki</td>
<td></td>
</tr>
<tr>
<td>sweet potato</td>
<td>ajwalla</td>
<td>ajwallle</td>
<td>not planted in bap</td>
</tr>
<tr>
<td>cowpea</td>
<td>ngonno</td>
<td>ngoori</td>
<td></td>
</tr>
<tr>
<td>green gram</td>
<td>ugonno</td>
<td>ugodi</td>
<td></td>
</tr>
<tr>
<td>bambara bean</td>
<td>kallo</td>
<td>kalli</td>
<td>only in lul area</td>
</tr>
<tr>
<td>groundnut</td>
<td>apuul</td>
<td>apuuli</td>
<td>only in lul area</td>
</tr>
<tr>
<td>pumpkin</td>
<td>ukonno</td>
<td>ukonne</td>
<td></td>
</tr>
<tr>
<td>sesame</td>
<td>nyimmo</td>
<td>nyimi</td>
<td></td>
</tr>
<tr>
<td>tomato</td>
<td>atimatim</td>
<td>atimatimi</td>
<td></td>
</tr>
<tr>
<td>pawpaw</td>
<td>ulili</td>
<td>ulile</td>
<td>*</td>
</tr>
<tr>
<td>banana</td>
<td>baala</td>
<td>baale</td>
<td>*</td>
</tr>
<tr>
<td>mango</td>
<td>mannga</td>
<td>manngae</td>
<td></td>
</tr>
<tr>
<td>sugar cane</td>
<td>thu keer</td>
<td>thu keere</td>
<td>*</td>
</tr>
<tr>
<td>lime</td>
<td>lemun</td>
<td>lemune</td>
<td></td>
</tr>
<tr>
<td>cassava</td>
<td>ababura</td>
<td>ababure</td>
<td>*</td>
</tr>
<tr>
<td>other crops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tobacco</td>
<td>thaba</td>
<td>thabe</td>
<td></td>
</tr>
<tr>
<td>gourd</td>
<td>keeno</td>
<td>keene</td>
<td></td>
</tr>
<tr>
<td>cotton</td>
<td>waaro</td>
<td>waare</td>
<td></td>
</tr>
</tbody>
</table>

AGRICULTURE

Crops

Crops cultivated by the Anywaa are shown in Table 2. Maize (abbai) and sorghum (bel), their staple food, and pumpkin (ukonno), sesame (nyimmo), tobacco (thaba) and gourd (keeno) are cultivated throughout Anywaaland. Some of the crops are found only in a part of Anywaaland. As mentioned before, groundnut (apuul or athitom) and bambara groundnut (kallo) are cultivated only in lul. Yam is common in lul, while in wok it is cultivated only in the eastern part and is not found in bap. Taro (upeela) is planted on the riverbank in wok but is not found in lul. In bap it grows wild. Sweet potato (ajwalla) is not commonly cultivated in bap.

Some crops have local varieties. There are many varieties of sorghum. I
collected thirteen names, but there are doubtless more. They are named differently according to color and shape of ear, taste, height and time necessary for maturing after sowing. For instance, *gaanga* with a whitish and compact ear is the most common variety. *Abworri* with a red and compact ear is a quick-maturing variety, and when the rain starts, it is planted first in a small garden around the homestead (*atok-oto*, meaning "behind the house"), not in a cultivated field. The Anywaa say it is very tasty. *Aburi* is also a quick-maturing variety. *Agadha* has open ears. There are two varieties of groundnut: *apuuli-gaala* (groundnut of the Gaala) and *apuuli-anywaa* (groundnut of the Anywaa). As the names indicate, the former is considered to have been brought from the Gaala (the Anywaa name for the Oromo or Galla in particular, and for highlanders in general), while the latter is considered an original Anywaa crop. The difference is that while *apuuli-anywaa* is creeping, the other grows erect. Pumpkin also has *gaala* and *anywaa* varieties. The *anywaa* one has smaller fruit and larger leaves.

There are three varieties of maize: *aba-gaala* (maize of the Gaala) or *amara* (Amhara), *aba-anywaa* (maize of the Anywaa) or *utuila*, and *amerika* (America). *Utuila* is the oldest variety as the other name, *aba-anywaa*, indicates. It is quick-maturing, taking about three months, and has a short ear with yellowish and round grains. It is preferred to other varieties because of its sweet taste. *Abagaala* or *amara* is said to have been brought from the Oromo or Amhara, the Ethiopian highlanders. It has a long ear with whitish and flat grains. *Amerika* is the most recently introduced variety due to the American Mission in the 1950s. It has a short ear with whitish grains.

Even *utuila* may be a foreign crop, but it is not easy to discern its origins. So far I have not been able to find any linguistic affinity for *abbai*, the general Anywaa word for maize, in any other language except Pari in which the same term is used. There are two possible routes of introduction: from the Ethiopian highlands and from northern Sudan. Some informants told me that the *utuila* variety was brought from the Majangir. If this is true, maize reached the Anywaa from the highlands through the Majangir. But *makale*, the Majangir name for maize (*Stauder* 1971: 26), does not correspond to *abbai* or *utuila*. An old man of eighty said that the first maize, which was an *utuila* variety, was brought along the Baro River by the Nuer during his father's time. But again, neither *abbai* nor *utuila* correspond to the Nuer name for maize nor to the Shilluk name (*abwok*) (*Heasty* 1937: 74). This question needs further investigation.

Now maize has overtaken sorghum as the staple food. This is a recent change that took place in the last twenty years. This is not because the taste is preferred. Moreover, maize needs much more labor to grind into flour than sorghum. When asked why they prefer maize to sorghum, the answer was that maize required much less labor in scaring away birds. This is especially true today when many of the children whose work it was to scare away birds are enrolled in school and not available. Another reason is the commercial value of maize in the market of Gambela town. Maize used to have more value than sorghum and people brought
surplus maize to the town for sale, although the situation has changed today.

Some crops were recently introduced, during the last one hundred years. They were from the British or the Ethiopian Ministry of Agriculture, or through cultural contacts with the Oromo. These crops include sweet potato, tomato, cassava, sugar cane, papaya, banana, mango, and lime. Except for sweet potato, banana and mango, they are not widely cultivated or planted. Although cassava is planted in villages to demarcate homesteads, it is rarely eaten.

Tools

Anywaa agricultural tools are rather simple. The hoe (kweri or cala) and machete (gajira, the type called panga in East Africa) are most important and used for many purposes besides agriculture. A hoe has a broad iron blade and a wooden shaft about 1.5 m long. It is used for clearing the field before sowing, sowing, weeding, harvesting root crops and groundnut, and cutting down the stalks of maize and sorghum after harvest. The hoe used for weeding has a shorter shaft about half the length of the usual one (Photo. 5). It should be noted that the angle between a hoe's blade and its shaft is 180°. The holder uses it in a standing or kneeling position. So the cultivation hoe is not used for digging but just for scratching the surface of the field. The soil is neither deeply dug nor turned over. Gajira is used to clear grass, cut smaller trees and stalks of maize and sorghum.

Other tools are as follows. An ax (lei) is used to cut trees. A digging stick (apiidhi) is used for sowing sorghum (for maize, a hoe is used) and harvesting root crops. A wooden stick whose end is slightly bent (digaano) is used to collect grass.
cut by machete. A knife (*cakin* or *billa*) is used to cut ears of sorghum for harvest. A kind of stick knife (*kulu*) is used to open and remove the husks of an ear of maize. After harvest, sorghum is beaten and threshed with *abaiya*, a flat and heavy stick.

Maize and sorghum are pounded into flour with pestle (*lek*) and mortar (*pany*). For winnowing, a boat-shaped basket (*luur-anywaa*) is used at first, then an iron sieve with a rectangular wooden frame (*luur-gaala*).

Many Anywaa names for iron tools are of foreign origin. *Calal* (hoe) and *gajira* (machete) are Oromo. The other name for a hoe, *kweri*, is a common and old Lwo word, but now not used so frequently. Two names for knife, *cakin* and *billa*, are, respectively Arabic and Amharic. This may suggest that although there were Anywaa blacksmiths, many iron tools were brought from outside. In fact, informants agree that iron used to be precious and scarce, and a European traveler observed in 1900 that spears with heads of giraffe leg-bone were still in use (Austin 1901: 502-503; Kurimoto 1992). Today people buy most iron tools in town.

**Shifting cultivation**

Shifting or slash-and-burn cultivation is practiced in *lul* and the hinterlands of *wok* and *bap*. While a cultivated field is called *pwodho* (pl. *pwoth*) In general, a field under shifting cultivation is called *angota*. This term derives from the verb *ngot*, “to cut,” because trees and shrubs are cut when a new field is made.

In *lul*, agricultural work starts in February when weeds in the field are cleared and burnt. When the rain starts, sorghum and maize are sown in May, first in gardens in villages. This garden is called *atok-oto*, “behind the house.” Both crops are of quick-maturing types. They are harvested after three months. Tobacco and sesame are also cultivated in the garden. After sowing in the garden, the field is cultivated by hoe. This cultivation is called *tong*. Then mixed seeds of maize and pumpkin are sown. Sorghum is sown by itself. Each other crop such as groundnut, bambara groundnut and sweet potato, is planted in its own small plot in a field. Weeding (*aluudi*) is done twice. Sometimes weeding is accompanied by thinning. This is called *doi*. Crops are harvested once a year in August and September.

A field in *lul* may be continuously cultivated for more than ten years without any manuring or crop rotation. When it is abandoned, the Anywaa say it is not because the soil is exhausted but because of weeds and termites.

An abandoned field site becomes covered with tall grasses and thorny trees which are absent in the forests of the *lul*. This kind of land is called *kang*. Eventually it becomes *wok*.

Shifting cultivation in *wok* and *bap* is basically the same as in *lul*. There may be a second harvest of sorghum and maize, *upaani*, in January, when rain is abundant. In the case of sorghum, there is no sowing for *upaani*. It grows naturally from shoots after the first harvest. The second harvest is much less than the first one. Seeds of different crops are not mixed when sown. A field is
abandoned after four to five years of continuous cultivation, as the soils of doodo and ruup are not as fertile as that of lul (lwala). Shifting cultivation in wok and bap is not so stable as that in lul, because it is more subject to the pattern of rainfall. Maize and sorghum in doodo may be spoilt by excessive rain, while in ruup they require much more rain.

**Riverbank cultivation**

In wok, agricultural production is mainly obtained by riverbank cultivation, not by shifting cultivation. In the flat plains of wok, the winding rivers become inundated in July-September, turning the riverine area into swamp (bap). The riverbank is where Anywaa villages and cultivated fields are located (Photo. 6). Seasonal changes in the water level are very drastic. The western Ethiopian highlands where the rivers originate receive some of the heaviest rainfall in Ethiopia (Ethiopian Mapping Authority 1988: 12). For instance, at the town of Gore, the annual rainfall is more than 2,000 mm, 60% of which falls between June and September (Ellman 1972: 14). In April, when the rainy season starts, the water level gradually begins to rise and reaches its highest in August or September.

Anywaa riverbank cultivation is an adaptation to this ecological condition. Soil of is renewed every year by organic matter in river water deposited when the fields are covered with water for some weeks every year. Thus, in theory, there is no problem of exhausting soil fertility. The field may be continuously cultivated forever unless the river changes its course. Moreover, Anywaa maize and sorghum seem to be resistant to floods because they are not spoilt when the field is covered with water for a few weeks. These crops are presumably adapted to the wet
Figure 2. Schematic model of the riverine land in wok area along the Gilo river.

Note. Maize is preferred for rainy season cultivation, while both maize and sorghum are cultivated in dry season.

ecological condition.

There is another advantage. A field on the riverbank can be cultivated during the dry season when rain is scarce, because the soil contains enough water. Farmers can regularly harvest twice a year. Agricultural production on the riverbank is stable and fruitful, not affected by drought or soil exhaustion.

Not all the land along the riverbank is suitable for cultivation. Actual land utilization is based on folk knowledge of the environment. The riverbank (bat-nam) of a winding river is divided into two categories: ataa or utanni and cwiny-gol or appan. Ataa is the outer curve of the winding river which is not suited for cultivation, while cwiny-gol is the inner curve, a desirable cultivation site (Figure 2).

How these two parts are affected by flooding is the key factor. During flooding, the water flows faster and in a larger quantity over ataa. This causes soil erosion and sedimentation by relatively heavy sands. In cwiny-gol, the water flows gently leaving deposits of organic matter. The Anywaa recognize two different weeds as indicators of the two parts. Agada (Panicum sp.), a tall reed-like grass which forms a thick bush, is the indicator of ataa. Amatageela (Commelina sp.) which covers the ground is the indicator of cwiny-gol.
Cwiny-gol is a combined word: cwiny (liver) and gol (another word for riverbank). Cwiny means liver, but cwi alone means fertile. For the Anywaa, the liver as well as the stomach is an organ of special significance. It is the location of sentiments. Anger, happiness and other feelings are generated in the liver. I may translate cwiny-gol as "the heart of the riverbank." This terminology, I suppose, suggests its importance in Anywaa thought and subsistence.

The first sowing in cwirry-gol is in April. Only maize and sorghum are sown because other crops are not resistant to the flood. Weeding is done once. In August and September, the field is covered with water for a few weeks. Harvesting in September is often done while the field is still flooded. The second sowing is done in October and November. This time, crops other than maize and sorghum are also sown. Seeds are soaked in water for a day or more to help germination. Moreover, in the case of sorghum, some water is poured on the sown seeds. Weeding is conducted once and crops are harvested in January and February.

The slope down to the river is usually planted with tobacco. Taro is often planted at the edge of a field to mark the border. It is harvested in December and January.

Diet

An Anywaa meal consists of a thick porridge (k'won) made with sorghum or maize flour, and a soup (kado). Basically the Anywaa eat twice a day, at noon and in the evening. In the morning, left overs of the previous evening, if available, may be eaten. A large shell (apat) is used as a spoon. A lump of porridge is then soaked in the soup. The Anywaa do not eat with their hands.

Common ingredients of the soup are vegetables, both wild and cultivated. Pumpkin leaves are very frequently eaten. Cowpea leaves (boo) and a variety of wild herbs are cooked as ingredients of the soup. As food, pumpkin and cowpea leaves are much more important than their fruits and beans. These vegetables are generally called amaru. Cowpea and greengram beans are also used as ingredients. Fish and meat of wild or domestic animals, when available, is cooked in the soup.

Salt (acebo), and occasionally ground sesame and groundnut, are the only seasonings of the soup. Salt is bought in town. When it was scarce, lye (ulweta) and its dried powder (dweta) were used as seasoning. They are still in use and the taste is adored.

Sweet potato, yam and taro are boiled and eaten as a snack or as a substitute for a meal. A mixture of maize or sorghum grains and cowpeas is also boiled and eaten. Roasted ears of sorghum and maize are common snacks during their harvest season. These are eaten without a soup, and although sometimes a substitute, they are not considered a proper meal. This is suggested by the use of two different verbs, to eat a meal (porridge and soup) (cemato) and to eat a snack (nyamo).

Kewa is a special food for preservation. Flour mixed with water is roasted. After that it is dried in the sun and pounded. Then it is mixed with sesame. Roasted and ground seeds of desert dates (Balanites aegiptica) are sometimes mixed
in instead of sesame. This food is carried on journeys.

**RECENT CHANGES**

**Background of changes**

The Ethiopian Anywaa society and culture have undergone enormous changes in the last twenty years, particularly since the socialist revolution in 1974. The Anywaa were incorporated into the state administration to an extent which had never happened before. Primary schools were constructed even in remote areas and many children were enrolled. Men, women, and youths were organized into peasant, women and youth associations. New socialist policies were taught at school and in these organizations. Peasant associations were also used as a tool to collect taxes. Many traditional institutions and customs were abolished, because they were allegedly reactionary and anti-revolutionary. They included a political system under nobles (*nyieya*) and village headmen (*kwaaro*), appropriation of nature by “fathers of the land and river,” payment of bridewealth in the form of special beads (*dimui*), body cicatrization, and the extraction of four lower teeth as a sign of Anywaa identity. Thousands of young men were recruited into the National Army and sent to the front line.

Another form of state encroachment is the various government projects launched in Anywaaland. The new government tried to exploit the land and water resources. A state cotton farm and a mechanization project were established in the Abwobo area on the Aluoro river. An irrigation project involving the construction of a dam on the Aluoro River was started by the Ethiopian Water Resources Development Authority. Moreover, about 60,000 settlers, many of them Tigre and Kambata, were brought from the highlands and settled in wok along the Baro and Gillo Rivers and in *lul* near Abwobo (Photo. 7).

These projects were all located in Anywaaland and commenced without consultation with the local people. Many Anywaa were forced to abandon their land and to live with settlers in mixed villages.

Another factor that very much influenced Anywaa life was the huge influx of Sudanese refugees after 1983, as a result of the intensifying civil war. In 1988, there were 300,000 refugees at Itang and Pinyudo camps in Anywaaland. Those who came were not only refugees but soldiers and members of the Sudan People’s Liberation Movement-Sudan People’s Liberation Army (SPLM/SPLA). The SPLM/SPLA set up a headquarters, a training center, and camps in Anywaaland. Relations between the SPLM/SPLA and Anywaa were not peaceful and there were many unfortunate incidents. But the Ethiopian government made little effort to intervene and protect the Anywaa against atrocities committed by the well-armed and ill-disciplined SPLM/SPLA.

Under these circumstances, it is no surprise that many Anywaa resented the Ethiopian regime and that some young Anywaa dissidents formed a “Gambela
People's Liberation Movement" and started an armed struggle against the Ethiopian government and the SPLM/SPLA.

Encroachment of the market economy
Recent history has also witnessed drastic changes in the economy. In short the importance of the subsistence economy has been decreasing, while there is ever more encroachment by the market economy.

Some aid goods for refugees were channeled in great quantity to the local market. Aid goods to the settlers were also sold. These were such items as maize, sugar, tinned meat and fish, biscuits, cooking oil, soap, clothes and blankets. At Gambela town they were sold at much cheaper prices than materials of the same kind transported from Addis Ababa.

In the meantime the road network between Gambela and Addis Ababa and within the Gambela Region was improved to meet the logistic needs of refugee camps and government projects. Gambela town and Itang and Pinyudo refugee camps flourished as busy trading places. Many aid goods were smuggled to Addis Ababa and sold in shops. Daily bus services connecting Gambela and the Itang and Pinyudo camps were always full of passengers who were engaged in small-scale trade.

For the economic life of Anywaa, the low price of maize had a great effect. Between December 1988 and January 1989, I stayed for six weeks in the vicinity of
Pinyudo refugee camp. There, a 90kg sack of maize was available for only five birr or even less. At that time, many Anywaa were not farming as they had been, but depended on maize bought from the refugees. The abundant low-priced maize discouraged agricultural production. Another factor was the cattle brought by refugees. These trampled the cultivated fields of the Anywaa and no effective measures to prevent this were taken. During my stay, I noticed that the Anywaa were buying from the refugees not only maize but also other food items such as tinned corned beef and fish. Porridge made of maize bought from refugees and corned beef soup became a common meal. They were also buying biscuits, soap and clothes. Therefore the need for cash was greater than ever.

This may be an extreme case only observed near a refugee camp. The further one went from such a camp, the higher the prices of goods became. For instance, at Gambela town a sack of maize was sold at around twenty birr. But a similar situation was found, of course to a lesser degree, in all parts of Anywaa and where I visited between August 1989 and January 1991. How and from where could they obtain cash?

The trading business in Gambela is dominated by merchants from the highlands and settlers. The Anywaa have little opportunity to squeeze in except by small-scale trading of tobacco, soap, and salt among themselves. On the other hand, they have few products for sale in the market. Job opportunities for wage labor are scarce. Besides two options below, the Anywaa were almost always consumers.

These options have been brewing by women and the collection of gold dust by men. Brewing maize or sorghum beer (koongo), mead (ugolli), and distilled alcohol (arak) are an important means of acquiring income for women. The Anywaa say that they drink much more than they used to. Until recently, women and the young did not drink. But now they drink like adult men. The drinking of locally distilled alcohol, which often leads to alcoholism, is a recent introduction. Setting aside the unhealthy aspect of heavy drinking, the development of a brewery business may be seen as a reaction by women to cope with the encroaching market economy.

However, drinkers of Anywaa-made drinks are always Anywaa, except for Sudanese refugees. Therefore, this business does not contribute very much to increasing the amount of cash accumulated by the Anywaa, as a whole.

Today, gold panning has become the most important Anywaa economic activity. More than three thousand men are permanently engaged in this business. There are several panning places in lul. The largest is Dambala, located at the upper Akobo, near Gurafarda in the former Kafa Region. It takes a week on foot to reach there from Gambela town. I visited panning camps in Lunga in the upper Aluoro where the work began in 1987. There were nine camps and I estimated the population of one camp at one hundred. The Anywaa say there are many more people at Dambala than at Lunga.

In Lunga, panning places are distributed along the riverbed of a stream. A
Photo. 8. Gold panning at Lunga.

A hole about 3 m deep is dug and soil containing gold is brought out. This is put in a large wooden tray (gubatu), which is washed with water while shaking the tray slowly and carefully until a little gold dust is left (Photo. 8). A hole is dug and owned by a couple of men, but the work of extracting gold dust is done individually. The work is rather simple, but it needs patience and skill in finding good soil.

At digging camps Anywaa from many places including Sudan work. Some stay for a few weeks and others stay longer, sometimes for years. The workers say that if one is lucky, he may get 3 g of gold dust a day. When a certain amount has accumulated, it is sold to Anywaa brokers or to traders from the highlands in town. In 1990 the price per gram was thirty-five birr at Lunga, forty birr at Abwobo, and fifty birr at Gambela town. When it was brought to Addis Ababa, it was sold at seventy birr.

Therefore, gold digging may bring very high rewards. If a man worked for a month, gained 30 g of gold, and sold it at Gambela, he obtained 1,500 birr. This was equal to the monthly payment of the top government official of the Gambela Region, and more than that of a lecturer at Addis Ababa University.

An important political aspect of gold panning is that a panning camp is a shelter for Anywaa men from the oppressive Ethiopian state. Those who stay there are free from taxation and recruitment into the National Army. Many of them are armed with rifles, and no people except the Anywaa dare to visit. It retains a sort of extra-territoriality.

Panning camps are also trading places. There is a great need to supply daily
People of the River

Photo. 9. In 1993 there was only one Anywaa who had invested money earned by gold business and become the owner of a shop. This photograph was taken in front of his shop at Abwobo. Note the sewing machine which is also his means of business.

commodities for the residents. Large amounts of grain, flour, tinned food, salt, tobacco, distilled alcohol, manufactured liquor, soap and clothes are brought and sold. This business is also monopolized by the Anywaa.

The flourishing gold business has created many wealthy young men who have thousands and sometimes even tens of thousands of birr in their pocket. It is interesting to note that so far there are very few men who have tried to invest the money in other business so that it may create more capital (Photo 9). Most of the money is spent on fashionable clothes, shoes, watches, and radio-cassette players, and for drinking with friends. It is used for “ostentatious consumption.” In fact, Anywaa young men who are successful in the gold business are very well-dressed and look smart. This kind of consumption creates more need and desire for cash.

CONCLUSION

Until recently, the Anywaa living on the riverbank had a stable subsistence economy which was a combination of shifting cultivation, riverbank cultivation, fishing, hunting, gathering, and, in the western area, pastoralism. This mode of life was well-adapted to the natural environment.

Today, however, after all the changes brought about by the encroachment of the state and the market economy, as well as the influx of settlers, Sudanese refugees, and the SPLM/SPLA, the Anywaa motivation for pursuing subsistence activities seems to have declined. Whenever I visited a village, I felt the air of
stagnancy and devastation. Young men were hard to find because many were either in the National Army or at gold digging camps. The village social life, once centered around traditional leaders, had gone. I heard of many cases of broken marriages and saw the spread of alcoholism.

I will not discuss the socio-cultural aspects of the changes, but in the economic field, my argument is that the encroachment of the market economy has brought about the decline of the subsistence economy and the development of the brewery and gold panning businesses. This change, in turn, has created more demand for cash, in order to drink more and buy more commodities. Many of the settlers may leave Gambela when they are granted freedom to choose their own residence.

It is not yet known, however, whether these new changes will bring a “revival” not only of the subsistence economy but also abolished customs and political leadership. These issues await future research and study.

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NOTES

1) The first field research was conducted between December 1988 and February 1989. It was part of a research project, “Comparative Studies on the Subsistence Economy Systems in North-East Africa: Folk Models and Their Applicability,” headed by Dr Katsuyoshi Fukui of the National Museum of Ethnology, Osaka, which was sponsored by a Grant-in-Aid for Scientific Research (No. 63041135) of the Japanese Ministry of Education, Science, Sports and Culture. The second study was carried out under a research grant of the Institute for the Study of the Languages and Cultures of Asia and Africa (ILCAA), Tokyo University of Foreign Studies, between August 1989 and February 1991. Subsequent visits to Gambela were also made in February 1993 and August-September 1995.

2) According to Evans-Pritchard, Anywaaland is divided into three distinct zones: bap, rup and lul (Evans-Pritchard 1947: 70–71). He used rup, instead of wok. I have found that wok is used as a general term referring to the area between bap and lul, while rup is a more specific term representing only a part of the wok.

3) Bap may be called pwola. This is a general term meaning an open place without trees. Waaga means the same as pwola, but they say that it is an old term hardly used today. Among the Pari, waaga is still used to mean an open place without trees (Kurimoto 1984).

4) I am grateful to Mr Yoshiaki Koga, a student of Russian at Tokyo University of Foreign Studies, who kindly translated the original Russian paper into Japanese.

5) In a recent paper, Mengistu Woube has also dealt with the ethnobotany of Anywa (1995).

6) Based on linguistic evidence, Pasch argued that the diffusion of maize into inland East
Africa occurred along the Oromo-Anywaa-Acholi route. In Anywaa, maize is called *igalla* as it came from the Galla (Oromo). The Acholi, Alur and Luo call it *anywagi*, named after Anywaa. In several languages of Uganda and Rwanda including Nyoro, Toro and Ganda, it is called by various names, such as *ebicoli*, *kasoli* and *goori*, all deriving from the name of the ethnic group, Acholi (Pasch 1983). Although I did not come across the term *igalla* in Anywaa, I assume that the Oromo-Anywaa-Acholi connection served as a starting point for maize diffusion into inland East Africa. I suppose that maize may have been introduced to the Acholi from the Anywaa by way of the Pari, all of them belonging to the same Lwo language group. In Pari, maize is called *abbai* as in Anywaa. See also Kurimoto (1995).

7) For full accounts of recent changes in Anywaa society and economy since the commencement of the socialist revolution, see Kurimoto (1996).

8) At that time one US dollar was equal to two birr at the official exchange rate, and to five birr on the black market. In Gambela town, one sack of *tef* cost more than one hundred birr and one kilogram of coffee was about five birr.

REFERENCES

Austin, H. H.

Burton, John W.

Dyson-Hudson, Neville

Ellman, Antony O.

Ethiopian Mapping Authority

Evans-Pritchard, Edward E.

Golubtsov A. G.

Gulliver, P. H.

Heasty, J. A.
E. Kurimoto

1984 Agriculture in the Multiple Subsistence Economy of the Pari. In Keiichi Sakamoto (ed.), *Agriculture and Land Utilization in the Eastern Zaire and the Southern Sudan*, pp. 23-51, Department of Agricultural and Forestry Economics, Faculty of Agriculture, Kyoto University.

1986 Traditional Fishery among the Nilotic Pari of the Southern Sudan. In Keiichi Sakamoto (ed.), *Comparative Study of the Agricultural Production in the Upper Nile Area and Great Lake Area*, pp. 65-88, Department of Agricultural and Forestry Economics, Faculty of Agriculture, Kyoto University.

1992a Ikai to no kyōkai to shite kawa wa nagareru (The River Flows as the Boundary with the Other World). *Kikan minzokugaku* (Ethnology Quarterly) 60: 20-29. (in Japanese)


Mengistu Woube


Pasch, von Helma


Stauder, Jack

APPENDIX: List of Collected Specimen of Useful Wild Plants

Eighty two plant specimen were collected between December 1988 and January 1989 at Pinyudo, Thatha and Gok. They were identified at the National Herbarium, Addis Ababa University and are kept there. I am grateful to Dr Sebsebe Demissew and Dr Getachew who did the identification.

Out of eighty two specimen, thirty were identified to the species level, fifteen to the genus level and four to the family level.

Four domestic plants are not included in the above list. They are alaaba (Pithecellobium dulce (Roxb) Benth.), uliru, badho (Dioscrea abyssinica Kunth.), and modo (Dioscrea abyssinica Kunth.). Alaaba is a tree of the LEGUMINOSAE family whose pods are edible. It was brought from outside to Anywaaland and planted in villages. Uliro, though it was not identified, should be castor-oil tree (Ricinus communis Linn.). They are planted near homesteads. The oil extracted from seeds is used by women for smearing body and hair. Its root is used as medicine. The outer skin of root is soaked in water and then boiled until all the water evaporates. The remained salt-like powder is dosed for chest sicknesses including asthma and tuberculosis. Both badho and modo are yams. Though they belong to the same species, different local names are given. Modo also grows wild.

<table>
<thead>
<tr>
<th>vernacular name</th>
<th>scientific name (family name)</th>
<th>habitat</th>
<th>remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>aciwoi</td>
<td>Cassia obtusifolia L. (LEGUMINOSAE)</td>
<td>weed in wok and lul</td>
<td>leaves are bitter, medicine for hepatitis (ajaana)</td>
</tr>
<tr>
<td>adik</td>
<td>Cadaba farinosa Forssk. (CAPPARIDACEAE)</td>
<td>weed in wok and lul</td>
<td>whole herb is edible, both wild and cultivated</td>
</tr>
<tr>
<td>adilegi</td>
<td>Commetina sp. (TILIACEAE)</td>
<td>weed in wok</td>
<td>leaves edible</td>
</tr>
<tr>
<td>ajada</td>
<td>Corchorus olitorius L. (TILIACEAE)</td>
<td>weed in wok</td>
<td>fresh leaves are edible, trunk for canoe</td>
</tr>
<tr>
<td>akea</td>
<td></td>
<td>weed in wok</td>
<td>eaten during the hunger</td>
</tr>
<tr>
<td>amanya-dhur</td>
<td></td>
<td>weed in lul</td>
<td>cooked leaves very sticky, stem used as rope</td>
</tr>
<tr>
<td>aneedo</td>
<td></td>
<td>wok</td>
<td>stem used as rope</td>
</tr>
<tr>
<td>vernacular name</td>
<td>scientific name</td>
<td>habitat</td>
<td>remarks</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>acak</td>
<td>Diospyros abyssinica (Hiern), F. White. (EBENACEAE)</td>
<td>lul</td>
<td>trunk for mortar</td>
</tr>
<tr>
<td>aceri</td>
<td>? Ocotea sp. (LAURACEAE)</td>
<td>lul</td>
<td>hut building material</td>
</tr>
<tr>
<td>adik</td>
<td>Abutilon sp. (MALVACEAE)</td>
<td>weed in lul</td>
<td>stem for rope</td>
</tr>
<tr>
<td>adimoti</td>
<td>Malacantha alnijblia (Baker) Pierre (SAPOTACEAE)</td>
<td>wok and lul</td>
<td>tooth brush, bark for honey wine yeast</td>
</tr>
<tr>
<td>adipaga</td>
<td>Ocotea sp. (LAURACEAE)</td>
<td>wok</td>
<td>creeping tree, roasted seeds are eaten, trunk used as rope</td>
</tr>
<tr>
<td>ameeno</td>
<td>Malacantha alnijblia (Baker) Pierre (SAPOTACEAE)</td>
<td>wok and lul</td>
<td>creeping plant, stem for weaving basket and hut</td>
</tr>
<tr>
<td>coobaci</td>
<td>Malacantha alnijblia (Baker) Pierre (SAPOTACEAE)</td>
<td>lul</td>
<td>shelf and platform building material</td>
</tr>
<tr>
<td>jwelu</td>
<td>Malacantha alnijblia (Baker) Pierre (SAPOTACEAE)</td>
<td>wok</td>
<td></td>
</tr>
<tr>
<td>lango</td>
<td>Malacantha alnijblia (Baker) Pierre (SAPOTACEAE)</td>
<td>wok</td>
<td></td>
</tr>
<tr>
<td>lango</td>
<td>Zizyphus abyssinica Hochst ex.</td>
<td>wok</td>
<td></td>
</tr>
<tr>
<td>leero</td>
<td>Celtis roka (Forssk) (ULMACEAE)</td>
<td>wok and lul</td>
<td></td>
</tr>
<tr>
<td>monyo</td>
<td>Zizyphus abyssinica Hochst ex.</td>
<td>wok</td>
<td></td>
</tr>
<tr>
<td>pok</td>
<td>Combretum sp. (COMBRETACEAE)</td>
<td>wok and lul</td>
<td>mortar</td>
</tr>
<tr>
<td>puth</td>
<td>Combretum sp. (COMBRETACEAE)</td>
<td>wok and lul</td>
<td>mortar</td>
</tr>
<tr>
<td>thangu</td>
<td>Aningeria altissima (SAPOTACEAE)</td>
<td>lul</td>
<td>bark cloth</td>
</tr>
<tr>
<td>thow</td>
<td>Balanites sp.</td>
<td>wok</td>
<td>Both flesh and seeds are edible, trunk is for mortar and pestle, burnt ash for seasoning lye, bark used as washing soap</td>
</tr>
<tr>
<td>tibo</td>
<td>Stereospermum kunthianum Cham. (BIGNONIACEAE)</td>
<td>wok</td>
<td></td>
</tr>
<tr>
<td>tworo</td>
<td>Sanservia sp.</td>
<td>wok</td>
<td>fiber used for beer filter and weaving basket</td>
</tr>
<tr>
<td>udhatu</td>
<td>Ficus exasperata Vahl. (MORACEAE)</td>
<td>fallow in lul</td>
<td>leaves as sandpaper, root for knife shaft</td>
</tr>
<tr>
<td>ulam</td>
<td>Ficus sycomorus L. (MORACEAE)</td>
<td>wok and bap</td>
<td>trunk for canoe, sap as adhesive</td>
</tr>
<tr>
<td>ulemo</td>
<td>Ximenia sp. (OLACACEAE)</td>
<td>wok</td>
<td>very sour</td>
</tr>
<tr>
<td>vernacular name</td>
<td>scientific name</td>
<td>habitat</td>
<td>remarks</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>urogu</td>
<td><em>Ficus vasta</em> Forsk. (MORACEAE)</td>
<td><em>lul</em></td>
<td>canoe, mortar and tray</td>
</tr>
<tr>
<td>wodo</td>
<td><em>Trichilva</em> sp.</td>
<td><em>wok</em></td>
<td>flesh is edible, cooking oil taken from seeds</td>
</tr>
<tr>
<td>abou</td>
<td><em>Echinochloa cruspavonis</em> (Kunth) Schult. (POACEAE)</td>
<td><em>bap</em></td>
<td>fishing bite</td>
</tr>
<tr>
<td>abunhhno</td>
<td><em>Cenchrus cilaris</em> (POACEAE)</td>
<td>weed in <em>lul</em></td>
<td>dominant weed</td>
</tr>
<tr>
<td>adibuc</td>
<td></td>
<td><em>lul</em></td>
<td>common as undergrowth of forest, leaves soaked in water to make its taste better, branch used as toy-spears indicator of <em>cwiny-gul</em></td>
</tr>
<tr>
<td>amatageela</td>
<td><em>Commelina</em> sp. (COMMELINACEAE)</td>
<td>riverbank</td>
<td>indicator of <em>cwiny-gul</em></td>
</tr>
<tr>
<td>aroma</td>
<td><em>Celtis</em> sp. (LAMIACEAE)</td>
<td>wok and <em>lul</em></td>
<td>bark for honey wine yeast, trunk for hut building</td>
</tr>
<tr>
<td>atebi</td>
<td><em>Launnea</em> sp. (ASTERACEAE)</td>
<td>weed in <em>lul</em></td>
<td>burnt ash for seasoning lye</td>
</tr>
<tr>
<td>atwelawiyewe</td>
<td><em>Leucas</em> sp. (LAMIACEAE)</td>
<td>weed in <em>lul</em> and <em>wok</em></td>
<td>burnt ash for seasoning lye</td>
</tr>
<tr>
<td>cicamai</td>
<td></td>
<td><em>lul</em></td>
<td>creeping plant, stem and root for washing soap, fishing bite</td>
</tr>
<tr>
<td>dhegu</td>
<td></td>
<td><em>lul</em></td>
<td>no use, but the tallest tree in <em>lul</em></td>
</tr>
<tr>
<td>gari</td>
<td></td>
<td>weed in <em>lul</em></td>
<td>burnt ash for seasoning lye</td>
</tr>
<tr>
<td>goi</td>
<td>(EUPHORBIACEAE)</td>
<td>wok and <em>lul</em></td>
<td>bark for honey wine yeast</td>
</tr>
<tr>
<td>utwelo</td>
<td></td>
<td>riverbank</td>
<td>burnt ash for seasoning lye</td>
</tr>
</tbody>
</table>