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Historical Interaction with Neighbors from the View of Livelihood Change: A Study of the Sandawe of Tanzania

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ABSTRACT

Historically, many hunter-gatherer societies were assimilated into the society of the majority, or themselves accepted agriculture or livestock-keeping. However, many researchers lost interest when they decreased to depend on hunting and gathering; consequently few studies have been conducted on a society's relationships with its neighbors after its livelihood changed. Based on an analysis of historical livelihood change among the Sandawe of Tanzania, this article examines how the relationships between hunter-gatherers and their neighbors change when a hunting-gathering society takes up another livelihood. Most Sandawe appear to have adopted agriculture and livestock keeping toward the end of the 19th century. Nowadays, most of them have crop fields and depend on their cultivated crops for the bulk of their diet. As a consequence, Sandawe economic relationships with neighbours have declined whereas intra-group relationships have been reinforced. Although engaging in various livelihoods based on agriculture and being economically independent of others, this does not mean that Sandawe identity also became similar to others. It is concluded that the primary methods of Sandawe livelihood have transitioned slowly rather than forcibly. As a result, the Sandawe have not abandoned hunting-gathering completely and have maintained their ethnic identity without being unilaterally dependent on their neighbors.

INTRODUCTION

The relationships between hunter-gatherers and their neighbors have been a longstanding theme in anthropology. Using case studies, many researchers have examined several types of cultural, economic and social relationship between two societies with different technological bases (Woodburn 1988; Ogawa 2000; Ikeya 2005; Matsuura 2012; Takeuchi 2014). Historically, many hunter-gatherer societies have adopted cultivation and livestock-keeping as a result of contact with immigrant agriculturalists and pastoralists or development projects, for example watermelon farming and goat raising among the San in the Central Kalahari (Ikeya

1993, 1996) and cultivation by the Baka in the rainforest in Cameroon (Kitanishi 2003). In those researches, Ikeya (1993, 1996) insisted that the most important point among the San is that such a simple system of watermelon distribution from "those who have" to "those who do not" can maintain a stable crop production per household each year. By the system, while there may be a noticeable difference in material wealth among the San in field size and the number of goats, the "equal distribution" principle prevents these differences in material wealth from creating a class society. And Kitanishi (2003) mentioned the Baka cultivation is unplanned and haphazard nature, because while a part of their life changed by the adoption of cultivation, they maintain their forest life based on "immediate-return system." Both Ikeya and Kitanishi pointed that, for the San and also the Baka, cultivation is just only one choice in their subsistence activities including hunting and gathering.

However, there are any other hunter-gatherer societies which were assimilated into the majority society or adopted agriculture independently. Then some researchers lose interest in them when hunter-gatherer societies change to agriculture-based societies. Consequently, there has been little research on the relationships of hunter-gatherers with their neighbors after livelihood strategies change. Do they continue to exchange products when a group's livelihood becomes similar to that its neighbors?

This study focuses on the Sandawe of Tanzania. It is widely accepted that the Sandawe belong to the Khoisan language group, which uses click sounds. Most Sandawe adopted agriculture and began to raise livestock toward the end of the 19th century, although still they depend heavily on bush products such as honey and wild plants (Newman 1970). Today, most Sandawe have individual crop fields and depend on their cultivated crops for the bulk of their diet. For them, agriculture is not just one of the choices in their subsistence activities, is main subsistence to produce their food.

Through a focus on the relationships between the Sandawe and their neighbours, this paper has three objectives:

- (1) to map the relationship between the Sandawe and their neighbors, based on historical livelihood changes detailed in previous research and the author's own field interviews, and make a description of the Sandawe to understand their internal historical changes;
- (2) using the author's own field data, to examine present-day relationships between individual Sandawe and their neighbors that occurred after the change of subsistence strategies from hunting-gathering to agriculture; and
- (3) to consider both practical relationships and the differences in positioning the identity of the Sandawe and their neighbors.

DESCRIPTION OF RESEARCH SITES AND A REVIEW OF SANDAWE STUDIES

1) Description of research sites

The Sandawe inhabit the Chemba District of Dodoma Region, Tanzania (Figure 1). In this article, the term "Sandawe Country" is used to denote the 32 villages shown Figure 1 in which the Sandawe form the majority population. It is estimated that the Sandawe have occupied their settlement areas earlier than any other groups. Their population size is unclear, but the number of speakers of the Sandawe language is estimated to be 40,000 by Eaton (2010) and 60,000 by Steeman (2011). According to the 2002 population census, 53,061 people lived in Sandawe Country (Table 1); however, members of other ethnic groups are included in this number. Considering that there are many Sandawe who live outside of Sandawe Country, the author agrees with Steeman's estimation. Northeastern Sandawe Country is sparsely populated, since it is a forest reserve, whereas the western, southern areas are more densely populated. In the 1970s many villagers were forced to relocate along main roads, under the national villagization policy.

Sandawe Country is located in the Central Highlands of Tanzania. Today, many ethnic groups, each with a different historical backgrounds and languages live in the area. They include the Hadza hunter-gatherers, the Cushitic Iraqw and Burunge agro-pastoralists, the Maasai and Datoga Nilotic pastoralists, and the Rangi and Nyaturu Bantu agriculturalists or agro-pastoralists. Sandawe Country was located once on a long-distance trade route, so many Arab traders passed through it in the 19th century. Further, French missionaries arrived there in 1908, and Christianity spread. Because of these historical interactions, fusion and intermarriage occurred between the Sandawe and their neighbors (Newman 1970: 50).

The Central Highlands are semi-arid, with an annual rainfall of 600–700 mm. This area is located on the border between *miombo* woodland and *Acacia* woodlands. The former is dominated by trees of Caesalpinoidea which occur from southern Tanzania to Zambia, a region occupied primarily by agriculturalists. The *Acacia* woodlands of East Africa extend from Central Tanzania to Kenya, where Acacia provides fodder. This ecological boundary might have permitted people engaged in multiple livelihoods, like hunting-gathering, farming and livestock keeping to live close together in the Central Highlands.

Beginning in 2003, the author conducted a total of 30 months of fieldwork in Farkwa Village, located in southeastern Sandawe Country (No.23 in Figure 1). The area borders the settlements of the Gogo and Burunge. It takes about 4 hours by bus to reach Farkwa from Dodoma Town. Farkwa was founded in 1971 under the compulsory villagization policy. A Roman Catholic church was built there in 1929, a primary school in 1947, and a secondary school in 2005. The village has 3,227 inhabitants according to the 2012 population census, an increase of about

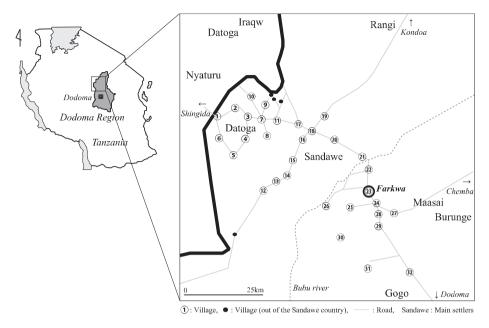


Figure 1 Geographical distribution of the Sandawe and the main research site *Those numbers are correspond to the numbers in Table 1.

Table 1 The population of each village in Sandawe Country

No.	Village	Population	No.	Village	Population
1	Kinyamshindo*1	2,289	19	Ndoroboni	949
2	Mengu	1,021	20	Porobanguma	2,066
3	Ovada	2,136	21	Bubutole	589
4	Baaba	1,785	22	Mombose	1,366
5	Jogolo	971	23	Farkwa	2,165
6	Tarkwa	1,283	24	Donse	517
7	Magambua	1,009	25	Bugenika	1,380
8	Dinae	882	26	Gonga	3,049
9	Manantu	729	27	Tumbakose	1,524
10	Wairo	962	28	Khubunko	1,051
11	Ilasee	539	29	Makorongo	1,748
12	Sanzawa	4,049	30	Maziwa	2,621
13	Gungi	1,268	31	Chase	3,493
14	Motto	1,467	32	Babayu	3,850
15	Gumbu	1,604	Total 53,061		
16	Kurio	1,601	Source: Tanzania 2005		
17	Msera	1,018	*1According to my interview, the Nyaturu is about a		

2,080

18

Kwamtoro

half of villagers.

1,000 since 2002 (Tanzania 2005, 2012). The present population density of Farkwa is 26.8 people/km². More than 90 percent of the villagers are the Sandawe, and the remainder Maasai, Gogo, and "others".

2) Previous research on the Sandawe and their neighbors

The main previous research on the Sandawe and some population census data are listed in Table 2. The first study of the Sandawe was done in 1891–3 by O. Baumann, a leader of a German anti-slavery mission (Newman 1970). He reported that for the Sandawe the staple importance of bush products and bush meat was on a par with crops (Bagshaw 1924–5; Newman 1970). Some 30 years after Baumann's report, Bagshaw (1924–5) noted that the Sandawe were quite at home in the bush, and they gained weight when other ethnic groups went hungry. According to Newman (1970), Kimmanade mentioned that as late as the 1920s, some Sandawe lived almost exclusively off game, bush fruits and honey. Compared with other ethnic groups in Tanzania, the subsistence economy of the Sandawe at that time was based on hunting and gathering

It is widely accepted that the Sandawe belong to the Khoisan language group, which uses click sounds. This group is distributed mainly in southern Africa and Tanzania. At one time, only the Sandawe and the Hadza languages were classified as belonging to the Eastern Khoisan group. However, later research suggested that the Hadza language did not belong to the group, despite its use of click sounds, which distinguished it from other languages. Today, many researchers argue that the Hadza and the Sandawe are hardly linked linguistically (Sands 1998a: 1998b). Further, analyses of mtDNA and Y chromosomes indicate few genetic links, and that both groups are more strongly related to their own neighboring groups (Tishkoff *et al.*, 2007).

The main neighboring ethnic groups who interact with the Sandawe, both in the past and today, are the Datoga, Maasai, Nyaturu, Gogo, Burunge and Rangi. The Datoga are Nilotic pastoralists who inhabit northern Tanzania. Their population is estimated at about 87,800 (SIL international 2016). In Sandawe Country, they live mainly in the western area. The Maasai are also Nilotic pastoralists who live in northern Tanzania, where their population in Tanzania is estimated at about 613,000 (SIL international 2016). In Sandawe Country, the Maasai live mainly in the eastern and southern parts. The areas inhabited by the Datoga and Maasai generally do not overlap.

The Nyaturu are Bantu agro-pastoralists. They are the western neighbors of the Sandawe and have an estimated population size of about 801,000 (SIL international 2016). Some Nyaturu live in villages in western Sandawe Country. The Gogo are also Bantu agro-pastoralists whose zone of occupancy borders on the south of Sandawe Country. Their population is an estimated 1,930,000 (SIL international 2016).

The Burunge are Cushitic agriculturalists settled in eastern Sandawe Country. Their population is an estimated 55,000 (Ostberg 1995). They seem to have come

Table 2 The descriptions of the Sandawe through time

Source	Population	Hunting and gathering	Agriculture and livestock keeping	Relationship with neighbors
Baumann 1894*1 Colonial explorer	15,000	Bush products and game meat were on a par with agriculture in providing food staples.		
Obst 1915; 1923 (Ten Raa 1969)				They are of northern origin but moved south into Gogoland.
Dempwolff 1916* ¹ Linguist	16,270		Much of their vocabulary referring to food preparations, agricultural implements, and agricultural activities is of Bantu derivation.	
German Native Census 1921*2	13,852		There are a billed an arrange	There are from the granth
Bagshaw 1924-5 Missionary	15,000	They are quite at home in the bush. They make bows and arrows. They use poison purchased from the Kamba of Kenya.	They are not skilled or energetic agriculturalists. They grow sorghum, Kafir corn, maize, sweet potatoes and tobacco. They make beer made from sorghum. They own large numbers of cattle, goats and donkeys, with a few sheep, though their herds have been greatly reduced during this generation by disease.	They came from the north. Originally they lived as scattered clans and families over a very wide area and became concentrated by the converging pressure of Bantu and Hamite. They do a large trade in beeswax, which is bought by native hawkers who come from the coast in search of it.
Kondoa District Census 1928*2	19,424			
Bleek 1931			the Sandawe are a cattle keeping people.	The Sandawe vocabulary is more directly related to the Nama vocabulary than the Hadza speech.
Kimmanade 1936*1 Missionary	21,000	As late as the 1920's, some Sandawe lived almost exclusively off game, bush fruits and honey.		The Sandawe originally lived in rock shelters and/or a tipi-like structure (Lim, 1992: 102). There was intensive integration of the Sandawe and Nyaturu.
Trevor 1947		(According to his informant), after the Sandawe had almost abandoned hunting, there was a severe famine. Their stock stolen by neighbors and they began once more to hunt and to collect honey.	(According to his informant), about 450 years ago, after the Sandawe had almost completely abandoned hunting, there was a sever famine and their livestock was stolen by the Nyaturu and Datoga.	The Nama and the Sandawe are of the same stock. Also the Sandawe traditionally have been concerned about their contacts with the neighboring Nyaturu.
Last African Population Census 1948*2	21,202	-		
General African Census 1957*2	28,309			
Murdock 1959 Anthropologist	25,000	East African hunters	Now they have now adopted intensive agriculture and animal husbandry from their Bantu neighbors.	
Greenburg 1966 Linguist				Sandawe is considered to be a part of the Khoisan language family, together with the southern-African Khoisan languages and the other Tanzanian click language Hadza.
Ten Raa, 1966; 1967; 1968; 1969, 1970; 1971, 1974; 1982; 1986 Anthropologist		Their digging sticks is used for digging up tubers and the bulbous roots of various bush plants; some are eaten, but most are used for preparing medicines.	cattle-bleeding and the building-up of real herds was introduced by the Nyaturu, who may have borrowed these traits from the Datoga.	In Sandawe Country, there is some archaeological evidence linking them with the Chusitic Iraqw . (On Ten Raa's study of their migration history, see this volume.)
Sutton 1968			They depend largely on cultivation and livestock keeping because of the reduction of game, the efforts of government, the reasonable fertility of their land for both cropping and grazing, and the apparent disappearance of the tsetse fly.	

Huntingford 1969 Anthropologist		They still hunt a good deal and eat almost anything.	The main crops are millet and tobacco; some maize and sweet potatoes are grown. They have large herds of cattle and goats, with a good many donkeys.	
Newman 1969; 1970; 1978; 1980; 1991-2 Geographer	28,300	Hunting and gathering are still important activities and make subsistence contributions to the food supply. They are renowned in central Tanzania for their ability as honey collectors.	They grow bulrush millet, sorghum, maize, pumpkins, haricot beans, groundnuts, bambarra nuts, sweet potatoes, cowpeas and castor beans.	Some intermarriage between Sandawe and non-Sandawe. Among those, Nayturu-Sandawe: 40%, Sandawe-Turu: 28%, Kimbu- Sandawe: 9%, Gogo-Sandawe: 9%, Sandawe-Rangi: 4%
Lim 1992 Anthropologist		Hunting is not so important these days, although some men continue to hunt regularly, as individuals and in groups.		
Sands 1998a; 1998b Linguist				Their language is related to the San language, but distant from the Hadza language.
Eaton 2001; 2010 Linguist	40,000 (number of speakers)			
Steeman 2012 Linguist	60,000			
Yatsuka, 2012; 2015; this study		They hunt mainly dikdik, duikers, lesser kudu, wild pigs, bush hyraxes and porcupines. They eat 72 species of wild plants.	They grow bulrush millet, sorghum, maize, pumpkins, cassava, sweet potatoes, common beans, pigeon peas, haricot beans, groundnuts, bambarra nuts, cowpeas, sunflower and sesame. Originally they used much land for cultivating bulrush millet, but today they cultivate clayey soil for maize and cash crops.	There are few exchange relationships with neighbors because their subsistence activities became similar.
SIL international 2016	60,000			

*1 Source: Newman (1970) *2 Source: Ten Raa (1967)

from the northern Central Highlands (Ostberg 1995). According to Sandawe oral history, although the Burunge inhabited the southwest of present Sandawe Country, the Sandawe came from the north and the Burunge moved eastwards. In the southeastern Sandawe Country, some places have Burunge names.

The Rangi, Bantu agriculturalists are the northern neighbors of the Sandawe. However, they have had little contact with the Sandawe because of a tsetse fly belt that occurs in the north Sandawe Country, where they settled near a forest reserve (Newman 1970). Today they are the majority in Kondoa town, where the Sandawe often visit. Recently, as discussed below, the Sukuma Bantu agropastoralists also migrated to Sandawe Country.

Farkwa villagers interact closely with the Gogo and Burunge. Today many Sandawe live in Dodoma Town too, the main town in Gogo Country. On the other hand, in the villages of western Sandawe Country, people have extensive historical and contemporary relationships with the Nyaturu. Kinyamshindo, the westernmost village shown in Figure 1, is located on the border between Dodoma Region and neighboring Singida Region. It is said that half the villagers are Nyaturu and half is the Sandawe.

SANDAWE COGNITION OF THEIR OWN HISTORY

The Sandawe maintain an identity separate from neighboring groups, and consider themselves the descendants of hunter-gatherer ancestors from Southern Africa. Before considering the relationship between the Sandawe and their neighbors, in this section their identity according to Sandawe oral history is described.

The Sandawe first observed similarities between their language and those of Southern Africa when they heard Nelson Mandela, speaking on the radio¹⁾. For example, a man in his seventies related the following story: "Mandela asked Julius Nyerere the first President of Tanzania, to return the Sandawe to South Africa, but Nyerere declined saying that if South Africans live in Tanzania, they will be Tanzanian and if Tanzanians live in South Africa, they will be South African." In another example observed during fieldwork in August 2011, a Sandawe man, a Sandawe woman, and a Gogo woman were chatting over a local beer and talked "the Bushman living in South Africa are the same as the Sandawe." The two Sandawe then asked the Gogo woman: "We know that we were from South Africa. Why don't you know about your origin?" In this conversation, they described South Africa as "our land."

The Sandawe do not have neighbors who speak a similar language; however, they know that some people in South Africa speak a click language, like they do. They obtained this information from rumours, via the radio and from researchers. Their cognition of the distinctiveness of their language has led them to believe that originally they came from an area in present day South Africa.

In addition to their distinct language, the Sandawe have a lighter skin color than their neighbors. As such, the Sandawe easily can imagine that their origin is completely different from that of their neighbors. Newman (1978: 112) reported that the Sandawe frequently say that "we just look different" or "it is obvious we do not appear alike", and they argue that their indigenous perceptions of physical differences define Sandawe ethnicity.

These linguistic and physical distinctions have had strong impacts on the Sandawe and their neighbors. Although linguistic and genetic differences have been discussed in many research articles, the Hadza hunter-gatherers in northern Tanzania and the Sandawe are, in terms of their language and origin, recognized by other Tanzanians as being the only groups that are dramatically different from other people in the country. The hunting and gathering facets of the Sandawe way of life are well-recognized by their neighbors, but they are more often seen as negative cultural attributes. Newman (1978: 113) stated that it is not unusual to hear the Sandawe derided as "bush people" who hunt wild game. This view of the Sandawe by their neighbours has hardly changed since Newman's research and publication in the 1970s. When the present author talked with neighbouring peoples during her stay in Sandawe Country, many people asked "How do you live in the bush?" and "Please bring me bush meat." In addition, Newman (1978:

112) pointed out that the Sandawe placed special emphasis on their "lighter" skin color, for which there is a strong local preference, particularly as an indicator of female beauty. However, they have been rejected as possible wives by many neighbors because they are stereotyped as lazy and very poor cultivators. Today the Sandawe engage mainly in agriculture, as examined in the following section. Nevertheless, their neighbors still regard the Sandawe as not knowing how to cultivate properly.

HISTORICAL LIVELIHOOD CHANGE THROUGH NEIGHBORS

Throughout their history, the Sandawe have changed livelihoods by interacting with their many neighbors. In the Sandawe language, for example, are many terms pertaining to livestock and cultivation that have been borrowed from their neighbors. Also, Sandawe oral history asserts relationships with many other ethnic groups. For example, the Sandawe once lived near Itigi town, about 150 km west of Dodoma Town, and they engaged in hunting and collecting of honey. They exchanged honey for their neighbor's livestock. After that, the Sandawe moved north with these livestock, but encountered pastoralists and were chased to the present Sandawe Country. As stated previously, some analyses of mtDNA and Y chromosomes indicated that the Sandawe have strong genetic links with neighbouring groups (Tishkoff *et al.* 2007).

Many ethnic groups neighbor the Sandawe, and in the history of their livelihood transformation, neighbors have been major factors accounting for these changes (Figure 2). The Sandawe seemed to have acquired livestock earlier than cultivation and settlement. Trevor (1947) reported that when the Sandawe first encountered cattle, they wished to hunt them. However, they did not do so because they saw that the animals were tended by humans.

According to Ten Raa (1986a, 1986b) the first outsiders who came to Sandawe Country were the cattle-owning Alagwa. The Alagwa originated from the Iraqw cluster of peoples, who appear to be a branch of the Southern Cushitic peoples.²⁾ The Alagwa came from the north approximately 10–11 generations ago, and settled down by intermarrying with the Sandawe, ultimately becoming Sandawe-speakers and inhabiting northwestern Sandawe Country. During this time, elsewhere in Sandawe Country, many families continued to follow their hunting-gathering ways of life until the beginning of the 20th century. Ten Raa (1986a) suggested that the Sandawe acquired their first cattle from poor Alagwa refugees, who were attacked by the Datoga and who subsequently lost most of their cattle and fled. The Alagwa married Sandawe women to secure the continuation of their lineages. As a result, the Sandawe received their first cattle as bridewealth. The Alagwa introduced rainmaking expertise and lineage awareness to Sandawe country (Ten Raa 1986b), and their descendants are regarded as still holding one of the rainmaker clan names among the Sandawe.

The Taturu, a particular Datoga Nilotic pastoralist group, were the second

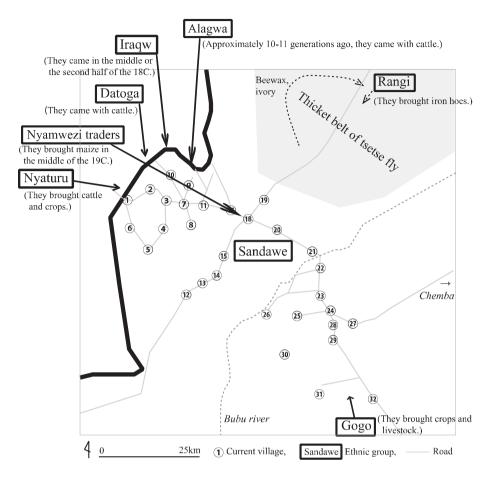


Figure 2 The historical impacts of neighbors on Sandawe livelihood

people to come to Sandawe Country (Ten Raa 1986b). Since the 1920s, the Datoga and the Sandawe had been completely separated by a belt of tsetse-infested land that stretches across northern Sandawe Country. Previously, the Datoga had been fairly frequent visitors to Sandawe Country, searching for pasturage and also for raiding purposes, while the Sandawe travelled into Datoga Country to collect salt (Newman 1970: 53). According to Sandawe history, on one occasion the Datoga raiders entered their country, stole all their cattle, and chased many Sandawe into the corridor which now hosts Kwamtoro and Sanzawa Villages (Ten Raa 1986a).

The Bantu-speaking Nyaturu, from the northwest, is another group who have had significant influence on the cultural development of the Sandawe. They settled in western Sandawe Country and some married Sandawe women. The Nyaturu brought more cattle with them when they settled in Sandawe Country, but the fact

that Nyaturu cattle terminology is quite similar to Datoga suggests that this group previously had frequent and significant interaction with their Datoga neighbors (Ten Raa 1986b).

Ten Raa (1986b) also argued that the Sandawe acquired much of their basic cattle vocabulary from the Cushites, but their terms for distinguishing among individual cattle are taken from the Datoga, who are Nilotes. Thus, he suggested that the first, basic elements of cattle culture in Sandawe Country are derived from the Cushites (mainly Alagwa), but that cattle-bleeding and the building-up of real herds was introduced by the Nyaturu, who may have borrowed these traits from the Datoga.

Conversely, the first source of Sandawe agriculture seems to have been the Nyaturu, but it is not clear when this first occurred. Newman (1970) suggested that the Nyaturu were the source for the initial introduction of domesticated crops to the Sandawe, because the Nyaturu claimed that "Our ancestors showed the Sandawe how to cultivate." In addition, it is a common tradition among the Sandawe to say that it was from the Nyaturu that they first learned about growing crops. In one particular Sandawe story, during a severe famine some Sandawe settled among the Nyaturu, and some Nyaturu settled in Sandawe Country in desperate attempts to locate food. Thus, the Sandawe gained much information about domesticated plants from the Nyaturu, such as bulrush millet, sorghum and cowpeas (Newman 1970). A possible secondary source for the spread of agriculture is the Gogo agro-pastoralists, especially in the southern part of Sandawe Country. The Gogo brought livestock also. New crops, such as maize, sweet potatoes and haricot beans, came from the Nyamwezi Bantu people, who have a large population and live in western Tanzania (Newman 1970).

The Rangi have had little contact with the Sandawe, except as traders of iron hoes which they supplied to the Sandawe against beeswax and, since the mid-19th century, after the arrival of Arab traders in Kondoa, also some ivory. However as the author stated above, the thick belt of tsetse fly had kept them apart for a long time.

Many discussions assert that the Sandawe transitioned from hunting and gathering to other subsistence activities around the mid-19th century. However, others state that the Sandawe accepted agriculture and livestock-keeping earlier. For example, Trevor (1947) reported his informant as saying that about 450 years ago, after the Sandawe had almost completely abandoned hunting, there was a severe famine and their livestock were stolen by the Nyaturu and Datoga. So, out of necessity they started hunting and gathering again. Bagshaw (1924–5) suggested that the Sandawe are a "remnant" of a larger ethnic group destroyed by the Bantuspeaking groups and forced down the social scale, losing their cattle and the art of cultivation when they were driven into the bush. Newman (1970) argued that the Sandawe were essentially nomadic in the fairly recent past. In his 1991–2 paper, however, Newman reinterpreted the Sandawe's hunting and gathering past, inferring that the agricultural transition in Sandawe Country could have begun no

later than the first decades of the 16th century. He did this by focusing on the difference in the rate of population growth between hunting-gathering and agricultural-based societies (Newman 1991–2). However, these theories are all speculative.

The historical relationships between the Sandawe and their neighbors regarding livelihood change reveals differences according to geographical location. For example, the Alagwa and Datoga came to the western part of Sandawe Country. As a result, in that area, the Sandawe have more livestock than elsewhere. In addition, the area adjacent to Nyaturu Country has a historically strong relationship with the Nyaturu people, where the Sandawe cultivate finger millet as a cash crop and sell it in Shingida Town, the main area of Nyaturu Country. This millet is used to make alcohol for local consumption among the Nyaturu.

Surrounding Sandawe Country, there have been many ethnic groups who engage in different livelihood practices and speak different languages. The history of migration and settlement of these peoples has likely affected Sandawe livelihoods. In fact, the Sandawe have made the slow transition from a huntergatherer society to an agriculture-based society in a relatively autonomous manner, based solely on relationships with their neighbors (i.e., without being influenced by the government policy or external economies). After acceptance of agriculture and livestock-keeping in Sandawe Country, however, their history reflects occasional total losses of livestock and a return to living in the bush. In addition, the edaphic and climatic conditions of Sandawe country are far from suitable for those activities.

The next section focuses on a case study of Farkwa Village, where most of this author's fieldwork was done. The village's present ethnic relationship is examined primarily through analysis of the livelihood and exchange relationships.

CURRENT LIVELIHOOD AND CHANGING RELATIONSHIP WITH NEIGHBORS IN FARKWA VILLAGE

In the 1960s, the Sandawe subsisted primarily on domestic crops supplemented with livestock products, but hunting and gathering were still important activities that greatly contributed to the food supply (Newman 1970: 27). In the 1980s, Lim (1992: 73–74) emphasized that although the Sandawe engage primarily in agriculture, hunting is still important for the self-identity of males. At present, most Sandawe cultivate their own fields to produce many kinds of crops including cash crops, supplemented with livestock-keeping, hunting, gathering, and bee-keeping. Each household produces particular staple crops based on local soil conditions (Yatsuka 2012). According to the author's research in Farkwa in 2004, the villager's fields devoted to producing staple foods accounted for approximately 90 percent of the total arable area (Yatsuka 2005). The Sandawe engage in slash-and-burn style agriculture with about five-year field rotation cycle



Photo 1 Farkwa Village.

basically. The soil in large parts of the village has a high sand content and is not very fertile; thus, shifting cultivation is suited to these edaphic conditions. As a result of diversification of crop species, today some Sandawe cultivate an area with much clay soil, they have cultivated the same field for more than 15 years. However, most people continue using the original slash-and-burn agriculture (Yatsuka 2012).

According to a dietary survey conducted by the author³⁾, the Sandawe eat many different cereals that they cultivate. These comprise 93 percent of their staple foods (Yatsuka 2012). The author did not calculate the amount of calories derived of each crop, but it could be inferred that the Sandawe obtained many of their calories from crops. Fields of cash crops like as sesame and sunflower are increasing at present. Although inter-annual yields vary, in 2009 a villager earned 500,000Tsh⁴⁾ from selling cash crops, leading many Sandawe to believe that agriculture can make big money.

At present not many households keep livestock. The average household has few, although some have 20 or more cows. Owners say that their once larger numbers were reduced by disease, famine and sale for cash. Occasionally they sell livestock at local monthly markets.

Since they incorporated cultivation and livestock-keeping in their livelihood, hunting and gathering activities, especially hunting, now contribute only a small percentage to caloric intake. Although the Sandawe no longer rely on hunting for

subsistence, but hunting culture is still significant. The Sandawe use bows and arrows and nets to hunt mainly dikdik, duikers, impalas, lesser kudu and bush pigs. Most Sandawe men carry their bows and arrows whenever they walk around the village. This does not mean that they are always looking for game, but rather reflects the ideal of Sandawe men, who are very proud of their hunting tools and techniques. Some blacksmiths in Farkwa make arrowheads for sale to villagers. The Sandawe rarely use guns, and they use traps only to hunt small animals, such as bush hyrax and porcupine. Children sometimes hunt birds and rats. It is likely that the Sandawe could maintain their original hunting method without using guns, because they have long ceased to depend on hunted products as a main source of calories.

Under Tanzanian law, hunting without a license is illegal; however, few Sandawe can obtain a hunting license because it is expensive. Consequently, they are sometimes arrested for hunting "illegally", particularly for hunting with a net. Game officers sometimes enforce strict regulations in Sandawe villages and arrest participants for hunting; therefore, many men now avoid net hunting. In additional, game officers have enforced bans on the Sandawe's traditional arrow design, which use feathers of wild guinea fowl. Today, chicken feathers have replaced those of guinea fowl.

Regarding the illegality of their hunting, the villagers told that they hunted animals because "we are the Sandawe." On the other hand, they also point out that agriculture is necessary for their diet. As such, they identify themselves either as hunter-gatherers or as farmers, depending on context. However, just because they now engage primarily in agriculture, it does not imply that hunting is not important for both their culture and society.

The Sandawe often gather wild plants, mushrooms and insects and they use at least 72 species of wild herbal and woody plants as food (Yatsuka 2012). In the dry season, they often eat baobab (*Adansonia digitata*) fruit and kernels of marula (*Sclerocarya birrea*), and in the rainy season, they use many kinds of wild plant leaves in popular dishes. Among these species, the most important grow in their crop fields as non-domesticated herbs especially *Ceratotheca sesamoides*. These plants, referred to by the Sandawe as "weeds," tend to grow in large clusters in their crop fields during the rainy season, and they are easier to gather than fully wild vegetation. Thus, cultivated fields are valuable also as convenient gathering sites for important wild food plants. The author's dietary survey revealed that gathered foods, such as wild plant leaves and mushrooms, accounted for 52 percent of side dishes, whereas 18 percent were farm products. Among gathered foods, 38 percent were "weeds" from crop fields (Yatsuka 2012). It is suggested that this use of "weeds" spread among the Sandawe shortly after the introduction of agriculture and today it is one of the most important food ingredients for them.

In Sandawe Country, there are a few cash resources acquired from hunting and gathering and traders hardly come to buy goods. Because hunting is illegal for those without a license, bush meat is generally sold secretly only within the village. However, the Sandawe are famous for honey collectors even now and some Sandawe collect honey to sell outside their village (Photo 2). In general, however, except for crops Sandawe have few chances to exchange products with their neighbors. On the other hand, they often use a type of bartering called *tele kwa tele* in Swahili in Sandawe Country. *Tele* means "full", so *tele kwa tele* is exchanging one full container for another full container. In *tele kwa tele*, they use the same container to measure an amount of the products to be bartered. The weight and the market price are not factors in *tele kwa tele*; rather, trade is determined only by volume. With *tele kwa tele*, they exchange many food ingredients, such as dried gathered plants, dried "weeds," mushrooms, worms, beans, and grain. *Tele kwa tele* serves to enrich the Sandawe's diet. Each villager engages in multiple livelihood activities concerning foods. It seems that other ethnic groups, such as the Gogo, also use *tele kwa tele*, but they barter mainly several kinds of grains.

To summarize, the Sandawe engage in multiple types of livelihood, such as agriculture, livestock-keeping, hunting-gathering, and bee-keeping. They have become calorifically independent of hunted products, and complement their diet



Photo 2 A Sandawe man collects honey.

using crops, wild hunted-gathered materials, livestock products, and other goods that are produced within the society. Consequently, there is a great diversity in the Sandawe's selected livelihoods. For example, one person may prefer to concentrate on expanding his crop fields and produce a marketable surplus, whereas another may prefer to actively hunt and gather; and yet another may like to keep livestock.

Recently, among the Sandawe, production of cash crops has been increasing rapidly. With their, cultivation continues to occupy an increasingly important place in Sandawe livelihood, and there have been new exchanges of labor between some Sandawe making serious attempts to cultivate a wider range of cash crops and other villagers. It is presumed that this division of livelihood activities resulted in a lack of a need to exchange products with neighboring groups who engage in other livelihood activities.

According to Kitanishi (2003), some Baka men in Cameroon do not clear the fields every year because they stayed in the forest or visited another Baka village. Also even if they clear their fields, they sometimes fail in cultivation. However they do not seem to mind it so much because they can find some alternative resources either in the forest or in the field of farmers to assist them. However the Sandawe case is seemed different. Although they also argue that if they fail in cultivation, they go to bush to get some products, the author did not see they did so. For the subsistence or diet among the current Sandawe, significance of agriculture is not similar to that of hunting and gathering.

In addition, the recent regulation of hunting has been a major reason for the Sandawe to reduce the scale of their hunting. This shift may reduce their dependence on exchange with neighbors. The Dodoma Region, including Sandawe Country, has experienced many severe famines .Since the author started her research there in 2003, the Sandawe have suffered several times from famine owing to erratic rainfall. They explained "it's not a big deal because we can go to bush to look for products such as honey and bush meat." However, during periods of famine, the author witnessed many Sandawe who were seeking wage labor, such as at missions and NGOs in Farkwa, or looking for work in neighboring towns.

THE RELATIONSHIP WITH NEW NEIGHBORS: COEXISTENCE AND CONFLICT

In and around Farkwa, some people from other ethnic groups marry Sandawe and end up settling there. In Farkwa, a few households are composed of people who originated from both Sandawe and neighboring groups. In the case of M hamlet, one of three hamlets in Farkwa and that which the author researched most intensively, nine (8.8 percent) of households were composed of a Sandawe-non-Sandawe couple, out of a total of 102 households⁵). Of these only two households had non-Sandawe husbands whereas six had Gogo wives and one had a Rangi wife. The Rangi wife was an elementary school teacher who could not speak the



Photo 3 A Maasai man (the rightmost person) joins in the collective work of threshing sorghum of the Sandawe.

Sandawe language, although the members of the other households could and led a lifestyle similar to households with Sandawe-only couples. Some Sandawe and Gogo couples owe their relationship to the geographical location of Farkwa. A Sandawe man and Gogo woman, in particular, typically met around Dodoma Town, where Sandawe men often seek work, and would sometimes return to Farkwa with a Gogo woman.

Unlike the other two hamlets in Farkwa, M has no Maasai residents. The Maasai live far from the center of the village, owing to their typically large number of livestock, although some live along the main road, where they run a small guest house. The Maasai have crop fields similar to those of the Sandawe, and have a close relationship with the Sandawe; therefore, they often work collectively to tend Sandawe crop fields (Photo 3). Some Maasai marry the Sandawe. In the rainy season, Maasai women often bring milk to certain Sandawe households either daily or every other day to exchange for small amounts of cash. Then they go either to kiosks to buy goods or visit places with milling machines in order to process their crops.

Most inhabitants of Sandawe Country are native Sandawe, so intermarriage is limited. Newman (1970) wrote that the Sandawe are regarded as lazy and incompetent cultivators. Even today they are sometimes described as hunters or bush people. Nevertheless, especially in town, ethnic borders seem not to be the most important factor when Sandawe and people of other ethnicities decide to marry.



Photo 4 Rice fields of the Sukuma at Bubutole Village, in 2013.

Since about 2007, the Sukuma Bantu agro-pastoralists, the largest population group in Tanzania, have migrated to Polobanguma and Bubutole villages (No. 20 and 21 in Figure 1). The Sukuma subsist mainly on livestock-keeping and rice cultivation. They cleared a huge area of seasonal swamp in Sandawe Country to make rice fields (Photo 4). Some Sandawe are strongly opposed to this social development and to the Sukuma themselves. By 2013, in Bubutole, the number of the Sukuma households was more than 200, exceeding the number of households comprised of Sandawe, Maasai and Datoga, who are indigenous to the area.

For many generations the Sandawe used the seasonal swamps for hunting and collecting honey. Also, the Maasai and Datoga use these areas for grazing whereas the Sandawe prefer not to graze their livestock there owing to the high prevalence of ticks. Also, for the Sandawe, the seasonal swamps are not suitable for use as crop fields because of the high clay content in the soil. The Sukuma, however, received a usufruct for a huge area of this swamp from village authorities, which included some non-Sandawe and sometimes they gave a bribe to the authorities. They began to cultivate rice, tomatoes and oranges and to sell them both inside and outside the villages. To manage these huge rice fields, the Sukuma needed a large labour force; however, a Sukuma man said to the author "The Sandawe are unwilling to work in the mud, so they cannot cultivate rice. They are lazy about work. I would rather call someone from my country than employ the Sandawe." The Sukuma have increased their population as well as the number of their

livestock, and have advanced their cultivation in Sandawe Country. In addition, they built their own houses in a radically different style to those of the Sandawe.

After the Sukuma population in Bubutole exceeded that of the Sandawe, the latter began to complain about this in-migration well as Sukuma use of the land. For the Sandawe, the use of seasonal swamp as rice fields conflicts with their culture, and has incited fear in Sandawe that they will lose all their land in the coming years. In August 2014, in Bubutole, one Sukuma man was killed and several others were injured with bows and arrows by villagers⁶⁾ who strongly oppose the presence of the Sukuma. This resulted in some fearful Sukuma leaving Sandawe Country⁷⁾.

As in the case of the Alagwa and other ethnic groups discussed previously, the relationships among Sandawe and their neighbors were small in scale until the 19th century. These early immigrants were a small population and married the Sandawe, ultimately adopting the Sandawe culture. Also today, the Maasai and Datoga coexist in Sandawe Country in what are still small populations and they engage in different livelihoods. The Sukuma case, however, is different in that many people migrated within a short period, and opened a huge area for rice cultivation in a way that was in stark contrast to the livelihood activities of the Sandawe. In addition, the Sukuma have not accepted the Sandawe way of life, and their scale of population and activities are simply too large for peaceful coexistence with the Sandawe.



Photo 5 Sukuma rice in full containers will be exchanged for Sandawe maize using tele kwa tele.

The aforementioned violent incident was reported widely in the Tanzanian media. However, despite complaints and conflict, the Sandawe and Sukuma individually maintained exchange relationships for various products. For example, in 2007, a Sukuma man grew tomatoes in Bubutole village and brought them by bicycle to sell in Farkwa. In Farkwa at that time, few people tried to cultivate tomatoes and they could obtain them only when someone brought them from elsewhere. So many people were delighted to buy his tomatoes. Following his success, many Sukuma moved into both Bubutole and Polobanguma villages. In 2014, even after the violent incident, the Sukuma brought rice to Farkwa and bartered it for Sandawe maize using *tele kwa tele* system. (Photo 5). Additionally, some market kiosk owners in Farkwa visited the Sukuma to buy their rice, and then sold it in their kiosks back in Farkwa.

The livelihood products of the Sandawe have been similar to the neighbor's. It is seemed that this is a reason why they do not depend heavily to neighbors economically. However, when the Sukuma came and started to produce other new food ingredients such as tomatoes and rice, they started to exchange with their products naturally at another level with the conflicts for land.

DISCUSSION

The livelihood strategy of the present day Sandawe depends on multiple types of livelihood activity, but is based primarily on agriculture, as they supply a large portion of their daily food needs from their own products. This study focuses on the Sandawe, and, in particular, on Farkwa Village, to examine how relationships between hunter-gatherers and their neighbors have changed, and to determine if hunter-gatherers become independent of hunting-gathering and dependent other livelihoods

First, it was demonstrated how the livelihood activities of the Sandawe have been diversified throughout their history owing to various relationships with different neighbors. They have transformed from a hunting-gathering-based livelihood into an agriculture-based livelihood through the interaction with other ethnic groups. When they engaged former livelihood, they might change their hunted and gathered products with others. After changing their livelihood, their products have become quite similar to that of their neighbors. Today in Farkwa, economic relationships have been limited to a few examples, such as purchases of milk from the Massai. The Sandawe can supply most of their daily foods by themselves, and not depend heavily on their neighbours economically. On the other hand, the Sandawe continue to barter, using tele kwa tele. Ultimately, this shows that when they depended strongly on hunting-gathering, they might have maintained exchange relationships with other ethnic groups having different technological bases. Today, however, the Sandawe themselves engage in multiple livelihoods and exchange several products among themselves. Thus it can be said that economic relationships with neighbors have declined and inter-group relationships have been reinforced. Sometimes they sell their products such as honey or crop for outsiders, but much amount of them are sell for urban merchants, not for the neighbors.

Although they can engage in various livelihoods based on agriculture, and live economically independent of others, this is not to say that Sandawe identity also became similar to that of other peoples. In the previous section, it was demonstrated that the Sandawe regarded themselves as being totally different from their neighbors. The economic relationships with neighbors have changed, but there are still widely differing images among them.

The Sandawe is not regarded by outsiders as a group that receives special treatment from the government and NGOs, for example, because their economic activities are not different from those of other Tanzanians. For example, the Hadza in northern Tanzania are regarded both locally and globally as hunter-gatherers. Since the colonial period, the government has forced the Hadza to assimilate into mainstream culture. Today, however, the Hadza are involved in international indigenous peoples' movements, and claim their rights. The Sandawe also were once considered a vulnerable minority of indigenous peoples in East Africa (Parkipuny 1989). However, rarely have they been involved in any sort of indigenous people's movement.

It is suggested that because their main present livelihood is agriculture, they stand out little from their neighbors. This has resulted in an absence of government assimilation policies to force them into the mainstream Tanzanian society. There is also no NGO support for maintaining either their original livelihood, or knowledge and techniques necessary to sustain it. In addition, engaging in sedentary agriculture typically does not motivate a group to fight for a claim for land use, generally because their original fields were not easily taken by other groups, at least until the Sukuma began to enter the area and raise crops. So, for the Sandawe, joining the indigenous peoples' movement and claiming their rights has not been particularly attractive (Yatsuka 2015).

Why did the Sandawe came to engage in multiple livelihoods based on agriculture, instead of remaining dependent on the agricultural or pastoral products of their neighbors?8) Some possible explanations are that, first, Sandawe Country is semi-arid, receiving between 600 mm and 700mm of erratic annual rainfall. It is possible to cultivate crops and keep livestock on a small scale, but the environment of this area limited for the activities of early farmers and herders; therefore, new settlers came in small numbers (Newman 1991-2). Therefore, second, most of Sandawe Country might have been occupied by native Sandawe at least since the German colonial period. Third, they have made the transition from a hunter-gatherer society to an agriculture-based society in a relatively autonomous manner, without being influenced by government policy or external economies. Fourth, most Sandawe have small-scale crop fields, and for such activities, there are still enough room in the Sandawe Country to sustain people. Fifth, compared to hunter-gatherers in rain forests, the Sandawe have few natural

resources from which they can make and sell products to earn cash. On the other hand, since they can grow and sell cash crops, today agriculture is important means of making money. In summary, the Sandawe have transitioned their primary methods of livelihood slowly rather than forcibly. Therefore, they have not abandoned hunting-gathering completely, and have maintained their ethnic identity without a unilateral dependence on neighbors.

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NOTES

- 1) Mandela was a Xhosa. The Xhosa language also uses clicking sounds, but it belongs to the Bantu language group, not the Khoisan language group.
- 2) In previous research there are two theories about the origin of the Alagwa: from the Iraqw and from the Datoga. In research conducted in the 1970s, their origin was thought to be Datoga, but research in the 1980s and 1990s suggests that they are from Iraqw. The latest research on their origin is accepted here.
- A dietary survey of the Sandawe was conducted from February to May in 2006 in three households.
- 4) In 2009, 500,000 Tanzania shillings was about 370 USD.
- 5) Among 111 households in M hamlet, nine households composed of only non-Sandawe people have been eliminated. These are all families of immigrant elementary school teachers.
- 6) The villagers who killed the Sukuma were not cleared until September 2014, but it was rumored that it was done by the Datoga who collaborated with the Sandawe.
- Today, there are similar conflicts caused by Sukuma immigration in several parts of Tanzania.
- 8) Ikeya *et al.* (2009) argued that studies on the interrelationships between hunters and farmers, or pastoralists, from prehistory to the present, provide extremely important clues for examining the processes of change from a hunter-gatherer society to an agricultural one.

REFERENCES

Bagshaw, F. J.

1924–1925 The People of the Happy Valley (East Africa) Part 3: The Sandawi. *Journal of the Royal African Society* 24(95): 219–227.

Bleek, D. F.

1931 Traces of Former Bushman Occupation in Tanganyika Territory. South African Journal of Science 28: 423-429.

Eaton, H.

2010 A Sandawe Grammar. SIL e-Book, SIL International.

Greenberg, J. H

The Languages of Africa (Publication of the Indiana University Research Center 1966 in Anthropology, Folklore and Linguistics 25). Bloomington: Indiana University.

Huntingford, G. W. B.

1969 Part VIII East Central Africa. The Southern Nilo-Hamites (Ethnographical Survey of Africa), pp. 135–139. London: International African Institute.

Ikeva, K.

1993 Goat Raising among the San in the Central Kalahari. African Study Monographs 14 (1): 39-52.

1996 Dry Farming among the San in the Central Kalahari. African Study Monographs Supplementary Issue 22: 85-100.

2005 Socioeconomic Relationships between Herders and Hunters: A Comparison of the Kalahari Desert and Northeastern Siberia. In K. Ikeya and E. Fratkin (eds.) Pastoralists and Their Neighbors in Asia and Africa (Senri Ethnological Studies 69), pp. 31-44. Osaka: National Museum of Ethnology, Japan.

K. Ikeya, H. Ogawa and P. Mitchell

Introduction. In K. Ikeya, H. Ogawa, and P. Mitchell (eds.) Interactions between Hunter-Gatherers and Farmers: From Prehistory to the Present (Senri Ethnological Studies 73), pp. 1–11. Osaka: National Museum of Ethnology, Japan.

Kitanishi, K.

2003 Cultivation by the Baka Hunter-Gatherers in the Tropical Rain Forest of Central Africa. African Study Monographs Supplementary Issue 28: 143–157.

Lim, I. L.

1992 A Site-Oriented Approach to Rock Art: A Study from Usandawe, Central Tanzania. Brown University, Ph.D. thesis.

Matsuura, N.

The "Modern Forest People": An Ethnography on Babongo Pygmies in Central 2012 Africa. Kyoto: Showado. (in Japanese)

Murdock, G. P.

1959 Africa: Its People and Their Culture History. New York, Toronro, London: McGraw-Hill Bool Company, INC.

Newman, J. L.

1969 A Sandawe Settlement Geography. East African Geographical Review 7: 15-24.

1970 The Ecological Basis for Subsistence Change among the Sandawe of Tanzania. Washington, D. C.: National Academy of Science.

1978 Place and Ethnicity among the Sandawe of Tanzania. In M.T. Brian (ed.) Ethnicity in Modern Africa, pp. 105–121. Colorado: Westview Press.

1980 Dimensions of Sandawe Diet. In J. R. K. Robson (ed.) Food, Ecology and Culture, Reading in the Anthropology of Dietary Practices, pp. 27-33. Philadelphia: Gordon and Breach Science Publishers.

1991-2 Reconfiguring the Sandawe Puzzle. Sprache und Geschichte in Afrika 12/13: 159-170.

Ogawa, H.

2000 Prehistoric Interactions between Hunter-Gatherers and Farmers: Special Reference on the Interdependency. In H. Ogawa (ed.) *Koryu-no Kokogaku (Archaeology of Interactions)*, pp.266–295. Tokyo: AsakuraShoten. (in Japanese)

Ostberg, W.

1995 Land is Coming Up: The Burunge of Central Tanzania and their Environments. (Stockholm Studies in Social Anthropology). Stockholm: Stockholm University.

Parkipuny, M.

1989 The Human Rights Situation of Indigenous People in Africa. *Fourth World Journal* 4 (1): 1–4.

Sands, B. E.

1998a Eastern and southern African Khoisan: Evaluating claims of Distant Linguistic Relationships (Quellen zur Khoisan-Forschung 14). Cologne: Rüdiger Köppe Verlag.

1998b The Linguistic Relationship between Hadza and Khoisan. In M. Schladt. (ed.) Language, Identity, and Conceptualization among the Khoisan (Quellen zur Khoisan-Forschung 15), pp.266-283. Cologne: Rüdiger Köppe Verlag.

SIL International

2016 Ethnologue: Languages of the World, Tanzania. Online. https://www.ethnologue.com/country/TZ/languages (Accessed 7, July 2016).

Steeman, S.

2012 A Grammar of Sandawe: A Khoisan Language of Tanzania. Leiden University, Ph.D. thesis.

Sutton, J. E. G.

1968 Archaeological Sites in Usandawe. *Azania: Archaeological Research in Africa* 3: 167–174.

Takeuchi, K.

2014 Interethnic Relationships between Pygmies and Farmers. In B. Hewlett (ed.) Hunter-Gatherers of the Congo Basin: Cultures, Histories and Biology of African Pygmies, pp.299–320. New Brunswick, U.S.A and London, U.K.: Transaction Publishers.

Tanzania, National Bureau of Statistics, Central Census Office

2005 Population and Housing Census: Volume VII: Village and Street Statistics: Age and Sex Distribution: Dodoma Region. Dar es Salaam, Tanzania.

Tanzania, National Bureau of Statistics, Ministry of Finance, Office of Chief Government Statistician, President's Office, Finance, Economy and Development Planning, 2013

2012 Population and Housing Census: Population Distribution by Administrative Areas, Dar es Salaam & Zanzibar, Tanzania.

Ten Raa, E.

1966 Geographical Names in South-Eastern Sandawe. *Journal of African Languages* 5: 175–207.

1967 Sandawe Oral Literature. Oxford University, Ph.D. thesis.

1968 Bush Foraging and Agricultural Development: A History of Sandawe Famines. *Tanzania Notes and Records* 69: 33–40.

1969 Sandawe Prehistory and the Vernacular Tradition. Azania: Archaeological Research in Africa 4: 91–103.

1970 The Couth and the Uncouth: Ethnic, Social, and Linguistic Divisions among the

- Sandawe of Central Tanzania. Anthropos 65 (1/2): 127-153.
- 1971 Dead Art and Living Society: A Study of Rockpaintings in a Social Context. Mankind 8: 42-58.
- 1974 A Record of Some Pre-historic and Some Recent Sandawe Rockpaintings. Tanzania Notes and Records 75: 9-27.
- 1986a The Acquisition of cattle by hunter-gatherers: A Traumatic Experience in Cultural Change. Sprache und Geschichte in Afrika 7(2): 361-374.
- 1986b The Alagwa: A Northern Intrusion in a Tanzanian Khoi-San Culture, as Testified through Sandawe Oral Tradition. In R. Vossen and K. Keuthmann (eds.) Contemporary Studies on Khoisan 2 (Quellenzur Khoisan-Forschung 5-2), pp. 271–299. Hamburg: Helmut BuskeVerlag Hamburg.
- Tishkoff, S. A., M. K. Gonder, B. M. Henn, H. Mortensen, A. Knight, C. Gignoux, N. Fernandopulle, G. Lema, T. B. Nyambo, U. Ramakrishnan, F. A. Reed, and J. L. Mountain.
 - 2007 The History of Click-speaking Population of Africa Inferred from mtDNA and Y chromosome Genetic Variation. Molecular Biological Evolution 24(10): 2180-2195.
- Trevor, J.C.
 - The Physical Characters of the Sandawe. Journal of the Royal Anthropological 1947 *Institute of Great Britain and Ireland* 77: 61–78.
- Yatsuka, H.
 - 2005 The Utilization of the Vegetation for the Livelihood by the Sandawe People in the Semi-arid Area in Tanzania. Proceedings of the 7th Kyoto University International Symposium 2005: Coexistence with Nature in a "Glocalizing" World -field Science Perspectives, pp. 175–183. Kyoto: Kyoto University.
 - 2012 Changing Natural Resource Use and Social Relationships among the Sandawe in Tanzania: Implications with Regard to the Modernization of Hunter-gatherer Societies. Kyoto: Shokado, (in Japanese).
 - 2015 Reconsidering the "Indigenous Peoples" in the African Context from the Perspective of Current Livelihood and its Historical Changes: the Case of the Sandawe and the Hadza in Tanzania. African Study Monographs 36(1): 27-48.
- Woodburn, J.
 - 1988 African Hunter-Gatherer Social Organization: Is It Best Understood as a Product of Encapsulation? In T. Ingold, D. Riches and J. Woodburn (eds.) Hunters and Gatherers Volume 1 History, Evolution and Social Change, pp.31-64. Oxford and Washington D.C.: Berg.