

DEFECATION ATTITUDE AND INFLUENCE OF TOILET CONSTRUCTION ACTIVITIES AMONG THE BAKA OF SOUTHEASTERN CAMEROON

Koji Hayashi^{1,*} & Takao Shimizu²

¹*The Center for African Area Studies, Kyoto University*

²*Faculty of Global Culture, Kyoto Seika University*

*E-mail: mojukoe@gmail.com

ABSTRACT In this paper, the ambivalent phenomenon that emerged between the actual defecation attitude of settled hunter-gatherers and recent trends (Community-Led Total Sanitation; CLTS and Sustainable Development Goals; SDGs) reveals the need for and significance of toilets for hunter-gatherers. Baka hunter-gatherers have been adapting to a sedentary lifestyle since the 1950s in the rainforests of Cameroon but continue to lead a nomadic lifestyle with seasonal camping in the forest. Based on the ecological environment of the region and their adapted lifestyle, many do not build fixed and specific toilets and consider open defecation to be sufficient. However, despite frequent attempts to build toilets as an external refined tool or as sanitation improvement for their appropriate use, these practices have not taken root. This study examined the defecation attitude of the Baka people to provide perspectives on their sanitation and hygiene towards building better toilets and sanitation practices for the Baka people.

KEYWORDS: Baka hunter-gatherers; SDGs; Settled lifestyle; Toilet; Tropical rainforest.

INTRODUCTION

The Sustainable Development Goals (SDGs) state the commitment to development in the strong words “leave no one behind,” in which sanitation has been identified as a global challenge. As articulated in Target 6 of the SDGs⁽¹⁾, the need to ensure safe drinking water supplies and latrines for people worldwide to maintain sanitation is seen as a feasible challenge. In this paper, we examined views on defecation and the necessity of toilets in rural African communities where the concept of the toilet is relatively weak.

The setting of this paper is a rural area surrounded by tropical rainforest in the eastern part of the Republic of Cameroon, where different ethnic groups live symbiotically in different regions. The Baka are “pygmy” hunter-gatherers, but their settlement and agriculturalization spread earlier than other pygmy groups. The population was estimated to be approximately 25,000 in southeastern Cameroon in the late 1990s (Joiris 1998) and 30,000–40,000 in Cameroon, Gabon, and the

Republic of the Congo combined, in the 2010s (Bahuchet 2014). More than half a century has passed since the 1950s, when the Baka began to settle. In Cameroon, the Baka have lived a life of forest nomadism, with hunting and gathering as their primary livelihood until the government's resettlement policy took hold; for many, this way of life still continues. Hunter-gatherers in tropical Africa, including the Baka, have depended heavily on forest resources not only for the supply and use of food and material culture, but also for their worldview. However, it has been pointed out that these people's activities themselves have acted to revitalize forests (Ichikawa 2001). For example, hunter-gatherers set up camps and cut down trees in the vicinity as part of their nomadic lifestyle in the forest, which provides an opportunity for some plants to gain sunlight. The ashes generated after people make fires are scattered here and there in the forest as a result of their subsistence activities and have a positive effect on plants.

The promotion of safe water and sanitation, which are essential for a settled life, has become a global trend in recent years. In Cameroon, the government, administration, and international NGOs are leading campaigns to improve sanitation (including toilets) from the perspectives of health and education. However, it has been empirically pointed out that for the Baka people, "civilized things" such as goods and technologies brought by governments and NGOs, or western ideas such as environmental issues, have only temporary utility or take a long time to penetrate (Hayashi 2009; Hattori 2014). Community-Led Total Sanitation (CLTS) projects and other sanitation improvement measures have been developed in Cameroon since 2000. And in the Eastern region, where the Baka live, guides and manuals have been prepared and disseminated since around 2010 as part of efforts to improve sanitation, which is a national goal. Activities to solve problems such as water treatment, storage and transport, menstrual and environmental sanitation, hand washing, prevention of cholera, and malnutrition have expanded (Institute of Development Studies 2016). In fact, in several cases in the Baka settlements, toilets have been installed under such influences; however, many still have poor toilet facilities and several issues pertaining to hygiene, safety, and private protection remain, indicating the difficulty of their sustainable use.

In this paper, we analyze the defecation attitude among the Baka and clarify their views on the acceptance of toilets and future prospects, while taking into account the intentions of the Baka.

RESEARCH TARGET AND METHOD

I. Baka's settlements and surroundings

The southeastern part of Cameroon, where the Baka live, is located in the Congo Basin, which is the second largest tropical rainforest area in the world. The annual rainfall in the tropics of the Eastern region is approximately 1,500 mm. The climate consists of four seasons: a dry season from December to February, a light rainy season from March to May, a light dry season from June to mid-August, and a heavy rainy season from mid-August to November. Lomié,

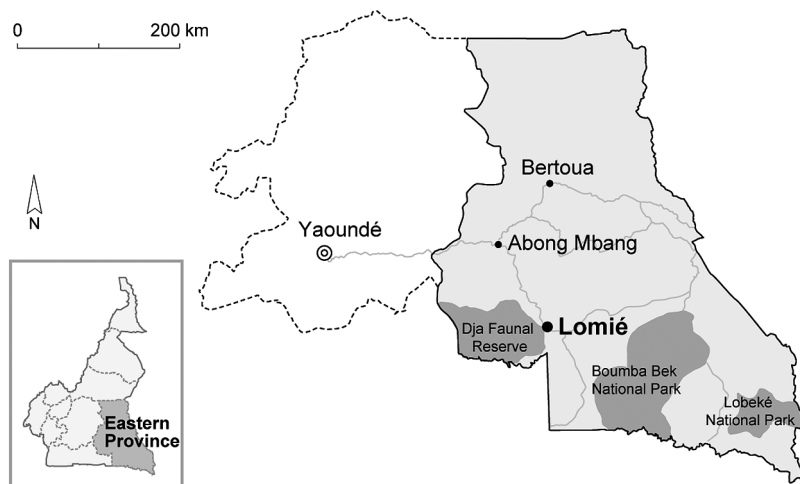


Figure 1 Eastern Cameroon and study area

the main research site for this study, is a regional city in the Haut-Nyong Department of the Eastern region that has prospered since the colonial period as a transit point for various parts of the Eastern region. Cocoa farming (carried out mainly by the non-Baka) and forest resources are the major product of the region, and Lomié is also a center for logging and mining companies. The center of Lomié, also the political and economic center of the region, is lined with government buildings, stores, and eateries, and many residences are scattered around the city. Contrarily, the city is surrounded by lush tropical rainforest and is adjacent to Dja Wildlife Reserve, a UNESCO World Heritage Site (Figure 1). Within walking distance or a few kilometers from the center are the scattered settlements of the Nzime and Njem, the ethnic minorities in the region. Three settlements of settled hunter-gatherer Baka (A, S, and M) are scattered in an area somewhat distant from the center of Lomié (Figure 2).

II. Baka's defecation attitude and research method

Despite the rapid spread of settlements and farmlands since the 1950's, the Baka's defecation habits have not significantly changed as compared to other aspects of their lifestyles. For example, even today, many Baka communities do not build specific toilets, but instead practice daily open defecation behind their houses, beside fields, and near trails in the forests. Perhaps they believe that even though life in settlements has become more prevalent, access to forests is still easy, and there is no merit in building toilets with the burden of labor. When they have bowel movements, they move to a nearby grassy area where they could defecate without being seen. Even in present-day settled life, traces of defecation at the back of a settlement is often observed. The author has had many opportunities to accompany groups of several or at most ten families to observe them

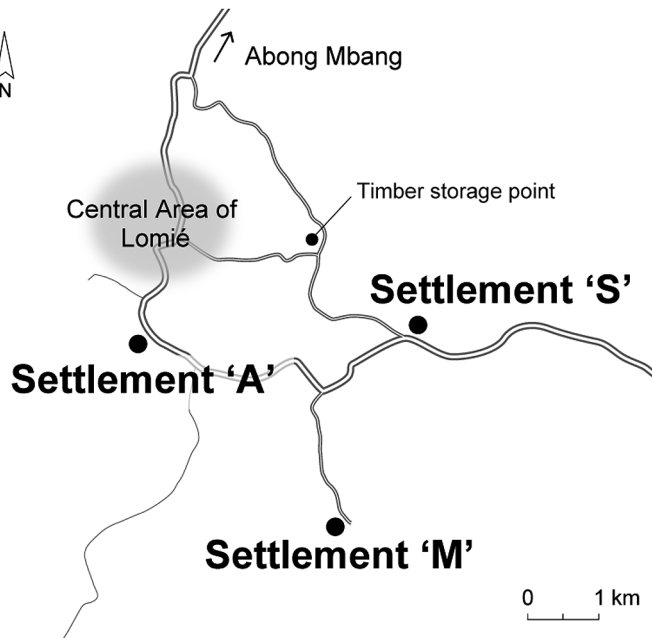


Figure 2 Lomié and Baka's settlements

in the forest since 1998, but none of the camps are densely populated, and under tropical climate conditions, where organic matter decomposes at a rapid rate, excrement is decomposed and recycled relatively quickly in the ecosystem, backed by the biodiversity of the forest.

This study is based on household surveys (68 households in March 2019) and interviews conducted with the Baka around Lomié community, particularly from 2018 to 2022, following a preliminary survey focusing on the defecate culture among the Baka from 2016 in Gribé area. A questionnaire survey was conducted on 51 Baka regarding whether they used the toilet and where they actually defecated in 2019. In addition, through participant observation, we recorded the defecation behavior and attitude of the Baka.

In the following section, we also discuss our results and analyses based on our observations when we constructed the toilets with the Baka.

RESULTS

I. Spatial perception and toilets among the Baka

Baka hunter-gatherers in tropical rainforests set up forest camps near rivers to facilitate drinking, cooking, and bathing. Each group has its own spatial awareness of the forests, such as knowing the location of rivers and mountains (hills), the names of the places where they set up camps, and where to go next (Sato

et al. 2012; Yasuoka 2009). They also know where to gather wild yams and nuts for food and where to set traps. By ensuring that their campsites and trap sites do not overlap with those of the other groups, they subconsciously distribute their resources to facilitate sharing. It is interesting to observe how these spatial perceptions of the forests have been affected by the increasing settlement in the area. For example, the locations of settlements and houses and the cultivation of fields are often shared among relatives, although there are no specific rules. However, ownership rights represented by houses and fields are clear, and by extension, ownership rights or users of latrines, which are few and far apart today, are also clear.

The Baka take into account sanitation reasons in the way they use water sources. However, in addition to spring and well water, the Baka may also use river water for drinking and domestic purposes. The challenge here is to find as safe a water source as possible, considering the location of the toilets (i.e., defecation sites). In addition, because the location of defecation sites is usually fixed near residences, the transmission of pathogens by flies is more likely to occur. Therefore, care needs to be taken with water storage containers, sanitation of dishes, and hand washing.

In a questionnaire survey conducted in 2019, 57 percent (29 respondents) of all respondents answered that the “actual place of defecation in the settlement” was open defecation in the forest and 35 percent (18 respondents) usually used a specific toilet in the settlement. At that time, few specific latrines were installed or used in the settlements, and the respondents who used them were limited to family members or relatives who owned a latrine in the same settlement.

In an interview accompanying this response, a woman in her 20s answered, “When I am in the settlement, I use the toilet there. When I am in the forest, I defecate in the forest.” Thus, even those who have toilets in the settlement may defecate in the open while working in slash-and-burn fields away from the settlement or while hunting and gathering in the forest. Considering these patterns based on livelihood, it is assumed that the actual frequency of open defecation is even higher. The Baka people do not avoid the use of toilets. However, securing private space is also considered to be an important factor.

For example, as with defecation, bathing in the settlement is done out of sight, especially in the case of men, who bring water to the back of the house. We have observed many cases of bathing in the toilet, which is an “enclosed” space. This is not limited to the Baka, but based on the fact that it fulfills the “drainage” function and is an enclosed, individual space, the toilet will be recognized as a private space like the unit bath in the future, especially among the Baka who have become sedentary.

II. Baka’s narrative for the toilet

In the Baka language, the term “*yando*” is the French counterpart of the cabinet and latrines for a place of defecation, indicating a “toilet” (Brisson 2010). In everyday Baka words, the vocabulary was limited to exchanges of words that mixed the words for “excrement (*dipa*)” and “urine (*sio*)”. For example, it was

common for well acquainted Bakas to say “I go to the toilet (*ma go a dipa/ma go a sio*)” or “I go to the forest/bush (*ma go a bele*).”

Next, we examined how Baka people think about their toilets and defecation practices based on the results of a survey conducted in 2019. In three villages inhabited by Baka near Lomié, we actually saw only six specific defecation sites that were considered “toilets,” two of which were shared with farmers living nearby.

Of the 51 respondents to the questionnaire survey, 18 mentioned the daily use of toilets, including two families with toilets in village S. Of the total respondents, 75 percent (38) recognized the need for toilets. As reasons for the need for toilets, they indicated the importance of safety and hygiene, such as “I need a safe toilet” (male, in his 30s), “Toilets in the village are good for my health” (female, in her 50s), and “Toilets in the village are safe and good” (female, in her 30s, and many others). In particular, some respondents commented on the danger of snakes when defecating in the forest as well as the inconvenience during rainfall and at night.

Although there were no responses in this survey that indicated the needlessness of the installation of latrines, there were a number of explanations given by the Baka for the lack of latrines, such as “The latrines in the villages are good, but we don’t have the tools to dig (holes)” (male, in his 40s) and “The latrines in the villages are good, but men are not serious about digging holes” (female, in her late teens), thus avoiding the responsibility for the lack of materials and resources. The questionnaire employed in this study did not always yield answers regarding the essence of the problem, which is a weakness of this survey method. However, even during the observation, which was supposed to allow a deeper approach to the issue, we rarely heard narratives about toilets, even at the verbal level. Among the few Baka narratives, the one that stood out most was a single word from a preliminary survey conducted in the village of Gribé in 2016. When we asked a Baka friend of ours in Gribé about his perception of toilets, he said, “Toilets that collect human excrement in one place are unclean. During the rainy season, they are overflowing with filth” (male, in his 30s).

Such narratives by themselves do not lead to any proof, but they tell us about the subtleties in the lives of the Baka people, who are not aware of the widespread use of toilets. In particular, the last words of the man in Gribé give us a clue to Baka’s worldview.

III. “Toilets” brought in by outsiders and acceptance by the Baka people

According to a local NGO staff in the Eastern region of Cameroon with past practical experience, a project to build latrines in a Baka settlement with the aim of improving sanitation of the CLTS activities, Baka people initially showed a cooperative attitude and understanding. But it was difficult to keep them motivated at all times and to keep them going. Furthermore, when the project was completed and the visits of the people involved ceased, some of the latrines were no longer used in some places, or the latrine buildings themselves collapsed and were abandoned afterwards, making it difficult for the latrines to be habitually

used (interview conducted on March 21, 2019).

Since 2018, we have been in discussions with the Baka in Lomié to support them in building latrines by donating the minimum tools required to build them. However, when we visited Cameroon in September 2019 and February 2020, the construction of latrines had not sufficiently advanced, and a wide-area survey of the Baka settlement based in Lomié conducted in 2019 revealed that there were many areas that needed improvement in terms of safety, hygiene, and privacy protection, based on the prevalence of latrines and the sites and conditions where they were not used despite their availability.

When we returned to the site in August 2022, after the COVID-19 pandemic settled, the construction of latrines remained largely abeyant. Although a few households had built new latrines, we were reminded once again of the difficulty of implementing a comprehensive approach that includes construction, maintenance, management, and opportunities for use.

DISCUSSIONS

I. Exploring Baka's views on toilets

In a lifestyle that involves settling in along a logging road a or setting up a camp in the forest, the range of activities include moving to the fields, working, and walking in the forest for hunting and gathering, in addition to the time spent in the house that serves as a residence or in a simple camp dwelling. In such a daily life, with daily livelihood activities in the background, a lifestyle that does not require a specific toilet is accepted. On the other hand, as people settle down, the distance between houses and people becomes denser, and they may be forced to be aware of their “surroundings,” which they were not very conscious of during their forage life in the forest.

Seventy years after the settlement of the Baka people, many development projects have promoted the establishment and use of latrines. For example, the local NGO mentioned above has been working to improve the lives of the Baka in the Eastern region since 1991 (Mutcare; Zobome et al. 2023). Its activities are centered on promoting “Water, Sanitation and Hygiene (WASH)” in the Eastern region with a broad awareness of issues such as human rights and the environment. This NGO members emphasize that toilets have not taken root in the region, especially within the Baka community, noting that although many toilets have been installed, many are no longer in use or have been abandoned. In other words, it is recognized that activities to achieve the goal of “sanitation for all” as stated in the SDGs and other goals are not going well, but why this is the case is never mentioned. However, it needs to be examined why the acceptance of toilets has not progressed despite the Bakas becoming increasingly settled and theoretically in need of toilets in their environment, from the viewpoint of the Baka's “ownership” consciousness.

The collection of empirical ethnographic data from many hunter-gatherer societies in the first half of the 20th century revealed that while land and its resources

were shared by the local group, tools and acquired food were individually “owned,” and that this individually owned food was distributed within the group (Lee 1988). In addition, in a joint study of hunter-gatherer ownership, a dichotomous discussion of ownership in hunter-gatherer societies has emerged between “communal ownership” and “private ownership” (Ingold et al. 1988). Among the Baka, practices based on the egalitarian customs characteristic of hunter-gatherers are maintained even today. For example, although there are tools and accessories, such as hunting gear and other objects, that belong to individuals as daily necessities, resources in the forests from which they obtain food and daily necessities are perceived as common property. However, with the spread of settlements and agriculture, a sense of ownership of houses and farmland (land) seems to have increased. In addition, as people were incorporated into the market economy, money and commodities flowed into their daily lives and their desire for and sense of ownership of things increased.

In this context, we discussed how the Baka perceive toilets. In the continuation of a partially customary nomadic lifestyle, there are also places where the actual situation of defecation sites has not yet been identified, and it is thought that the “civilized” toilets brought in from outside are not seen as something as familiar as housing or fields. Furthermore, it is clear from the efforts of NGOs and the construction of toilets with the Baka people through this study that knowledge of the degree of labor required for construction, durability of materials, and maintenance and management of toilets is not sufficiently widespread among the Baka. In other words, in addition to the sanitation function of toilets, the secondary functions that toilets are supposed to have, such as improving hygiene, health, and safety, are not widely realized. Thus, it can be said that for the Baka people, toilets are still in a transitional situation before they are perceived as objects to be “owned” by individuals or households.

II. Why the Bakas don’t build or maintain toilets?

Based on the results and analysis so far, the following circumstantial evidence has been organized.

- (1) Due to their long-standing nomadic lifestyle as hunter-gatherers, Bakas were not in the habit of using specific toilets.
- (2) Based on their experience of using toilets (pit latrines), they do not necessarily believe that toilets contribute to the maintenance of sanitation; rather, they believe that the accumulation of manure deteriorates sanitation during the rainy season.
- (3) In light of the Baka’s concept of ownership, there is a strong perception that the toilet is not considered something that accompanies the dwelling and whose ownership is attributed to the family; however, it is shared and can be provided by an outsider.

From these three situations, we can identify two issues that must be addressed to promote the transformation of defecation habits in nomadic lifestyles. The pit latrines that are currently being introduced into the Baka community have not adapted to this local environment. The first challenge is technical: the overflow-

ing toilets during the rainy season, as described in the text, discourage the use of toilets in a rainforest environment, even considering their original purpose. As the narrative by the Baka in Gribé reminds us that it may be natural for us to think that toilets are used to keep our living environments clean, but the Baka, who have a nomadic lifestyle, may have maintained their environment by dispersing human waste. For the Baka, who have cultivated their lifestyle and culture in such an environment, pit latrine (a basic sanitation facility consisting of a hole in the ground to collect human waste) overflowing is a risk that they must always be concerned about. Second, despite the long intervention period by the outsiders, multiple approaches to toilet introduction have not been considered. For example, including the attempts made in this study, the number of installations per settlement conducted by support groups has been small, forcing the use of toilets beyond households, and there has been no verification of the case where toilets are installed for each household. The concept of ownership in the Baka society places toilets in the commons, where no proactive management can be expected.

On the other hand, the dilemma of conservation-induced policies related to the adaptation of the Baka has been pointed out (Awuh 2015), and the construction of modern schools, hospitals and household toilets has been reported as the voice of the Baka, who have difficulty adapting to a lifestyle that is not their own (Messe et al. 2023: 34). However, they also mention positive responses to the installation of toilets, such as requests for “build a good toilet house with doors and a safe place,” as well as the statement that “ensure strict respect for their cultures: customs, traditions, and traditional knowledge” (Messe et al. 2023: 34–35). As mentioned above, in order to promote the active construction and maintenance of toilets by the Baka people, we should seek toilet installations that align with the ownership concept of the Baka while maintaining the fairness of outsider intervention.

CONCLUSION

Toilets are devices for maintaining sanitation under conditions of tight population density, and are not an absolute requirement from a hygienic standpoint unless ethical and safety considerations are taken into account. This conclusion can be drawn from the “status quo” of toilet acceptance within the Baka community. However, it is unlikely that the Baka people will ever again return to a life of roaming the forests; their society is bound to change, even if slowly. Current African countries are a good example of this: people are becoming more settled and clustering, nutritional and sanitary conditions are improving, and the population is growing. If we consider that the Baka society is in the process of such a change, we may expect a major change in their acceptance of toilets. However, this shows that “civilized” methods and means may not always be appropriate, as in the case of the SDGs and CLTS.

The current ambivalence over toilet use in the Baka society presents questions about the implicit understanding of the relationship between humanity and toilets, which is by no means universal when the social change variable is incorporated.

Therefore, the authors did not focus on the gradual establishment of toilet use in this region.

Despite the extremely low rate of toilet adoption by the Baka, learning from NGOs with experience in toilet building with local communities remain essential to improving adoption. One example is the “fruit toilet” that we are co-creating with the aforementioned local NGO, Mutcare (Hayashi & Shimizu 2022; Zobome et al. 2023). The idea is to make the latrine pit much shallower than conventional pit latrines and plant fruit seedlings in the pit latrine, taking advantage of the fertilizing effect of manure, assuming that the latrine will be abandoned early. Incentives for toilet installation are added to “sanitation improvement” with the addition of “fruit (goods) acquisition.” In addition, the burden on users can be reduced by simplifying the installation and management of toilets. Through these measures, it is hoped that a new sense of value for toilets and a new form of toilet that is adapted to the lifestyle of the Baka will be created in their society, which is currently in the transitional stage of toilet use.

NOTE

- (1) ‘By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies’.

REFERENCES

- Awuh HE (2015) Adaptive livelihood strategies in conservation-induced displacement: The case of the Baka of East Cameroon. *African Studies Review* 58(2): 135–156.
- Bahuchet S (2014) Cultural diversity of African pygmies. In (Hewlett BS, ed) *Hunter-Gatherers of the Congo Basin: Cultures, Histories, and Biology of African Pygmies*, pp. 1–29. Transaction Publishers, New Brunswick.
- Brisson R (2010) *Petit Dictionnaire Baka-Français: Sud-Cameroun*, L’Harmattan, Paris.
- Hattori S (2014) Current issues facing the forest people in southeastern Cameroon: The dynamics of Baka life and their ethnic relationship with farmers. *African Study Monographs Supplementary Issue* 47: 97–119.
- Hayashi K (2009) Development and marginalized hunter-gatherers in African rainforests (Afurika Netai-urin no Kaihatsu to Shuenka sareru Syuryou-saisyu-min). In (Kishigami N, ed) *Development and Indigenous Peoples* (Kaihatsu to Senju-min), pp. 255–271. Akashi Shoten, Tokyo (in Japanese).
- Hayashi K & Shimizu T (2022) Cameroon: Actors’ intentions and differences. In (Shimizu T, Ushijima K, Ikemi M & Hayashi K, eds) *The Mechanism and Co-creation of Sanitation* (Lecture: Sanitation Studies, Vol. 5), pp. 153–191. Hokkaido University Press, Sapporo (in Japanese).
- Ichikawa M (2001) The forest world as a circulation system: The impacts of Mbuti habitation and subsistence activities on the forest environment. *African Study Monographs Supplementary Issue* 26: 157–168.
- Ingold T, Riches D & Woodburn J (eds) (1988) *Hunter and Gatherers Vol. 2: Property, Power and Ideology*. Routledge.
- Institute of Development Studies (2016) Community-Led Total Sanitation Cameroon. <https://>

- archive.ids.ac.uk/clts/country/cameroon.html (Accessed August 29, 2024)
- Joiris DV (1998) *La chasse, la Chance, le Chant: Aspects du Systme Rituel des Baka du Cameroun*. PhD dissertation, Universit Libre de Bruxelles.
- Lee R (1988) Reflections on primitive communism. In (Ingold T, Riches D, & Woodburn J, eds) *Hunters and Gatherers*, pp. 252–268. Berg Publishers Limited, Oxford.
- Messe V, Nsonkali C, Hayashi K, Sai A & Yamauchi T (2023) Eradication of open defecation in the face of COVID-19 in hunter-gatherer societies: challenges faced and a sense of belonging among Baka hunter-gatherers in Cameroon (Association Okani Reports). *Sanitation* 7(1): 29–35.
- Mutcare, website. <https://mutcare.org/> (Accessed October 1, 2023).
- Sato H, Kawamura K, Hayashi K, Inai H & Yamauchi T (2012) Addressing the wild yam question: how Baka hunter-gatherers acted and lived during two controlled foraging trips in the tropical rainforest of southeastern Cameroon. *Anthropological Science* 120(2): 129–149.
- Yasuoka H (2009) The variety of forest vegetations in southeastern Cameroon, with special reference to the av ailability of wild yams for the forest hunter-gatherers. *African Study Monographs* 30(2): 89–119.
- Zobome CG, Hayashi K, Sai A & Yamauchi T (2023) COVID-19 countermeasures and sanitation co-creation through women’s agricultural activities (Mutcare Reports). *Sanitation* 7(1): 22–28.