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Anthropological approach within "One Health Water Africa" (OHWA) project in 2022 and 2024

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Introduction & context

One Health Water Africa (OHWA) is an international, multidisciplinary field school organized jointly by Cameroon and France that took place in Akonolinga, in the Mefou-et-Afamba Department of the Center Region, Cameroon. According to the WHO (2026), One Health is "[...] an integrated, unifying approach to balance and optimize the health of people, animals, plants and ecosystems." Since 2022, OHWA has brought together graduate students and faculty members from both countries Cameroon and France to participate in a project addressing issues related to the *Nyong* River through a research approach that combines both qualitative and quantitative methods. During the first edition, OHWA studied waterborne diseases related to life along the *Nyong* River, focusing on *Buruli* ulcer—a neglected tropical disease—typhoid, diarrhea, etc., while in 2024, the research focused on the social, hydromorphological, and epidemiological aspects of malaria.

One Health and pluridisciplinary approach

One health's principles follow a multidisciplinary approach which is supported within several scholarly debates. Antoine-Moussiaux, & *al.* (2024) said that One Health raises questions relevant to many fields of application and thus calls for the involvement of numerous disciplines, but also requires recognizing, valuing, and drawing on other forms of knowledge. Therefore, OHWA was drawn upon several disciplines, including epidemiology, hydromorphology, earth sciences, agronomy, anthropology, etc.

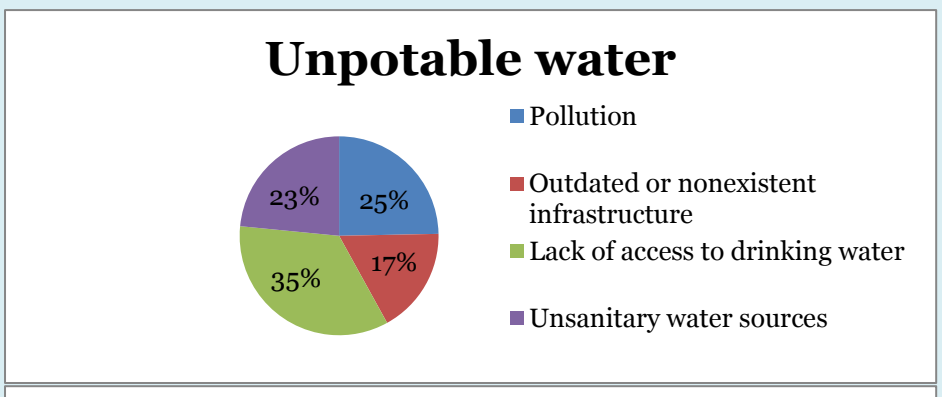
Material and methods

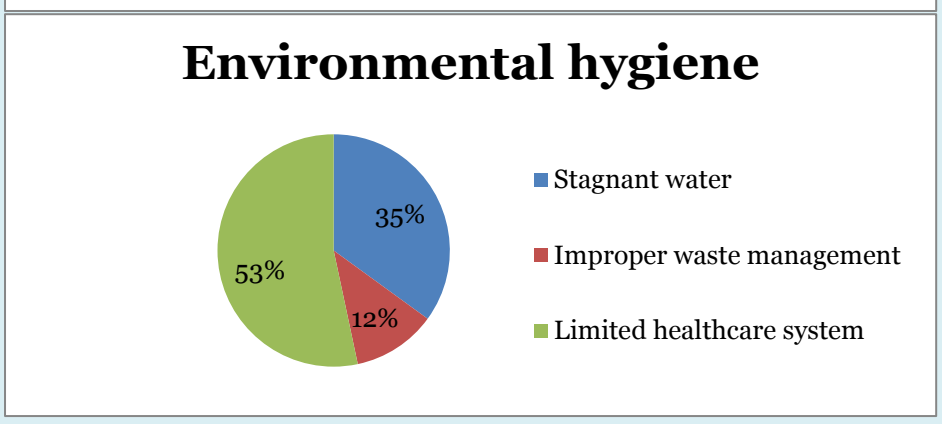
During the two editions of OHWA, we visited around twenty sites, including: Mengueme-Sii, Abem, Medjek, Nkolessong, Bii, Nyaze, Aboe Bikele, Wouma, Essang-Ndibi, Edouma, Ebang Sombo, Ebolakounou, etc. For the anthropological activities, our team utilised observations, semi-structured interviews and focus groups. A probabilistic sample of 43 people, comprising 25 women and 18 men from various groups, including farmers, traditional healers, civil servants, traders, etc. Quantitative analyses were carried out using SPSS and MS Excel, whilst qualitative analyses were conducted using Atlas.ti.

Results

Lexicometric analysis

The data show that 76% of respondents—33 informants—are aware that the water they use is unfit for consumption due to the microbiological and physicochemical risks it poses as well as the understanding of the impact of environmental hygiene on the spread of waterborne diseases such as malaria.





These two diagrams show the percentages of the use of categorized expressions in the lexical fields related to knowledge of non-potable water and unsanitary environments—which are vectors of waterborne diseases affecting the populations of the Akonolinga Health District—as reported during interviews.

Buruli ulcer: Pathway of treating and symbolism

Analysis of the data shows that the treatment pathways for people affected by "Atom" or "Essilick"—the local names for *Buruli* ulcer—vary widely depending on available resources, educational level, beliefs, and so on. Here are a few examples:

- From traditional medicine to biomedicine;
- From biomedicine to traditional medicine;
- Self-treatment using indigenous knowledge, traditional medicine, and finally biomedicine;
- Etc.

To ward off this disabling pathology, the people interviewed practiced rituals described as follows:

> "[...] In each house in the village, people took one seed of each product from the last harvest (peanuts, pistachios, cacao pods, etc.) and a 25-FCFA coin, which they offered to the Nyong River under the guidance of two older villagers who knew the village well." (Enama, 65+, female farmer, Edouma).

Endogenous treatment of malaria

Given their vulnerability due to low incomes, informants rely on their local pharmacopoeia to combat diseases:

> "For malaria, we ferment the bark of a local tree called IKOUCK in local liquor called ODONTOL. After 48 hours of fermentation, we drink one glass of this beverage in the morning and another in the evening. Despite its strong odor and bitter taste, this potion helps treat people who cannot always afford to go to the hospital." (Assomo, 45+, unemployed man, Medjek).

Discussion

These results might be analyzed in the following ways:

- Most often, resilience is highly linked to health systems which resist disruptive events such as epidemics and/or disasters (Jatobá & de Carvalho, 2022). OHWA investigated the local health system of Akonolinga and highlighted the resilience of the localities facing vulnerability (Naepels, 2019), as well as to present some responses formulated by local communities to preserve their health.

Conclusion

All in all, OHWA was an invaluable experience which brought together several disciplines under the One Health principles, for scientific research in the Center region of Cameroon. Specifically, anthropology has mainly contributed through ethnography, in collecting, analyzing and codifying data. The pluridisciplinary approach of OHWA and the obtained findings are essential elements for decision-makers which will use them for ameliorating health policies.

Bibliography

Antoine-Moussiaux, A., Carmo 2, L. P., Léger, A., & Simoes, M. (2024). Inter- and Transdisciplinarity in One Health. *Principles of One Health for a better planet*, 52-72.

Jatobá, A., & de Carvalho, P. R. (2022). Resilience in public health: precepts, concepts, challenges, and perspectives. *SAÚDE DEBATE, 46*(8), 130-139.

Naepels, M. (2019). *Dans la détresse: Une anthropologie de la vulnérabilité.* Editions de l'Ecole des Hautes Etudes en Sciences Sociales (EHESS).

Who. (2026, 05 08). *one Health*. Consulté le 09 29, 2026, sur World Health Organization: https://www.who.int/news-room/fact-sheets/detail/one-health

Photo album









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