

The Food Environment Perceived Through A Lens: A Photovoice Study in Southern and Eastern Zambia

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Background

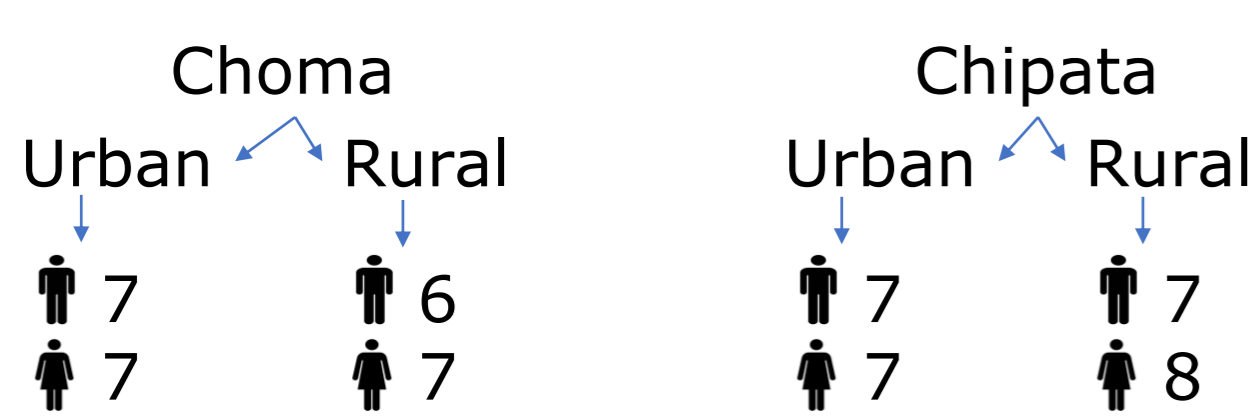
- The food environment plays an important role in shaping the diets of individuals (1,2,3).
- Consumption of healthy diets that include *mabisi*, a Zambian traditional fermented milk is encouraged
- *Mabisi* possesses probiotics and their metabolites the short-chain fatty acids (SCFAs) which may prevent NCDs (2).
- However, *mabisi* consumption in Zambia is not evenly distributed due to socio-cultural drivers and preferences

Objective

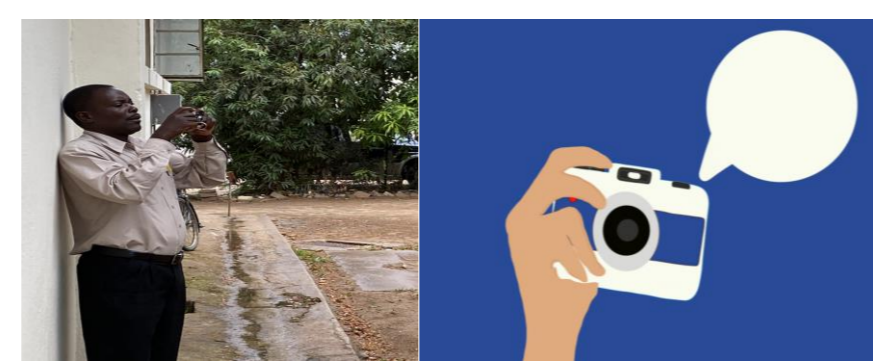
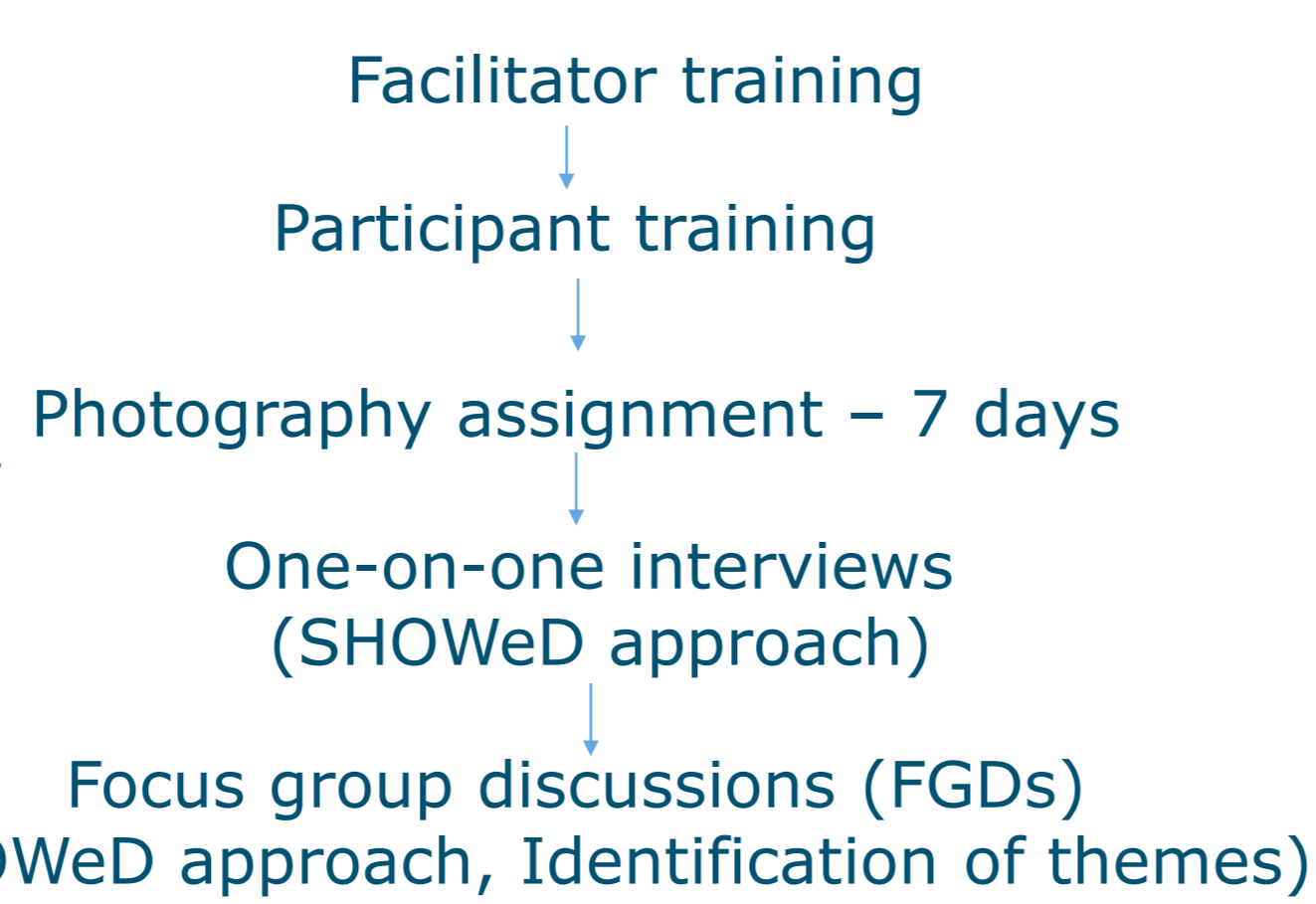
- To assess the food environment surrounding diets that (may) include *mabisi* in the urban and rural areas of two culturally different districts, namely, Choma and Chipata in Southern and Eastern Provinces, respectively.

Methods & Participants

Participants



Methods



Results

Choma



"What is likely to happen is that if these cows don't get well and they die then we will be in big trouble because we use these cows for farming and we get our milk from them and we also eat the meat"



"When you look at this bucket of sour milk that is just in the sun, as well as the okra, these things may have been here longer (...) no longer good for our health (...) no longer fresh."



"Water is life, I want to believe that safe water is more good for one's health. (...) I am happy because I have the water just at home (...) but others go for miles to get the same commodity which I can get 24/7"

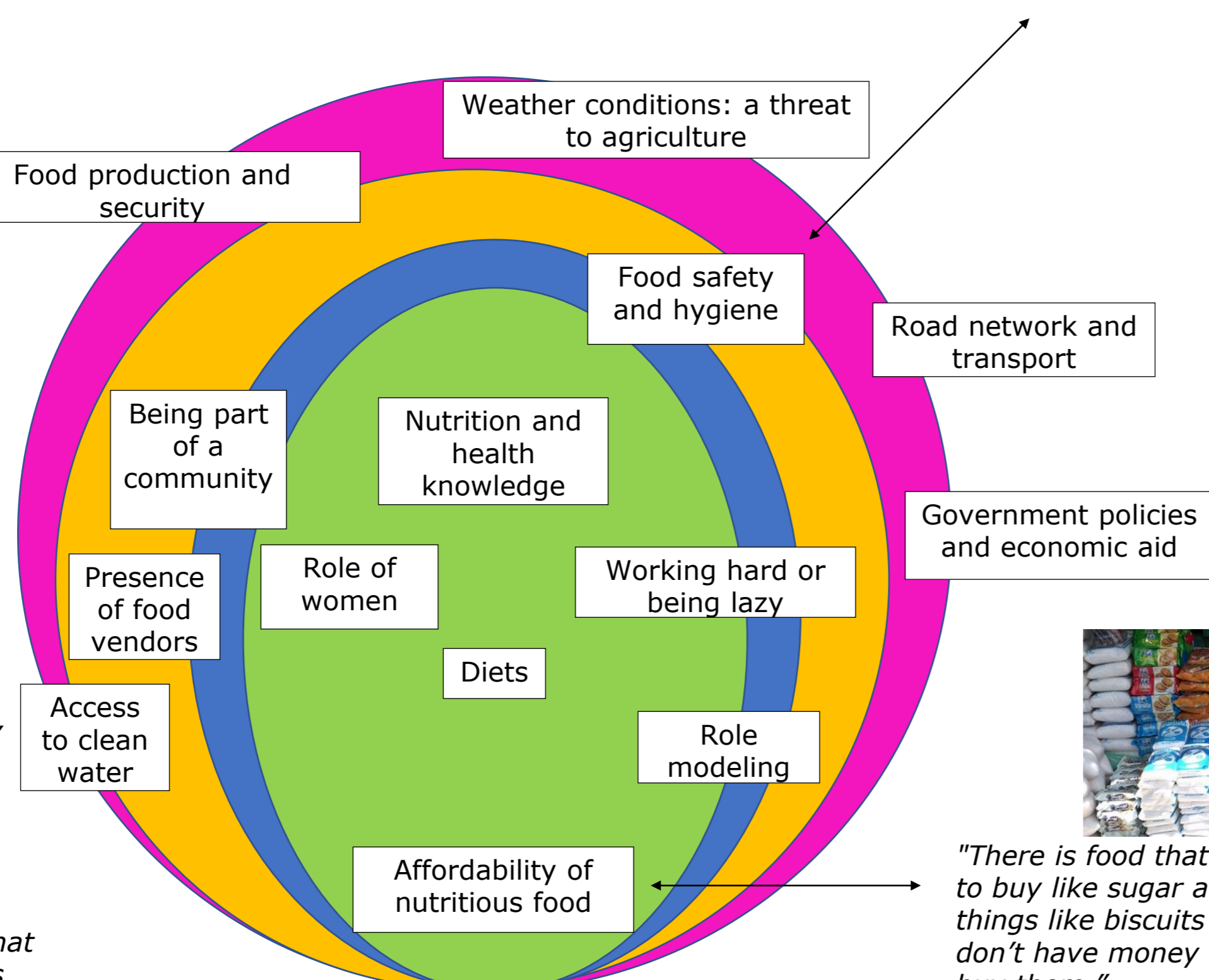
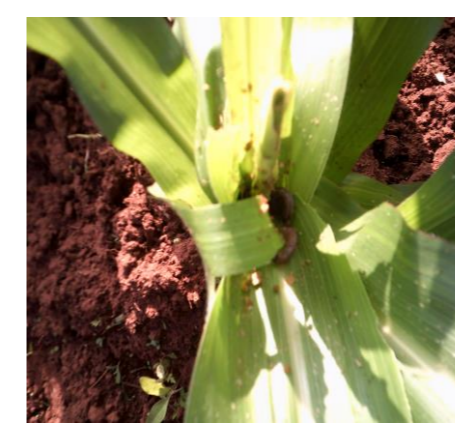


Figure 1: Different themes from Choma arranged in the Story et al. (2) and Osei-Kwasi et al. (3) frameworks. Key: Macro level (pink), Social level (blue), Physical level (yellow), Individual level (green).

Chipata



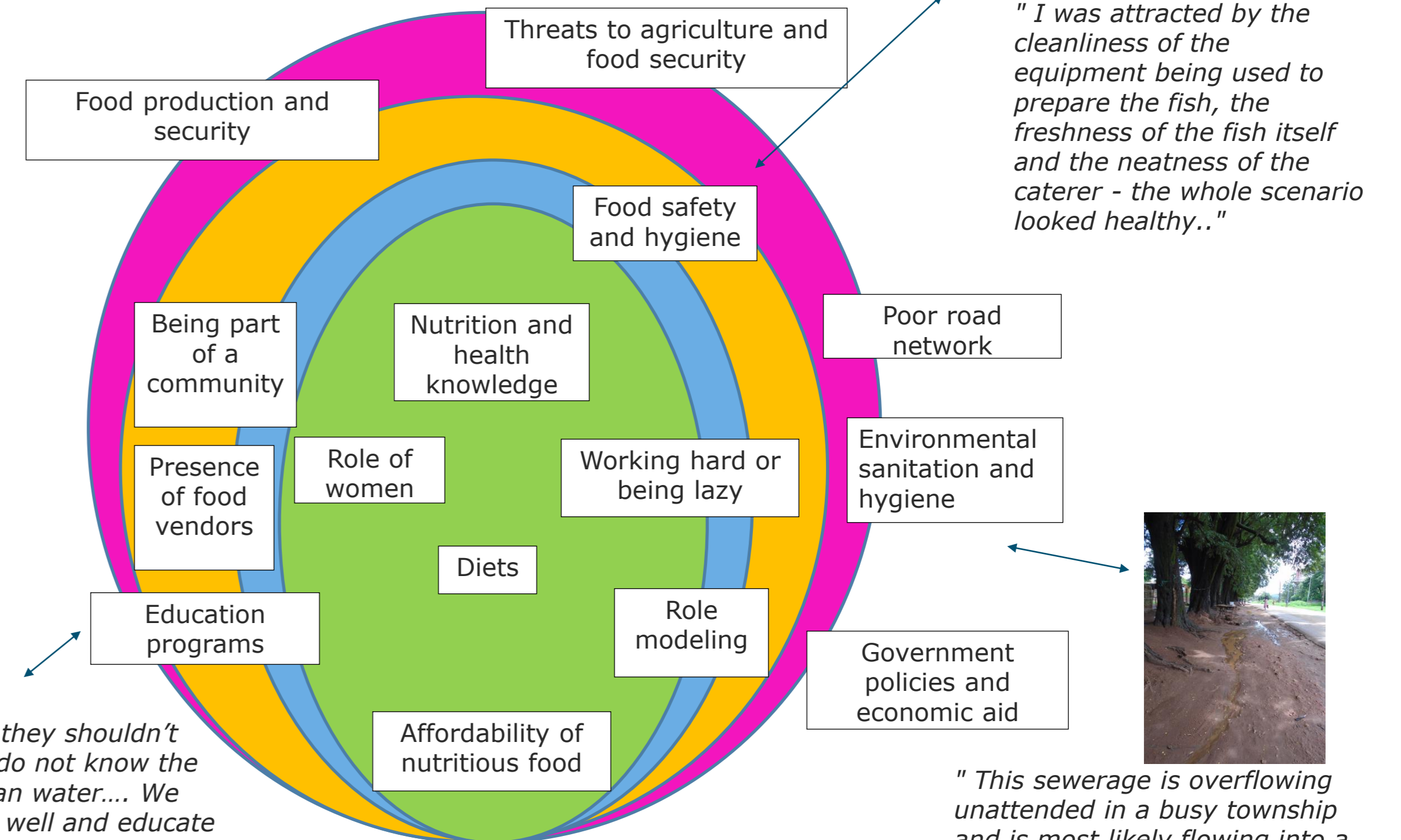
"a maize plant with army worms which destroy the plants thereby killing any hopes to harvest maize.... When the maize grows, we harvest it and grind it for mealie meal to cook nsima.....If the maize is infested, then we won't get a harvest from it"



"I was attracted by the cleanliness of the equipment being used to prepare the fish, the freshness of the fish itself and the neatness of the caterer - the whole scenario looked healthy.."



"I want people to see that they shouldn't drink dirty water...people do not know the importance of drinking clean water.... We can install a tap, clean the well and educate them about the importance of consuming clean water."



"This sewerage is overflowing unattended in a busy township and is most likely flowing into a stream where some people may be drawing water for domestic use."

Figure 2: Different themes from Chipata arranged in the Story et al. (2) and Osei-Kwasi et al. (3) frameworks. Key: Macro level (pink), Social level (blue), Physical level (yellow), Individual level (green).

"Something, a situation or someone that makes it easy for you to consume healthy foods and drinks"

Urban



Choma



Chipata

Rural



Choma



Chipata

"Something, a situation or someone that makes it difficult for you to consume healthy foods and drinks"

Urban



Choma



Chipata

Rural



Choma



Chipata

Conclusions

- Similar food environments exist in both districts
- *Mabisi* only identified in the Choma food environment
- Agriculture plays an important role in shaping diets
- *Mabisi* consumption may be increased by availing it in the Chipata food environment coupled with education
- Food and environmental safety and hygiene concerns must be addressed

References

1. HLPE. Nutrition and Food Systems. A Report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. 2017. Accessed March 12, 2020. <http://www.fao.org/3/a-i7846e.pdf>
2. Story, M., Kaphingst, K. M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating healthy food and eating environments: policy and environmental approaches. *Annual Review of Public Health*, 29, 253-272. <https://doi.org/10.1146/annurev.publhealth.29.020907.090926>
3. Osei-Kwasi, H. A., Laar, A., Zotor, F., Pradeilles, R., Aryeetey, R., Green, M., Griffiths, P., Akparibo, R., Wanjohi, M. N., Rousham, E., Barnes, A., Booth, A., Mensah, K., Asiki, G., Kimani-Murage, E., Bricas, N., & Holdsworth, M. (2021). The African urban food environment framework for creating healthy nutrition policy and interventions in urban Africa. *PLoS One*, 16(4), e0249621. <https://doi.org/10.1371/journal.pone.0249621>