

## ABSTRACT

In an effort to contribute to resilient food and nutritional security in urban slums, a food system approach was applied to understand the key socio-economic factors driving fish species consumption in Kibera, the largest informal settlement in Africa located in Nairobi, Kenya. Data were collected from 385 randomly selected households using a structured questionnaire. A multivariate probit model was applied to estimate the relationship between the variables in order to determine the socio-economic drivers of preferences for different fish species. The results indicated that Lake Victoria sardine (*Rastrineobola argentea*) had the highest preference (73%) among the respondents, followed by Nile tilapia (*Oreochromis niloticus*) (70%) and Nile perch (*Lates niloticus*) (23%), respectively, with other fish species at 12%, including African catfish, marbled lungfish, common carp, fulu and tuna (*Clarias gariepinus*, *Protopterus aethiopicus*, *Cyprinus carpio*, Haplochromine cichlids and *Thunnus* sp., respectively). Large household size showed an increase in preference for the Lake Victoria sardine, while higher income influenced preference for Nile tilapia and Nile perch positively, implying that when more income is available, Nile tilapia is the preferred fish over other fish species. Increased fish prices positively influenced preference for Nile tilapia, which is explained by the willingness to pay extra for quality and origin, for instance, to avoid the cheaply cultivated Chinese fish. In the case of the Lake Victoria sardine, lower prices positively affected the preferences. Religious and cultural practices and beliefs influenced preference for species and consumption of fish. Residents who migrated from western Kenya had a higher preference for the Lake Victoria sardine, while residents born and raised in Kibera had a higher preference for Nile tilapia. Neighbourhood effects reduced the preference for consuming Nile perch. These findings provide insights into future market opportunities for specific target groups. For instance, given that small-sized fish like the Lake Victoria sardine is highly demanded, in order to increase resiliency in food and nutrition security, small-sized cheap Nile tilapia will have a large potential in the future, with ever higher demand specifically from the residents born and raised in Kibera.