

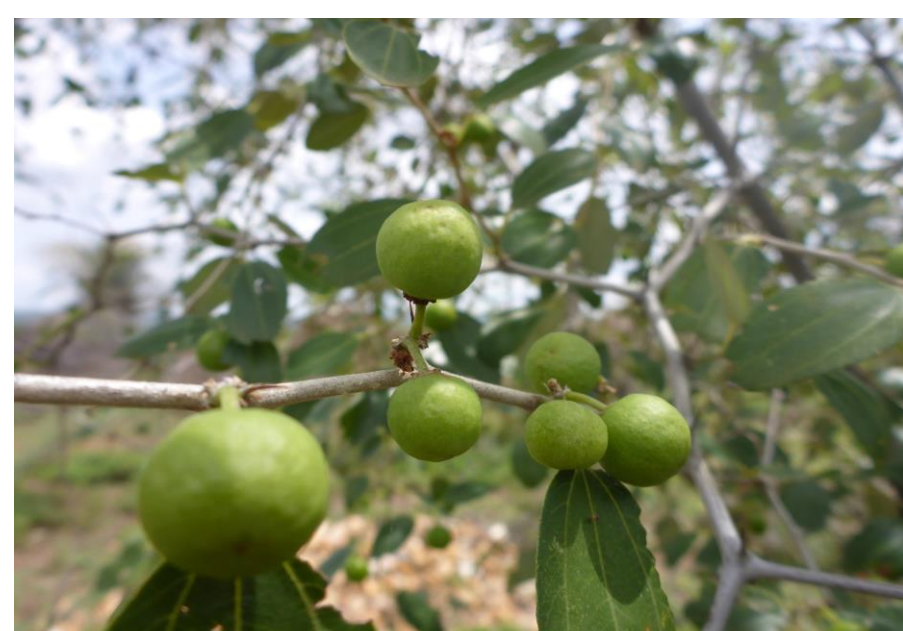
Understanding the contribution and dynamics of wild harvest in Turkana County

Alliance



Francis Odhiambo Oduor^{1,2}, Irmgard Jordan¹, Dasel Wambua Mulwa Kaindi², George Ooko Abong², Faith Thuita³, and Céline Termote¹

1 Food Environment and Consumer Behavior - Alliance of Bioversity International and CIAT; 2 Department of Food Science, Nutrition and Technology, Faculty of Agriculture – University of Nairobi; 3 School of Public Health – University of Nairobi



Ekalale/*Ziziphus jujuba*



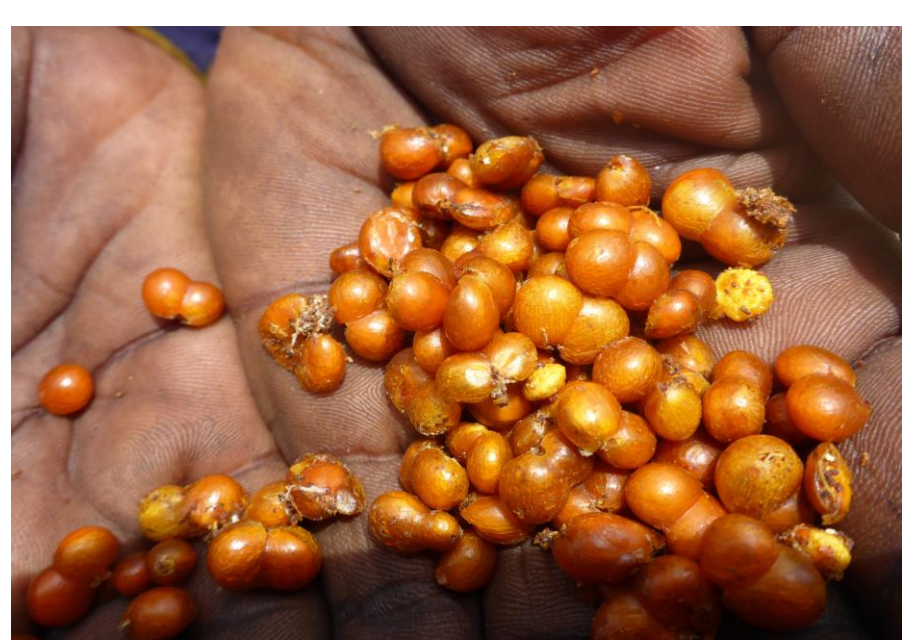
Elamach/*Balanites pedicellaris*



Ngalam/*Ximenia americana*



Murere/*Corchorus olitorius*



Engomo/*Grewia tenax*



Ekamuraia/*Carissa spinarum*



Eng'ol/*Hyphaene compressa*

Conclusion

- Turkana County is very rich in a wide diversity of wild edible plants (WEPs) that are harvested for use as either as fruits, vegetables, spices, condiments and beverages, and as staple
- Majority of the people in Turkana County harbor a positive perception about WEPs as they are seen as part of the people's culture
- Although WEPs did not feature in the diets of all the participants, they remain important to the community as safety nets for the poor and during food scarcity
- Further exploitation of WEPs and their conscious integration into national and policy dialogues is economically and ecologically recommendable for their sustainable use in improvement of the communities food and nutrition security

Background

Wild foods/ wild edible plants (WEP)

- are less known than domesticated food plants
- are often harvested in the lean seasons when households' staple stocks are low or depleted
- are rich in essential nutrients, positively linked with improved diet diversity and lowered cost of nutritious diets
- harvesting and consumption patterns, seasonal availability, knowledge, attitudes and local perceptions differ

The current study sought to describe the diversity and consumption of WEPs available in Turkana County in Northern Kenya, an arid area characterized by frequent droughts and high levels of malnutrition and severe food insecurity.

Method

Phase I: September – October 2016

- 3 pastoral and 3 agro-pastoral villages, randomly sampled in Loima Subcounty, Turkana, Kenya
- Purposive sampling of 120 participants
- 12 participatory four-cell focus group discussions (FGD), 2 groups per village, stratified by gender
- Compilation of all wild edible plants cited in the FGD, forest walks to verify the species listed and specimen collection, specimen identification at the East African Herbarium -> descriptive analysis

Phase II: September – October 2020

- 17 community units randomly selected in Loima and Turkana South Subcounties, Turkana, Kenya
- Probability sampling of 360 households with children 6 – 36 months
- Interview on household food security status, perceptions towards wild edible plants, harvesting and consumption patterns

Results

Diversity of Wild edible plants

- Participants from the FGDs cited in total 73 WEPs
- 15 of the WEPs mentioned could not be identified fully

By Livelihood pattern

- 53 WEPs cited by the pastoral communities versus 44 WEPs in the agro-pastoral communities.
- 39 WEPs (67.2%) were mentioned in both pastoral and agropastoral communities.
- 14 WEPs unique to the pastoral communities versus 5 WEPs in the agro-pastoral communities.

By gender of participants:

- 47 by male participants versus 34 species by the female participants.
- 23 species were cited by both males and female participants.
- 24 species were cited by males only versus 11 by female participants.

Edible parts

- 29.3% of the WEPs cited have more than one harvestable part
- 31 WEPs have parts classified as fruits, 22 vegetables, 14 as spices, condiments & beverages, 11 Legumes, nuts & seeds and 3 roots & tubers

Consumption of Wild edible Plants

- 48.5% households harvest and consume WEPs (n=352)
- 39.4% in the peri-urban households (n=142)
- 56.2% agropastoral (n=130); 51.2% pastoral (80)

24 (32.8%) of the wild plants cited during the FGDs were consumed by the households in the reporting period (Feb-Aug 2020); Households consumed 1 – 10 WEPs; average of 2.8

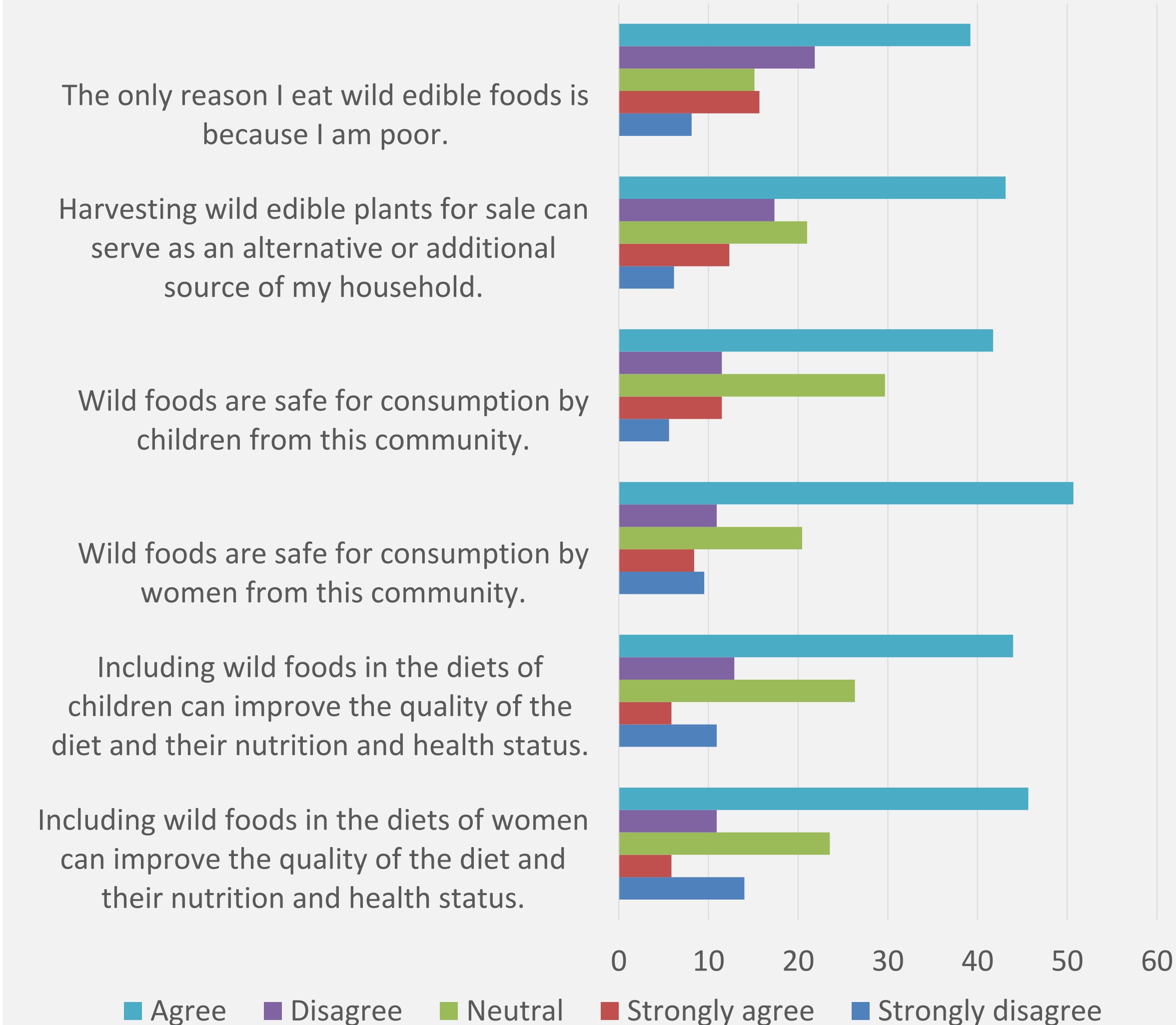
Non consumption was due to:

- distance to the harvesting sites (67%),
- lack of knowledge about when they were on season (61.6%),
- lack of knowledge on how to prepare them (4.3%),
- cumbersome to prepare (2%)
- bad taste and texture (2%)

Wild edible plant consumption frequency



Household perceptions towards consumption of wild edible plants



Food Insecurity of wild edible plant consumers & non-consumers

HIFAS events	Consumers (% n=170)	Non-consumers (% n=182)	Overall (% n=352)
Worry about food	90.0	83.0	86.4
Unable to eat preferred foods	89.4	84.6	86.9
Eat a limited variety of foods	91.2	85.2	88.1
Eat foods that you really did not want to eat	92.4*	84.6	88.4
Eat a smaller meal	94.1	90.1	92
Eat fewer meals in a day	96.5*	90.7	93.5
No food to eat of any kind in the household	85.9	85.7	85.8
Go to sleep at night hungry	82.4	77.5	79.8
Go a whole day and night without eating anything	77.1	68.1	72.4



The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) is part of CGIAR, a global research partnership for a food-secure future. Bioversity International is the operational name of the International Plant Genetic Resources Institute (IPGRI).

Africa Hub
c/o icipe (International Centre of Insect Physiology and Ecology)
Duduville Campus Off Kasarani Road
P.O. Box 823-00621, Nairobi, Kenya
Tel. (+254) 0709134000

alliancebioversityciat.org/
www.cgiar.org