

Quantifying the Direct Contributions of Forests to Diets in Zambia: sharing preliminary results from a CIFOR-FAO project

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5 May 2020, Wilson Center Webinar



Objective and Aim of the study

Objective: Estimate quantities of wild foods consumed to understand how much they contribute to diets in several regions in Zambia

Aim: Pilot a strategy that can be used for national agency in Zambia or elsewhere to estimate of the quantity of wild forest foods collected and consumed.



Site Selection

- 1+ District within each main agro-ecological region; selected chiefdom; selected ward.
- Randomly selected 3 villages within the ward.
- Randomly selected about 45 households (HH) within these villages to survey
- Total of 209 HH



Methods

- Focus group to identify top wild foods consumed of each food type
 - Fruits, vegetables, insects, tubers, fish, meat, wild aquatic plants, mushrooms, nuts
- Administer questionnaire to female head of household
 - 7-day food frequency survey
 - Questions on amounts of wild food collected and consumed
- Measure collecting containers
 - Unique feature of survey



To quantify collection across many types of containers

- HH identified its large, medium, and small collecting containers.
- Measured with groundnut shells.
- Recorded for each HH
- For each food, how much was collected in hh collecting containers?





Preliminary Results for fruit



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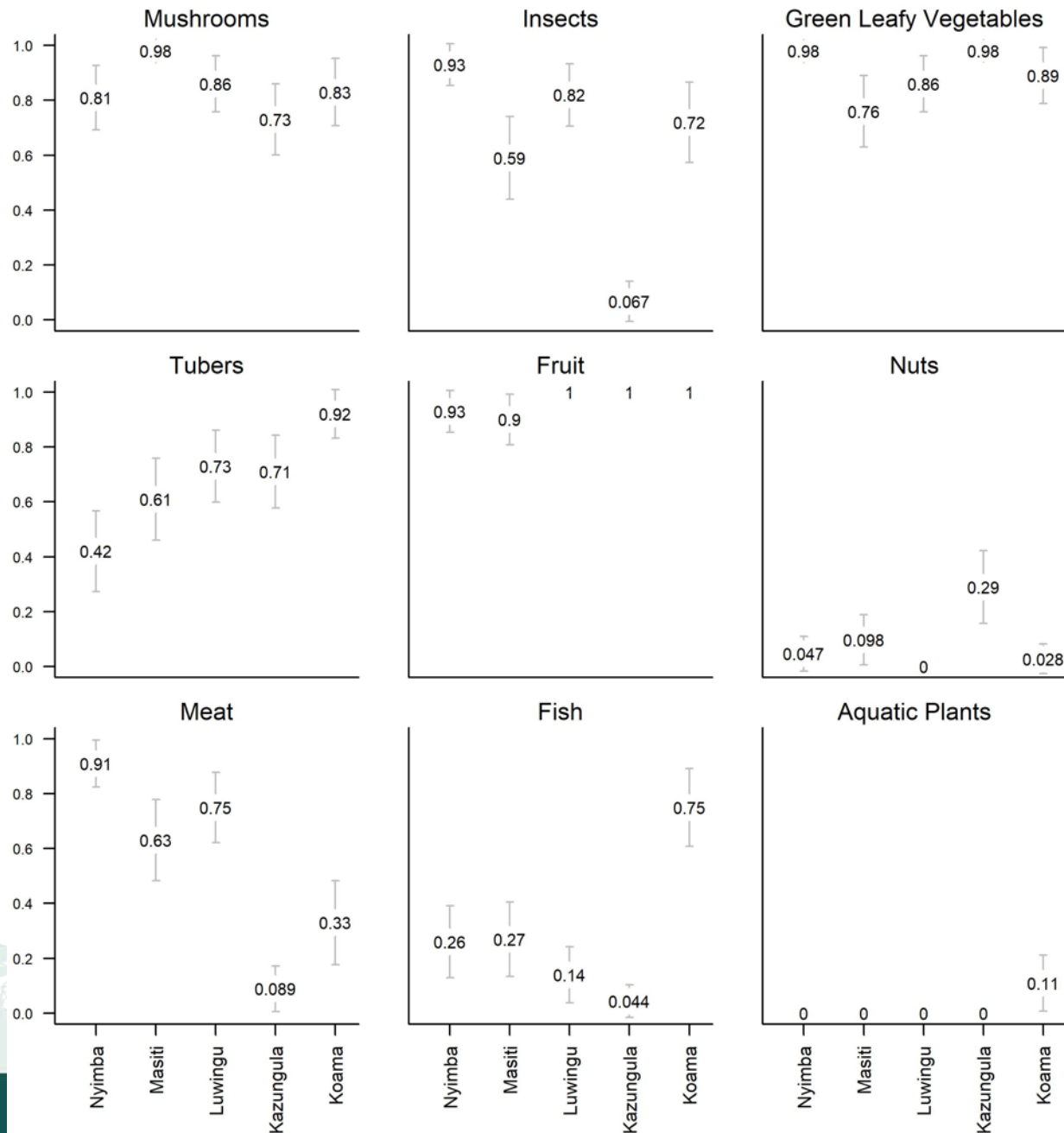
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Why focus on fruit?



- rich in micronutrients & phytochemicals
- important source of fiber
- diets low in fruit most important dietary risk factor for mortality globally*
- few countries in the world meet recommendation of minimum 200g per person per day

% of households
collecting food type



Seven Day Food Frequency for female head of household (n=209)

Food Groups	Avg. # of times	Std. dev
nshima	14.28	2.86
domestic green leafy veg	11.98	8.32
wild vegetables	1.16	2.99
other vegetables	7.66	7.18
total fruit	2.85	4.17
domestic fruit	0.91	1.95
wild fruit	1.94	3.66
insects	0.03	0.25
Fish total	2.43	3.13
Local fish	2.41	3.1
total meat	1.38	2.02
domestic meat	1.25	1.96
wild meat	0.13	0.5
pulses & legumes	4.45	5.8

In order to meet most min. Recommendations for fruit, should be consuming about 2.5 per day = 15 times

Results from STEP 2017 nationally representative study found that adults on avg consumed fruits 2.1 days per week w/ avg serving size of 0.7*

Weekly Fruit Consumption

(note: preliminary results)

- 42% of women did not consume any fruit in the week preceding the survey;
- Only 11% had one fruit an average of at least once a day;
- For the 58% of women consuming any fruit, **wild fruit was consumed more than twice as frequently as domestic fruit** (3.4 times vs 1.6 times per week)



Wild Fruit Collected & Consumed

- 15 wild fruits reported consumed (note that this is not exhaustive list)
- The three most widely consumed:
 - *Strychnos cocculoides* (117 hhs);
 - *Uapaca kirkiana* (98 hhs);
 - *Parinari curatellifolia* (96 hhs)



Quantities Collected & Consumed

(note: preliminary results)

- 97% of fruit collected was consumed
- Households on average consumed 112 kilos of wild fruits (median 57 kilos)
- Per adult equivalent this is about 22 kilos per person or **60 grams per day per person**
- Why our quantity may be underestimated
 - We only asked about top 5 foods from FGDs
 - We only asked main collector (kids often eat fruit on their own)
- Why may be overestimated
 - Does not account for edible portion size

Summary: Wild Fruits....



collected by almost all households surveyed across 15 villages in Zambia in four agroecological zones



comprised 68% of women's fruits consumed in a seven- day period (in frequency)



contributed over 25% of recommended daily intake of fruits over one year period on avg



typical person in our sample could meet her recommended fruit intake with wild fruit for 110 days per year



Next step in our work:
calculate contributions to recommended nutrient intake from wild fruit for some key nutrients



THANK YOU
for listening!

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