

FEED THE FUTURE INNOVATION LAB FOR FISH

Using the Household Hunger Scale to explore food insecurity among smallscale fishers, processors, and traders at Lake Bangweulu: Fish4Zambia Results

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BACKGROUND

- **FISH4ZAMBIA** is a multi-methods project conducted among fishery value chain actors at Zambia's Lake Bangweulu – i.e., women and men who are fishers, fish processors, and fish traders.
- **PROJECT GOAL.** To better understand how gender equity and other factors within the fishing value chain differentially impact women and men in order to help transition rural families towards better food security, nutrition, and economic security through sustainable fisheries productivity.
- **STUNTING AND HIDDEN HUNGER IN ZAMBIA.** Fish provide essential micronutrients and contribute to diversified diets for millions of Zambians. Yet undernutrition is a serious problem in Zambia, where **40% OF CHILDREN UNDER AGE FIVE ARE STUNTED**.¹
- In addition to stunting, **HIDDEN HUNGER**² is an issue as daily intake of energy, calcium, iron, and vitamin A by infants and young children is below recommendations, which is reflective of **INADEQUATE FEEDING** during the first 1,000 days of life³ – the 1,000 days between conception and a child's 2nd birthday.⁴
- These data on **STUNTING AND HIDDEN HUNGER** suggest that food insecurity is an important issue among vulnerable households throughout Zambia.
- However, there is little research on **HOUSEHOLD-LEVEL HUNGER** among rural communities in Zambia whose members are smallscale fishers, fish processors, and fish traders.



RESEARCH QUESTION

- Does reported **HOUSEHOLD-LEVEL HUNGER** differ among women and men – the majority of whom are **HUSBAND-WIFE DYADS** – who are smallscale fishers, fish processors, and fish traders at Zambia's Lake Bangweulu?

WOMEN'S EMPOWERMENT IN FISHERIES INDEX [WEFI]

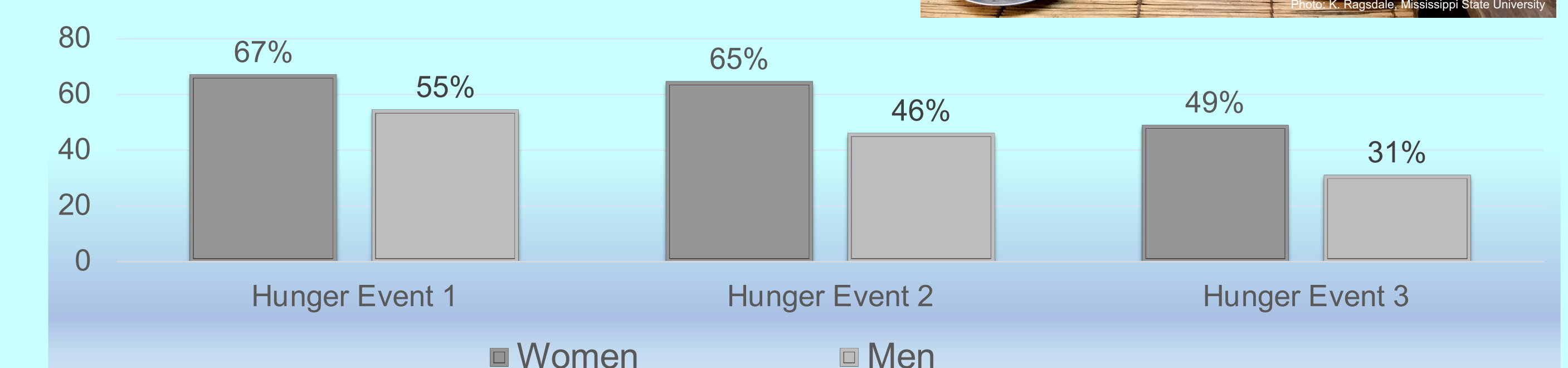
- For **FISH4ZAMBIA**, we administered the **WOMEN'S EMPOWERMENT IN FISHERIES INDEX [WEFI]** – which was adapted from the Women's Empowerment in Agriculture Index [WEAI] – to a random sample of 397 fishers, processors, and fish traders who live in permanent fishing villages and temporary fishing camps on Lake Bangweulu.
- The WEFI included the **HOUSEHOLD HUNGER SCALE [HHS]**,⁵ a cross-cultural and previously validated 6-item scale used to measure three household-level **HUNGER EVENTS**:
- **HUNGER EVENT 1 [HE1].** *In the past four weeks, there was no food to eat in the respondent's home due to lack of resources to get food.*
- **HUNGER EVENT 2 [HE2].** *In the past four weeks, the respondent or another household member went to sleep at night hungry because there was not enough food.*
- **HUNGER EVENT 3 [HE3].** *In the past four weeks, the respondent or another household member went a whole day and night without eating anything because there was not enough food.*
- The HHS uses these results to categorize household-level hunger as occasional, moderate, or severe:
- **OCCASIONAL HUNGER** = **HE1, HE2, or HE3** occurred 1-2x in the past four weeks. **MODERATE HUNGER** = **HE1, HE2, or HE3** occurred 3-10x in the past four weeks. **SEVERE HUNGER** = **HE1, HE2, or HE3** occurred >10x in the past four weeks.

DEMOGRAPHIC RESULTS

	Males % [n=193]	Females % [n=204]	Total % [N=397]
Gender	48.6 [193]	51.4 [204]	100 [397]
Age 18-29 years	32.6 [63]	43.8 [86]	34.5 [149]
Age >30+ years	67.4 [130]	57.8 [118]	65.5 [248]
Married	90.7 [175]	86.8 [177]	86.8 [352]
< Primary Education	9.3 [18]	23 [47]	16.4 [65]
Occupation			
Fishing	86.5 [167]	31.4 [64]	48.2 [231]
Fish Trading	8.3 [16]	46.6 [95]	28 [111]
Other [e.g., farming]	5.2 [10]	14.2 [29]	9.8 [39]
Fish Processing	—	7.8 [16]	4 [16]

HOUSEHOLD-LEVEL HUNGER RESULTS

- Women [67%] were more likely than men [55%] to report **HE1** [$p = .004$].
- Women [65%] were more likely than men [46%] to report **HE2** [$p = .000$].
- Women [49%] were more likely than men [31%] to report **HE3** [$p = .000$].
- **OVERALL:** Men and women were equally likely to report **OCCASIONAL HUNGER** for **HE1, HE2, and HE3**.
- However, women were significantly more likely to report **MODERATE** and **SEVERE HUNGER** for **HE1 and HE2**.



Discussion

- This **GENDER-DISAGGREGATED DATA** provides a more complete picture of how food insecurity is differentially reported – and **POTENTIALLY DIFFERENTLY EXPERIENCED** by men and women. Further exploration of these results is warranted to 1) better understand intra-household hunger and how it **AFFECTS MEN'S AND WOMEN'S RESPONSES** with the aim to improve the **HHS' utility** and 2) explore **HUSBAND-WIFE RESPONSE CONCORDANCE**.⁶
- It is widely recognized that unequal distribution of food within the household can leave women and children – particularly girls – more vulnerable to food insecurity. Yet the **HHS** does not currently record gendered aspects of food insecurity.
- **FISH4ZAMBIA** results will inform the **FISHFIRST! ZAMBIA** project, wherein we will modify the **HHS'** by asking women and men – including **MEMBERS OF THE SAME HOUSEHOLDS** – to separately report their experiences of **HE1, HE2, and HE3** at both the individual- and the household-levels.

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4. 1,000 Days [Web Log Post]. Why 1,000 Days. Accessed December 1, 2020. <https://thousanddays.org/why-1000-days/>
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