Food environments in artisanal gold mining areas of rural Guinea

On behalf of Peter Winch, Rolf Klemm, Mohammed Lamine Fofana, Alpha Oumar Barry, Sadio Diallo, Ronald Stokes-Walters, and Laetitia Zhang
Collaborators

• Helen Keller International
  • Rolf Klemm (PI)
  • Stella Nordhagen – currently with GAIN
  • Mohammed Lamine Fofana

• Johns Hopkins Bloomberg School of Public Health
  • Peter Winch

• Julius Nyerere University, Kankan Guinea (UJNK)
  • Sadio Diallo
  • Alpha Oumar Barry

• 18 Students / Recent Graduates
What is artisanal gold mining?
Informal sites
Boreholes, 12-20 m, up to 40 m, deep
Extraction by hand
Hand washing
Earn what you find
Study Design
Methods

- **18 mining sites + associated villages/camps**

- **Phase I**
  - Site visits, observations, stakeholder consultation

- **Phase II**
  - Cross-sectional survey, in two waves (n=613)
  - In-depth interviews: Single miners (15), mothers of young children (25), food vendors (20)
  - Observations with mothers of young children (25)
  - Quarterly market surveys (7-8 markets)
  - stakeholder consultation

- **Phase III**
  - In-depth interviews: mothers of young children (20), food vendors (20)

<table>
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<tr>
<th>Phase I</th>
<th>Phase II, part 1</th>
<th>Phase II, part 2</th>
<th>Phase III</th>
<th>Final market survey</th>
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Source: Turner et al. 2018
Availability & Accessibility
Prices & Affordability
“… sometimes you can spend the entire day without finding anything, and if you don’t find anything, you can’t eat.”
Food Properties & Vendor Properties
Desirability & Convenience
“The vendor I trust, it’s because she’s clean. It’s not that I like her, it’s the cleanliness.”
Concluding remarks

- Food environments in artisanal mining communities are dynamic; reflect interplay of consumer needs and vendor responses
- They are generally not conducive to good nutrition for either adults or children
- Need to design and test programmatic & regulatory strategies to improve these food environments
Thank you.

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