

# Developing a new approach to measure food environments in Nepal

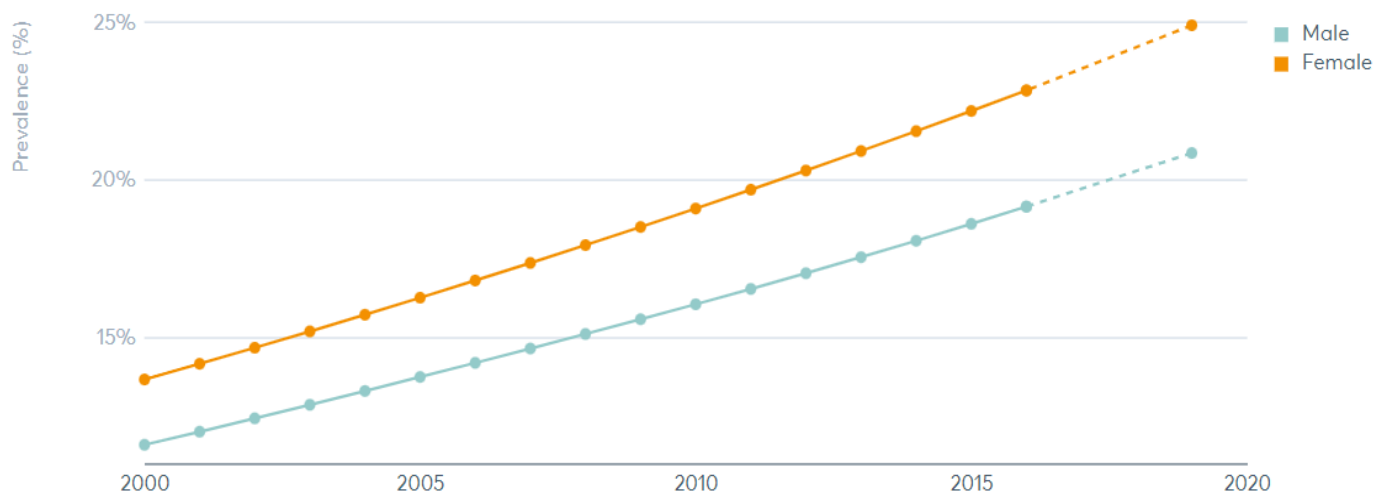
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# Motivation: nutrition transition

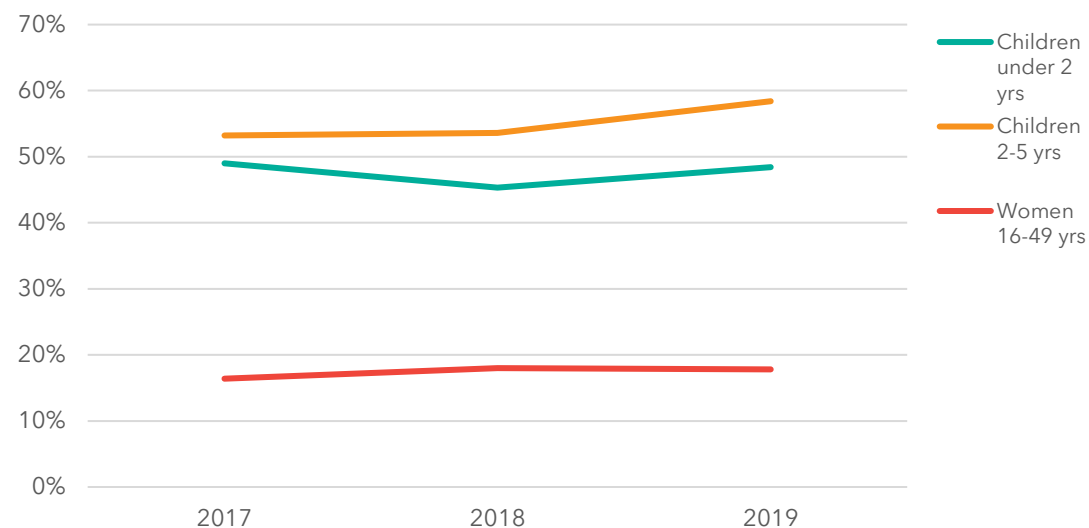
- Significant shifts in food systems and environments
- Rise in overweight, obesity, and diet-related disease in most low- and middle-income countries (LMICs)

Overweight among adults in Nepal



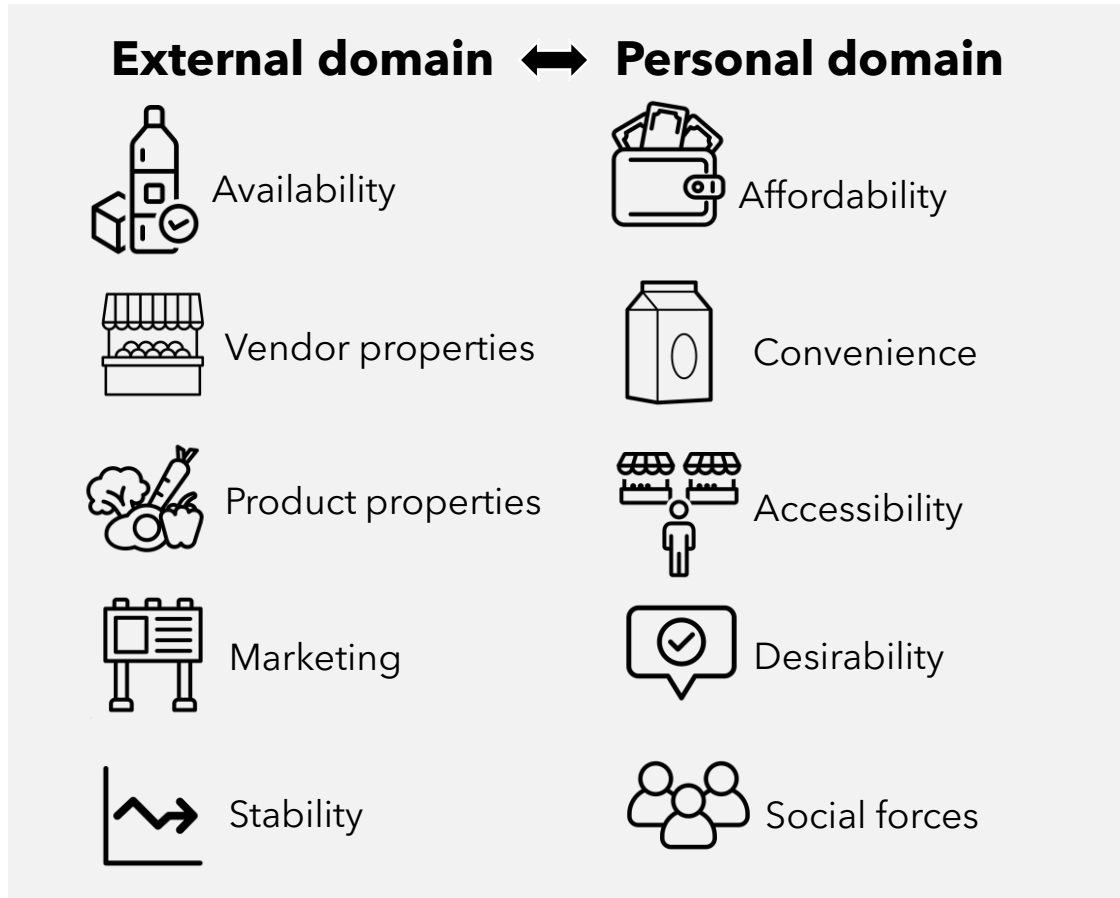
NCD Risk Factors Collaboration, 2019

Consumption of processed foods high in sugar, salt, fat



Nepal, Suaahara II annual survey


# Food environments



- Complex
- Need better measures to capture food environment dimensions
- Influence of food environments on food choice warrants further research

# Existing food environment measures

- Developed mostly in high income countries
- Greater focus on objective measures of food environments less on perceived measures
  - Distances to markets, prices, store inventory

Nutrition Environment Measures Survey (NEMS) Food Outlet Cover Page	
	
Rater ID: <input type="text"/>	
Store ID: <input type="text"/>	Restaurant ID: <input type="text"/>
<input type="radio"/> Grocery Store <input type="radio"/> Convenience Store <input type="radio"/> Other: _____	<input type="radio"/> Fast Food <input type="radio"/> Fast Casual <input type="radio"/> Sit Down <input type="radio"/> Specialty: _____ <input type="radio"/> Other: _____
<b>Secondary Store Type (if applicable):</b> <input type="radio"/> Not Applicable <input type="radio"/> Drugstore or pharmacy <input type="radio"/> Ethnic food store	<b>Site Visit</b> Date <input type="text"/> / <input type="text"/> / <input type="text"/> <small>Month    Day    Year</small>

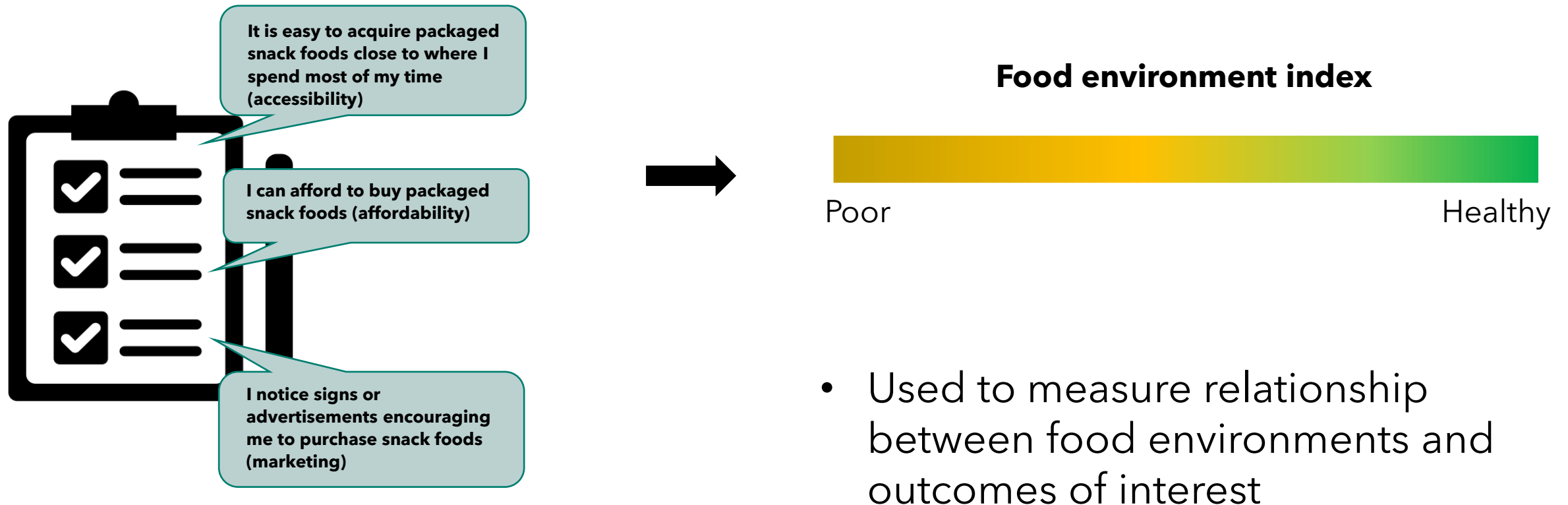
# Objectives

**Objective 1:** Develop a *perceived food environment survey questions*

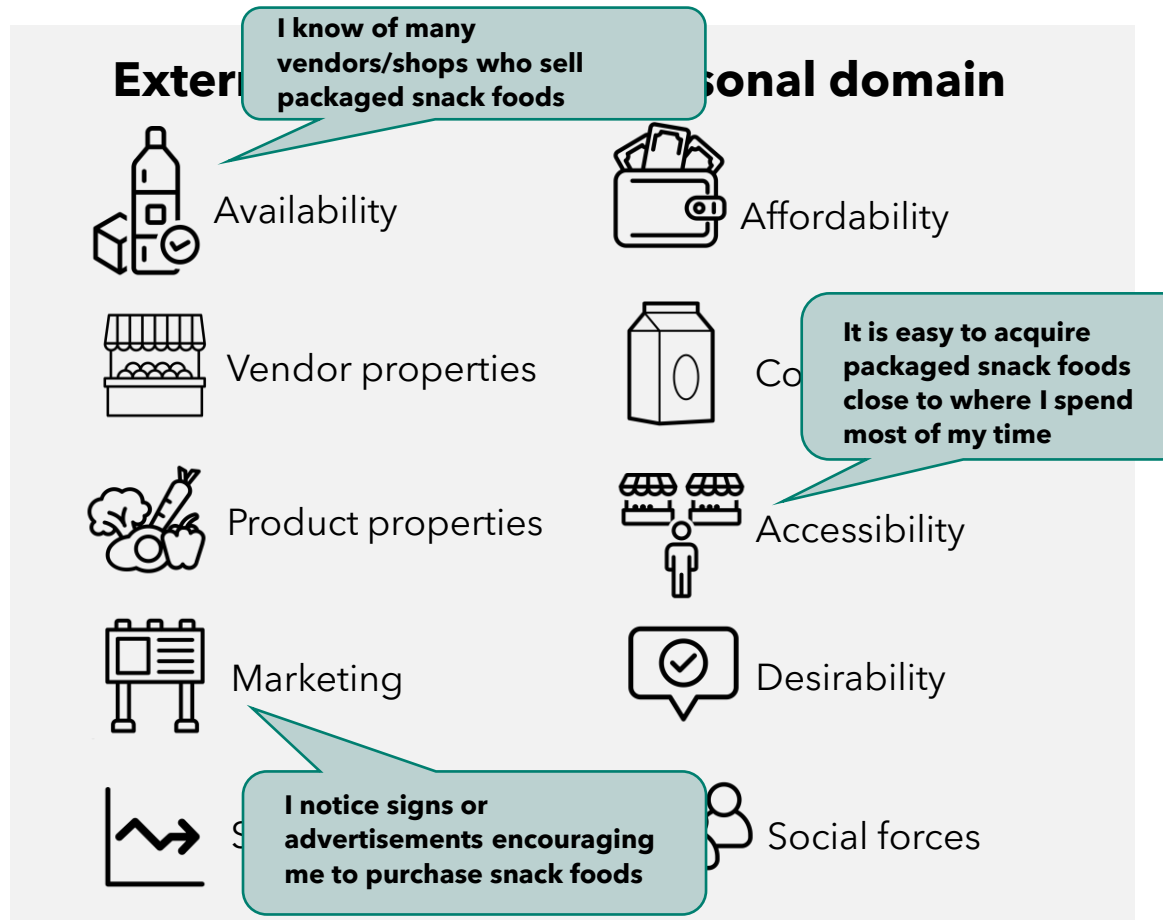
**Objective 2:** Develop a *food environment index* as a composite measure

# How can I use a food environment index?

- Distill complex multidimensional concept in simple measure



# Methods: Develop food environment questions



- Stakeholder engagement - expert consultation
- Pilot test
- Implement in Suaahara II household survey

# Progress to date

1. Expert consultation

**Original version:**  
**Snack foods are easily available to me**



**Revised version:**  
**I know of many vendors/shops who sell packaged snack foods**

2. Pilot test

**Original version:**  
**Vendors near me sell fruits and vegetables that are high quality**




**Revised version:**  
**Dark green leafy vegetables that I have access to are high quality (such as clean and fresh)**

3. Successfully incorporated questions into Suaahara II annual survey to collect food environment data on vegetables and processed packaged foods



## Next steps

- Complete data collection  Construct food index
- Robustness and validity testing of index
- Index will be used to analyze associations between food environment and unhealthy and healthy food consumption

# Acknowledgments

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