Elucidating rural-urban linkages on food systems for healthier diets: updates from A4NH in Vietnam

Tuyen Huynh, Thanh Duong, Huong Pham, Louis Reymondin, Brice Even
Rural-urban linkages and food systems
Conceptual Framework of Food systems

C. Béné, et al. 2019
Elucidating food systems for healthier diets along the rural-urban transect
Rural-urban transformation in Ha Noi

Nguyen Quang
UN-Habitat Office in Viet Nam
Conceptual framework of food systems for diets and nutrition (HLPE 2017, FAO)
The Double Burden of Malnutrition (children under 5 years old)

- Undernutrition (stunted, underweight, wasted)
- Overweight and obesity

Legend:
- Low
- Medium
- High
Diet: What Vietnamese Eat: weekly food baskets by site

Urban site: Cau Giay

Peri-Urban site: Dong Anh

Rural site: Moc Chau

contrast
Diet: Minimum Dietary Diversity For Children & Women

Women reached MDDS
5 out of 10 defined food groups

Children reached MDDS
4 (out of 7) or more food groups

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Peri-urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Women</td>
<td>62</td>
<td>57</td>
<td>37</td>
</tr>
<tr>
<td>% Children</td>
<td>58</td>
<td>31</td>
<td>42</td>
</tr>
</tbody>
</table>
## Food Environment: Food outlet diversity

<table>
<thead>
<tr>
<th>Index</th>
<th>Urban</th>
<th>Peri-urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of food outlets</td>
<td>11</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Food retail diversity (H)</td>
<td>1.7</td>
<td>1.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Effective number of food outlets (ENF) /equally common food outlets</td>
<td>5.6</td>
<td>6.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Food retail evenness (E)</td>
<td>0.7</td>
<td>0.8</td>
<td>0.3</td>
</tr>
</tbody>
</table>

- The diversity and evenness of food outlets in urban and peri-urban areas are much higher than in the rural area.
- The urban and peri-urban areas have more dominant types of food outlets than rural area.
Exploring the food environments of Vietnam

Traditional groceries that specialized in food, drink or tobacco:
small format store that sells only one or two ranges of products and typically privately owned.

image source: CIAT Hanoi

https://arcg.is/1y990L
Main food retail outlets

Urban
- Supermarkets: 50.2%
- Formal wet market: 31.7%
- Informal wet/street market: 8.4%
- Consumer cooperatives: 4.8%
- Specialized shops: 0.8%
- Colleagues/Relatives: 0.4%

Peri-urban
- Supermarkets: 51.7%
- Formal wet market: 44.4%
- Informal wet/street market: 2.1%
- Consumer cooperatives: 1.7%
- Colleagues/Relatives: 0.8%

Rural
- Supermarkets: 41.6%
- Formal wet market: 39.9%
- Informal wet/street market: 8.4%
- Colleagues/Relatives: 0.4%
Modern food shopping practices

**Use of food labels**

- Urban: 85.5\(^a\)
- Peri-urban: 63.6\(^b\)
- Rural: 61.4\(^b\)

**Consumption of FAFH**

- Urban: 59.8\(^a\)
- Peri-urban: 55.1\(^a\)
- Rural: 11.3\(^b\)
Consumer Behavior

Nutrition knowledge

30 questions on knowledge of food and diets

The percentage of respondents with a high score (>21) in urban and peri-urban sites is higher than in rural site (33.3%, 22.5%, and 12.6%, respectively)
Food systems profiles along rural-urban transect

Sustainable Food Systems Profile

Objectives

- Providing a synopsis of the food system of Moc Chau district, Son La province, in order to characterize the existing situation, to highlight key challenges and to provide a baseline for measuring and monitoring future changes.
- The profile gives an overview of the main food system components, actors, and drivers, through a set of matrices. Emphasis is put on nutrition and health, economic and environmental outcomes, diets, consumer behavior, food environment, food supply, drivers of change, and forecasted opportunities for innovation.
- To help identify actionable policy recommendations as well as prioritization of socio-economic development plans at the local level.

Core indicators applied in this profile

1. Nutrition and health outcomes
2. Economic and environment outcomes
3. Food supply chains
4. Food environments
5. Consumer behavior

General Information

- Moc Chau is a mountainous district in Son La province, located in the Northern region of Vietnam. It has a population of approximately 76,000 people, with a density of around 120 persons per square kilometer. The district covers an area of 107.17 km² and has a total population of 112,000 people.
- The district is known for its mountainous landscape and diverse agricultural products, including rice, coffee, tea, and fruits.
Promoting rural-urban linkages on food systems through improved food provision information sharing and management
Layer 1 – MAC tracking – First figures

Number of devices observed in two markets

- Urban (101 devices)
- Urban (84 devices)
- Wholesale market (52 devices)
- Rural (469 devices)
- Rural (1 device)

Connections:
- Urban to Wholesale: 3 devices
- Urban to Wholesale: 1 device
- Wholesale to Rural: 0 devices
- Wholesale to Rural: 1 device
- Rural to Wholesale: 3 devices
- Rural to Urban: 5 devices
Layer 2 survey – First figures

- 33420 answers (from 27th of July)
- 4200 people
Layer 2 survey – Dashboard

Layer 2 statistics

- Who are you? (4678)
- Do you have food store in the market? (1641)
- Which is the main do you have in your store (1218)
- From whom do you buy most of the products? (142)
- How do you mainly preserve your products? (59)
- How do you mainly transport the products to the market? (67)
- Do you have any relationship with your
- What do you think are the 3 most important
- What do you think are the 3 most important
**WP 2a.** Consumer-responsive retail innovations such as improved rural-urban food provision information sharing creating a trading opportunity to bring local rural fruits and vegetables to the retails in urban and/or more convenient packaging or quantities that engage low-income consumers as a solution to gaps in year-round access to fruits and vegetables are in consideration for a designing phase.
Thank you!

Huynh Thi Thanh Tuyen
Country coordinator of Agriculture for Nutrition and Health (A4NH) in Vietnam
International Center for Tropical Agriculture (CIAT) – Regional Office for Asia
Email: t.huynh@cgiar.org
www.ciat.cgiar.org  |  CIAT is a CGIAR center