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Nutritional Knowledge in NICE cities

What do average consumers know about nutrition?

Women in Rubavu (Rwanda) preparing a balanced meal. — © Alice Kayibanda/Swiss TPH/Fairpicture

AFS Newsletter - News by

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1. Context and relevance

To improve citizen health through better nutrition, the Nutrition in City Ecosystems (NICE) project connects urban consumers with peri-urban smallholder farmers and multi-sectoral platforms bringing together various food system stakeholders from all sectors. Adequate availability, accessibility, and affordability of safe, nutritious foods produced locally using agroecological practices are key for sustainable city ecosystems. Understanding which foods contribute to a healthy diet is essential for creating informed consumer demand and guiding dietary choices toward improved nutritional outcomes.

2. Actions and recent progress

To assess the dietary knowledge of both farmers and city dwellers in malnutrition-prone city areas in the NICE cities – Dinajpur and Rangpur in Bangladesh, Bungoma and Busia in Kenya, and Rubavu and Rusizi in Rwanda, NICE assessed the understanding of 150 farmers and 150 city-dwellers if food groups, if all are available, can be consumed liberally, moderately, or sparingly. The following food groups were probed in a random order and using locally available examples: 1) Dairy, fish, meat, egg; 2) Cereals, rice, beans, potatoes; 3) Sweet and snacks, 4) Nuts, oil and fats, 5) Vegetables and fruits; 6) Water and plain tea, plain coffee (without sugar or milk).

3. Lessons learned and future plans

Interventions such as school collaborations on nutrition, integrating nutrition advice into agricultural training, and city-wide healthy diet campaigns improved farmers' dietary knowledge. Among the city dwellers in malnutrition-prone city areas, 58.1% (701 interview respondents) achieved a score of 0-3 indicating good understanding (0 = correct allocation, 1 = one category slightly misallocated, e.g. liberally instead of moderately, 2 = one category heavily misallocated, e.g. liberally instead of sparingly) while 39.4% (475 interview respondents) achieved a score 4-6 (average understanding) at the project's endline survey in February 2025.Over the four project years, the percentage of farmers with good knowledge of balanced diets increased from 14.4% to 25.3%, while average understanding of balanced diets rose from 48.0% to 70.8% among the farmers. The largest gain in good dietary knowledge throughout the project was observed in Rangpur, Bangladesh, from 14.7% to 35.5%, while the largest decrease in insufficient knowledge was observed in Rubavu, from 56.7% to 6.0%. A holistic approach to food system transformation, involving diverse stakeholders, benefits both, city ecosystems and the well-being of producers themselves. Prioritizing nutrition enables cities to promote ecological and social sustainability of the city ecosystem and enhances public health, ultimately reducing healthcare costs and fostering resilient urban populations. Nutrition thus serves as a key catalyst for food system transformation. Learn more about NICE's city nutrition journey , with much more to come.