



NUTRITION *in* CITY ECOSYSTEMS



Knowledge & Demand leaflet 1

Increasing the demand for nutritious foods produced using agroecological practices

Showcase:

RWANDA





The current food system is failing to produce and deliver high-quality diets to meet the nutritional needs of more than 8 billion people worldwide. About a third of the world's population suffers from some form of malnutrition, and many countries face a triple burden of malnutrition, meaning the coexistence of overnutrition, undernutrition and micronutrient deficiencies.

The challenges of failing food systems get further aggravated by more and more people moving to cities. In city settings, poor diets often result from a mix of factors, including shifts in the food environment, e.g. easier accessibility to highly processed foods, and changing perspectives and behaviours toward more convenient food. Similarly, degradation of natural resources and pollution often go along with rapid and unplanned urbanization.

The Nutrition in City Ecosystems (NICE) project works to improve nutrition and reduce poverty by increasing the supply of and demand for nutritious food produced using agroecological practices in six secondary cities across Bangladesh (Dinajpur and Rangpur), Kenya (Bungoma and Busia), and Rwanda (Rubavu and Rusizi). The NICE project works closely with local governments at secondary city level and aims to facilitate locally led actions to improve nutrition through agricultural, food, and health sector collaborations and public-private engagements, with strong emphasis on the role of women and youth entrepreneurs (see [Project Factsheet](#)).

Activities for increased and improved production and demand generation for participatively selected food value chains are at the core of the NICE project: Besides organizing smallholder farmers around so-

Secondary cities are geographically defined urban jurisdictions or centres performing vital governance, logistical, and production functions at a sub-national or sub-metropolitan region level. Generally, the population of secondary cities ranges between 10–50 % of a country's largest city.

Source: World Bank

called Farmers' Hubs and enhancing training on agroecological and good agricultural practices, public nutrition education and social behaviour change campaigns targeting consumers are run. Additionally, stakeholders involved in food system governance are empowered and supported to better collaborate. Peer-learning and information sharing sessions are other important components of NICE aiming at empowering and inspiring individuals active in food systems with knowledge and skills to drive meaningful food system transformation.

This leaflet presents more information about the demand creation workstream of the NICE project in Rwanda, which aims at creating knowledge and demand for nutritious foods produced using agroecological practices (Figure 1).

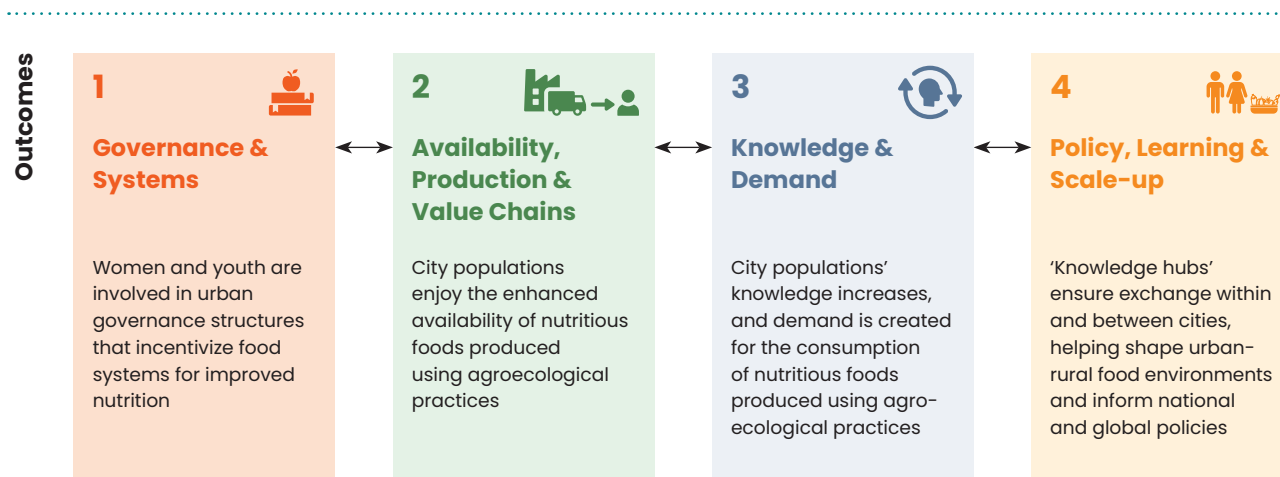


Figure 1: The four main outcomes of the NICE project



Why is there a need to create demand for production and consumption of nutritious foods produced using agroecological practices?

It is widely recognized that access to and availability of a certain food does not necessarily guarantee its utilization or consumption. We need to go beyond supplying and informing, and instead use effective measures, such as emotional appeals and social influences, to enhance food production, improve supply

practices, and stimulate demand and consumption for nutritious foods. In a world of multiple options and wide-spread misinformation, we need to gain key insights on motivators and nudge farmers and consumers towards better production practices and consumption choices for themselves and their families.

The demand creation efforts include four stages:



Figure 2: The demand creation process flow



Figure 3: The social marketing strategy design process

Understanding the behaviour of targeted urban communities through a (1) formative research helps to (2) design a social marketing strategy and (3) to develop a social marketing campaign. This social marketing campaign includes interventions appealing to the local culture and behaviour to positively influence farmers' practices and consumers' choices towards nutritious foods produced using agroecological practices.

The final step of the demand creation process is to (4) monitor and evaluate the impact of the social marketing campaign to further improve interventions and share knowledge with the community and stakeholders. The following sections will describe the four stages implemented in Rwanda.

Agroecological practices apply the concept of agro-ecology (utilization of ecological and social concept and principles in the design and management of sustainable agriculture and food systems) in agriculture. NICE specifically concentrates its efforts on five of the 10 main agroecology elements shaping sustainable food systems transformation: efficiency, recycling, diversity, resilience, and culture and food traditions.

Source: FAO

Nutritious foods are foods, that in the context where they are consumed and for the individuals that consume them, provide beneficial nutrients (e.g. vitamins, major and trace minerals, essential amino acids, essential fatty acids, dietary fibre) while being poor on potentially harmful elements (e.g. antinutrients, quantities of saturated fats and sugars etc.).

Source: GAIN



How did we design the formative research study for the NICE project?

Rwanda case:

The objective of the formative research was to interview farmers and consumers to obtain insights that could inform the development of a comprehensive social marketing campaign for nutritious foods produced using agroecological practices in two cities, Rubavu and Rusizi, in Rwanda.



Figure 4: Map of Africa and Rwanda, with the Western Province, where Rubavu and Rusizi City are situated

The used qualitative research methods comprised four different data collection methods:

- 1 In-home and farm observations:** we observed practices and behaviour at home and the farm
- 2 Shop-along observations:** we accompanied consumers to monitor purchasing behaviour.
- 3 In-depth interviewing:** we developed a topic guide to deeply understand food production, supply and consumption practices, health and nutrition knowledge and beliefs of consumers.
- 4 Qualitative market scanning:** we surveyed the fruits and vegetables markets, the local kiosks and boutique stores which sell fresh and whole foods as well as packaged and branded foods and beverages, to understand the complete external landscape that our consumer is exposed to in terms of choices for purchase and consumption.

The target sample for this study comprised a total of 45 respondents: 30 household respondents, specifically young women and women of reproductive age, and 15 male and female farmers, which in this intervention are being considered as food producers and consumers. The research questions for households focused on purchase, preparation, and consumption behaviours. On the other hand, for the farmers, in

addition to understanding food consumption, the research questions were focused on farming practices, challenges, and sources of information. At a general level, the study also aimed to understand personal motivations and aspirations that could be used to build relevance with the targeted consumers and farmers in Rubavu and Rusizi.



What were the general findings obtained from the formative research?

Motivations and anxieties around food production, purchasing and consumption among Rwandan consumers

Among interviewed consumers, there is a general understanding of what constitutes healthy and balanced diets:

“Healthy foods provide the body with energy, disease protection, and growth, and the preparation process is essential in preserving the nutrition in these healthy foods.”

Young mother, Rubavu

Women of reproductive age recognize that a diverse diet needs to include different food groups and they identify the food groups as:

- › **Energy-giving foods:** Starches featured in all meals, such as potatoes and green bananas.
- › **Body-building foods:** Main proteins consumed, such as small fish and beans.
- › **Fight diseases foods:** Vegetables regularly consumed, such as carrots and amaranth.

Home-cooked food is preferred because it is equated with trust, is less expensive than purchasing ready-made meals, and allows for greater hygiene control.

Shopping for food items is done either in a general market or from a neighborhood kiosk/boutique shop. Decisions around households shopping are primarily

driven by cost, children’s preference, and nutritional content. However due to budget constraints, pregnant and lactating women do not usually purchase or consume special food for their condition. They would, however, eat more fruit if they had a larger budget.

Social and healthcare workers and other women such as relatives and neighbors are considered the most trusted sources of information regarding health and nutrition.

Additionally, information about new foods is mostly obtained through market traders, trial and error, peer and adverts in radio and television.

To develop an effective social marketing strategy that connects emotionally with consumers, it is necessary to understand the values and beliefs of the community. Harmony and peace of mind were found to be the most important cultural values. A true sense of achievement is linked with being productive, smart and resourceful, while also being highly agreeable and cooperative. A strong hope and desire for a better life, the fulfilment of lost dreams and their children’s educational attainment and subsequent success is an important aspiration to all interviewed consumers. To achieve a better future, most consumers believe in the importance of making investments, operating small businesses or trading.



Figure 5: Young male cooking at home



Figure 6: Neighborhood kiosk



Aspirations and worries around food production among Rwandan farmers

The local farmer in Rwanda is a male or female family head, typically from 25–45 years old, who is optimistic and keen on growth:

“I plan to have a good harvest to feed my home and sell the surplus to earn money and use the same money to raise the living standards of my family.”

Crop farmer, Rusizi

Crop farmers get at least 80% of their household income from what they sell at the market, whereas fish farmers depend on farming for at least 40%. Their main customer base are wholesalers and middlemen.

Farmers’ main technological investments include farm inputs, agri inputs, such as fertilizers and pesticides, underlining their limited farming innovation. Local cooperatives, government bodies, international partners, and financial institutions support farm practices in various ways, including training. The different forms of support mentioned comprise agricultural supplies to enable crop irrigation and fishing, facilitated access to subsidized fertilizers, and financial or non-financial capital, such as poultry, and trainings for good agricultural practices. However, it was observed that crop and poultry farmers received more support compared to fish farmers.



Figure 7: Woman and man crop farmers in the field



Figure 8: Fish farmer in Rusizi/Lake Kivu

Most farmers are part of groups that serve their social needs beyond farming, where they talk about self-development including health insurance and savings. Very few farmers work by themselves, they value being part of the community. Farmers’ aspirations were also seen to be linked to peace of mind and harmony – with others and even with the environment. Farmers also aspire to expand their practice by incorporating new crops, especially vegetables and fruits, and accessing various farm input tools, such as fertilizers and cold rooms.

Lastly, radio is the most common media platform through which farmers access information and advertisements.



Why is a targeted social marketing campaign important?

The formative research helped ascertain that apart from financial limitations, there are gaps between what the consumer knows is healthy and nutritious and what their consumption and production prac-

tices are. Social marketing is an effective way to address this gap and help minimize barriers towards purchasing and consuming these foods.

A social marketing approach aims to encourage the target audience to modify their behaviour in either of the following four ways:

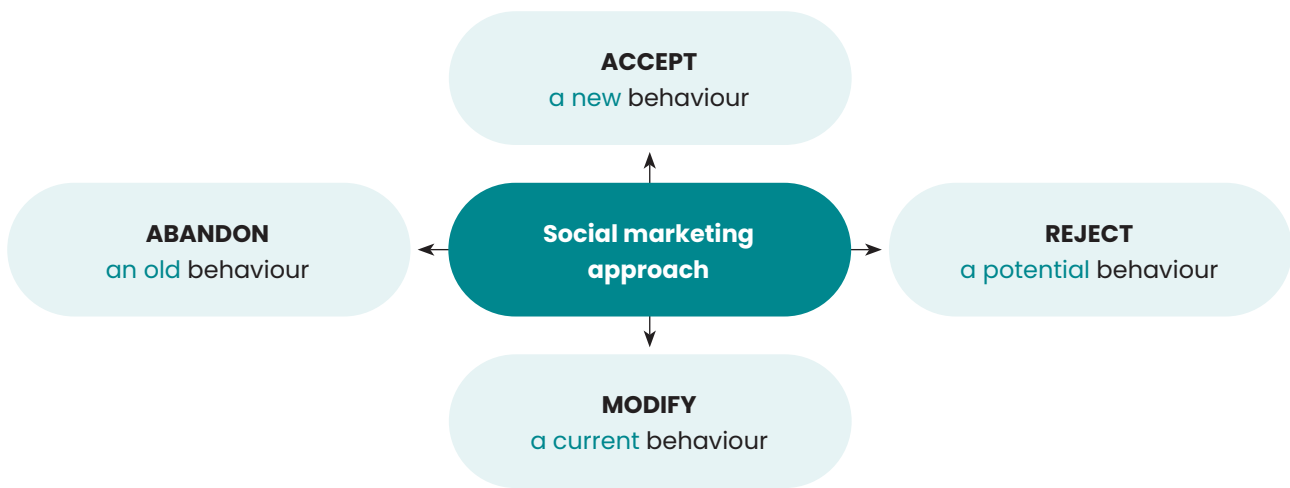


Figure 9: Four ways through which behaviour can be modified in a social marketing approach

What did the social marketing campaign look like in the NICE project?

The social marketing campaign addressed to a broad audience with the target segments being pregnant and lactating women and their husbands, mothers with at least one child under 5 years and their husbands, adolescents and their parents and finally farmers. The aim of this campaign was to build awareness about dietary diversity, clean, tasty and local food in an inspirational, appreciative and positive way.

In this regard, a local Rwandan creative agency helped to design a branded and targeted social marketing campaign called *Neeza*, which means “All is well” in Kinyarwanda. The campaign idea was

rooted in the consumer and farmer aspirations of a life where everybody lives in harmony and works and succeeds together.



Healthier choices were conveyed as the means to this aspired life. The overall campaign idea *Neeza* spoke to each target segment differently with specific messages conveyed through different channels. For instance, *Neeza* (All is well) was articulated as *Hinga Neza* (Grow well/farm well) for farmer-facing

interventions specifically, *Baho Neza* (Live well) and *Rya Neza* (Eat well) for the general population and *Kura Neza* (Grow well) for mothers specifically.

The first phase of this social marketing campaign lasted for 3 months.

The first phase of the NICE social marketing campaign comprised activations in three main settings:



› **Market activations** consisting of a community roadshow wherein a skit was presented in a common market ground and attracted up to 800 people. The campaign’s key messages were woven into the skit and there was information for everyone to learn from.



› **Health facility activations** involving a Nutrition Champion, a well-known and experienced health worker or nutritionist, who addressed a gathering of mothers in an interactive session. During the activations the health worker spoke about feeding practices for children and during pregnancy encouraging parents to make better food choices during purchasing and consumption.



› **Farmer activations** involving male and female farmers registered in local farmers’ cooperatives. Champion farmers spoke to a gathering of farmers in an interactive session and discussed the advantages and challenges of agroecological ways of farming and how to navigate these.



Monitoring & evaluation of the social marketing campaign

Monitoring and evaluation (M&E) was carried out accompanying the *Neeza* social marketing (before and after) to assess its effects.

Exposure to the *Neeza* social marketing campaign has contributed to positive shifts in consumer attitudes, and key changes observed when comparing baseline to endline data include:

- › A rise in the percentage of consumers recognizing the importance of special food for pregnant and lactating women, increased **from 47% to 60%**.
- › An increase in the percentage of children under 5 consuming eggs at least once a week, **from 20% to 50%**, post campaign exposure.
- › A noticeable rise in the percentage of children under 5 consuming fish at least once a week, increasing **from 29% to 50%**.
- › A significant increase in the percentage of children under 5 consuming milk at least once a week, rising **from 25% to 50%**.
- › A substantial increase in the percentage of children under 5 consuming fruits at least once a week, surging **from 24% to 50%**.

In terms of food safety and cleanliness practices, the M&E findings revealed that the percentage of consumers washing vegetables and fruits with potable water before consumption increased **from 86.7% to 100%**. Additionally, the percentage of consumers self-reporting washing hands with soap before cooking improved **from 88.3% to 100%**.

Outlook on phase 2

Phase 2 of the demand generation strategy focuses on making a clearer link to the specific nutrition value chains as they have become more readily available in city markets.

This requires the continued use of strategic social marketing and a whole system approach, to facilitate coordinated action of individual consumers, producers, community organizations and local institutions, all geared to positively shifting consumer purchasing and consumption habits towards specific value chains. Notably, for farmers, social marketing activities leverage the Farmers' Hubs as platforms for championing agro-ecological and nutrition practices, Farmers are being motivated to role-model the consumption of nutritious foods produced in accordance with agroecological practices, as well as further encouraged to invest in saving a share of their produce for their own consumption. For consumers, a social marketing strategy is being launched at the health sector, education sector and community level,

thereby ensuring the sustainability of all interventions. To this end, a city-toolkit is being developed which leverages existing formative research and lessons learned from the executed campaigns.

The kit includes:

- A)** an interactive training element with social marketing and motivational interviewing targeting community health workers and nutritionists,
- B)** a series of participatory, community and systems level social marketing tools, aimed at increasing practical skills and confidence of parents and youth in making small, yet effective, changes to their diets.



Sources:

World Health Organization (WHO). WHO accelerates work on nutrition targets with new commitments [Internet]. 2021 [cited 2023 May 5]. Available from: <https://www.who.int/news/item/07-12-2021-who-accelerates-work-on-nutrition-targets-with-new-commitments>

United Nations Children's Fund (UNICEF). Nutrition, For Every Child – UNICEF Nutrition Strategy 2020-2030 [Internet]. 2020 [cited 2023 May 5]. Available from: <https://www.unicef.org/media/91741/file/UNICEF-Nutrition-Strategy-2020-2030-Brief.pdf>

FAO. Formative Research. FAO term portal. [Internet]. [cited 2023 Apr 11]. Available from: <https://www.fao.org/faoterm/viewentry/en/?entryId=162328>

International Social Marketing Association. What is Social Marketing? [Internet]. iSMA. 2013 [cited 2023 Apr 11]. Available from: <https://isocialmarketing.org/>

Home | Agroecology Knowledge Hub | Food and Agriculture Organization of the United Nations [Internet]. [cited 2023 Apr 11]. Available from: <http://www.fao.org/agroecology/home/en/>

Global Alliance for Improved Nutrition (GAIN). GAIN's Definition of Nutritious and Safe Foods. Geneva, Switzerland; 2021. Report No.: Briefing Paper #8. Dalberg Research, Sight and Life. NICE Project – Final Report Formative Research in Rwanda. 2022.

Authorship: *Sight and Life* Foundation

The NICE project is supported by the Swiss Agency for Development and Cooperation and implemented by a public-private consortium which includes the Swiss Tropical and Public Health Institute, ETH Zürich, and *Sight and Life* foundation.

Further information is available on the **NICE webpage:**

 nice-nutrition.ch