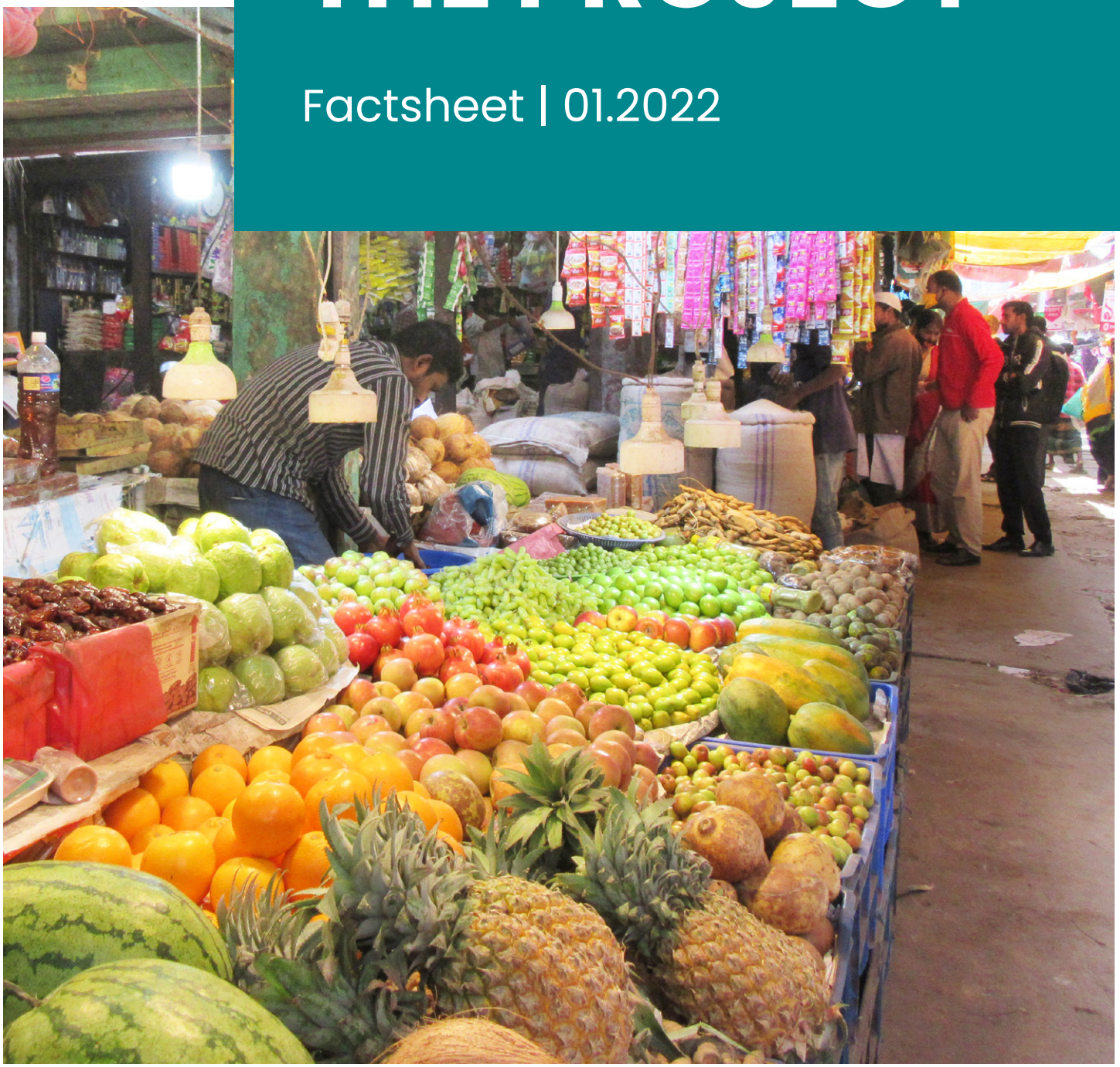
NUTRITION *in* CITY ECOSYSTEMS

THE PROJECT

Factsheet | 01.2022



Swiss TPH
Swiss Tropical and Public Health Institute

ETH zürich

sightandlife

syngenta foundation for sustainable agriculture

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Swiss Agency for Development and Cooperation SDC

Background

Suboptimal diet is responsible for **one third** of the world population suffering from the **double burden of malnutrition:** hunger and stunting of the population without sufficient access to safe and nutritious food on the one side, overweight and obesity on the other.

The effect is further exacerbated through current food systems that strongly rely on increased productivity and economic growth, but that create major concerns related to the degradation of natural resources, environmental pollution and a dramatic loss of biodiversity. Even though increased production of staples counteracts hunger, many people cannot afford enough vitamin and micronutrient rich foods, and dietary diversity is often low, especially in rapidly urbanized regions, where dietary and production patterns have shifted. Many people do not eat enough fruit, vegetables and other dietary fibres such as whole grains.

According to the United Nations, 68% of the world's population will live in urban areas by 2050, and around 90% of this increase will occur in small cities in towns of Africa and Asia. Similarly, it is in the fringes of rural and urban extremities where most of the world's food is grown, and where the sprawl drives farming land conversion. Therefore, the key actors and services for inputs, production, processing and trade of food are housed in urban regions.

City food systems encompass a complex set of interlinked activities that enable the production, aggregation, processing, wholesale, and retail of food, in addition to the acquisition, preparation and consumption of food by people.

Introduction

As part of the portfolio of the Swiss Agency for Development and Cooperation (SDC)'s Global Programme for Food Security (GPFS), the Nutrition in City Ecosystems (NICE) project works to **improve nutrition and health,** and to **reduce poverty** by increasing the demand and supply of local, diverse, agroecologically produced foods in secondary cities.

Vision of the NICE project

Populations in city regions demand and access an affordable healthy diet that comprises nutritious, safe foods that are locally produced according to sustainable agroecological practices. Farmers and food producers, local enterprises and start-ups along the value chain, encourage the entrepreneurship of women and youth, and respond to this changing demand by increasing the supply of local, safe, nutritious, diverse and affordable food to city markets. City governments, private sector and civil society improve food systems governance, collaborate across sectors, and mobilise resources for nutrition, with learnings and best practices disseminated and an active scale up strategy pursued.

Goal of the NICE project

The NICE project aims to facilitate locally-led actions to improve nutrition for vulnerable populations in secondary cities through agricultural, food and health sector collaborations, and public-private engagements, with strong emphasis on the role of women and youth entrepreneurs.

As such, the NICE project cuts across 6 out of 17 Sustainable Development Goals:

By uncovering dietary patterns as well as increasing access to and incentivizing nutritious local food.

By focusing on urban and peri-urban populations, and strengthening food system governance.

By nutrition improving the immune system and other body functions through diversified, micronutrient/ vitamin rich nutrition.

Through promotion of agroecological production and consumption.

By working in a gender-transformative way, and ensuring engagement of women and youth.

Through multi-stakeholder partnerships.

The NICE Consortium

Agroecological food production

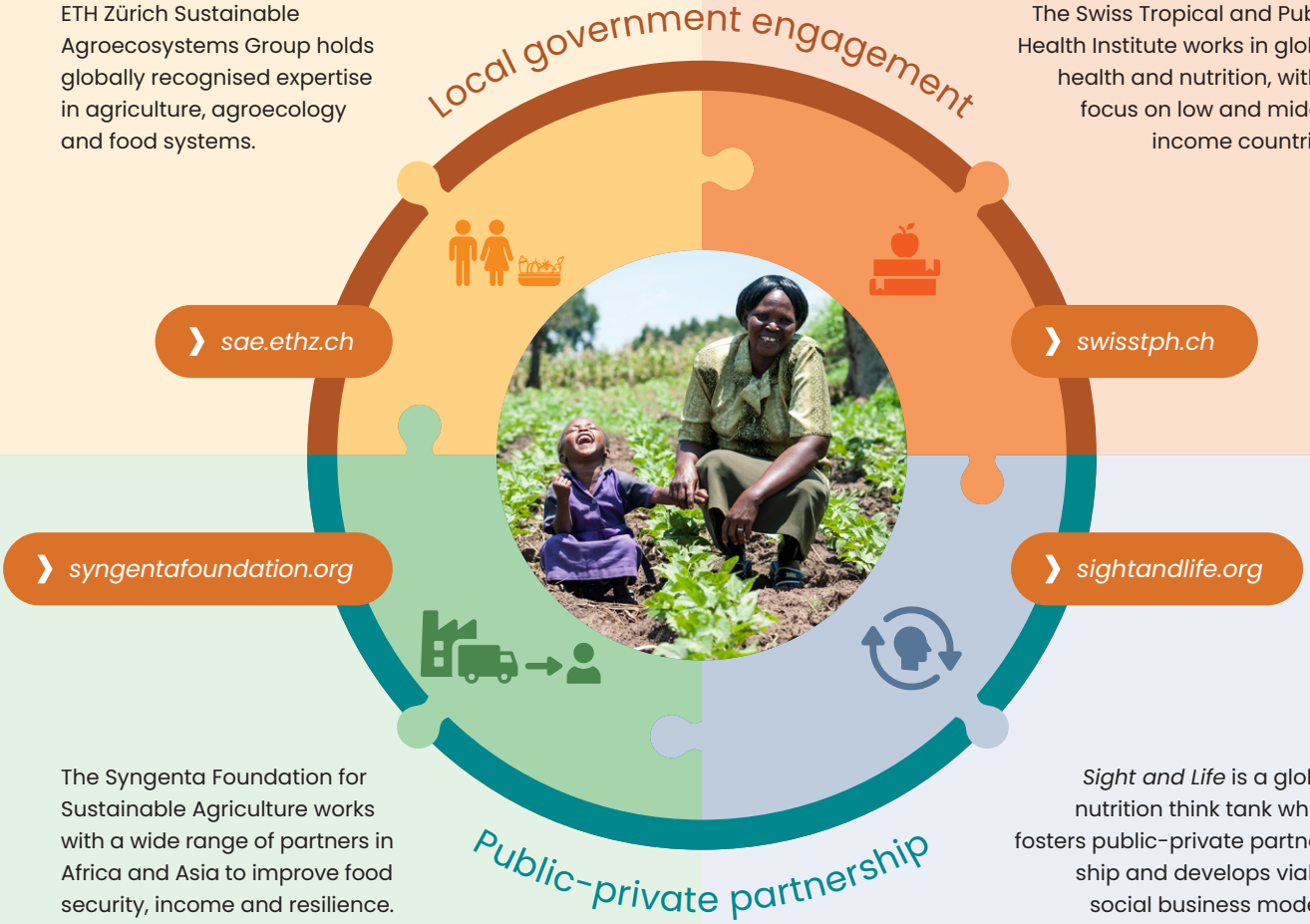
ETH zürich

ETH Zürich Sustainable Agroecosystems Group holds globally recognised expertise in agriculture, agroecology and food systems.

Governance & Nutrition literacy – health and education

Swiss TPH
Swiss Tropical and Public Health Institute

The Swiss Tropical and Public Health Institute works in global health and nutrition, with a focus on low and middle income countries.



The Syngenta Foundation for Sustainable Agriculture works with a wide range of partners in Africa and Asia to improve food security, income and resilience.

syngenta foundation for sustainable agriculture

Supply chains and markets

Sight and Life is a global nutrition think tank which fosters public-private partnership and develops viable social business models.

sightandlife

Behaviour change communication & Social marketing

More information and city factsheets on the **NICE webpage:** nice-nutrition.ch

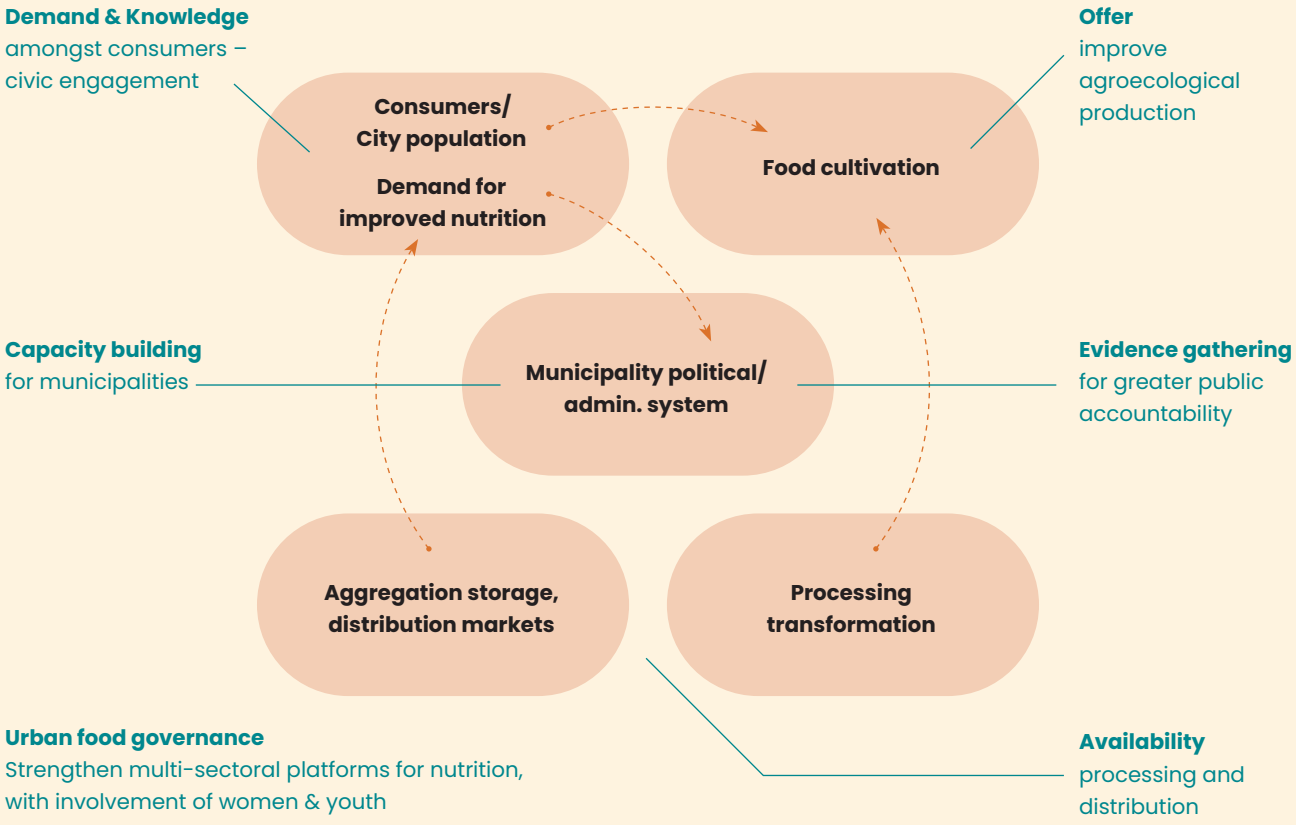
The NICE Approach

NICE follows a **context-sensitive approach,** which takes the opportunities and bottlenecks for change in the food systems of each participating secondary city into account.

City authorities and stakeholders involved in food systems platforms play a key role in these transformations. Through their routine planning tasks, which indirectly influence the food system, as well as by directly working to strengthen the food systems, local governments and planners may substantially influence and stabilize food systems.

The approaches promoted by the project are all based on best practices and latest evidence, in particular with regards to nutrition, the underpinning agroecological principles, and social and behaviour change communication. NICE fosters city level and national level ownership of the project as well as social accountability in order that selected front-runner cities channel experiences into national policies and exchange in national and international city networks.

Interlinkages between activities across city food systems in NICE



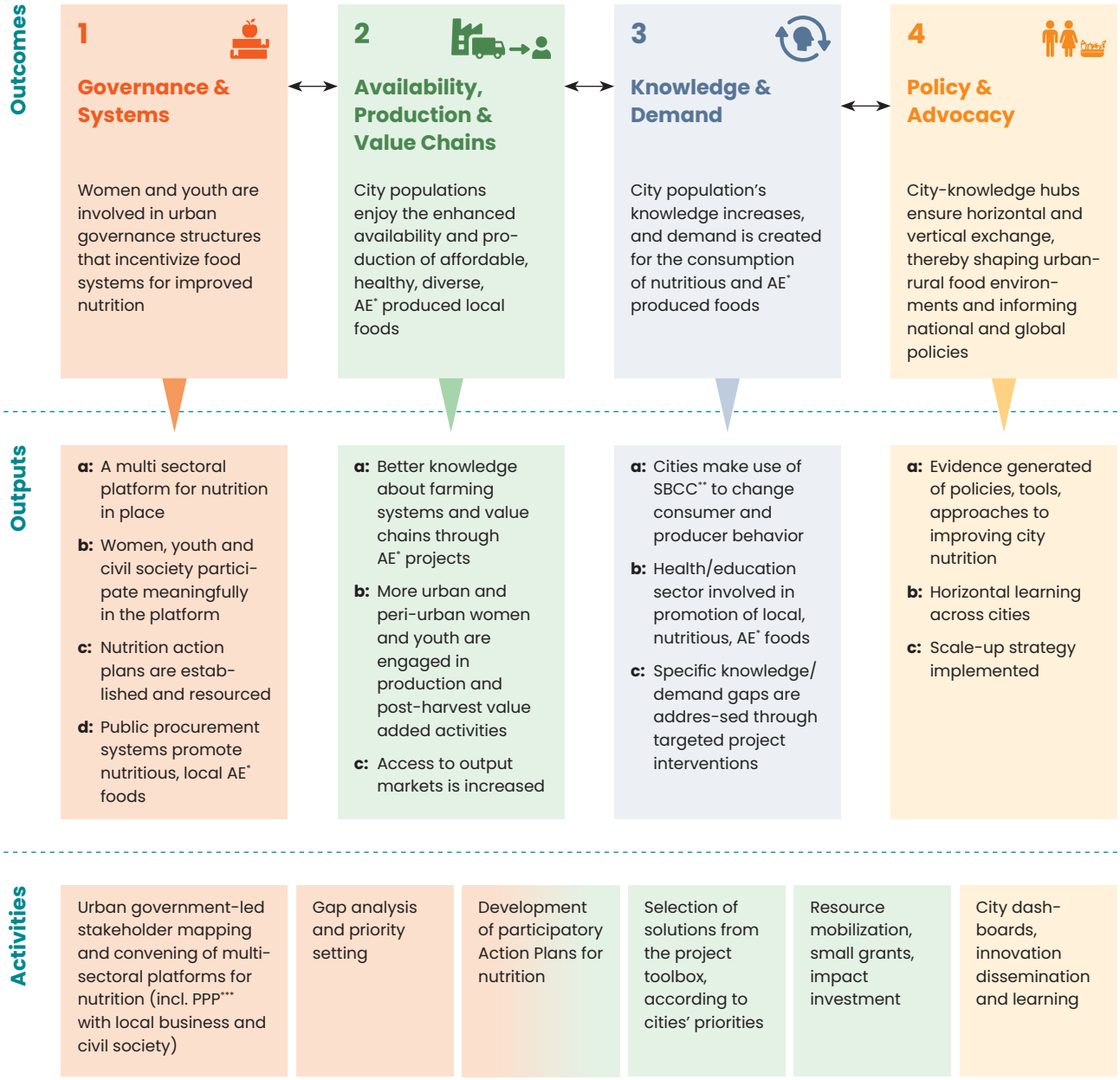
Project Inputs

The projects modes of engagement include:

- Building decentralized, institutional capacity in multi-sectoral collaboration
- Promoting the involvement of women, youth and representatives of vulnerable population groups
- Participatory identification of nutrition-focused value chains
- Co-design of interventions and innovations in city level partnerships
- Support to data driven planning, coordination and resource mobilization
- Capacity building in the agricultural, health, and education sectors
- Evidence generation, advocacy and policy dialogue

Expected Project Outcomes

In order to achieve its goal, the NICE project works towards **four outcomes** with their respective expected **outputs** and required **activities:**



* AE = agroecology, agroecolocial, agroecologically – ** SBCC = Social Behavior Change Communication – *** PPP = public-private partnership

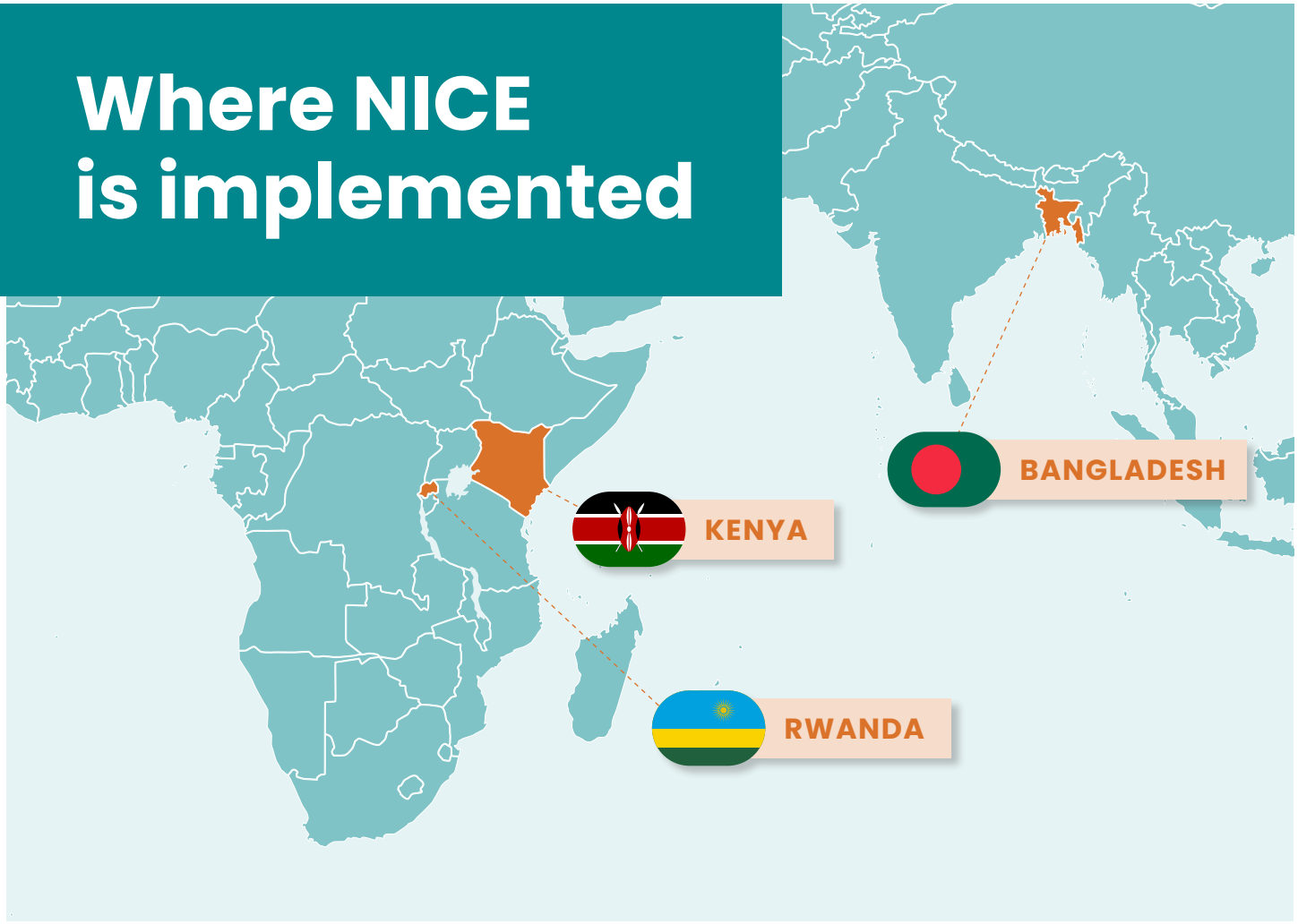
Outcome 1: Strengthens food system governance, in line with national policies. Women and youth participate strongly throughout. In each city, a locally suitable platform brings all the necessary sectors together, including civil society and business. Each platform is city-led and formally anchored, for example in a local by-law. Nutrition action plans are developed, and the necessary capacity is built to attract public and private funding for their implementation.

Outcome 2: Increases the supply of nutritious, local, agroecologically produced food to tackle dietary deficiencies. This requires a good understanding of the local agro-ecosystem and key value chains. Market access, storage, processing and value-addition are all improved. Digital innovations help link farmers and consumers. Agroecology is established in each city's food system. This requires promotion of the necessary understanding, capacity and political acceptance.

Outcome 3: Stimulates demand for nutritious and agroecologically produced food. To achieve this, consumers become participants in change rather than just "beneficiaries". Consumer insights shape the demand creation strategy in each city. The education and health sectors support the changes and promote new food norms. Consumer practices improve as nutritional literacy increases.

Outcome 4: Uses city experiences to improve the local food environment, regulations and policies. Stakeholders use data dashboards to track progress and take informed decisions. The lessons also spread nationally: The cities share them with up to four other cities in the same country. 'South-South' exchange is encouraged between the countries. NICE experiences also flow into wider networks, for example through links to Swiss cities that are also driving innovations in urban food systems.

Where NICE is implemented



BANGLADESH

1 Dinajpur

Dinajpur is located ca. 400 km North-West of Dhaka and has a population of about 300,000 inhabitants (2021) living on 24.5 km^2. The project's partner is the municipality of Dinajpur. The NICE baseline survey in 300 households in 2021, showed that food insecurity increased substantially in Dinajpur during the COVID-19 pandemic (from 34.9% to 54.1%). Under-5 stunting rates are 16.0%, while 48.7% of women of reproductive age are overweight. Many women do not consume a diverse diet with minimal diet diversity scores of <5 found amongst 29.1% of the women in the survey.

2 Rangpur

Rangpur is located in the North-Western part of Bangladesh and has a population of nearly 800,000 inhabitants (2021) living on 205.8 km^2. The project's partner is Rangpur City Corporation. According to the NICE baseline survey in 300 households in 2021, food insecurity increased substantially in Rangpur during the COVID-19 pandemic (from 33.4% to 55.2%). Under-5 stunting rates are 20.8%, while 42.4% of women of reproductive age are overweight. Many women do not consume a diverse diet with minimal diet diversity scores of <5 found amongst 29.4% of the women in the survey.

KENYA

1 Bungoma

Bungoma is located in the Lake Victoria Basin in Western Kenya, close to the Ugandan border and has a population of around 270'000 inhabitants (2019). The project's partner is the County of Bungoma. According to the NICE baseline survey in 150 households in 2021, food insecurity increased substantially in Bungoma during the COVID-19 pandemic (from 77.3% to 88.7%). Under-5 stunting rates are 13.3%, while 50.6% of women of reproductive age are overweight. Many women do not consume a diverse diet with minimal diet diversity scores of <5 found amongst 47.3% of the women in the survey.

2 Busia

Busia is located in the Lake Victoria Basin in Western Kenya, directly at the Ugandan border and has a population of around 110'000 inhabitants (2019) living on 45 km^2. The project's partner is the County of Busia. According to the NICE baseline survey in 150 households in 2021, food insecurity increased substantially in Busia during the COVID-19 pandemic (from 76.0% to 88.7%). Under-5 stunting rates are 9.1%, while 49.4% of women of reproductive age are overweight. Many women do not consume a diverse diet with minimal diet diversity scores of <5 found amongst 47.7% of the women in the survey.

RWANDA

1 Rubavu

Rubavu is located in the Western part of Rwanda and has a population of around 150'000 inhabitants (2018) living on 45 km^2. The project's partner is the District of Rubavu. According to the NICE baseline survey in 150 households in 2021, food insecurity increased substantially in Rubavu during the COVID-19 pandemic (from 81.3% to 98.7%). Under-5 stunting rates are 49.4%, while 44.4% of women of reproductive age are overweight. Many women do not consume a diverse diet with minimal diet diversity scores of <5 found amongst 73.3% of the women in the survey.

2 Rusizi

Rusizi is located in the Western part of Rwanda and has a population of around 70'000 inhabitants (2019) living on 88 km^2. The project's partner is the District of Rusizi. According to the NICE baseline survey in 150 households in 2021, food insecurity increased substantially in Rusizi during the COVID-19 pandemic (from 86.0% to 99.3%). Under-5 stunting rates are 28.6%, while 40.8% of women of reproductive age are overweight. Many women do not consume a diverse diet with minimal diet diversity scores of <5 found amongst 60.7% of the women in the survey.

› For more details about the cities, see the series of **city factsheets:**

All photos are from consortium members unless otherwise indicated.

Facts & Figures

	BANGLADESH		KENYA		RWANDA	
	1 Dinajpur	2 Rangpur	1 Bungoma	2 Busia	1 Rubavu	2 Rusizi
Population	300,000[a]	800,000[a]	270,000[b]	110,000[b]	150,000[c]	70,000[b]
Area	24.5 km^2	205.8 km^2	na	45 km^2	45 km^2	88 km^2
City dwellers owning or accessing farm land [farmers]	69%	74%	63%	66%	58%	59%
Farmers with ≤12 acres of farm land [smallholders]	78%	71%	100%	100%	32%	25%
<5 y stunting prevalence	16%	21%	13%	9%	49%	29%
WRA overweight/ obesity prevalence	49%	42%	51%	49%	44%	41%
MDD-W <5[d]	29%	29%	47%	48%	73%	61%
HFIAS 2021[e]	54%	55%	89%	89%	99%	99%

Stunting *defined as height-for-age Z-score <-2*
Overweight/obesity *defined as BMI > 25 kg/m^2*
WRA *= women of reproductive age*
MDD-W *= Minimal Diet Diversity for Women calculated based on consumption of 10 different food groups*
HFIAS *= Household Food Insecurity Access Scale*

[a] *2021* – [b] *2019* – [c] *2018*
[d] *Percentage of women consuming less than 5 out of 10 food groups according to MDD-W and thus characterized as having a poorly diverse diet.*
[e] *Percentage of households defined as food insecure during COVID-19 pandemics (April–June 2021) based on HFIAS.*