City Overview on *Food and Nutrition* of:

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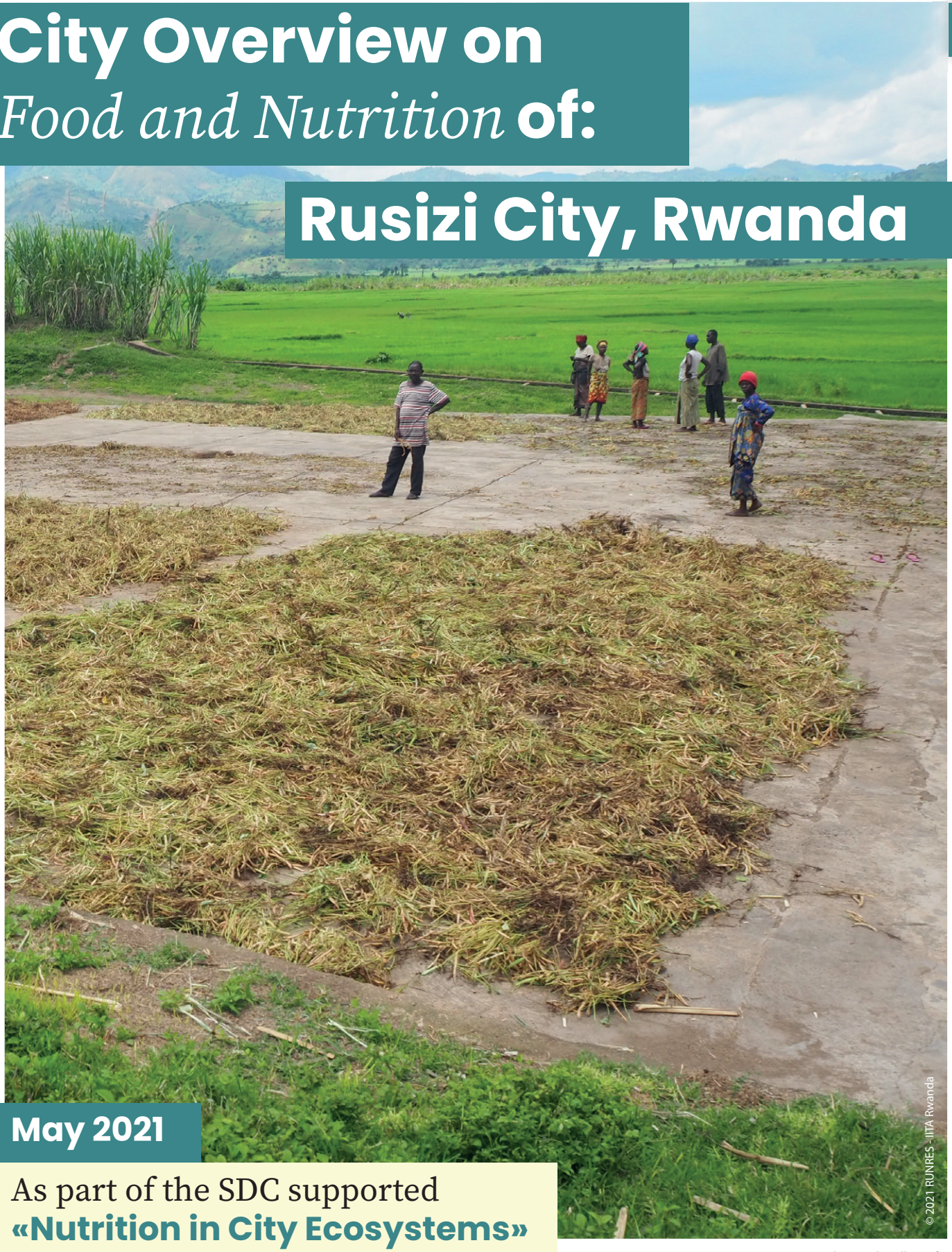
Rusizi City, Rwanda



Post-harvest handling of common beans in Rusizi

May 2021

As part of the SDC supported **«Nutrition in City Ecosystems»** (NICE) project

NUTRITION *in* CITY ECOSYSTEMS

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Landscape of Rusizi

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	Rusizi City [3]	Rusizi District [3]
Population size	66,962 (2019)	430,789(2019)
Total surface area	88 km^2	940,95 km^2
Density	1,091 inhabitants/km^2	399 inhabitants/km^2

Rusizi City is situated in the Western Province of Rwanda next to Lake Kivu. It is comprised of three spatial sectors: Kamembe, Gihundwe and Mururu which determine the boundary of the city[1]. **The city is a mix of urban and semi-urban land consisting of the built area, farming landscapes, scattered tree plantation, wetlands, water bodies and natural forest.** The city borders with the Democratic Republic of Congo, which has sustained a substantial amount of trade and logistics opportunities[2].

This district has a **tropical climate** with average temperatures ranging between of 20°C to 23°C and an annual rainfall ranging from 1,000 mm to 1,800 mm. Average temperatures decrease from west to east, and rainfall is highest near Lake Kivu and decreases when moving to the east[2].

Other keyfigures:

Distance from capital city Kigali: 274 km

Dominant religion[8]: Christianity

Language spoken by the population of Rwanda[7]: Kinyarwanda >90%, French <15%, English <5%, Swahili 11%

People in the district:

Living in poverty[6]: 33.5% (2018)
Living in extreme poverty[6]: 12.8% (2018)

Health and hygiene in the district[3,5]:

Food insecurity prevalence:	25.4% (2018)
Stunting:	34.8% of children under 5 years (2018)
Underweight:	14.7% of children under 5 years (2018)
Wasting:	1.4% of children under 5 years (2018)
Household sanitation coverage:	90.4% of the population (2019)

Waste management

One private company, named PAAK Kam Ltd, is actively collecting garbage in the inner city from house to house, supervised by the District Sanitation and Hygiene officer. However, this company is having a hard time keeping up with the continuous and considerable growth of Rusizi City and is, therefore, not operating effectively. There is one waste management site in Kamembe sector, which is also struggling with processing all the food waste from restaurants, hotels, and households of the city[9].

Transport of common beans by bicycle

From farm to fork

Production

The soils in Rusizi City can be considered fertile[9]. Farming activities in Rusizi City are often limited to subsistence farming and fish farming takes place on a limited scale at Lake Kivu[9]. The **total agricultural area in the urban area is around 1,060 ha** (28.8% of the total surface area). Some of the crops produced in the Gihundwe, Kamembe and Mururu sectors of Rusizi City are **maize, sweet potatoes, beans, cassava and banana**. In the surrounding sectors farmers also produce high volumes of rice, maize, tea, coffee, beans, cassava, bananas and a variety of fruits[2].

Interestingly, fruits (mostly mangoes and avocadoes) and vegetables (mostly carrots, tomatoes) produced in the district, are in some cases already **sold before harvesting to supply the nearby Bukavu City just across the border in the Democratic Republic of Congo (DRC).** This strategy of the farmers derives from two issues. First, the high production in some agricultural seasons inflict market fluctuations coming with deteriorating quality or loss of produce yet selling before harvest secures the farmers with income. Second, the lack of available and efficient processing plants in these sectors for value addition and shelf-life extension, and the lack of cold chain facilities gives farmers little choice but to secure their income by selling before harvest[9,10,11].

Agricultural land covers close to 40% of the total land area of the district [12]

32% of households own land smaller than 0,2 ha [5]

57% of the district population is employed in agriculture [9]

Processing

Rusizi has few food manufacturers processing rice, tea and other locally grown produce. Due to a lack of large processing plants for maize and rice, the quality of crops is deteriorating due to the distance and difficulty to reach to small processing plants (with low capacity) in other sectors. The main factors keeping the food processing industry in Rusizi City from expanding are limited resources to purchase natural and raw materials and general high taxes that make local products much more expensive than products from neighboring countries (Tanzania, Uganda, Kenya)[9].

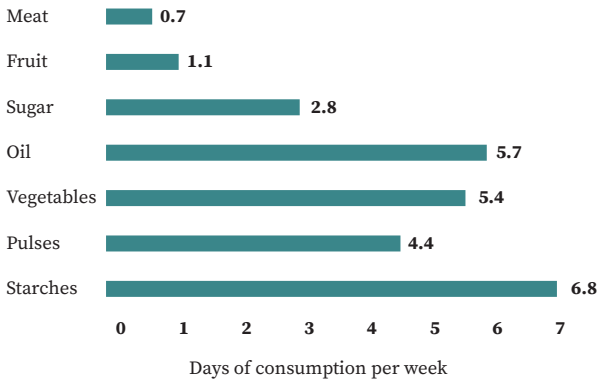
40% of food consumption
comes from the market,
55% from own production in Rusizi District[5]

Purchase and consumption

The majority of those employed in the agricultural sector take their lunch (they rarely have breakfast) between 12:00 AM-01:30 PM and dinner in the evening hours typically between 07:30-09:30 PM. **Lunch and diner usually consist of a mixture of beans, rice, maize and maize flour, cooked banana, sweet potatoes, potatoes and few legumes and fruits[9].**

To reach the main market, the rural and peri-urban population face difficulties reaching them, taking up to an average of 60 to 90 minutes to get there[6]. But usually the population of Rusizi buys their food near the roads on informal market stalls/mats ran mainly by women and youth. This informal way of selling increases issues related to hygiene and sanitation[9]. Currently, there is a **four-story high cross-border market in construction** along the cross-border road, which includes food stores to improve the conditions of selling[2].

Average household diet diversity in Rusizi district [5]



Transport

The cross-border trade is central to the flow and infrastructure of transport in Rusizi City. One national road, the NR11, passing through the city leads to Burundi and the DRC. Rusizi's urban roads are made up of 14.5 kilometres of asphalt roads and 8.9 kilometres of cobblestone roads. The city's location next to Lake Kivu allows for transportation on water, mainly used for the transport of goods and products to and from the four districts along Lake Kivu and the DRC[3].

Movements within the city and its neighborhoods are primarily done by foot, bicycle or motorcycles. The sloping nature of most parts of the town favours the use of motorcycles. Private mini-buses and motorcycle and bicycle taxis serve as public transport services to connect with other urban areas, such as Kigali City[2].

Women, youth and other vulnerable groups in the city-region food systems

Employment

Women and youth aged between 16-50 years **are highly active in the agriculture- and live-stock-based subsistence farming**[9]. They are also involved in **cross-border trading of fruits and vegetables**; women play a pivotal role in transporting the commodities into the DRC, comprising an estimated 70-80% of total cross-border traders[14]. The rise of cooperatives in the district has been benefitting youth and women, where they are highly present in, for example, the processing of fruits and coffee washing stations. However, both youth and women are constrained by not having had a good education, illiteracy in the field of agro-processing, lacking knowledge on post-harvest technologies and good agricultural practices. Apart from these knowledge constraints, the lack of capital and financial capacity is constraining them from making investments in the agro-value chain[8].

Supporting activities

There are already activities present to support youth, women and other vulnerable groups. To name a few: the **One Acre Fund** and **African Evangelistic Enterprise (AEE)** work in the district for the provision of trainings and inputs about fertilisers, clean and good quality seeds to vulnerable farmers. The health-focused governmental program **Nutrition Sensitive Direct Support (NSDS)** provides cash transfers to vulnerable families in Rusizi District to incentivize the use of health and nutrition services, and strengthen their knowledge on parenting and child care. Another promising project of the World Bank and the Rwandan government running until 2023 is the Stunting Prevention and Reduction Project (SPRP) aiming to support the government to adopt and implement a new national strategy to improve the visibility of stunting in Rwanda, and to deliver behaviour change messages across various platforms[9].

Women cooperatives

The district counts **48 cooperatives in which more than 70% of total members are women**. One of these cooperatives is COOPEK composed of more than 50 members including 8 men and 42 women. Among several activities, this cooperative sells fish in the Kamembe market in a house built by the Rwanda Food and Agriculture Organization of the United Nations (FAO)[8].

Thirty percent rule

Gender inclusion has become a major consideration in all districts. Following the government's **"30% rule" for women engagement in public functions**, actors in all sectors are including women in their activities and programmes and, in most of sectors, the number of employed women in public functions is at the moment higher than the 30% called for[15].

Around 23% of the households in Rusizi District are female-headed [6], one-third are food insecure [5]

Tomato seller in Rusizi

Local transport of bananas by bicycle in Rusizi

Policies, governance, advocacy for food and nutrition

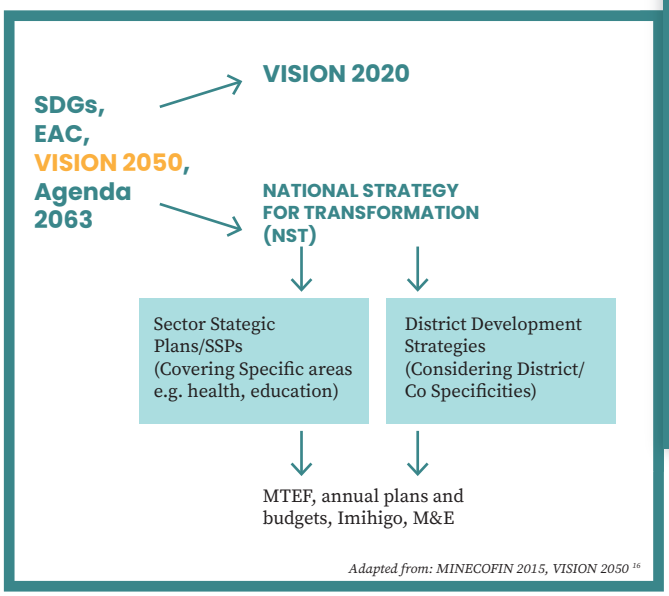
Policy framework

From May 2000 onwards, the Government of Rwanda has been operating under the principle of decentralization whereby public powers are dispersed to local governments and administrative divisions. The thirty districts, having financial autonomy and legal personality, oversee the functioning of the 416 sectors (*imirenge*), 2,148 cells (*akagali*). A key feature of the decentralization is the creation of a yearly performance contract signed between the district mayors and the President. The measures for progress in this contract demonstrate the achievements of the mayors in a year[13].

Rwanda Vision 2050

One of the priorities of the Rwandan government is **Rwanda's Vision 2050**, setting an ambitious agenda for further improvements in the standard of living. It aims at addressing food insecurity and malnutrition, as well as further reducing poverty, aligning with the broad recognition that stunting, with its long-term negative effects on human capital development, represents an impediment to Rwanda's aspiration to become a middle-income country.

The planning and execution of Vision 2050 will be driven by existing development planning and implementation frameworks at the national, sector, and district level, building on the earlier Vision 2020. In the words of the Rwandan government: where Vision 2020 focused on **„How to survive"**, the Vision 2050 focuses on **„The future we choose"**.The main targets of Vision 2050 are (1) Human Development, (2) Competitiveness and Integration, (3) Agriculture for wealth creation, (4) Urbanization and Agglomeration and (5) Accountable and Capable State Institutions[16].



Adapted from: MINECOFIN 2015, VISION 2050 [16]

Secondary cities

To meet the challenges that secondary cities are facing in terms of basic infrastructure services and growing population sizes, the Government of Rwanda has elaborated a **vision for secondary city development** aiming at strengthening the energy, transport, buildings, water, and sanitation sectors and infrastructures in Muhanga, Huye, **Rusizi**, Rubavu, Nyagatare and Musanze. These investments are also expected to increase employment opportunities in the cities and, in turn, develop their economic prosperity, with a specific focus on "green growth" and "green urbanisation" spelled out in a master plan for each of the cities[4].

Transport of onions by truck in Rusizi

Shocks to the food systems

In 2018, **21.9% of households in Rusizi District reported having been affected by shocks**, of which 35.9% of the affected households reported the shock was caused by drought[5].

The impacts of climate change

The most evident impact of climate change in Rusizi District is the **extension of the dry season**, which is negatively affecting the agricultural production on the farms. In order to overcome this, meetings about climate change are conducted between the Director of Agriculture, Livestock, and Natural Resources, District Agronomists, Sector Agronomists and farmers in order to inform about mitigation strategies, such as irrigation, rain water collection, harvesting techniques and options for placing greenhouses. Farmers get informed through press releases from Meteo Rwanda and meetings can be followed on Rusizi Radio[9].

COVID-19

Initially, the COVID-19 pandemic impact on Rusizi led to a **waste of fresh produce** for they could not be transported across the border to the DRC, as usual, due to the government preventive measure of closing the boarders. Subsequently, farmers reduced their efforts in agriculture farming and production because they could not find a sustainable market to sell their production (mainly vegetables, maize and fruits), which used to be sold in Bukavu City in the DRC. This led to a situation where small sellers could only sell their products through mediators who are able to cross the border for formal trade, thereby **affecting the most vulnerable in informal cross-border trade, the majority being mothers[9].** Furthermore, the processing industries are affected by limited resources to purchase raw materials and other products needed.

Cabbages growing in rural Rusizi

Final notes

The Rusizi City Consultation,held on the 31st of March, with government officials, representatives of the civil society, youth, businesses and cultural organizations as invitees, provided the following outcomes[8].

Main issues/priorities

Agricultural production
- **Limited access to production inputs (clean seeds and fertilizers).**
- **Prevailing knowledge gaps in Good Agricultural Practices (GAP).**
- **Post-harvest losses** for perishable products due to an insufficient post-harvest infrastructure (handling and processing).

Livelihoods
- High number of poor families constrained by limited access to nutritious foods
- **Financial constraints for local childcare centers** (Early Childcare Development centers)

Nutrition
- **High rate of malnutrition from children under 5 years** of age located mainly in Mururu and Nkombo sectors of Rusizi District.

Behaviour change
- **Prevailing poor nutrition pattern.**

Hygiene and sanitation
- **Inappropriate hygienic practices** in handling food and cleaning of the equipment and materials used in food preparation, consumption, and storage causing food borne diseases at household level.

Equity
- **Socio-economic marginalization of women** involved in agricultural cooperatives and small business due to low levels of literacy and limited access to assets.
- Functional and operational malfunctions in the **inclusion of disabled people in the existing Farmer Field School (FFS) and Self-Help Groups (SHG),** despite the involvement of the National Union for disabled People (NUDOR).
- **Constraints in the youth's access to assets and motivation for involvement in agricultural production and business.**

Drivers for a nutrition vital city

Agriculture
- **Farmer Field Schools (FFS) and Livestock Farmer Field Schools (L-FFS)** as a hub for sharing resources and the exchange of knowledge and skills.

Livelihoods
- **Support of the existing (women) cooperatives** as engines of socio-economic growth, agricultural development, social cohesion.

Nutrition
- Support and **enhancement of the financial and human capacities of DPM, SPM, CPM and VPM** for reducing malnutrition in particular among children, youth, women and vulnerable groups.

Socio-economic/Advocacy
- **Support establishment of Self Help Groups (SHG),** playing an important role locally in socio-economic development for people with a lower income. Members capitalize small amounts of money for saving, ensuring accessibility to loans on the long run, affecting food security positively.

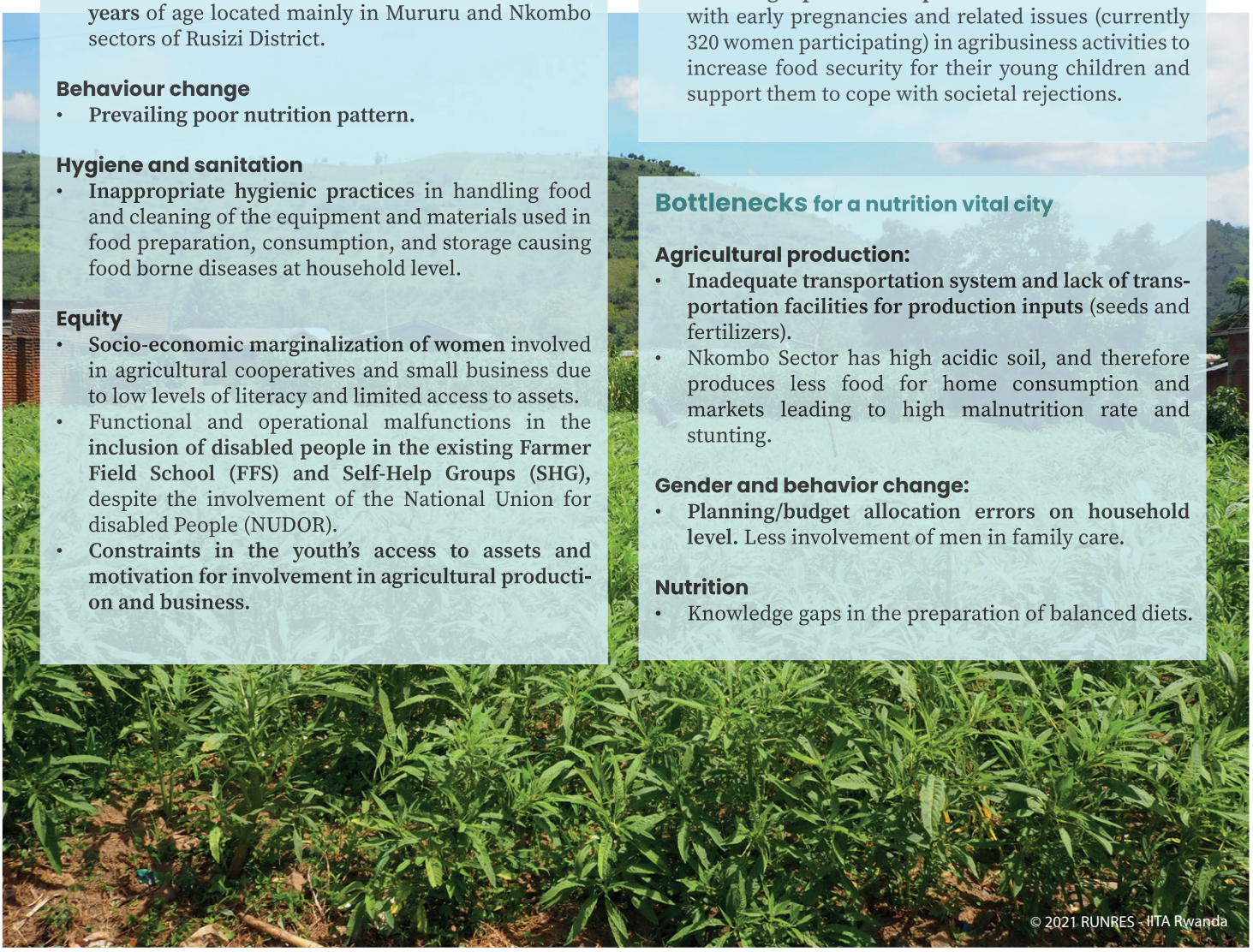
Equity
- **Involving Special Groups of Adolescent Mothers** with early pregnancies and related issues (currently 320 women participating) in agribusiness activities to increase food security for their young children and support them to cope with societal rejections.

Bottlenecks for a nutrition vital city

Agricultural production:
- **Inadequate transportation system and lack of transportation facilities for production inputs** (seeds and fertilizers).
- Nkombo Sector has high acidic soil, and therefore produces less food for home consumption and markets leading to high malnutrition rate and stunting.

Gender and behavior change:
- **Planning/budget allocation errors on household level.** Less involvement of men in family care.

Nutrition
- Knowledge gaps in the preparation of balanced diets.



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Endorsed by the World Food Programme (WFP), this project aims to connect the supply and demand side of food systems, engage women and young people – including through social business models – and build local governance capacity initially in two secondary cities each in Bangladesh, Kenya and Rwanda. Emphasis is placed on increasing the production and demand for local, agroecological, diverse and affordable foods, and on making food value chains more nutrition-focused so they contribute to better health. Multi-stakeholder and multisectoral collaboration brings together city authorities, local businesses and civil society, creating a dynamic network of city learning hubs for dissemination and scaling-up.

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Limitations

The majority of sources stem from the context assessment and city consultation processes that were arranged during the NICE project inception phase (January-May 2021). These sources are largely qualitative and have been put forward by city leadership, local stakeholders, and consultants to the project.

We acknowledge the efforts of all those that have contributed to this City Overview. The information was consolidated by Sophie van den Berg under the oversight of Dominique Barjolle from ETH-Zürich Group of Sustainable Agroecosystems, Department of Environmental Systems Science. Any views and ideas expressed herein are those of the author(s) and do not imply or reflect the opinion of the Swiss Agency for Development and Cooperation or the NICE consortium member institutions. We invite you to share this information freely. The suggested citation is Nutrition in City Ecosystems (NICE) Project City Overview Series (2021).

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