



NUTRITION *in* CITY ECOSYSTEMS

January 2025

CITY OVERVIEW on food and nutrition



KENYA

Bungoma City



Basic facts

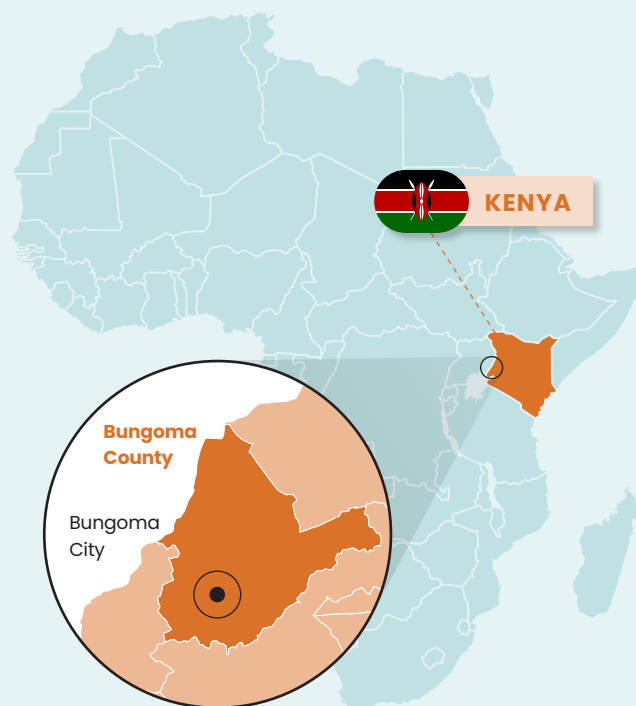
Bungoma City

Location

Bungoma City is an ever-growing western Kenya city that borders Uganda and is the administrative capital of **Bungoma County**.

The region benefits from two rainy seasons: the **long rains from March to July** and the **short rains from August to October**. Annual rainfall ranges from **400 mm to 1,800 mm**, which supports its **agricultural productivity**.

12% of the population in Bungoma County lives in the **urban area**.¹



Demographics

- **Population:**^{*}
190,112 people (Bungoma City)
1.67 million people (Bungoma County)
- **Density:** 581 people/km²
- **Average household size:** 3.8 people

* 2019 census



From a **2022 farmer survey** done in Bungoma City, **52%** of the households have **male household heads**, **45%** have **female household heads**, and **3%** are **headed by both** males and females.

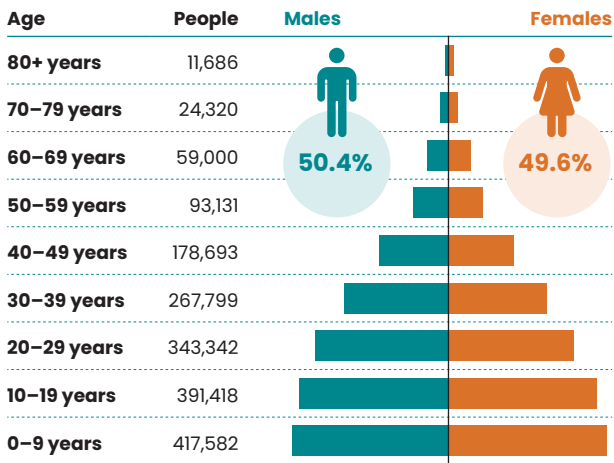
This is against a backdrop where Kenya stands at **75th** out of 146 countries in the **2024 Global Gender Inequality Index**, which was an increase from its previous rank of 77th in 2023.

As the county's most populous city, Bungoma is predominantly inhabited by the **Bukusu ethnic group**, a sub-group of the larger Luhya community. Other ethnic groups also found within the county include **Teso, Sabaot, Kalenjin, Kikuyu**, and **Luo**.

Though the major language spoken in the county is **Lubukusu**, **Swahili** and **English** are the national and official languages respectively.

A greater percentage of the people are **Christians**, both Roman Catholics and Protestants, though there is also a minority group of traditional African religionists as well as a small population of **Muslims**.^{1, 2, 3, 4}

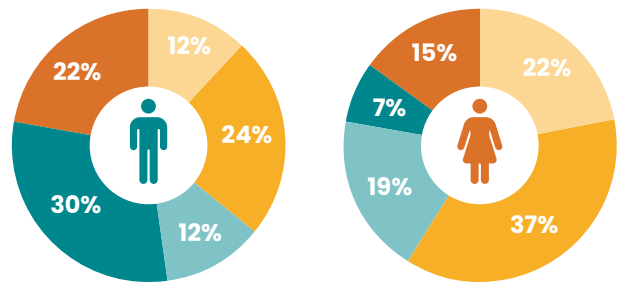
Age distribution ⁵



P 2023

Household head education ³

- No school
- Primary school – not completed
- Primary school – completed
- Secondary school – not completed
- Secondary school – completed
- Tertiary education



Living conditions

Agriculture is the driving force behind Bungoma’s economy, employing **62%** of the **workforce**. The **service sector** accounts for **31%** of jobs, while **7%** are employed in **industry**.

Despite a relatively low unemployment rate of **4.6%**, **poverty** remains a challenge, with **44%** of the city’s population living below the poverty line, though **food poverty** is slightly lower at **31%**.

According to a 2022 health survey, only **40%** of households have access to **basic sanitation**, while **70%** have access to **clean drinking water**, highlighting key areas for infrastructural improvement. Of those with access to water, **78%** rely on **wells or boreholes**, **10%** have **piped water**, **10%** source it from **streams**, and **2%** from other sources.^{6,7}



General health statistics

Health status

In Bungoma City, the socio-economic challenges manifest in alarming health indicators. The average **life expectancy** stands at **68.2 years for women** and **65.5 years for men**, while the **maternal mortality rate** is a staggering **238** per 100,000 live births. The **infant mortality rate** is also high at **39** per 1,000 live births. Additionally, only **18%** of the household population have any **health insurance**.

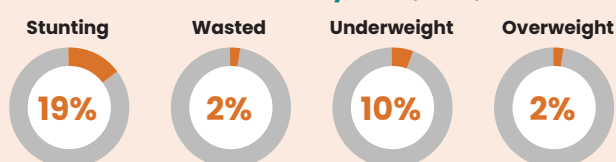
The average **out of pocket outpatient expenditure** in Kenyan Shilling is **929 KSh (\$7.20)** while out of **pocket inpatient expenditure** is **386 KSh (\$2.99)**. The county has **10 hospital beds** and **9 healthcare workers** per 10,000 people which is ranked 34 and 36 within the

country respectively. While Kenya's National Health Insurance Fund (NHIF) aims to provide **universal health coverage** for hospital stays and outpatient visits at accredited public and private facilities, it is estimated that only **24%** of Bungoma City's residents are being covered under the scheme.

These issues highlight significant barriers to essential healthcare, worsening burdens for vulnerable groups. Although **82%** of households are **within 5 km of care**, rural areas still face access challenges due to limited road development and difficult terrain, despite **458 km** of major **motorable routes**.^{1, 8, 9, 10, 11, 12}

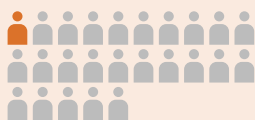
Key facts^{8, 9, 11}

Health of children under 5 years (2022)

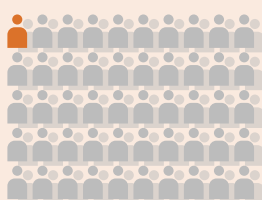


Chronic diseases (2021)*

1 out of 25 suffers from some cardiovascular disease



1 out of 100 suffers from Diabetes



* sampling data for people between 21 years and 80 years

Number of health facilities (2019)

Level 6: national referral and large private teaching hospitals

Level 5: county referral and large private hospitals

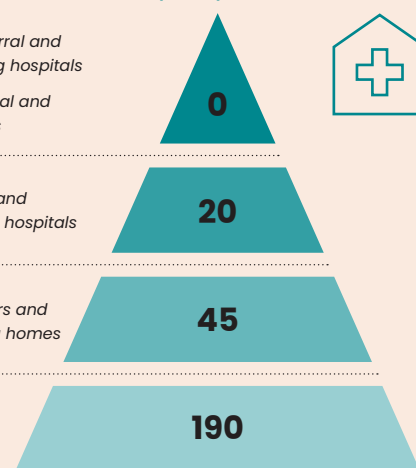
Level 4: sub-county and medium-sized private hospitals

Level 3: health centers and maternity and nursing homes

Level 2: dispensaries and clinics

Level 1:

Community service



The burden of **non-communicable diseases (NCDs)** in Kenya as of 2021 was estimated at about **33% of total deaths**, mainly due to cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases. Important modifiable risk factors include tobacco use, unhealthy diets, and environmental pollution.

The Kenyan government has launched a five-year **National Strategic Plan (2021–2025)** to reduce NCD

morbidity and mortality through enhanced health systems, early detection, and risk factor management. This plan integrates policies to address underlying social and environmental determinants, using **multi-sectoral approaches** to ensure healthy lifestyles and decrease the health and economic burdens of NCDs.^{8, 13}

Applying a systems approach to the Farm to Fork logic



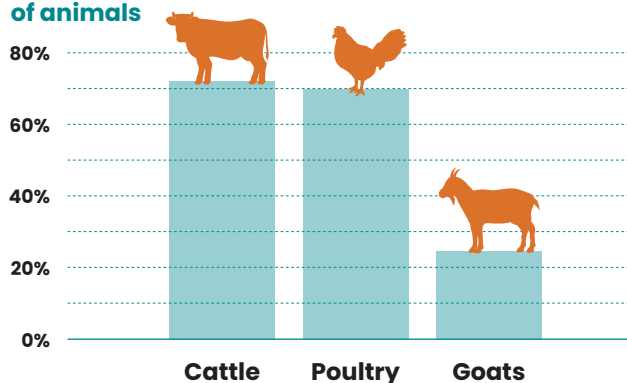
Production

Agriculture is at the core of Bungoma’s economy, with **mixed farming** – combining crops and livestock – being the dominant practice for 71% of households. **Maize** is the principal crop, with 97% of farmers engaged in its production, highlighting its importance as a staple in both diets and the local agricultural economy. Alongside maize, **beans** are another significant crop, cultivated by 90% of households.

Livestock farming complements crop production, with cattle (72%) and poultry (70%) being the most commonly reared animals. Despite the challenges in scaling livestock production, there is optimism in the farming community due to efforts in enhancing farming resilience and sustainability through **agro-ecological practices** and innovative farming methods. Moreover, as was evident from our **2022 Farmer’s Survey**, most Bungoma City farmers also rely on **non-farming income sources** to supplement agricultural earnings, indicating the potential for diversification and economic resilience.

The introduction of **crop and livestock insurance** by **ACRE Africa** has been a helping hand for a few small-holders providing a safety net and encouraging agricultural expansion. In our **2021 household survey**, 4% of Bungoma City farmers reported to have received a loan in the past year for agriculture. This development is injecting new hope and stability into the local farming community, potentially transforming the agricultural sector in Bungoma.^{3,14}

Household participation in the production of animals



Household participation in the production of crops

Seasonal crops ^a (Top 3)	% of households engaged in production
Maize	97%
African leafy vegetables	53%
Sweet potato (white flesh)	36%

Perennial crops ^b (Top 3)	% of households engaged in production
Banana	78%
Avocado	38%
Mango	32%

Leguminous crops ^c (Top 3)	% of households engaged in production
Beans	90%
Groundnut	64%
Cowpea	50%

a) **Seasonal crops** are plants that are cultivated and harvested during specific times of the year.

b) **Perennial crops** are plants that live for multiple years and produce crops year after year.

c) **Leguminous crops** are plants known for their ability to fix nitrogen in the soil, enhancing soil fertility.

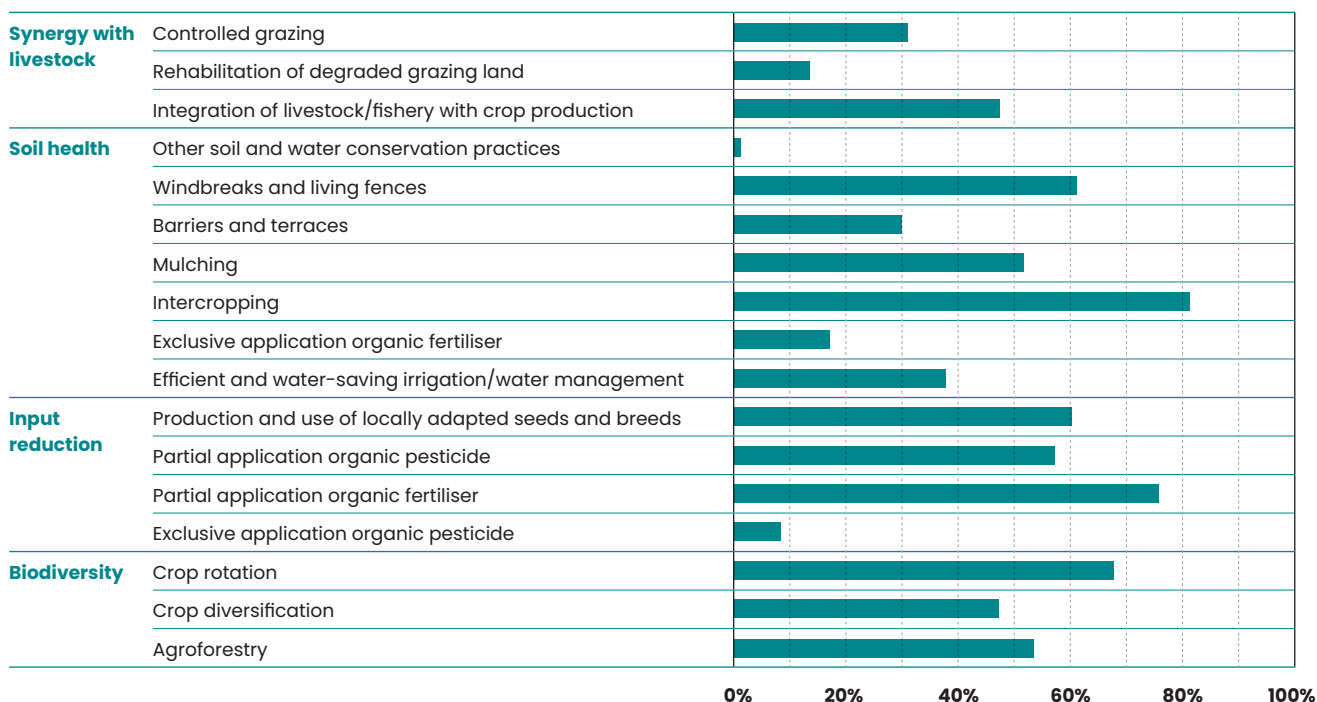


Farming and agroecological practices

Bungoma City demonstrates a commitment to diverse and sustainable farming practices. **Mixed farming** (71%) dominates, with farmers combining livestock and crop farming. **Agroecological practices** such as **intercropping, crop rotation**, and partial application of **organic fertilizers** are widely adopted,

with over **two-thirds** of the surveyed households employing these methods. This diversity of practices indicates a farming system that blends both traditional knowledge and modern sustainability practices, creating a potential foundation for further integration of agroecological approaches across Bungoma.³

Agroecological practices



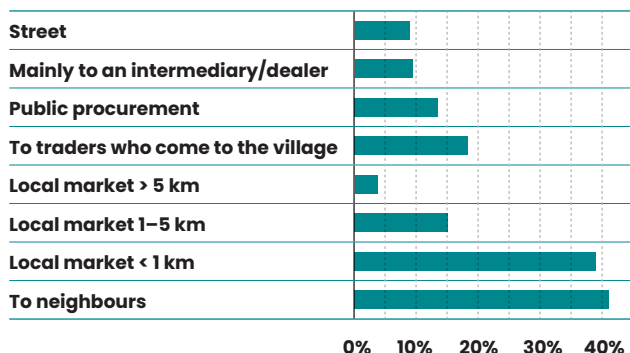
Agroecological practices in Bungoma City reveal a balanced approach to seed sourcing and soil management. An impressive **97%** of households source their seeds **from markets or shops**, but there is also a notable reliance on self-production, with **58%** of households practicing **seed saving**.

Soil fertility management relies both on **organic and synthetic inputs**. While **90%** of households use **livestock manure** and **86%** apply **compost, synthetic fertilizers** are equally widespread (**90%**). These practices suggest progress towards agroecological techniques combined with conventional farming, but also point to the need for greater emphasis on sustainable, self-sufficient methods to reduce external fertilizer use.

Despite these advances, **post-harvest processing** such as sorting, packaging, and refrigeration remains underutilized, offering a key area for future development in Bungoma City's agricultural sector.³

Selling locations

Most prominent selling channels/locations of farming output in Bungoma

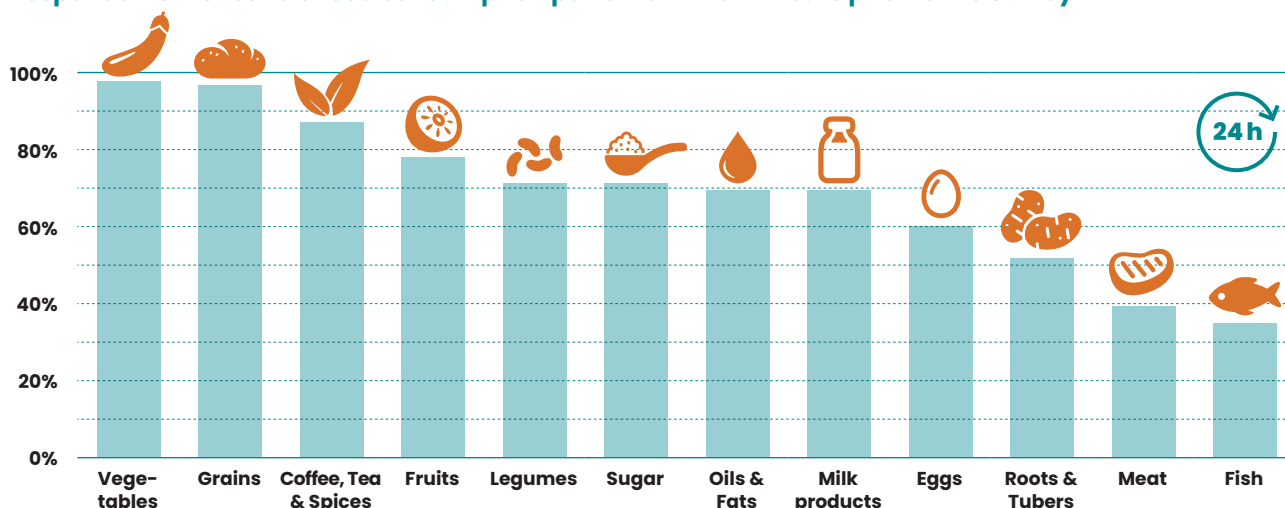


In Bungoma City, **convenience** plays a crucial role in selling agricultural produce. Around **80%** of households prefer to sell their produce either directly to neighbors or at local markets **within a 1 km radius**. This localized selling pattern underscores the impor-

tance of community ties and proximity to markets in the region’s agricultural trade. This reliance on local markets also highlights the potential to strengthen local economies through improved access to broader market networks.³

Food consumption

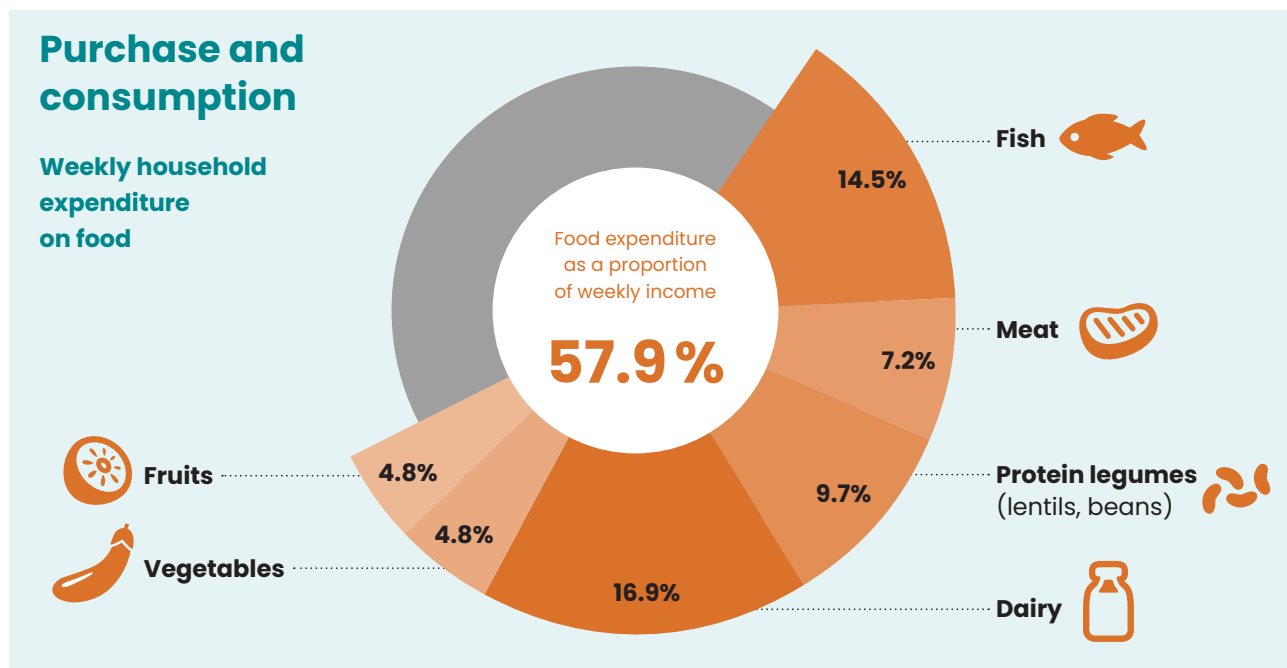
Respondents’ household food consumption patterns in the 24 hours prior to the survey



The dietary habits in Bungoma City reflect a plant-based tendency, with **vegetables** forming a vital part of daily meals for **97%** of households. Grains are another staple, consumed by **96%** of households. However, animal protein sources like **meat and fish and seafood** are consumed less frequently, with only **39%** and **34%** of households, respectively, reporting

them in their diet. **Dairy** is consumed by **69%** of households, showing a moderate presence in local diets.

The low consumption of animal proteins could be attributed to economic factors or cultural preferences, reflecting a diet that is shaped by local agricultural outputs.^{3,14}



Women, youth, and other vulnerable groups

In Bungoma, **women and youth** are central to the city’s food system, especially in small-scale farming and community-supported agricultural initiatives. **The NICE project** works to boost the role of these groups in **agroecological farming practices**, which is often overlooked, enhancing their engagement in the local economy. Women frequently participate in subsistence farming activities, while youth are being

encouraged to adopt sustainable farming methods to build resilience against climate change and economic fluctuations. This engagement is helping to improve household food security while providing economic opportunities for these vulnerable groups.³

For more detailed insights into farming systems, please refer to the [Farmers Survey Report](#)



Nutritional challenges

Food production



Bungoma is not different from most of the counties in Western Kenya, with its **overdependence on staple crops** like **maize and beans**, grown by **97%** and **90%** of households respectively. Other crops grown, though of less importance compared to staple foods, include **groundnuts, amaranthus, and traditional leafy vegetables**. Such low dietary diversification in production reduces the availability of **nutrient-dense foods**, hence perpetuating malnutrition, particularly among children and women of reproductive age. **Food processing techniques** of cleaning, sorting, and packaging are rarely used in Bungoma, as most of the harvested produce is normally consumed immediately. This reduces the opportunity for **value addition** and preservation that could raise food security and income generation.^{3,15}

Dietary diversity



Dietary diversity remains a big challenge in Bungoma. The **minimum dietary diversity score** was **4.6 out of 10**, while less than **half** of the **women of reproductive age** are consuming five or more food groups daily according to our Baseline survey. This trend is mirrored in the general population, where the average household dietary diversity score is slightly higher, at **6.0**. Nutritional diversity is mainly constrained by **economic inaccessibility** and too great a reliance on staple crops like maize. The results of this are that **19%** of the children under five years of age are said to be **stunted**.^{3,15}

Climate effects



Bungoma is very vulnerable to **climate change**, especially to **drought** and **erratic rainfall**. Most farming in Bungoma is **rain-fed**, with less than **2%** of the cultivable land within the region having **irrigation**. The dependence of crop and livestock production on rain makes it highly vulnerable to drought, leading to frequent **crop failure, loss of livestock**, and other risks. This trend is accentuated by the rapidly **declining soil fertility**. Poor state of soil health combined with extremely low adoption of **sustainable agriculture production methods** contributes to the low agricultural productivity to meet the food security and improved nutrition. There has been advancement in **climate-smart agriculture practices**; however, the adoption rate remains low.^{3,15}

Trade



Despite Bungoma being an important agricultural center in this area, its **market infrastructure** is limited, characterized by **narrow, poorly surfaced roads** that make it difficult for farmers to bring their produce to the market, while during the rainy season, transportation is almost impossible. Lack of appropriate means of **storage and transport** restricts farmers' access to other markets, thus limiting not only economic opportunities but also limiting the volume and variety of food that reaches the local markets. Agricultural producers have problems of **price variability** and poor **market connections**, resulting in little incentive to diversify crops.^{3,15}

Food insecurity



Food insecurity remains a key issue within Bungoma, with about **45%** of households being classified as **food insecure** due to limited access to sufficient amounts of nutritionally adequate and safe food. Most households depend entirely on **subsistence agriculture**, which is hardly enough for the family's daily nutritional needs. The county has a high rate of **poverty**, which worsens food insecurity because of inability of families to afford food, especially in low crop production periods. As such, **food expenditure** accounts for **58%** of the weekly expenditure, a situation that gets worse in the countryside. Food insecurity within Bungoma is also driven by the **low agricultural productivity** and **overdependence** on only a few staple crops, hence making households prone to crop failures.^{3,15}

Malnutrition rates



Stunting stands at **19%** in Bungoma, which is slightly above the national average of **18%**. As an indicator of chronic nutritional deprivation, it results mainly from a lack of **dietary diversity** and frequency of food. The prevalence of **underweight** children at **10%**, coupled with **wasting** at **2%**, signifies chronic and acute malnutrition conditions in Bungoma and calls for comprehensive interventions toward access to **quality food**.^{3,9,15}



Policy environment



National

The National Food and Nutrition Security Policy – FNSP

First launched in 2011, the Food and Nutrition Security Policy is Kenya's main framework, meant to ensure all its citizens have access to **enough and nutritious food**. It deals with **chronic and acute food insecurity**, focusing more on **long-term malnutrition** and addressing **short-term crises** such as droughts and floods. The policy also addresses **micronutrient deficiencies** by advocating for access to **nutrient-dense foods** throughout the life cycle. In Bungoma City, although agricultural production is high, nutritional outcomes are not at par; FNSP guides the interventions to improve nutrition and reduce malnutrition through **dietary diversity**.¹⁵

Kenya Health Policy (2014–2030)

The Kenya Health Policy aims to improve **public health outcomes**, including **nutrition-related diseases**, through promoting access to **nutritious and safe foods**. This policy places emphasis on **maternal and child nutrition**, especially **breastfeeding** and **complementary feeding** for the improvement of child survival and development. With high levels of child malnutrition, including stunting, this policy is critical at the local level of health interventions in Bungoma City. It also focuses on the reduction of **under- and overnutrition** through improved access to health services, nutrition education coupled with support.¹⁵

National School Meal and Nutrition Strategy

Launched in 2017, the program implements strategies to improve the **nutritional status** and **school performance** of children by providing **nutritious food** from local producers in a school setting. This gains local food products, while at the same time developing an integrated approach with **nutrition knowledge** into school syllabi. This, particularly in Bungoma City, is very helpful in assuring that children attending school from poor backgrounds are guaranteed to acquire nutritious food that will boost their **growth and development** academically. This policy also improves local food systems by linking **smallholder farmers** with the school feeding program, hence once more contributing to the county's effort of developing its emphasis on traditional foods.¹⁵

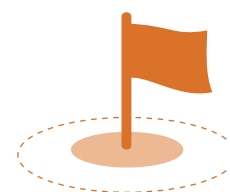
Kenya Climate-Smart Agriculture Implementation Framework (2018–2027)

This national framework builds agricultural practices in such a way that farmers' **productivity and resilience to climate change** are enhanced. Key **climate-smart strategies** include water-saving irrigation techniques and the cultivation of drought-resistant crops. These have high potential for replication in most of the agro-ecological zones in Bungoma City. This framework further outlines the role of **women, youth, and vulnerable groups** in providing ways for fairer participation in agricultural growth and reduction of under-nutrition through **diversification of foods produced**.¹⁵

Kenya Agri-Nutrition Implementation Strategy – ANIS (2020–2025)

This policy seeks to address issues of malnutrition by adopting a **collaborative approach** among state and non-state actors in enabling communities to produce and consume **safe, diverse, and nutritionally adequate foods**. The strategy covers the full value chain of the food system, from production through consumption, with particular emphasis on improved access to **nutrient-dense foods**. This supports and aligns with the aims of the NICE project, ensuring that **nutrition-sensitive agriculture programs** enhance diets and food security. ANIS implements an integrated **agricultural and nutritional approach** with the aim of addressing malnutrition across Kenya in a way that is sustainable and, thus, having long-term impacts on health and economic development in the country.¹⁵

County



Bungoma County Nutrition Action Plan – CNAP (2018–2023)

It is the localized version of the Kenya National Nutrition Action Plan and, therefore, presents the scheme which Bungoma City would use in implementing the fight against **malnutrition** and **food insecurity**. The CNAP emphasizes **multisectoral collaboration**, with major integration areas being **agriculture, health, and education sectors**. Among the key objectives are **nutrition-sensitive agriculture** and enhancement of **nutrition intervention governance** across the county. With **30%** of children in Bungoma City being **stunted**, CNAP will form the essential framework for tackling malnutrition and improving food access across the county.¹⁵

Agriculture Sector Transformation and Growth Strategy (2019–2029)

This strategy supports county-level agricultural reforms focused on improving **food security** and **nutritional outcomes**. This approach maintains the training of **extension officers** in nutrition-sensitive agriculture while encouraging collaboration between **agriculture and health departments** to promote better **nutritional education** and outcomes. Since agriculture is the heart of the economy in Bungoma City, this strategy will seek to include nutrition in agricultural policies that guarantee that food production will support a **diverse and healthy diet**.¹⁵

Bungoma County Integrated Development Plan – CIDP (2023–2027)

The current CIDP is central to Bungoma City; thus, it outlines the priorities at the county levels on **sustainable agriculture, nutrition, and health**. The CIDP shall help improve modernization in **agriculture, health systems, clean water, and sanitation**. Although the nutrition interventions are not well captured in the current CIDP, there is an overemphasis on **value addition, processing, and promotion of local and indigenous crops** to reduce food insecurity and improve the economy. Through enhanced food systems, CIDP increases the effort that Bungoma City is making in enhancing nutrition and improving **livelihoods**.¹⁵

The Bungoma County Food Safety Policy

This 2023-launched strategic framework was particularly developed for the protection of **public health**. Thus, the policy provides an elaborative framework governing the **production, management, distribution, and consumption** of food-stuffs. The policy mandates food handlers to uphold **hygiene standards**, ensure **regular surveillance** of food premises, and strictly adhere to national and international food safety regulations. The policy will also look into **stakeholder education** for farmers, vendors, and consumers on best practices in food safety. It aims to ensure **food safety** across the county by addressing challenges such as **foodborne illnesses** and contamination risks, ultimately promoting **wellbeing and economic growth** within the community.¹⁵

Bungoma County Food and Nutrition Security Bill (Upcoming)

Bungoma City is currently in the process of developing a local Food and Nutrition Security Bill, which will bring into a single law various efforts related to **food security, agriculture, and nutrition**. The bill will be geared toward the improvement of **food production, access, and utilization** but will place a strong emphasis on **nutrition-sensitive agriculture**. Support will be provided for local initiatives to strengthen **food systems** through public procurement and improved **local food value chains**, contributing to better nutrition outcomes for the county's population.¹⁵

Final notes



Limitations

Despite the involvement of local city officials and the use of data generated by the NICE project, there remains a dearth of information that is focused solely on Bungoma City within the larger administrative unit. In cases where city-level data was unavailable, urban data from the broader administrative area or national data has been used as a reference.

Acknowledgments

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Pictures: NICE Kenya

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

nice-nutrition.ch