

The New Senior Secondary Curriculum for Sierra Leone

Subject syllabus for Food Security

Subject stream: Science and Technologies



This subject syllabus is based on the National Curriculum Framework for Senior Secondary Education. It was prepared by national curriculum specialists and subject experts.



Curriculum elements for Food Security – an applied subject

Subject Description

'Food security' as a school subject is an area of study that uses various subjects to help learners understand and appreciate food as an imperative for living and having secure access to sufficient food as a basic right of all persons. The subject includes aspects of sciences, technologies and economics. Food security provides learners with knowledge, skills, and competencies to deal with food systems and key concerns in the food industry.

Food systems have been defined as ***'all the elements and activities related to producing and consuming food, as well as their effects, including economic, health, and environmental outcomes'***. The main food security concerns in Sierra Leone include food production, diversity of foods, sources of foods, uses of food, sustainable availability of food, consequences of food scarcity, and complexity of the food chain. In essence the food chain is not only about food production, but also concerns preservation, processing, storage, packaging, marketing, cooking, serving, etc., up to eventual consumption patterns, nutrition status and other health issues. The subject explores the influence of climate change on food availability and costs globally. It also covers current and potential job opportunities in the food industry.

Rationale for the inclusion of Food Security in the Senior Secondary School Curriculum

Like many nations, Sierra Leone is not self-sufficient in food. It relies on external sources to meet the food needs of the population. This makes it difficult and expensive for all segments of the population to have access to the food they need to survive and thrive as citizens. In addition, climate change affects food production and related supply chain elements, so that there is growing uncertainty across the world about availability, quality and prices of all types of foods.

Against this background, the Government of Sierra Leone regards food security as a major challenge and a high priority for the country. A May 2021 World Food Program report on the State of Food Security in Sierra Leone indicates that ***'Food insecurity and vulnerability to shocks have worsened significantly over the past ten years for most Sierra Leoneans, reaching a staggering 57 percent of the population'***. The rationale for having Food Security as an applied subject in senior secondary schools includes the following:

- 1) To enable the education sector to contribute essential human capital in support of long-term food security in Sierra Leone
- 2) To complement the Government's current food security policies and efforts with comprehensive and sustainable education measures
- 3) To encourage young people to see food more positively than as just labour-intensive farming, which many young people may despise
- 4) To build appropriate competencies in learners for critical job opportunities in various segments of the food chain in Sierra Leone
- 5) To promote enthusiasm for self-reliant communities with access to nutritious and affordable food for all citizens
- 6) To facilitate positive attitudes towards family farming and enhance the types of food produced and consumed in Sierra Leone
- 7) To understand the impact of climate change (droughts, floods, etc.) on the availability and price of food in Sierra Leone



- 8) To improve understanding of the links between food, the environment and conservation in facilitating sustainable food security
- 9) To contribute to a balanced economy, by reducing the high costs of food imports and increasing revenue from food exports
- 10) To learn how to conserve the environment and build resilience against the impact of climate change on food security

General learning outcomes/broad goals

By the end of the course, pupils should be able to:

- 1) Explain (with examples) the various ways in which **access to nutritious food at affordable costs** is a 'life and death' issue for individuals, families, households, communities, and nations
- 2) List a wide variety of foods that are consumed in Sierra Leone and put them in categories such as
 - Locally produced or imported from other countries
 - Seasonal or available throughout the year
 - Consumed daily (staple foods) or consumed selectively
 - Expensive or affordable
- 3) Outline and analyse some of the main factors that influence food pricing in Sierra Leone
- 4) Examine steps, or links in the food chain, from production to consumption, using selected food items
- 5) Demonstrate food production competencies by growing and harvesting crops in a school garden/farm
- 6) Outline and analyse the effects of climate change (droughts, floods, etc.) on food security
- 7) Discuss the viability of measures suggested for reducing the harmful effects of climate change on food security
- 8) Prepare national 'food maps' that indicate major sources of different foods in Sierra Leone
- 9) Track and document annual changes in price of various food commodities in different parts of the country
- 10) Prepare nutrition charts showing how different foods contribute to health and quality of life
- 11) Explain food safety concepts and discuss commonly held beliefs and food taboos in different parts of the country
- 12) Outline and analyse current practices of food preservation and storage in Sierra Leone
- 13) Prepare menus for nutritious and balanced meals using a variety of locally available foods
- 14) Design and cost nutritious and balanced 'family food baskets' for different parts of the country
- 15) Develop a food-based business plan that involves wholesale or retail trade in selected foodstuffs.



Subject Content Outline (Themes and topics to be covered)

Food for life

- Food and survival
- Hunger and starvation (no food no life)
- Food in history (hunting, gathering, farming, fishing, herding, etc.)
- Living things need food to survive
- Lack of food causing poor health and starvation
- Food as an essential aspect of human life.

Uses of foods

- Energy, nutrition, growth and physical health
- Psychological well-being
- Pleasure, social bonding and entertainment
- Celebration and ceremonies
- Medicinal uses

Types/categories of foods

- Cereals
- Root crops
- Fish and seafood
- Meat and poultry
- Cooking oils
- Fruits and nuts
- Herbs, seasonings and condiments
- Natural/raw and processed foods
- Healthy and unhealthy foods
- Clean and unclean foods
- Staples and non-staples
- Local and imported foods.

The food chain

- Food production and losses
- Harvesting
- Storage
- Preservation and processing
- Packaging and marketing
- Wholesale and retail
- Consumption and nutrition.

Sources of foods

- Foraging
- Hunter-Gathering
- Farms and gardens
- Oceans, rivers, streams and fishponds (fishing)
- Livestock (cattle, sheep, goats, rabbits and other domesticated animals)
- Poultry farms
- Fruit farms
- Family farming
- Industrial farming
- Backyard gardening.

Careers in food

- Farming and gardening
- Fishing
- Cattle herding
- Wholesaling and retailing
- Catering
- Manufacturing
- Branding
- Nutritionist
- Cooking
- Working in restaurants



The food industry

- Subsistence, small-scale and industrial production
- Food preservation
- Food Processing
- Wholesale and retail trading
- Food packaging, storage and distribution
- Marketing and advertising
- Restaurants and catering
- Diet, health and fitness industries
- Animal husbandry, farming and fishing

Food ethics and morality

- Enough food to meet needs, but not for greed
- Producing, distributing and consuming food fairly
- Food surplus, scarcity, waste and hoarding
- Price manipulation, gouging, profiteering and corruption

A systems approach to food

- The food chain at local, national, regional and global levels
- UN Decade of Family Farming (FAO)
- Economic policies and national investments in food security

Food economics

- Supply and demand
- Import and export
- Food loss
- Seasonality
- Market prices
- Investments in food production
- Food processing costs
- Storage and distribution costs
- Marketing, and its costs benefits
- Additives (eg, vitamins, iodised salt, fortified flour, artificial preservatives)
- Salting, smoking, curing, drying, canning and freezing of foods

Climate and food sustainability

- Soil erosion and soil conservation
- Deforestation
- Slash and burn habits
- Aquaculture (fish farming)
- Pollution (land, rivers and oceans)
- Plastic waste
- Changing weather patterns
- Heatwaves, droughts, winds and floods
- Climate change awareness
- Adaptation, preparedness and resilience

Land and water conservation

- Seeds and seedbanks
- Genetically modified seeds (GM)
- Soil erosion
- Pollution of land, lakes, rivers, oceans
- Forest reserves
- Timber logging
- Fishing quotas
- Grazing lands

Food and culture

- Migration and change – from farming to mining, rural to urban
- Taste and preference
- Traditional foods
- Foods that are taboo or forbidden by different cultures and religions
- Local foods for infants and children, Local foods for pregnant women
- Staple foods

Climate and food insecurity

- Seasonality
- Price variations, crop loss, hunger and famine,
- Supply chain disruptions
- Salination of land previously used for farming
- Migration out of farming and rural areas.

Climate change and food

- Crop failures
- Hurricanes
- Flood
- Droughts
- Monsoon
- Seasons and seasons change
- Rainfall and heatwaves



Structure of the Syllabus Over the Three-Year Senior Secondary School Cycle

	SSS 1	SSS 2	SSS 3
Term 1	<p>The basics of food and food security Types and categories of foods; foods consumed in Sierra Leone; foods produced in various parts of the country; foods imported into the country; food distribution (wholesale and retail); access to food and the cost of food; nutrition and food consumption; food availability and scarcity (seasonal hunger, malnutrition).</p>	<p>Climate change and food security Understanding climate change (not just weather events) and how it affects food security in the long term; droughts and floods; failed seasonal rains; desertification and land degradation; supply chain disruptions; climate effects on migration, agriculture, fishing, livestock; measures to mitigate the negative effects of climate change.</p>	<p>The food industry and related careers Farming, fishing, food processing, retail and wholesale food marketing; food packaging; food distribution; storage and preservation; legislation on 'local content' in shops and supermarkets; youth employment and the promotion of entrepreneurship in the food industry.</p>
Term 2	<p>The 'food chain' concept in Sierra Leone Foods: production, harvesting and storage; processing and preservation; packaging and marketing; branding and advertising; buying and selling; preparing and consuming; nutrition and healthy living; strengthening links in food chain at national, regional and global levels.</p>	<p>Production to consumption (key factors) Factors affecting production of food on farms and in oceans, lakes and rivers; reducing harvest loss and food waste; rural-Urban migration; migration from farming to diamond mining in Sierra Leone; protecting and preserving food stocks; marketing; health and nutrition.</p>	<p>Measures to improve food security in Sierra Leone UN Decade of Family Farming; Support to farmers for mechanised farming; support to fishing communities (boats, nets, cold rooms and fish smoking facilities); mitigating the negative impact of climate change at all levels (national/regional/global)</p>
Term 3	<p>The economics and ethics of access to food Subsistence farming, backyard gardening; small-holder farming; large-scale farming; national agriculture budgets and subsidies; food importation and related subsidies; price controls; food quality and balanced diets; nutrition for pregnant and lactating</p>	<p>Project: models and trends in food security Introduction to project work, group project tasks, research and preparation for project work, selection of projects to execute. Trends in Food Security; Modelling the dynamics of changing trends in food security. Predicting the future based on historic/current trends in food security.</p>	<p>Overview of food security in Sierra Leone Revision of key elements of food security in Sierra Leone, including impact of climate change, food chain and job opportunities. Factors influencing food price increases in Sierra Leone. Innovators making positive changes to food security in West Africa and across Africa. Food Security and</p>



women; child nutrition; adolescent food needs; special diets and supplements for old people; ownership and control issues related to GM crops; food distribution.

E.g., slump in self-sufficient rice production and new investments made to boost rice production.

Quality of life in Sierra Leone. The place of food security in national development goals and priorities





Teaching Syllabus

Senior Secondary Level 1

Topic/Theme/Unit	Expected learning outcomes	Recommended teaching methods	Suggested resources	Assessment of learning outcomes
The Basics of food and food security in the Sierra Leone context	<p>Learners will be able to:</p> <p>List food groups (with examples).</p> <p>Explain why food is critical for life.</p> <p>State sources of foods consumed in Sierra Leone (local/imported).</p> <p>Outline types of food produced in various parts of Sierra Leone.</p> <p>Explain why some foods have to be imported into Sierra Leone.</p> <p><i>Discuss (with examples) impact of food shortage on families.</i></p>	<p>Class interaction:</p> <p>Discuss categories of foods. Write on board. Learners list foods in each category. Trace origins (local/imported) of foods. Use examples to define and discuss hunger, famine, starvation. Explain how food keeps us alive and healthy. Groups discuss how we get meat, fish, rice, cassava, oil, and other basic foodstuffs. Discuss seasons for groundnuts, oranges, mangoes and other crops in Sierra Leone.</p>	<p>Reference items in an intensive resource pack for teaching Food Security.</p> <p>Notes prepared by teachers for use by learners.</p> <p>Extracts from key source materials.</p>	<p>Written exercise on how food keeps us alive and healthy,</p> <p>Pop-quiz on names / categories of foods in Sierra Leone and West Africa.</p> <p>Homework on types of foods produced in different parts of Sierra Leone.</p> <p>Class discussion on food basics.</p>
The Concept of the 'food chain' in the Sierra Leone context.	<p>Learners will be able to show:</p> <p>They know (can list) the links in the food chain in Sierra Leone.</p>	<p>Written tasks:</p> <p>Each learner traces selected food from production to consumption. Highlight links in the food chain. Does this affect access and price? List foods in</p>	<p>Notes prepared by teachers for use by learners as a study reference.</p> <p>Charts, pictures and other teaching and learning materials (TLMs).</p>	<p>Class test on listing links in the food chain for some local foods.</p> <p>Homework on what is involved in the food chain besides work on the farm.</p>



	<p>They appreciate there is more to food than farming/production.</p> <p>They can trace the food chain for specific examples of local foods.</p>	<p>local market. How do foods get to the market? What do they cost? Who buys?</p>		
<p>Economics and ethics of access to food in Sierra Leone.</p>	<p>Learners will be able to explain:</p> <p>How food prices affect access.</p> <p>Why different groups of the population lack access to food.</p> <p>How hunger affects vulnerable people.</p>	<p>Group reports: Present findings on market studies, the relative costs of different foods, who can afford food, cheap substitutes, lack of food (hunger/malnutrition).</p>	<p>Price lists with rise in food costs over several months.</p> <p>Food poverty notes</p>	<p>Class discussion on food prices. Households that may not afford access to foods.</p> <p>Homework to track food prices and access to food.</p>
<p>Recap on food and food security in the Sierra Leone context</p>	<p>Learners will be able to show:</p> <p>Pupils remember / understand the key essentials of food security.</p>	<p>Class interaction Q&A:</p> <p>Recall, outline, define, explain, question, argue, on Food Security lessons learned.</p>	<p>Collection of TLMs used so far to teach about basic food security.</p>	<p>Class test to test knowledge of key elements on the basics of food security in Sierra Leone.</p>



Senior Secondary Level 2

Topic/Theme/Unit	Expected learning outcomes	Recommended teaching methods	Suggested resources	Assessment of learning outcomes
Impact of climate change and its many impacts on Food Security in Sierra Leone, West Africa and Africa.	<p>Learners will be able to:</p> <p>Define 'climate change,' state the difference between climate and weather, and explain links between climate change and food security.</p> <p>Outline examples of climate effects on food security in Sierra Leone, West Africa and Africa.</p>	<p>Formal presentations:</p> <p>Use extracts from literature and articles on climate change. Standard definitions, illustrated case studies on the impact of climate change on food security.</p>	<p>Reference items from an intensive resource package for teaching Food Security. Notes prepared by teachers for use by learners. Articles accessed from online searches, the press, blogs.</p>	<p>Homework: search major sources and draft a report on the impact of climate change on Food Security.</p>
Factors influencing Food Security from production to consumption in Sierra Leone and West Africa	<p>Learners will be able to state (and explain) how we:</p> <p>Produce, process, preserve, package, market, procure, prepare, and consume various food as part of food chain.</p>	<p>Teacher-led/learner-based:</p> <p>'Skeleton notes' on how we produce, process and preserve foods. Learners discuss in groups and fill in details. Learners explain how we package, market, prepare, and consume foods.</p>	<p>Skeleton Notes by the teacher.</p> <p>Blank sheets of paper for learners to list their ideas and contributions.</p>	<p>Multiple-choice tests on food chain and food security.</p> <p>Homework to find out and report on processes that relate to the food chain.</p> <p>Essays on a topic relating to one part of food chain.</p>
Introduction and preparation for project work on food security.	<p>Learners will be able to:</p> <p>Select and define credible area of research in food security.</p>	<p>Learner-centered, teacher-guided:</p> <p>Informed decision by groups of learners on elements of the project they want to do.</p>	<p>Guideline Notes by the teacher on essentials of project work.</p> <p>Blank sheets of paper for learners to list their ideas and brainstorm.</p>	<p>Grade the quality of project proposals developed by each group of learners.</p>



		Criteria by teachers to guide decisions by learner groups.		
Group work on selected projects dealing with key aspects of food security in Sierra Leone.	<p>Learners will demonstrate:</p> <p>Capacity to plan and execute a project on food security.</p> <p>Capacity to organize findings and report on results.</p> <p>Ability to judge outcomes.</p>	<p>Learner-centered, teacher-guided:</p> <p>Informed decision by groups of learners on strategies for executing their project.</p> <p>Criteria by teachers to judge project results.</p>	Reference materials and resources for learners to use to carry out food security projects.	Assess the quality of project execution. using agreed criteria for good projects.
Review of achievements in project work on food security. Write-up and 'publish' class projects.	<p>Learners will show they can:</p> <p>Recall, explain and discuss a wide range of food security issues.</p>	<p>Teacher-guided tasks</p> <p>Organize and curate project results to mount an exhibition.</p>	Display boards and class wall 'galleries' to exhibit project results.	Grade the curating work by learners and the quality of the project exhibition.





Senior Secondary Level 3

Topic/Theme/Unit	Expected learning outcomes	Recommended teaching methods	Suggested resources	Assessment of learning outcomes
The concept of Food Security and potential job opportunities in the food industry in Sierra Leone.	Learners will be able to: Identify/describe wide range of jobs in the food industry.	Notes: Concepts and definition of food security and key jobs. Field trip to observe various food industry workers at an appropriate business place.	Copies of case studies on innovators in food Industry in West Africa Intensive resource catalogue/site, with current articles, case studies, news items and	Essays on life of a Food Industry worker in Sierra Leone. Pop-Quiz on who does what in the food industry
Review of measures to improve food security in Sierra Leone.	Learners will show they can: Analyse food industry issues. Describe how some problems of food security are resolved. Suggest viable new solutions to food security problems.	Reference materials on how food security problems are addressed in West Africa. Review Cases on African innovators in the food industry and how they have solved problems.	Resource materials on how key food security issues are addressed in Sierra Leone. Case studies on issues in food security.	Scenario reviews from real or imaginary cases of a food security crisis. Homework on proposed solutions to food security problems in Sierra Leone.
Overview of the food chain and food security in Sierra Leone as well as across Africa and globally.	Learners will be able to: Depict the food chain in chart form for selected local foods. Outline and describe key stages in the food chain.	Discuss the food chain in Sierra Leone and in Africa generally with notes and charts. Name and describe key stages in the food chain for typical local foods.	Food chain diagrams for various local foods. Extracts from TLMs on Food Security supplied to schools and teachers.	Class exercise: Construct food chain charts for 2 or 3 local foods. Homework to make a chart for the food chain of a local food
Revision for WASSCE	Learners will show they can:	Review all materials used by the teachers and learners during the course.	Collection of all TLMs and reference sources used in teaching of the course.	Class test and mock exam on key elements of food security in Sierra Leone.



	Recall, explain and discuss a wide range of food security issues.	Review summary revision points prepared by teacher.		
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References and resources

- 2022 Survey Report on 'Zeroing in on Ending Hunger: Perspectives on the Challenges, Priorities, and Critical Next Stages'. Published by DEVEX and Action Against Hunger. <https://www.actionagainsthunger.org.uk/publications-and-reports/zeroing-in-on-ending-hunger>
- Climate change in Africa: What will it mean for agriculture and food security? | International Livestock Research Institute (ilri.org), February 2022
<https://www.ilri.org/news/climate-change-africa-what-will-it-mean-agriculture-and-food-security>
- Climate Crisis in Sierra Leone: How WFP is Assisting | World Food Programme, November 2022 <https://www.wfp.org/publications/climate-crisis-sierra-leone-how-wfp-assisting>
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https://www.worldbank.org/en/topic/agriculture/brief/food-security-update?cid=ECR_E_NewsletterWeekly_EN_EXT&deliveryName=DM174511
- Food sustainability - Cool Scheme to Reduce Food Waste in Nigeria. Busani Bafana. [Food Waste https://www.africa.com/cool-scheme-to-reduce-food-waste-in-nigeria/ \(www.africa.com\)](https://www.africa.com/cool-scheme-to-reduce-food-waste-in-nigeria/) and <http://www.ipsnews.net/news/human-rights/food-sustainability/>
- Global Report on Food Crises 2022 (By Global Network Against Food Crises and Food Security Information Network. This is a very comprehensive multi-agency publication with country case studies on major food crises in 2022.) <https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1447880/>
- OECD (2021), *Jobs for Rural Youth: The Role of Local Food Economies*, Development Centre Studies, OECD Publishing, Paris.
<https://doi.org/10.1787/692c0ca1-en>
- State of food security in Sierra Leone 2020 Comprehensive Food Security and Vulnerability Analysis | World Food Programme (wfp.org).
<https://www.wfp.org/publications/state-food-security-sierra-leone-2020-comprehensive-food-security-and-vulnerability>
- Summary of Conclusions from a Restricted Meeting (6-8 April 2022) on Food Security in West Africa. Published by ECOWAS, UEMOA and RPCA.
<https://www.food-security.net/en/>
- Transforming how we price and finance the 'true value of food', DEVEX Partnerships, 20 September 2021 <https://www.devex.com/news/sponsored/q-a-transforming-how-we-price-and-finance-the-true-value-of-food-101618>
- World Bank Scales Up its Financing for Food Security with Additional \$315 Million to Strengthen the Resilience of Food Systems across West Africa – World Bank, July 2022 <https://www.worldbank.org/en/news/press-release/2022/07/29/world-bank-scales-up-its-financing-for-food-security-to-strengthen-the-resilience-of-food-systems-across-west-africa>



'By the digits': snapshot resource figures and links

23%: Agriculture as a share of Africa's GDP [How tech and a https://qz.com/africa/2084690/how-tech-and-agriculture-can-help-africas-pandemic-recoveryagriculture can help Africa's pandemic recovery \(qz.com\)](https://qz.com/africa/2084690/how-tech-and-agriculture-can-help-africas-pandemic-recoveryagriculture-can-help-Africa's-pandemic-recovery-qz.com)

\$1.2 billion: Value of agricultural exports from Nigeria in 2021 <https://www.statista.com/statistics/1298126/value-of-agricultural-exports-from-nigeria/>

60%: Farmers as a share of the population in sub-Saharan Africa <https://www.mckinsey.com/industries/agriculture/our-insights/winning-in-africas-agricultural-market>

25: African countries that import more than a third of their wheat supplies from Russia and Ukraine https://unctad.org/system/files/official-document/osginf2022d1_en.pdf

40%: Food as a share of consumer spending in Africa <https://www.imf.org/en/Blogs/Articles/2022/04/28/blog-africa-faces-new-shock-as-war-raises-food-fuel-costs>

1.5%: Nigeria's contribution to the world's total palm oil output, making it the world's fifth largest palm oil producer <https://www.statista.com/statistics/1134494/production-of-palm-oil-in-nigeria/>

80%: Imported fertilizer as a share of the total used in Africa https://email-tracking.qz.com/ss/c/oGyHAwqTH7BNOV4YtPRNH-fMiB2OQa4gY4av6Ngqgh-CKexlGT0EXLqW99yLRBIMR4vLkBJAUe8nbLepWVFMavj3HICae1QonclDjtlu0yXVMMvF3Gr0AxUXBp0q0XSA5Q7BHemcEqKNZSqqWvqKwO6MT_yAt2pgJQgD1ZxiHUfc42_p51TK002PEZCroUi0/3r4/oYuYhRhDQbqZbRk8jN4XkQ/h15/rZ9LwszxemXL1AHAmqzwT2hFyFjYtPnxTBNqPoWaLLM

52%: The share of Ghana's fertilizer imported from Russia, Ukraine, and Belarus https://email-tracking.qz.com/ss/c/oGyHAwqTH7BNOV4YtPRNH-fMiB2OQa4gY4av6Ngqgh-CKexlGT0EXLqW99yLRBIMR4vLkBJAUe8nbLepWVFMavj3HICae1QonclDjtlu0yXVMMvF3Gr0AxUXBp0q0XSA5Q7BHemcEqKNZSqqWvqKwO6MT_yAt2pgJQgD1ZxiHUfc42_p51TK002PEZCroUi0/3r4/oYuYhRhDQbqZbRk8jN4XkQ/h16/U_eINA5JcooRu0zxnWlf96hxeIOzq_HerDQC2z_Bj9c

350,000 tons: Ghana's fertilizer shortage as a result of the Ukraine war https://email-tracking.qz.com/ss/c/anlMDmyVAri2v1Mf53z7Z6HXiWHufLb9dS3BVnDuGVJmejtoAjCHlrEp2ORpYRpp-FE4KEyAs-X3zSBiSUJ7pjgkY_31uKoirJd7NKbEYnLsqFQVlcbDRaqZd9WB4ANQZEyxx7mOiykpwW6PxVAdoFF3xdwtyAqPis3jJboRJYwluUOQlIxaQR4HmoB2dCDN3mBmrOo-JdnBbu6lBMEZKg/3r4/oYuYhRhDQbqZbRk8jN4XkQ/h17/NjLUq7_z9xVSG-OBnLsbZ4e66wEoZ0F0O2xcNfu2ZNo



\$4 billion: The value of African food production lost post-harvest every year https://email-tracking.qz.com/ss/c/anlMDmyVAri2v1Mf53z7Z1pqzyMbhW1mclJ1HyD46XXilj43-Gu8AkpUTX5IWW3RSSv0GpCWVpzVYusQo_jKOZN3ERR5n3uXOOJr-eW2giMgPZnsnSXWlrUgDJPMtDk8sJvUiBrpuke4v_5raSrDEA-8e4ktMnGBqbCoT4fidmY/3r4/oYuYhRhdQbqZbRk8jN4XkQ/h18/NPLSWL8nvZkCl_CUJLMWccoKfGA3WkMvmNalevZd2go

\$75 million: Total venture funding for agritech startups in Africa in 2021, up from \$1 million in 2019 and \$10 million in 2020 <https://email-tracking.qz.com/ss/c/anlMDmyVAri2v1Mf53z7Z6SPexKu4OdXBGnoIVZ87ghyntxeGZuQsFBkInYNORIAWydUEotXeaK-Fz7KfaMTXluy34icY-HDk894N6-Jbe8x8h1BeqQulfGb5f2sZHhq/3r4/oYuYhRhdQbqZbRk8jN4XkQ/h19/CUfqQiZ7S0HQoBu8ypdO7WGZm74HF-LKqloivnUUcgE>

1%: The share of global venture funding received by African agritech startups in 2021 <https://email-tracking.qz.com/ss/c/anlMDmyVAri2v1Mf53z7Z6SPexKu4OdXBGnoIVZ87ghyntxeGZuQsFBkInYNORIAWydUEotXeaK-Fz7KfaMTXluy34icY-HDk894N6-Jbe8x8h1BeqQulfGb5f2sZHhq/3r4/oYuYhRhdQbqZbRk8jN4XkQ/h20/Krj6bX00c6wFP5g0Zm5mCBTZbpFcPwJ23vhK9UzsMyo>