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## SENIOR SIX TERM 2

### TOPIC 2/3: Problems of Food Supply

**Competency:** The learner analyses local and global food supply problems as well as strategies adopted to address them using relevant information and geographic tools, and proposes innovative solutions to ensure food security for all.

### Trends in World Food Supply

In general, higher levels of economic development are strongly associated with more secure and diverse food supply, while low-income countries face persistent undernourishment and vulnerability to shocks. Statistics show that income growth changes diets, improves agricultural productivity, and reduces hunger, but also introduces challenges like obesity and food inflation.

### Relationship Between Economic Development and Food Supply

#### (i) Low-income countries

- Food supply is often unstable, heavily dependent on subsistence farming.
- High rates of undernourishment: FAO estimates nearly **30% of people in Sub-Saharan Africa** face food insecurity.
- Limited infrastructure and technology reduce productivity.

#### (ii) Middle-income countries

- Rising incomes increase demand for diverse diets (meat, dairy, processed foods).
- Food supply improves with investment in irrigation, mechanization, and imports.
- Vulnerable to **food inflation**: IMF reports that between 2019–2021, global undernourishment rose by **126 million people**, partly due to rising food prices.

#### (iii) High-income countries

- Stable food supply with advanced agricultural systems, imports, and storage.
- Undernourishment rates are below **2%**, but obesity and food waste are major issues.
- Strong safety nets and subsidies protect consumers from shocks.

## Comparative Statistics

Income Level	Undernourishment Rate	Food Supply Characteristics
Low-income	~30% (Sub-Saharan Africa)	Subsistence farming, unstable supply
Middle-income	~12–15% (South Asia, parts of Latin America)	Growing diversity, vulnerable to inflation
High-income		Stable supply, obesity & waste issues

## Food Shortages in Developing Countries

Food shortages remain one of the most pressing challenges in many developing nations. They are caused by a mix of **environmental, economic, social, and political factors**, and their impacts ripple across health, education, and economic growth.

### Causes of Food Shortages

- (i) **Rapid population growth:** Demand for food outpaces supply, especially in regions with high fertility rates.
- (ii) **Climate change:** Droughts, floods, and unpredictable rainfall reduce agricultural productivity.
- (iii) **Poor agricultural infrastructure:** Limited irrigation, storage, and transport systems lead to post-harvest losses.
- (iv) **Economic constraints:** Poverty reduces access to food; farmers lack capital for modern inputs.
- (v) **Political instability:** Conflicts and weak governance disrupt farming and food distribution.
- (vi) **Dependence on imports:** Global price fluctuations make food unaffordable for low-income households.

### Impacts of Food Shortages

- (i) **Malnutrition:** High rates of stunting, wasting, and micronutrient deficiencies among children.
- (ii) **Health crises:** Increased vulnerability to disease due to weakened immune systems.
- (iii) **Economic stagnation:** Reduced labor productivity and higher healthcare costs.
- (iv) **Education disruption:** Hungry children struggle to attend or perform in school.
- (v) **Social unrest:** Food insecurity can trigger protests, migration, and instability.

## Measures to Address Food Shortages

- (i) **Investment in agriculture:** Improve irrigation, mechanization, and access to fertilizers.
- (ii) **Climate-smart farming:** Drought-resistant crops, agroforestry, and water conservation.
- (iii) **Food aid and safety nets:** Emergency relief, school feeding programs, and subsidies.
- (iv) **Improved storage and transport:** Reduce post-harvest losses and connect farmers to markets.
- (v) **Policy reforms:** Land tenure security, fair trade policies, and investment in rural development.
- (vi) **Education and empowerment:** Training farmers, empowering women, and promoting nutrition awareness.

## Key Takeaway

Food shortages in developing countries are not just about **lack of food production**—they are deeply tied to **poverty, governance, climate, and infrastructure**. Tackling them requires a **multi-pronged approach**: boosting agricultural productivity, building resilience to climate change, and ensuring equitable access to food.

## Policies and programs aimed at increasing food supplies in Uganda

Uganda has adopted several policies and programs to strengthen food security and increase food supplies, focusing on agricultural modernization, nutrition, and multi-sector collaboration. These initiatives aim to reduce hunger, improve productivity, and build resilience against climate and economic shocks.

## Key Policies and Programs

- (i) **Uganda Food and Nutrition Policy (2003)**
  - Provides a framework for ensuring food and nutrition security.
  - Promotes sustainable agricultural practices, improved food storage, and better dietary diversity.
  - Encourages community participation in food production and nutrition awareness.
- (ii) **National Planning Authority's Hunger-Free Uganda Policy Paper (2023)**
  - Advocates for a hunger-free society by integrating food security into national development plans.
  - Focuses on reducing malnutrition, strengthening agricultural value chains, and improving access to markets.
- (iii) **Uganda Multi-Sectoral Food Security and Nutrition Project (UMFSNP)**
  - Implemented by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) with support from the Ministry of Health and Education.
  - Aims to improve household food security and nutrition through irrigation, improved seeds, and farmer training.
  - Includes school feeding programs and community-based nutrition education.

**(iv) National Agricultural Policy (2013)**

- Promotes commercialization of agriculture, mechanization, and climate-smart farming.
- Encourages private sector investment in food production and agro-processing.

**(v) Uganda National Action Plan on Nutrition (UNAP)**

- Coordinates multi-sector efforts to tackle malnutrition.
- Links food supply policies with health and education interventions.

**Proposed action plan to end food shortages in Africa**

**(i) Boost agricultural productivity**

- Provide farmers with improved seeds, fertilizers, pest control and affordable mechanization.
- Expand irrigation and water harvesting to reduce reliance on rainfall.

**(ii) Strengthen climate resilience**

- Promote drought-resistant crops and climate-smart farming practices.
- Restore degraded soils and invest in agroforestry.

**(iii) Reduce post-harvest losses**

- Build storage facilities, silos, and cold chains.
- Train farmers in better handling and preservation techniques.

**(iv) Improve market access**

- Invest in rural roads and digital platforms to connect farmers to buyers.
- Facilitate regional trade to stabilize food supply across borders.

**(v) Expand social safety nets**

- School feeding programs, targeted food aid, and cash transfers for vulnerable households.
- Emergency reserves for drought and conflict-affected areas.

**(vi) Empower communities**

- Support women and youth in agribusiness.
- Provide training, extension services, and nutrition education.
- Promote cooperatives
- Provide financial incentives such agricultural credit at low interest rates

**Key Takeaway**

Ending food shortages in Africa requires a **multi-pronged approach**: raising productivity, building resilience to climate shocks, cutting losses, and ensuring equitable access through markets and safety nets.

**Thank You**

