STUNTED GROWTH AND DEVELOPMENT

Context, Causes and Consequences

Child

Stunted Growth & Development

The Mother

Food & Water Safety

Agriculture & Food Systems

Water, Sanitation & Environment

The Home

Political Economy

Poor Quality Foods

Inadequate Complementary Feeding

The Mother

Infection

Inadequate Care

Inadequate Breastfeeding

Education

Household

Society & Culture

Health & Healthcare

Community/Nation

STUNTED GROWTH AND DEVELOPMENT: Context, Causes and Consequences

World Health Organization
Child Consequences

Concurrent problems and short-term consequences
- Health: ↑ Mortality, ↑ Morbidities
- Developmental: ↓ Cognitive, motor, and language development
- Economic: ↑ Health expenditures, ↑ Opportunity costs for care of sick child

Long-term consequences
- Health: ↓ Adult stature, ↑ Obesity and associated co-morbidities, ↓ Reproductive health
- Developmental: ↓ School performance, ↓ Learning capacity, Unachieved potential
- Economic: ↓ Work capacity, ↓ Work productivity
The home
- Inadequate sanitation and water supply
- Low wealth and socioeconomic status
- Food insecurity
- Low status of women
- Low caregiver education
- Inappropriate intra-household food allocation

Poor quality foods
- Poor micronutrient quality
- Low dietary diversity and intake of animal-source foods
- Anti-nutrient content
- Low energy content of complementary foods

Food and water safety
- Contaminated food and water
- Poor hygiene practices
- Unsafe storage and preparation of foods

Infection
- Enteric infection: Diarrhoeal disease, environmental enteropathy, helminths
- Respiratory infections
- Malaria
- Reduced appetite due to infection
- Inflammation

The mother
- Poor nutrition during pre-conception, pregnancy and lactation
- Short maternal stature
- Infection
- Adolescent pregnancy
- Short birth spacing
- IUGR and preterm birth
- Poor mental health
- Hypertension

Inadequate care
- Poor care practices
- Inadequate child stimulation and activity
- Non-responsive feeding

Inadequate breastfeeding
- Delayed initiation
- Non-exclusive breastfeeding
- Early cessation of breastfeeding

Inadequate complementary feeding
- Infrequent feeding
- Inadequate feeding during and after illness
- Thin food consistency
- Feeding insufficient quantities
Political economy
- Food prices and trade policy
- Marketing regulations
- Political stability
- Poverty, income and wealth
- Financial services
- Employment and livelihoods

Agriculture and food systems
- Food production and processing
- Availability of micronutrient-rich foods
- Food safety and quality

Water, sanitation and environment
- Water and sanitation infrastructure and services
- Population density
- Climate change
- Urbanization
- Natural and manmade disasters

Health and healthcare
- Access to healthcare
- Qualified healthcare providers
- Availability of supplies
- Infrastructure
- Health care systems and policies

Society and culture
- Beliefs and norms
- Social support networks
- Child caregivers (parental and non-parental)
- Women’s status

Education
- Access to quality education
- Qualified teachers
- Qualified health educators
- Infrastructure (schools and training institutions)

An interactive version of the conceptual framework in a ZIP file click here