

Key Concepts for the National Strategy for Food Security and Nutrition 2019 - 2023

DRAFT

CAMBODIA

The Council for Agricultural and Rural Development

Office of the Council of Ministers

#41, Russian Federation Boulevard, Phnom Penh, Cambodia

Post Box: 2470 Phnom Penh Phone: +855 (0) 23426824 Email: <u>info@card.gov.kh</u> Web: <u>www.card.gov.kh</u>

www.foodsecurity.gov.kh

Contents

Introduction	1
Food Security and Nutrition	1
Causes of Malnutrition	3
Food Insecurity and the Double Burden of Malnutrition	5
Food Systems	7
Healthy Diets and Sustainable Food Systems	9
Nutrition-Specific Interventions	10
Food Fortification	11
Nutrition-Sensitive Interventions	12
The Focus of Interventions	14
Food Safety	14
Enabling environment for nutrition	14
Ten opportunities for double duty actions	15
References	17

Introduction

This booklet is designed to complement the publication of the National Strategy for Food Security and Nutrition (NSFSN) 2019-2023. The purpose of this booklet is to explain the key concepts that are relevant to the NSFSN 2019-2023, especially as some of these concepts may not be well understood. The booklet is designed for professional use. The guidelines for subnational level to be produced during the dissemination phase for the NSFSN 2019-2023 will include simplified terminology relevant for understanding at the local level.

This booklet aims to explain the key concepts briefly, providing key references to link the reader to a range of publications for wider reading. The information provided has been adapted to the Cambodian context for consistency with local use.

The National Strategy for Food Security and Nutrition (NSFSN) 2019-2023 signals an historic change in approach for Cambodia in that the Strategy must be designed to deal with both under-nutrition and overweight and obesity issues. The NSFSN 2019-2023 purposefully pushes nutrition matters to the forefront of thinking, recognising that lack of food security is an underlying cause of malnutrition.

Food Security and Nutrition

The universally adopted definition of food security is the situation where all people at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Food security depends on four causal dimensions:

- Food Availability: The physical availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid). Food availability addresses the 'supply side' of food security and it is achieved when adequate food, in terms of quantity and quality, is ready to have at people's disposal.
- 2. Food Access: Physical and economic access by households and all individuals within those households to adequate resources for acquiring appropriate foods for a nutritious diet (through production, purchase or donation). This includes traditional rights such as access to common resources (e.g. land and water) and other legal, political, economic and social arrangements of the community and households in which people live. An adequate supply of food at the national or international level does not in itself guarantee access to these foods to all households and individuals. Concerns about insufficient food access have resulted in a greater policy focus on incomes, expenditure, markets and prices in achieving food security objectives.
 - **3.** Use and Utilization of Food: Sufficient energy and nutrient intake by individuals are the result of both the use of food and the biological utilization of food. The use of food

is determined by care and feeding practices, food preparation, diversity of the diet and intra-household distribution of food. The utilization of food is commonly understood as the way the body makes the most of various nutrients in the food. The combination of the use of food and utilization of food determines the nutritional status of individuals. Adequate diet, clean drinking water, sanitation and health care are all required to reach a state of nutritional well-being where all physiological needs are met. This dimension highlights the importance of non-food inputs in food security. Pregnant and lactating women may themselves be malnourished, limiting the nutrition available to their infants. Mother-child care practices may not be appropriate for child health and nutrition. A high incidence of infections, such as acute respiratory infection and diarrhoea, and a lack of maternal and child health services may adversely affect mother and child health and nutrition. A lack of access to safe drinking water and hygienic sanitation may increase illness and infection rates and decrease health and nutritional status.

4. Food Stability: To be food secure, a population, household or individual must have access to adequate food at all times. The concept of stability affects each of the other dimensions of food security. Adverse weather conditions, environmental degradation, political instability, or economic factors (unemployment, rising food prices) may impact the regular supply of sufficient food and clean water, causing malnutrition and food insecurity.

People may be experiencing *chronic* food insecurity if they are unable to meet their minimum food requirements over a sustained period of time, resulting from e.g. extended periods of poverty, lack of assets and inadequate access to productive or financial resources. People may also be experiencing *transitory* food insecurity when there is a sudden drop in the ability to produce or access enough food to maintain a good nutritional status at one point in time (crisis) which renders them more vulnerable to the impacts of instability in the future. The concept of *seasonal food insecurity* falls between chronic and transitory food insecurity. It is similar to chronic food insecurity as it is usually predictable and follows a sequence of known events. However, as seasonal food insecurity is of limited duration it can also be seen as recurrent, transitory food insecurity. It occurs when there is a cyclical pattern of inadequate availability and access to food.

For food security to be realized, all four dimensions must be fulfilled simultaneously

Nutrition is the consequence of the intake of food and the utilization of nutrients by the body. Nutrition is fundamental to human health, to prevent disease and achieve sustainable development. It is secured when food intake, absorption and utilization provide all essential nutrients in required amounts to the body.

The term "food security and nutrition" as used in the NSFSN 2019 -2023 combines the two concepts of food security and good nutrition. The term recognises the importance of food availability, access, use and utilization, and stability dimensions of food security, but it emphasises the importance of key nutrition concerns such as care and feeding practices, public health and sanitation issues. This terminology makes clear that food security is a precondition to adequate nutrition and that different, but complementary actions are needed to achieve food security and nutrition objectives.

Food security and nutrition need to be addressed at different levels: at the global and national level (macro-level food security), at the household level and the individual level (referred to as household food security and nutrition). These concepts are fundamental to the National Strategy for Food Security and Nutrition (NSFSN) 2019-2023.

Causes of Malnutrition

Malnutrition refers to deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients. Malnutrition in all its forms refers to undernutrition (including wasting, stunting and micronutrient deficiencies) and overweight, obesity and diet-related non-communicable diseases (NCDs).

Malnutrition in all its forms significantly increases the risk of infectious diseases such as pneumonia, diarrhoea, measles and tuberculosis; NCDs such as heart disease, cancer and diabetes; and maternal and neonatal deaths; and child physical growth and development. Malnutrition also affects educational and economic outcomes of individuals, families, communities and nations. In addition to the costs of treating and managing malnutrition, malnourished populations and workforces that do not achieve their full productive potential, limit the economic development and prosperity of countries.

The UNICEF model of the causes of maternal and child undernutrition (Figure 1) serves as a very effective and widely understood conceptual model. Optimal nutritional status results when children have access to affordable, diverse, nutrient-rich food; appropriate maternal and child-care practices; adequate health services; and a healthy environment including safe water, sanitation and good hygiene practices. These underlying factors directly influence nutrient intake and the presence of disease which are the immediate causes of malnutrition. In addition, food, health and care are affected by social, economic and political factors (basic causes).

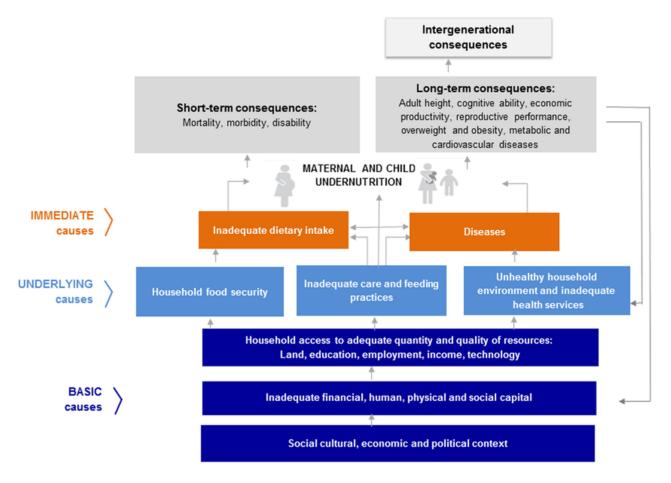


Figure 1: The causes of maternal and child undernutrition. Source: UNICEF (2013).

Focusing on this conceptual model is a deliberate step to focus the National Strategy for Food Security and Nutrition (NSFSN) 2019-2023 on key results and the ultimate impacts on the level of malnutrition. This fits the thrust of the major ministries involved and the increasing sophistication required for effectively dealing with the complex problems associated with malnutrition. It is also vital that there is wider understanding and application of a food systems approach to food security and nutrition.

Nutrition is a complex issue for Cambodia. In the past, there has been a strong focus on dealing with the problems of under-nutrition. These problems are manifest in conditions such as stunting, wasting and under-weight in children and low Body Mass Index (BMI) for adults. As we have seen in many countries in modern times, there tends to be a transition from under-nutrition to dealing with problems of over-weight and obesity. The coexistence of problems with both undernutrition and overweight and obesity, also acknowledging the resulting diet-related NCDs, is called the double burden of malnutrition (DBM). This can happen very quickly, so that both problems can occur within the country the same time, and in the same communities, families or even for the same individuals over their life time.

The most recent Lancet series (2019) identifies four intermediate and modifiable drivers of all forms of malnutrition, which are early-life nutrition, diet quality, socioeconomic factors and food environments. It is further understood that some population groups are at higher risk of the DBM because of by biological susceptibility or because social injustices mean they have greater exposure to these drivers.

The National Strategy for Food Security and Nutrition (NSFSN) 2019-2023 signals an historic change in approach for Cambodia in that the Strategy must be designed to deal with both under-nutrition and overweight and obesity issues. The NSFSN 2019-2023 purposefully pushes nutrition matters to the forefront of thinking, recognising that lack of food security is an underlying cause of malnutrition.

Food Insecurity and the Double Burden of Malnutrition

Rapid demographic, social and economic changes in many low- and middle-income countries have led to increased urbanization and changes in food systems, lifestyles and eating habits. These changes are being experienced in Cambodia, including a nutrition transition from an exclusive concern for under-nutrition to the experience of complex nutrition problems where under-nutrition persists in the face of growing over-weight and obesity problems and dietrelated NCDs. The coexistence of these problems is called the double burden of malnutrition (DBM). Dietary patterns are changing towards increased consumption of processed foods that are often energy-dense, high in saturated fats, sugars and salt, and low in fibre. Such changes bring with them a shift in the profile of nutritional status and diet-related diseases. At present, undernutrition and nutrient deficiencies remain the most serious public health threats for Cambodia relating to nutrition. This situation may change quite rapidly in the near future. The current demographic, social and economic transition is leading to increased energy consumption in the population, including among the more vulnerable. Under these conditions, undernutrition and some nutrient deficiencies begin to decline, while the excessive consumption of energy-dense, processed foods which are high in fats, salt and sugars becomes a major issue. The new consumption patterns lead to increasing rates of overweight and diet-related non-communicable chronic diseases, such as cardiovascular disease and diabetes.

The double burden of malnutrition can exist at the individual level – for example obesity with deficiency of one or various vitamins and minerals, or overweight in an adult who was stunted during childhood. The double burden of malnutrition can also exist at the household level – when a mother may be overweight or anaemic and a child or grandparent is underweight; and at the population level – where there is a prevalence of both undernutrition and overweight in the same community, nation or region.

Moreover, the relationship between undernutrition and overweight and obesity is more than a coexistence. Reflected in the epidemiology and supported by evidence, undernutrition early in life – and even in utero – may predispose to overweight and NCDs later in life. Overweight in mothers is also associated with overweight and obesity in their children. Rapid weight gain early in life may predispose to long-term weight excess. These are just some of the examples of biological mechanisms, which along with environmental and social influences, are

increasingly understood as important drivers in the global burden of malnutrition across the life-course.

Food insecurity can be a cause of the double burden of malnutrition through two main pathways (Figure 2).

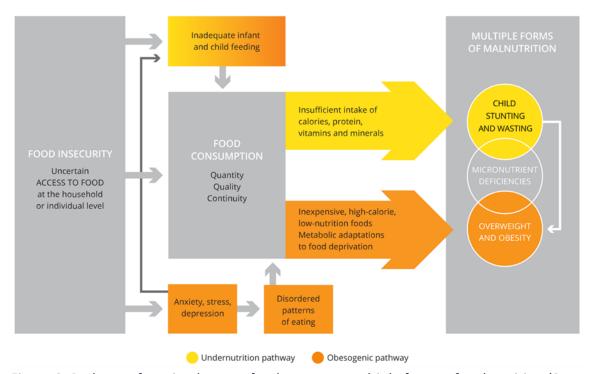


Figure 2: Pathways from inadequate food access to multiple forms of malnutrition (Source SOFI 2018)

The pathway from poor food access to child stunting and wasting and micronutrient deficiencies is widely understood, because this pathway is relatively straightforward. A diet with insufficient intake of calories, protein, vitamins and minerals will impede foetal, infant and child growth and development. Food insecurity can directly cause child wasting, stunting and micronutrient deficiencies through compromised diets and can also impact indirectly, through stress on infant feeding. Nutritional knowledge and food habits may play a positive role by moderating the effects of household food insecurity on diet and nutritional outcomes. The lack of access to clean water, sanitation and quality health care can cause diarrhoea and infectious diseases that interfere with the body's ability to absorb nutrients. Recurrent infections and disease are serious contributing factors to wasting and stunting in children.

The second pathway describes food insecurity being associated with overweight and obesity and/or micronutrient deficiencies. The link between food insecurity and overweight and obesity passes through diet, which is affected by the cost of food. Nutritious, fresh foods often tend to be expensive. When household resources for food become scarce, people choose less expensive foods that are often high in caloric density and low in nutrients, particularly in urban settings. Where the relative cost of foods that are high in fats and sugar is low compared to fresh products such as fruits, vegetables and legumes, the prioritization of cost for food-insecure families may result in diets high in energy and low in diversity, micronutrients and fibre. The experience of not having certain or adequate access to food can cause feelings of anxiety, stress and depression, which in turn can lead to behaviours that

increase the risk of overweight and obesity. It is important to highlight that the experience of food insecurity also has other harmful consequences for the well-being of children and adults beyond malnutrition. Food insecurity has negative impacts on the academic performance of children and is associated with behavioural problems. Food-insecure children are more likely to face adverse health outcomes and developmental risks.

Food Systems

Food systems gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the output of these activities, including socio-economic and environmental outcomes (HLPE 12, 2017). The food system is composed of sub-systems (e.g. farming system, waste management system, input supply system, etc.) and interacts with other key systems such as the energy system, trade system and health system (FAO 2019a). A structural change in the food system might originate from a change in another system; for example, a policy promoting more biofuel in the energy system will have a significant impact on the food system.

There are three core components of the food system, the **food supply chains**, the **food environments** and the **consumer behaviour**.

- **Food supply chains** consist of the activities and actors that take food from production to consumption and to the disposal of its waste", including production, storage, distribution, processing, packaging, retailing and marketing.
- Food environments refer to the physical, economic, political and socio-cultural context in which consumers engage with the food system to make their decisions about acquiring, preparing and consuming food
- **Consumer behaviour** reflects all the choices and decisions made by consumers on what food to acquire, store, prepare, cook and eat, and on the allocation of food within the household.

Focusing on food systems allows us to consider all the different **elements** of the system (environment, people, inputs, processes, infrastructure and institutions) and the **activities** that relate to food value chains and food consumption, as well as the socio-economic and environmental **outcomes**. The **drivers of change** in food systems can be grouped in five categories: biophysical and environmental; innovation, technology and infrastructure; political and economic; socio-cultural; and demographic drivers (HLPE 12, 2017).

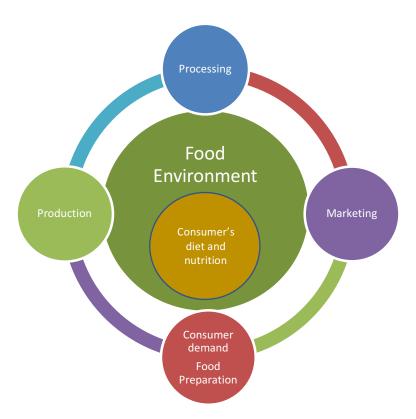


Figure 3: A simple conceptual model of the food system and impacts on diet and nutrition (adapted from FAO 2017).

Nutrition-sensitive food systems ensure access to, and promotes consumption of a healthy diet, while also taking into consideration other causes of malnutrition (including access to health services, access to safe drinking water and sanitation, adequate caring practices, nutrition knowledge and a healthy environment).

Food system policy measures that support healthy diets will be context specific and might include agricultural research or incentives to encourage the productivity of nutrient-rich foods like fruit and vegetables; taxes on sugar, sweeteners, and fat to reduce the prevalence of obesity; regulations for advertising and promotion; education about nutrition; investing in transport and cold-chain infrastructure to reduce food loss; regulations for retail and food service chains; food labelling policies; and legislation to ensure institutional procurement from local smallholder farmers, where relevant. (Pinstrup-Andersen, 2013 and FAO, 2019).

A sustainable food system is a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised. This means that it is profitable throughout (economic sustainability); it has broad-based benefits for society (social sustainability); and it has a positive or neutral impact on the natural environment (environmental sustainability). There is a strong link between sustainable food systems, ecosystem health and human health through diets. A shift towards healthy diets will help to achieve environmental sustainability of food systems (FAO and WHO, 2018).

A sustainable food system lies at the heart of the Cambodia Sustainable Development Goals (CSDGs). Major transformations in agriculture and food systems in order to end hunger, achieve food security and improve nutrition by 2030. To realize the CSDGs, the food system needs to be reshaped to be more productive, more inclusive of poor and marginalized

populations, environmentally sustainable and resilient, and able to deliver healthy and nutritious diets to all. These are complex and systemic challenges that require the combination of interconnected actions at the local, national, regional and global levels.

Healthy Diets and Sustainable Food Systems

According to the World Health Organization, a healthy diet contains fruits and vegetables, whole grains, fibres, nuts and seeds, and with limited free sugars, sugary snacks and beverages, processed meat and salt. In a healthy diet, saturated and industrial trans-fats are replaced with unsaturated fats (WHO, 2018).

The food we eat, the ways we produce it, and the amounts wasted or lost have major impacts on human health and environmental sustainability. A diet that includes more plant-based foods and fewer animal source foods is healthy, sustainable, and good for both people and planet. Getting it right with food will be an important way for countries to achieve the targets of the UN Sustainable Development Goals and the Paris Agreement on climate change. Five broad strategies are proposed to adjust what people eat and how it is produced:

- i. Encourage people to choose healthier diets by improving availability and accessibility to healthy food. As this may increase costs to consumers, social protection for vulnerable groups may be required to avoid continued poor nutrition in low-income groups.
- ii. Refocus agriculture from producing high volumes of crops to producing varied nutrient-rich ones.
- iii. Sustainably intensify agriculture while taking into account local conditions to help apply appropriate agricultural practices and generate sustainable, high quality crops
- iv. Preserve natural ecosystems and ensure continued food supplies by protecting intact natural areas on land, prohibiting land clearing, restoring degraded land, improved capture fisheries governance and reduced aquaculture footprints.
- v. Halve food waste. The majority of food waste occurs during food production due to poor harvest planning, lack of access to markets preventing produce from being sold, and lack of infrastructure to store and process foods. Improved investment in technology and education for farmers is needed to reduce food waste.

Source: The EAT-Lancet Commission on Food, Planet and Health, 2019.

Nutrition-Specific Interventions

Nutrition-specific interventions address the immediate causes of malnutrition, like inadequate dietary intake and disease, and some of the underlying causes like feeding practices and access to food. Nutrition-specific interventions utilized at scale, can significantly reduce stunting, micronutrient deficiencies and wasting as well as the risk of overweight and obesity. These interventions largely focus on women, in particular pregnant and lactating women, and children under two years of age. The examples below are adapted from UNICEF for the Cambodian context and Ministry of Health guidelines.

Adolescence	Food fortification including salt iodization
and	Iron and folic acid for pregnant women, weekly iron and folic acid
pregnancy	supplementation for women of reproductive age (WRA)
programo,	Fortified food supplements for undernourished mothers
	Nutrition counselling for improved dietary intake during pregnancy
	4 Antenatal Care checks for pregnant women
Birth	Delayed cord clamping
	Initiation of breastfeeding within one hour after birth (including colostrum)
	Anti-retroviral therapy for HIV-exposed infants
0-6	Exclusive breastfeeding – counselling and support for breastfeeding through
months	community-based and facility-based contacts
	Early essential new born care for healthy infants
	Control of the marketing of breast milk substitutes
	Counselling on appropriate infant feeding practices and anti-retroviral therapy
	for HIV-exposed infants
	Use of fortified foods, micronutrient supplementation and home fortification
	with multiple micronutrients for undernourished women
	Nutrition counselling for improved dietary intake during lactation
	Communication for behavioural and social change to prevent all forms of
	malnutrition
6–23	Timely, adequate, safe and appropriate complementary feeding
months	Promotion of continued breastfeeding
	Counselling on appropriate infant feeding practices
	Anti-retroviral therapy for HIV-exposed infants
	Zinc treatment for diarrhoea with oral rehydration salts
	Management of Severe Acute Malnutrition (SAM)
	Food fortification, including salt iodization
24-59	Counselling and nutrition advice to WRA/adults
months	Communication for behavioural and social change to prevent all forms of
	malnutrition
	Management of SAM (and moderate acute malnutrition)
	Food fortification including salt iodization and Vitamin A supplementation
	Zinc supplementation with oral rehydration salts for diarrhoea treatment and
	management

Adapted from UNICEF 2015

Food Fortification

Adding vitamins or minerals to commonly eaten foods – food fortification – has the potential to make a big impact on micronutrient deficiencies. Fortification has played a major part in improving public health in the past and can contribute much more. Fortification involves adding micronutrients (vitamins and minerals) to foods, generally with little effect on taste and cooking properties. Staple foods and condiments are normally used as a vehicle for fortification as they are consumed by the majority of the population (WFP 2018).

Food fortification is one important step in making sure populations gain a balanced diet. It helps to fill micronutrient gaps where populations struggle to access nutritious foods. This is especially important as populations grow, live in more urban areas, and consume more processed foods rather than freshly grown food. Many nations have been consuming fortified foods to increase nutrition as early as the 1970's.

Fortification is a cost-effective strategy because it can piggyback on already existing distribution channels and initiatives such as school meals and social safety nets. In this way, it does not divert significant resources away from other efforts, and can be delivered alongside complementary programmes to address consumer awareness, behaviour change and the underlying causes of malnutrition.

Fortified foods can deliver vitamins and minerals to large portions of the population without requiring large changes in our behaviour or diet. For example, salt is a regularly used ingredient in Cambodia and has been fortified with the addition of iodine. This improves iodine levels, which is important for healthy growth and learning. Despite evidence of great impacts through fortified salt in Cambodia, very few other foods have been fortified with micro-nutrients.

Fish and soy sauces are common ingredients in Khmer cooking and are good vehicles for iron fortification. Low iron levels are a significant issue in Cambodia, resulting in a dangerous condition called anaemia. This is an issue for children and also for young mothers who require good iron levels before and during pregnancy (World Vision, 2019).

Food fortification in Cambodia is managed by the National Sub-Committee for Food Fortification under the Ministry of Planning.

Nutrition-Sensitive Interventions

Nutrition-sensitive interventions address the underlying determinants of malnutrition such as food security, care and feeding practices and healthy household environment and health services. By drawing on complementary sectors such as agriculture, social protection, early childhood development, education and WASH, nutrition-sensitive interventions can serve as delivery platforms for nutrition-specific interventions have enormous potential to enhance the effectiveness of nutrition-specific interventions (The Lancet, 2013).

The examples below are adapted from UNICEF for the Cambodian context and Ministry of Health guidelines.

Adolescence	Improved availability, access and use of locally available foods
and	Increased access to primary and secondary education for girls
pregnancy	Adolescent health services providing access to contraceptives and care
	Promotion of hand washing with soap and improved water and sanitation
	practices
	Antenatal care, including HIV testing and deworming
	Intermittent preventative medicine and promotion of insecticide-treated
	bed nets for pregnant women in high-malaria areas
	Social protection and safety nets targeting vulnerable women
	Education and program on family planning
	Promotion of increased age for marriage and reduced gender
	discrimination and gender-based violence
	Parenting and life skills for early childhood development
Birth	Skin-to-skin care for newborns
	Support for birth registration and strengthening of civil registration
0-6	Maternity protection in the workplace and early childhood development:
months	responsive care
6–23	Hand washing with soap and improved water and sanitation practices
months	Early childhood stimulation and education
	Improved use of locally available foods for infants (improved food access
	and dietary diversification)
	Deworming for children and prevention and treatment of infectious disease
	Early childhood development: responsive care
24-59	Hand washing with soap and improved water and sanitation practices
months	Provision of healthy foods and nutrition and physical education in schools
	Deworming for school-age children and prevention and treatment of
	infectious disease
	Early childhood development: child to child and school readiness

Adapted from UNICEF 2015

The examples below show nutrition-sensitive interventions by different sectors.

Agriculture	Improved availability, access and use of a diversity of locally available foods
	Behaviour change related to specific nutrition practices Crop choices: factor in nutritional value of crops

Breeding choices: factor in nutrient content Post-harvest choices: factor in nutrition in storage, processing, and preservation Food safety practices: minimize the contamination Conditional cash transfers School meals and conditional take-home rations Food supplements Early childhood development Maternity protection in the workplace and early childhood development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Education Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding			
and preservation Food safety practices: minimize the contamination Conditional cash transfers School meals and conditional take-home rations Food supplements Early childhood development Maternity protection in the workplace and early childhood development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Education Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools WASH Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Breeding choices: factor in nutrient content	
Food safety practices: minimize the contamination Conditional cash transfers School meals and conditional take-home rations Food supplements Early childhood development Maternity protection in the workplace and early childhood development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Education Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Post-harvest choices: factor in nutrition in storage, processing,	
Social protection Conditional cash transfers School meals and conditional take-home rations Food supplements Early childhood development Maternity protection in the workplace and early childhood development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Education Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools WASH Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		and preservation	
School meals and conditional take-home rations Food supplements Maternity protection in the workplace and early childhood development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools WASH Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Food safety practices: minimize the contamination	
Food supplements Maternity protection in the workplace and early childhood development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools WASH Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding	Social protection	Conditional cash transfers	
Early childhood development Maternity protection in the workplace and early childhood development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Education Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools WASH Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		School meals and conditional take-home rations	
development: responsive care Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools WASH Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health- system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Food supplements	
Parenting and life skills for early childhood development Early childhood development: stimulation and education, responsive care, child to child and school readiness Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health- system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding	Early childhood development	Maternity protection in the workplace and early childhood	
Early childhood development: stimulation and education, responsive care, child to child and school readiness Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		development: responsive care	
responsive care, child to child and school readiness Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health- system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Parenting and life skills for early childhood development	
Increased access to primary and secondary education for girls Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health- system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Early childhood development: stimulation and education,	
Family planning Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health- system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		responsive care, child to child and school readiness	
Provision of healthy foods and nutrition and physical education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding	Education	Increased access to primary and secondary education for girls	
education in schools School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Family planning	
School meals and take-home rations Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Provision of healthy foods and nutrition and physical	
Separate toilets for girls in schools Instruction for childcare skills in schools Hand washing with soap and improved water and sanitation practices Health systems Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		education in schools	
Instruction for childcare skills in schools WASH Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		School meals and take-home rations	
WASH Hand washing with soap and improved water and sanitation practices Nutrition-specific interventions embedded within health-system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Separate toilets for girls in schools	
Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		Instruction for childcare skills in schools	
Health systems Nutrition-specific interventions embedded within health- system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding	WASH	Hand washing with soap and improved water and sanitation	
system Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding		practices	
Peer counseling and facility-based promotion for the up-take of exclusive breastfeeding	Health systems	Nutrition-specific interventions embedded within health-	
of exclusive breastfeeding		system	
		Peer counseling and facility-based promotion for the up-take	
Improved position of putrition within health curricular and		of exclusive breastfeeding	
improved position of natificion within fleatin curricular and		Improved position of nutrition within health curricular and	
health training of professional training		health training of professional training	

Adapted from Global Nutrition Report 2014

Programmes can become more nutrition-sensitive by:

- Strengthening their nutrition goals, design, and implementation. For example, health programmes can often deliver nutrition services through antenatal care services, routine immunisation, and family planning.
- Improving targeting, timing, and duration of exposure to interventions. For example, integrating nutrition into programmes that reach families with pregnant and lactating women and children between 0 and 24 months of age will optimise delivery of key services during the critical window of opportunity.
- Using conditions to stimulate demand for programme services, while ensuring good service quality. For example, cash transfer programmes can set conditions on payments that require families to utilise key nutrition services, enforce school enrolment and attendance.
- Focusing on women's nutrition and empowerment. For example, when programmes
 are designed from the outset to increase women's decision-making power, they can
 increase investments in better nutrition for the whole family.

The NSFSN 2019-2023 acknowledges the importance of scaling-up the nutrition sensitivity of sector-led contributions to FSN, including agriculture, health, education, water supply and

sanitation, industry and commerce. These sector-led contributions are relevant at national and sub-national level and are supported by a coordinated and convergent approach to ensure that no one is left behind.

The Focus of Interventions

The intervention approaches and prioritization of activities should be highly context-specific and informed by an equity-focused situational analysis to tailor strategies to address the multiple determinants of malnutrition. The key target populations for nutrition programming are children under two years of age, children aged 2–5 years and pregnant and lactating women. A secondary, yet critical, focus should be on adolescent girls and women of reproductive age, where the investment will improve their well-being and help break the intergenerational cycle of child undernutrition.

Food Safety

Access to sufficient amounts of safe and nutritious food is key to sustaining life and promoting good health. Unsafe food containing harmful bacteria, viruses, parasites or chemical substances can cause more than 200 different diseases – ranging from diarrhoea to cancers. Food safety, nutrition and food security are closely linked. Unsafe food creates a vicious cycle of disease and malnutrition, particularly affecting infants, young children, elderly and the sick. In addition to contributing to food and nutrition security, a safe food supply also supports national economies, trade and tourism, stimulating sustainable development. The globalization of food trade, a growing world population, climate change and rapidly changing food systems have an impact on the safety of food (WHO 2019).

Food safety is the absence, or safe, acceptable levels, of hazards in food that may harm the health of consumers. Food borne hazards can be microbiological, chemical or physical in nature and are often invisible to the eye (bacteria, viruses or pesticide residues are some examples). Food safety has a critical role in assuring that food stays safe at every stage of the food chain from production to harvest, processing, storage, distribution, all the way to preparation and consumption (FAO 2019b).

Enabling environment for nutrition

An enabling environment for nutrition includes the political and policy processes that build and sustain momentum for the effective implementation of nutrition specific and nutrition-sensitive actions that reduce malnutrition. The enabling environment addresses the basic determinants of malnutrition, such as the social cultural, economic and political context, and the access to resources and capital (The Lancet, 2013).

There are three interlinked factors being crucial for building and sustaining momentum for nutrition and for conversion of that momentum into impacts accelerating nutrition.

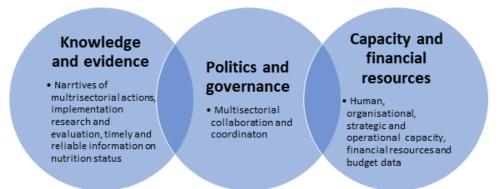


Figure 4: Three factors of an enabling environment for accelerating malnutrition reduction (adapted from The Lancet 2012, Gillespie et al. 2013)

Governance at all levels is critical in achieving the goal of the NSFSN 2019-2023. Governance mechanisms at international, national and subnational levels underpin all sector-led contributions as well as the joint priority areas. The joint priority areas for multi-sectorial coordination include healthy diets, nutrition-sensitive WASH, food value chains, food safety and food fortification; community-led nutrition, social assistance and FSN, FSN in disaster management and climate change. CARD has several key functions in the coordination of FSN, e.g. coordination of sector-led and multi-sectorial governance for FSN, addressing cross-cutting issues, conducting research, training and capacity building, , information sharing and knowledge management, monitoring and evaluation, and resource mobilisation and advocacy.

Ten opportunities for double duty actions

There are ten strong opportunities for political policy processes for double duty actions across different sectors, including interventions delivered through health, social protection, education and agriculture, food systems, and food environments, which governments should consider.

Health services

- Scale up new WHO antenatal care recommendations, including counselling on healthy
 eating and balanced energy and protein intake; in food insecure populations, provide
 balanced energy and protein supplements as needed and monitor energy intake to
 prevent unintended excess weight gain.
- 2. Scale up programmes to protect, promote, and support optimal breast-feeding practices and eliminate the promotion of breastmilk substitutes.
- 3. Redesign guidance for complementary feeding practices that emphasises healthy and diverse diets; optimal infant and young child feeding practices; guidance on energy

- density and selection of healthy snacks; and new training for primary care workers in double-duty nutrition counselling.
- Redesign existing growth monitoring programmes to include counselling on healthy diets and snacks and the detection and referral of children who are overweight or obese.
- 5. Prevent undue harm from energy-dense and micronutrient-fortified foods and ready to use supplements by promoting healthy diets and snacks as a default measure and establishing clear criteria, guidelines, and counselling for their appropriate use.

Social safety nets

6. Redesign cash transfers and food transfers, subsidies, and vouchers to rebalance food environments and improve the availability and affordability of nutritious food; deliver counselling on nutrition, healthy diets and snacks, and health education and support healthy behavioural change.

Educational settings

7. Redesign school feeding programmes and devise new nutritional guidelines for food in and around educational institutions that meet energy and nutrient needs and restrict unhealthy foods and snacks, involve parents and children, are innovative, and offer educational opportunities.

Agriculture, food systems, and food environments

- 8. Scale up nutrition-sensitive agriculture programmes that promote diversity in food production and consumption, empower women, and provide counselling on healthy diets and snacks, and support urban and peri-urban agriculture.
- 9. Design new agricultural and food system policies that focus on the production of nutritious foods and support healthy and affordable diets
- 10. Implement policies to improve food environments from the perspective of malnutrition in all its forms. In addition to actions 1-9, this includes well targeted taxes and subsidies, elimination of promotion of breastmilk substitutes, policies that monitor and restrict nutrition and health claims, and incentives and rules for producers, retailers and traders.

(Source: Hawkes et al, 2020)

References

EAT-Lancet Commission on Food, Planet and Health, 2019, available at: https://eatforum.org/eat-lancet-commission/

Gillespie et al. 2013, The politics of reducing malnutrition: building commitment and accelerating progress. The Lancet, 382: 552-69.

Global Nutrition Report 2014, Actions and accountability to accelerate the world's progress on nutrition, available at https://globalnutritionreport.org/reports/2014-global-nutrition-report/

FAO 2008.Food Security Information for Action. Practical Guides, available at http://www.fao.org/3/a-al936e.pdf

FAO 2017, Nutrition-sensitive agriculture and food systems in practice: options for intervention. Rome. Available at www.fao.org/3/a-i7848e.pdf

FAO 2019a, Sustainable food systems: concept and framework, available at http://www.fao.org/3/ca2079en/CA2079EN.pdf

FAO 2019b, Food Safety, available at http://www.fao.org/food-safety/en/

Hawkes et al. 2020, Double-duty actions: seizing programme and policy opportunities to address malnutrition in all its forms, Lancet, $\underline{https://doi.org/10.1016/S0140-6736(19)32506-1}$

HLPE 2017, Nutrition and food systems. A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. HLPE Report 12. Rome. 152 pp. Available at http://www.fao.org/3/a-i7846e.pdf

The Lancet 2013, Maternal and child nutrition series, available at https://www.thelancet.com/pb/assets/raw/Lancet/stories/series/nutrition-eng.pdf

Pinstrup-Andersen, P 2013, 'Nutrition-sensitive food systems: from rhetoric to action' in *The Lancet, Maternal and Child Nutrition*, June 2013, pp 9-10.

UNICEF 2013, Improving Child Nutrition: The achievable imperative for global progress. United Nations Children's Fund; p. 4.

UNICEF 2015, Nutrition: The case for support, available at: https://www.unicef.org/publicpartnerships/files/NutritionTheCaseForSupport.pdf

UNICEF, undated, Multi-sectoral Approaches to Nutrition: nutrition-specific and nutrition-sensitive interventions to accelerate progress, available at

https://www.unicef.org/eu/files/101322_000_Unicef_Brief_NutritionOverview_A4_v1r15.p df , accessed 11 Nov 2019.

WFP 2018, Food Fortification, available at: https://docs.wfp.org/api/documents/WFP-0000073392/download/?ga=2.128248526.37868848.1580727566-115593241.1507692426

WHO 2018, *Healthy diet* [online]. Cited 2 September 2018 Available at www. who.int/mediacentre/factsheets/fs394/en/

WHO 2019, Food Safety, available at: https://www.who.int/health-topics/food-safety/

World Vision, 2019, What is food fortification? Available at https://www.wvi.org/cambodia/what-food-fortification







This publication was produced with the financial assistance of the European Union. The contents of the publication are the sole responsibility of FAO and can in no way be taken to reflect the views of the European Union.





