



**FANRPAN**  
Food, Agriculture & Natural Resources Policy Analysis Network

2021

**GUIDELINES  
ON HOW  
TO MAKE  
AGRICULTURE  
NUTRITION-  
SENSITIVE**





## INTRODUCTION

### BASIC CONCEPTS ON NUTRITION, FOOD SECURITY AND LIVELIHOODS



Before we discuss how agriculture and food systems can be made more nutrition-sensitive, it is important to understand some basic concepts on nutrition, food security and livelihoods.

**Nutrient intake** is one of the most important concepts in nutrition. It refers to the different nutrients taken in by the body. These are macronutrients and micronutrients. Macronutrients are the main sources of energy and structural components which are needed in relatively large amounts. They include carbohydrates (starches, sugars and dietary fibre as sources of energy), fats, protein and water. Micronutrients are required in small amounts to support physiological functions. They include vitamins, e.g. Vitamin A, B-group vitamins and Vitamin D, among others, and trace minerals such as Iron, Zinc, Iodine and others. These are required at low quantities of less than 100 mg/day. Macro-minerals are needed in larger quantities and include Calcium, Potassium, Magnesium, Chlorine and Magnesium.

**Nutrient requirements** are the nutrients needed by the body for energy, growth and repairs, as well as protection against diseases. The requirements vary by physiological state, that is age, gender, level of physical activity, height, weight, stage of life and health.

A **balanced diet** is one that provides an adequate amount and variety of food to meet energy and nutrient requirements for a healthy and active life. The diet must be made up of foods from different food groups to supply all the necessary macro- and micro-nutrients. In summary, the food groups include staples such as cereals and tubers, fats and oils, legumes and nuts, vegetables, fruits, sugars, and water.

**Malnutrition** is defined as a state of inadequate nutrition, "an abnormal physiological condition caused by deficiencies, excesses or imbalances in energy and other nutrients necessary for an active, healthy life". Malnutrition includes overweight and obesity, undernutrition and micronutrient deficiencies and when all these conditions are found together this is referred to as the triple burden of malnutrition. Obesity or overweight has been linked to an increase in non-communicable diseases such as hypertension, heart disease and diabetes. This is a growing problem globally, including in developing countries.

**Undernutrition** is generally classified through its effects, especially among children aged 6-59 months:

- Wasting – is low weight for height due to acute malnutrition in children aged 6-59 months;
- Stunting – is low height for age caused by chronic malnutrition in children aged 6-59 months;
- Underweight – is low weight for age due to both acute and chronic malnutrition in children aged 6-59 months.

**Micronutrient deficiencies** are known to cause a number of conditions, for example anaemia (shortage of iron) in children and women of reproductive age; night blindness due to Vitamin A deficiency; extreme fatigue and goitre due to Iodine deficiency.





**Vicious cycle of malnutrition** – is a common phenomenon in communities experiencing malnutrition. It starts off with a stunted girl child, resulting in a stunted adolescent, developing into a malnourished woman, who then gives birth to a low weight (less than 2.5 kg) baby, who develops into a baby exhibiting signs of wasting, stunting and/or underweight.

**Food security** is defined as: When all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (World Food Summit 1996). From this definition, we see the four pillars of food security as:

- Availability
- Accessibility
- Utilization and
- Stability

**Nutrition security** has expanded the definition of food security: “All people, at all times, consume food of sufficient quantity and quality in terms of variety, diversity, nutrient content and safety to meet their dietary needs and food preferences for an active and health life, coupled with a sanitary environment, adequate health and care”.

**Livelihood** refers to the capabilities, assets (natural, human, physical, social and financial) and activities required for survival and well-being. Livelihoods are sustainable if they can cope with and recover from stresses and shocks, maintain or enhance their capabilities and assets, provide net benefits to other livelihoods locally and more widely, both now and in the future, without undermining the natural resource base (IDS 1991<sup>1</sup>).

**Food system** - The Food and Agriculture Organization of the United Nations (FAO 2014) defines a food system as “...the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded”. It is composed of sub-systems (e.g. farming system, waste management system, input supply system, etc.) and interacts with other key systems (e.g. energy system, trade system, health system, etc.). Therefore, 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. A food system approach is more preferable in dealing with complex issues such as nutrition which need a multi-sectoral approach to resolve them as they are determined by multiple factors which involve many sectors and actors.

The **food system** environment refers to the interface between the food system and consumers. It deals with issues such as food availability, affordability, convenience and desirability.

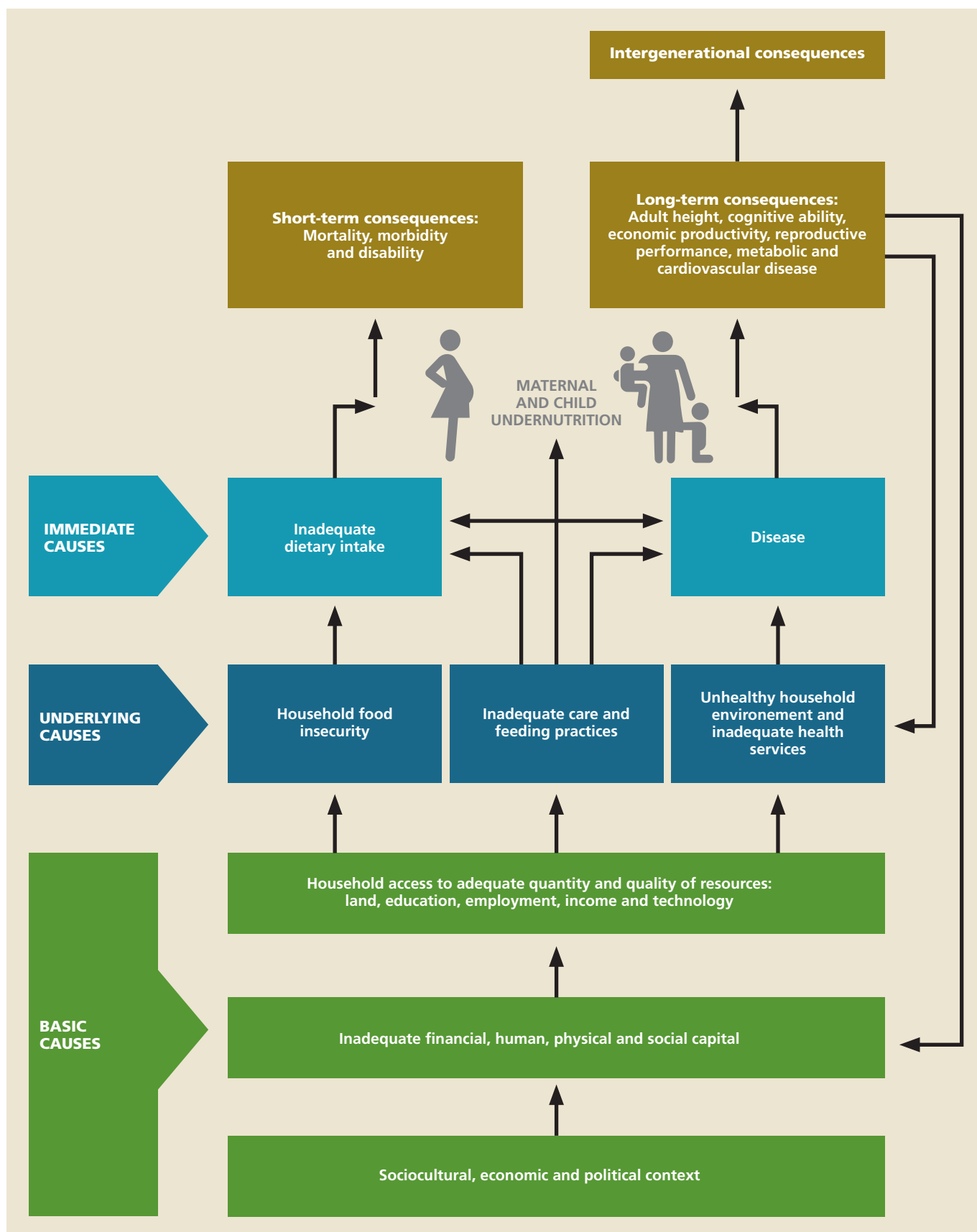


<sup>1</sup> IDS 1991. Sustainable Rural Livelihoods: Practical Concepts for the 21st Century.

## GENERAL CAUSES OF MALNUTRITION

The UNICEF malnutrition framework categorises the causes of malnutrition into three, namely, immediate, underlying, and basic causes (Figure 1). Due to the complex nature of the causes of malnutrition, it is clear, therefore, that malnutrition cannot be addressed by one sector. It needs a multi-sectoral and holistic approach involving agriculture and food systems, the health, water and sanitation sectors, social security and the food system environment as influenced by formal and informal infrastructure, political ideology and policies and availability of resources. Any food and nutrition strategy would need to encompass the three causal levels of malnutrition.

Figure 1. Conceptual framework for the causes of malnutrition (adapted from UNICEF 1990)





## GLOBAL AND REGIONAL FOOD AND NUTRITION SECURITY SITUATION

The 2020 Global Nutrition Report and the State of Food and Nutrition (SOFI) 2020 paint a grim picture of the global food and nutrition security situation. Globally, one in nine people in the world is hungry and one in every three is overweight or obese. Many countries are experiencing the double/triple burden of malnutrition, where undernutrition and micro-nutrient deficiencies co-exist with overweight, obesity and other diet-related conditions such as NCDs. The number of people affected by hunger has been slowly increasing since 2014, with greater increases in Sub-Saharan Africa than any other region (SOFI, 2020). The world is not on track to achieve the Sustainable Development Goal (SDG) 2 – zero hunger, by 2030. If anything, current trends would result in 840 million hungry people by 2030, with the COVID-19 pandemic adding 83-132 million (SOFI 2020). Similarly, not one country is on course to meet all ten of the global nutrition targets and just eight out of 194 are on track to meet four targets.

Within Southern Africa, the Southern Africa Development Community (SADC) Regional Vulnerability Assessment Synthesis Report 2020 indicated that the food and nutrition security outlook for 2020/21, especially during the lean season of November 2020 to January 2021 was dire. Even before COVID-19 related national lockdown and restrictive measures to contain the spread of the pandemic had been put in place from early 2020, the region was on course to reach high levels of food and nutrition insecurity similar to the situation in 2019/2020 when 41 million people were food insecure. Therefore, the COVID-19 pandemic exacerbated an already precarious situation. For the 2020/2021 season, there is a projected increase of at least 10% in food insecure people in the SADC region, comprising 33.6 million people in rural areas and 11.1 million in urban areas.

The three focal countries for the CCARDESA-GIZ-supported Covid-19 Agriculture Recovery Project, that is Malawi, Mozambique and Zambia, are all experiencing high levels of malnutrition. In Malawi, 23% of all child deaths are related to under-nutrition<sup>2</sup>. Inadequate infant and young child feeding practices, household food insecurity, micronutrient deficiencies, inappropriate agricultural practices, lack of access to water and sanitation and poor maternal nutrition, are some of the causes for the high rates of malnutrition in Malawi. About two-thirds (64%) of children aged 6-59 months are anaemic. Anaemia prevalence in women of reproductive age is 34%, and is not on course to meeting the WHO 2025 targets. Although stunting has improved, the rate is still high (39%) and is higher than the African regional average of 29.1%. According to the Global Nutrition Report (2020), 59.4% of infants aged 0-5 months are exclusively breastfed. Dietary diversity is low and only a quarter (25%) of children aged 6-23 months have an adequately diverse diet. Zinc deficiency is high and affects 60% of the population<sup>3</sup>.

Malnutrition in Mozambique remains high, with 43% of children under the age of five years are stunted, 6% wasted, 69% have vitamin A deficiency and 74% have iron deficiency<sup>4,5</sup>, thus resulting in loss of human capital and an estimated GDP loss of approximately 11% (US\$1.6 million). It is also estimated that about a third of the population (30%) have poor dietary diversity, consuming a lot of the same type of food, mainly cassava, maize and wheat. Poor dietary diversity partly explains the micronutrient deficiencies in Mozambique, where cereals and starch foods provide almost 80% of the dietary energy supply. Green leafy vegetables are eaten together with the staples but consumption of micronutrient-rich vegetables, fruits and animal source foods is very low. This was demonstrated by the pellagra outbreak that affected Mozambique in 2020<sup>6</sup>. Mozambique is not on course to meet the Sustainable Development Goals, except for the target on maternal, infant and young child nutrition (MIYCN), with a wasting prevalence of 4.4% among children under five years of age. Among women aged 15 to 49 years, 51.0% have anaemia, reflecting the lack of progress towards achieving the target of reducing anaemia among women of reproductive age. However, there has been some progress towards reducing low birth weight and increasing exclusive breastfeeding targets. The prevalence of low weight at birth is reported to be 13.8%, while 41.0% of infants aged 0 to 5 months are exclusively breastfed. No progress has been made in halting the increase in prevalence of overweight among children under five years of age (7.0%). There is also no evident progress towards achievement of diet-related NCD targets, with obesity prevalence of 10.5% in adult women and 3.3% of adult men. Consequently, diabetes is estimated to affect 6.2% of adult women and 6.6% of adult men. In response to the various nutrition challenges in the country, the government of Mozambique adopted a multifaceted approach, which included development of policies and strategies with strong nutrition content and capacity building of decision makers, provincial and district officers, and health and community workers on nutrition topics<sup>7</sup>.



<sup>2</sup> UNICEF. Nutrition statistics in Malawi [https://www.unicef.org/malawi/sites/unicef.org.malawi/files/2018\\_09/UNICEF\\_Nutrition\\_Factsheet\\_2018.pdf](https://www.unicef.org/malawi/sites/unicef.org.malawi/files/2018_09/UNICEF_Nutrition_Factsheet_2018.pdf)

<sup>3</sup> Government of Malawi. National Multi-Sector Nutrition Policy 2018-2022. 2018

<sup>4</sup> FAO, Nutrition country profile Republic of Mozambique, 2011.

<sup>5</sup> FANTA, Strengthening nutrition in Mozambique: a report on FANTA activities from 2012 to 2018, 2018.

<sup>6</sup> SADC RVAA. Synthesis report on the state of food and nutrition security and vulnerability in Southern Africa, 2020.

<sup>7</sup> FANTA, Strengthening nutrition in Mozambique: a report on FANTA activities from 2012 to 2018, 2018.

Zambia, as is the case with most countries in Southern Africa, continues to battle malnutrition in its various forms. Under-nutrition, over-nutrition and micronutrient deficiencies are common types of malnutrition in Zambia. The country has been battling with micronutrient deficiencies such as iron deficiency anaemia in children and women of reproductive ages. Prevalence of anaemia in women of reproductive health is 33.7%<sup>8</sup> and 58% in children 6-59 months (ZHDS 2018). Vitamin A deficiency is at 54% in children under 5 years of age. Iodine deficiency used to be a problem until legislation was passed to iodise salt and now it is no longer a big problem<sup>9</sup>. According to UNICEF<sup>10</sup>, there are additional side effects of COVID-19, which include rising prices of basic goods and services, movement restrictions and disruptions to crucial social services. The list also includes climate shocks (droughts, floods and locust invasions) and conflict (insecurity, instability and displacement), which existed before the pandemic but have intensified since the start of the year. Several efforts have been put in place to try and reduce the burden of malnutrition in the Zambian population. For example, policy development, implementation of nutrition-sensitive and nutrition-specific interventions have been implemented, as well as being part of the SUN movement<sup>11</sup>.

The drivers of food and nutrition insecurity in the region include the following:

- i) Poor availability of food, mainly due to low productivity and production;
- ii) Limited purchasing power due to loss of employment and other livelihoods, lately due to the COVID-19 pandemic;
- iii) Delays at borders restricting movement of food imports for land-locked countries;
- iv) Price increases in response to limited supplies;
- v) Reduced remittances;
- vi) Increase in urban-rural migration following loss of jobs, putting pressure on rural area food availability;
- vii) Climate change-related extreme weather events and shocks such as cyclones, floods and droughts; and
- viii) Conflicts in some countries, for example, in Northern Mozambique.

<sup>8</sup> Global nutrition report. Country nutrition profiles 2020 (<https://globalnutritionreport.org>)

<sup>9</sup> UNICEF. Zambia nutrition profile 2021 (<https://www.unicef.org/zambia/nutrition>)

<sup>10</sup> COVID-19: A Catastrophe for Children in Sub-Saharan Africa Cash Transfers and a Marshall Plan Can Help NOVEMBER 2020

<sup>11</sup> USAID, Zambia nutrition profile accessed from <https://www.usaid.gov/sites/default/files/documents/1864/Zambia-Nutrition-Profile-Mar2018-508.pdf>, 2018.



## AGRICULTURE AND NUTRITION NEXUS

Traditionally, agriculture has largely been concerned with increased productivity, production and incomes through value chain development, and lately protecting production against climate change. Nutrition was not included among the objectives of agricultural development programmes and nutrition outcomes were considered as intuitive as agriculture was considered as the main source of food. However, development efforts to increase agricultural production, especially of staples, have not always been associated with improved nutrition outcomes, as evidenced by the impact of the green revolution and recent increases in agricultural production in Africa on nutrition. This phenomenon has been referred to as the disconnect between agriculture and nutrition. Agriculture, therefore, needs to deliver better on nutrition outcomes by being more nutrition-sensitive.

### THE ECONOMIC COST OF MALNUTRITION

Malnutrition and diet-related conditions are the biggest risk factors for the global burden of disease, responsible for over 70% of mortalities. On average, malnutrition is responsible for losses of 11% of gross domestic product (GDP) annually in Africa and Asia (Global Nutrition Report 2017). Preventing malnutrition has been reported to deliver \$16 in returns on investment for every \$1 spent. The question is whether countries can afford the cost of doing nothing about malnutrition. With this realisation, many countries have agreed to set targets on various nutritional indicators, but most are still a long way from achieving these targets.

At the global level, nutrition is central to achievement of Sustainable Development Goals (SDGs). For example, SDG 2 targets are to end hunger, achieve food security and nutrition and promote sustainable agriculture. Similarly, as a region, Africa has set itself some ambitious nutrition targets: Malabo Declaration 2014 - end hunger by 2025, reduce stunting to 10%, and underweight in children to 5%; and the African Union Agenda 2063 has the goal of a healthy and well-nourished citizenry.

### THE LINK BETWEEN AGRICULTURE AND NUTRITION

To tackle malnutrition, we need both nutrition-specific and nutrition-sensitive interventions (see UNICEF framework on causes of Malnutrition). Nutrition-specific interventions address immediate causes of malnutrition, for example through supporting exclusive breastfeeding up to six months of age; continued breastfeeding, together with appropriate and nutritious complementary food, up to two years of age; micronutrient supplementation; and treatment of severe malnutrition. Nutrition-specific interventions have traditionally been the domain of the health sector.

Nutrition-sensitive interventions address the underlying and basic causes of malnutrition and these may be deployed by health and other sectors as shown below:

- Agriculture: Making nutritious food more accessible to everyone, and supporting small farms as a source of income for women and families;
- Clean water and sanitation: Improving access to reduce infection and disease;
- Education and employment: Making sure children have the energy that they need to learn and earn sufficient income as adults;
- Healthcare: Improving access to services to ensure that women and children stay healthy;
- Support for resilience: Establishing a stronger, healthier population and sustained prosperity to better endure emergencies and conflicts; and
- Women's empowerment: At the core of all efforts, women are empowered to be leaders in nutrition-sensitive approaches.



From the above, it is clear that agriculture has a big role to play in delivering nutritious and safe food for positive nutrition outcomes. This can happen through the following possible pathways:

- i) Food production for household consumption;
- ii) Income-oriented production for food, health and other non-food items;
- iii) Empowerment of women as agents;
- iv) Reduction in real food prices associated with increased agricultural production; and
- v) Nutrition-sensitive agricultural growth.

The first three pathways operate at household level, while the last two operate at national level through policy interventions. Figure 2 is a schematic diagram showing all the above pathways and how they interact in delivering nutrition outcomes. Figure 3 shows how the pathways impact on the UNICEF malnutrition framework.

**Figure 2. Agriculture-nutrition pathways**

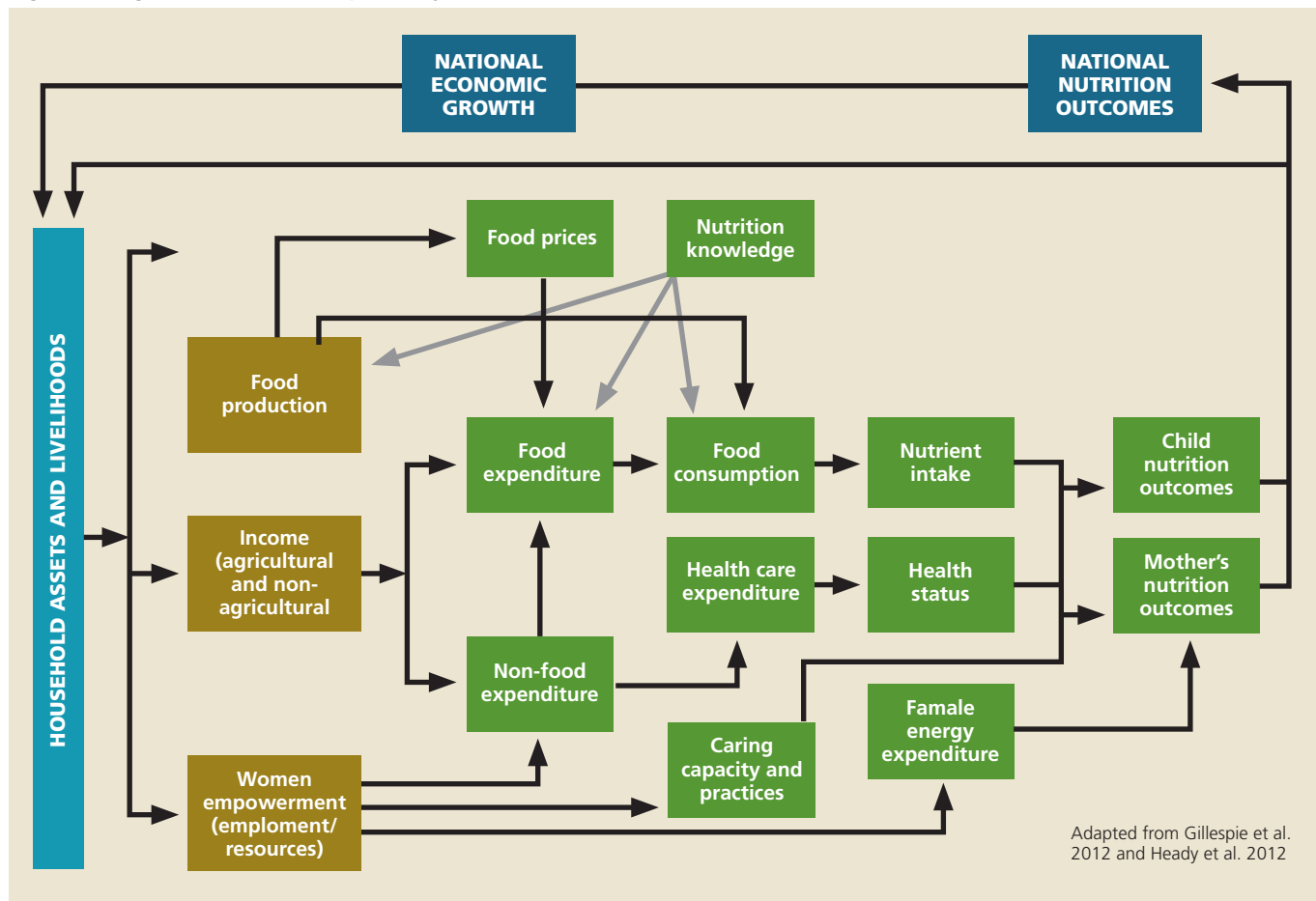
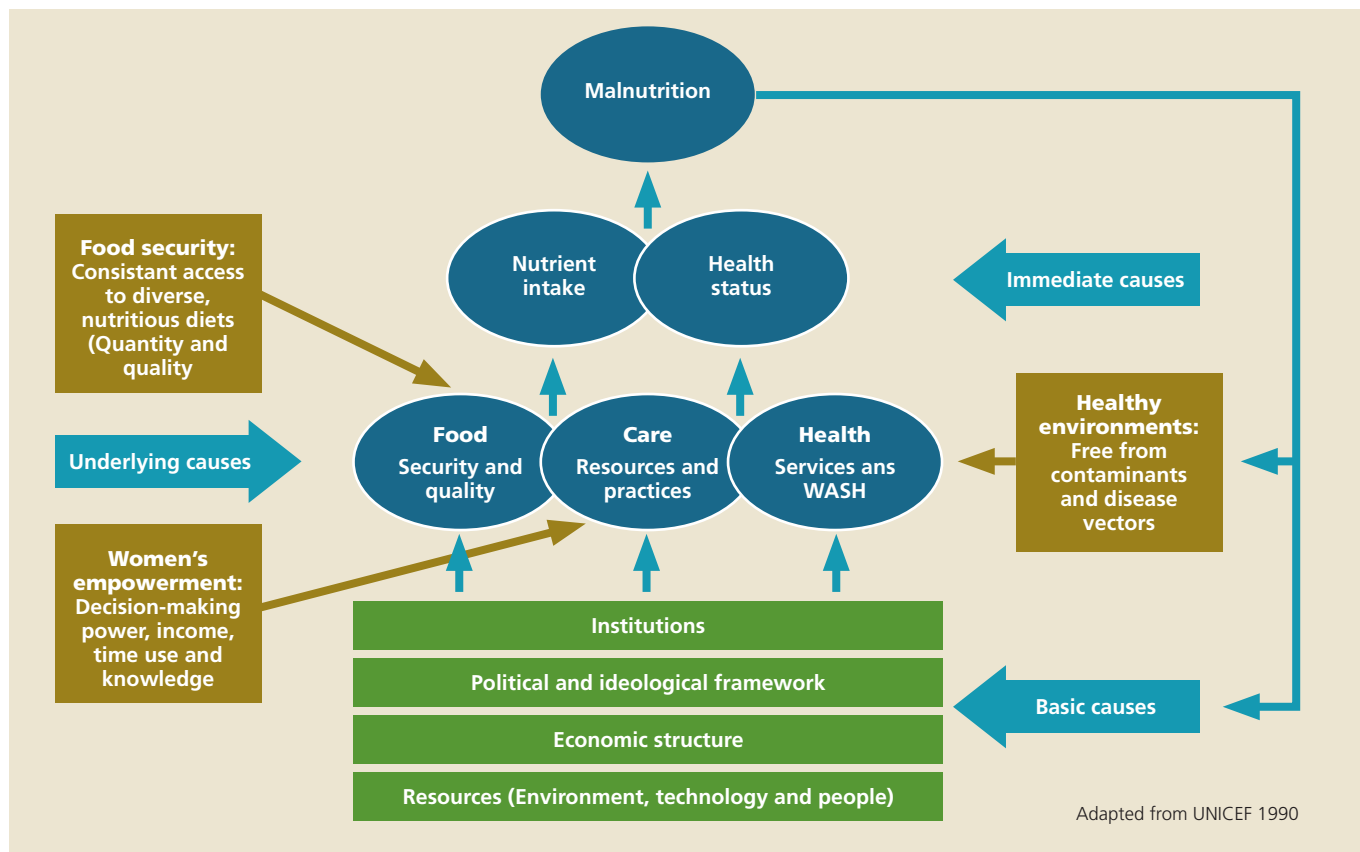


Figure 3. Agriculture, women’s empowerment and health environment and the UNICEF malnutrition framework



## OPPORTUNITIES FOR NUTRITION-SENSITIVE INTERVENTIONS (NSIS)

NSIs can be located anywhere along the agricultural value chain, depending on the design and objectives of an agricultural development project or programme (Figures 4 and 5). It is important that agricultural programme implementers and policy makers apply a nutrition lens in order to make agriculture and food systems nutrition-sensitive.

Figure 4. Agricultural value chain



### Primary agricultural production entry points to NSA

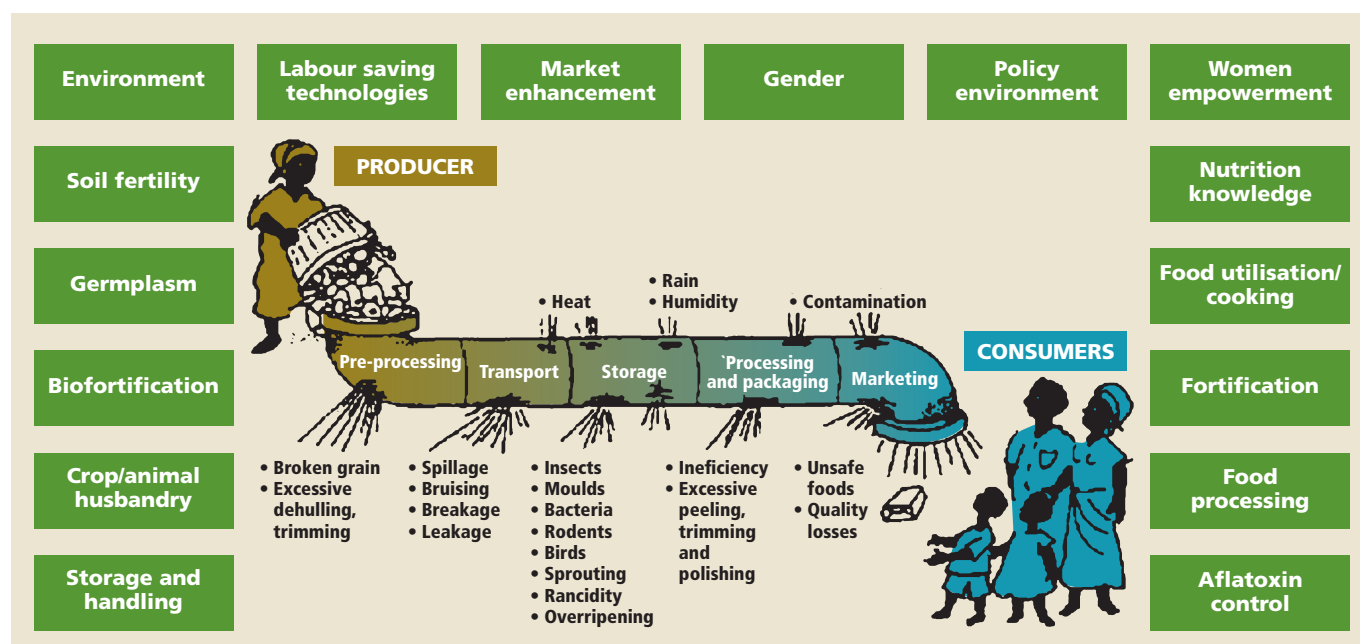
Entry points for nutrition-sensitive agriculture at the primary agricultural production stage include the following:

- i) Management of soil fertility, e.g. high zinc fertilizers which have been shown to influence the zinc content of crop products such as cereals, making them more nutritious.
- ii) Use of biofortified germplasm, e.g. improved seed with high nutrient content, such as high protein maize, orange-fleshed sweet potato and cassava with high Vitamin A content and high iron bean varieties, among others.
- iii) Production of diversified crops as opposed to monocultures, for example promotion of traditional crops and vegetables and women’s crops.
- iv) Promotion of production of small livestock and fish.
- v) Labour-saving technologies, especially for freeing women’s time and saving their energy.
- vi) Promotion of retention and consumption of own food production rather than selling everything.





Figure 5. Opportunities for nutrition-sensitive interventions along agricultural value chain



### Post-harvest entry points

Post-harvest handling, storage and processing of food offer great entry points for improving nutrition outcomes by preserving and extending the shelf life of food, converting food into more stable forms and improving convenience in food preparation. However, such transformation may result in loss of nutritive value such as vitamins and micro minerals, depending on the degree of processing. Examples include the following:

- i) Improved management of post-harvest food losses, which can average 30% and may be as high as 50% for some value chains (FAO, 2015)<sup>12</sup>. Food loss may be qualitative, when referring to lost nutrients, or quantitative. It represents loss of economic value and may affect availability and prices of food. Most of the food wastage and loss occurs early in the food supply chain, with 50% occurring during the post-harvest phase, 25% during processing and packaging, 20% during distribution and retail, and 5% at consumer level. Post-harvest losses are ascribed to lack of facilities for pre- and post-harvest storage and processing of food.
- ii) Improved food storage at farm level to safeguard food from contamination and enable farmers to sell later when prices are higher.
- iii) Avoiding ultra-processing of foods as this leads to loss of nutrients and physical form.
- iv) Use of labour-saving technologies in home processing of food to free women's time.
- v) Food fortification is an effective, sustainable, and scalable intervention to address vitamin and mineral deficiencies in processed foods, but may need to be monitored to enforce quality standards for both locally produced and imported foods (Rowe 2020)<sup>13</sup>.
- vi) Control of contamination of food by pathogens such as fungi, e.g. aflatoxin in groundnuts and cereal grain is critical.

### Marketing and distribution of food entry points

- i) Improved access to markets for farmers as well as for consumers to purchase nutritious foods they cannot produce themselves, especially during lean seasons.
- ii) Prevention of spoilage and waste of food during marketing and distribution by appropriate use of cold storage for perishable products.
- iii) Ensuring that food is appropriately labelled to communicate nutritional information and shelf-life and control marketing of infant formulas.
- iv) Taxation of ultra-processed foods and high sugar products.
- v) Enforcement of regulations on food labelling, fortification and safety.



<sup>12</sup> FOA 2015

<sup>13</sup> Laura A. Rowe 2020. Addressing the Fortification Quality Gap: A Proposed Way Forward. *Nutrients* 2020, 12, 3899; doi:10.3390/nu12123899. www.mdpi.com/journal/nutrients

## Food utilisation and consumption



The opportunities in this section are largely targeted at consumers and include the following:

- i) Providing consumers with basic nutrition education and awareness to help them make informed food choices.
- ii) Promotion of education on how to prepare, utilise and preserve the nutritional value of different foods, including food for infants, through recipes, radio and tv programmes.
- iii) Addressing cultural norms and taboos that limit food choices and act as barriers to good nutrition, especially for women and children.
- iv) Improved access to clean water and hygienic environment for food preparation.
- v) Addressing unequal intrahousehold food allocation, especially for women and children.
- vi) Creating income generation opportunities to improve access to income to purchase additional nutritious food and meet health needs.

## Gender and women empowerment

Gender and women empowerment is one of the key pathways of agriculture-nutrition. Research has shown that when women are involved in decision-making and have greater control and access to productive resources and household dietary issues, there are more positive nutrition outcomes for the whole household as well as for women and children. The following interventions can address gender dynamics at household and community levels and result in improved nutrition outcomes:

- i) Promotion of social behaviour change communication targeted at women and men to address household gender dynamics, including access to and control of resources and sharing of household workload and chores.
- ii) Engagement of men in gender issues and bringing awareness of the importance of nutrition for women and children and the need to share household work and lighten the burden on women.
- iii) Engagement of local and traditional leaders on issues related to gender dynamics and social norms and taboos that may act as barriers to achieving nutrition outcomes, e.g. prohibition of consumption of meat and eggs by women and children, which tends to perpetuate malnutrition conditions such as stunting.
- iv) Promotion of women access to income generating opportunities, business and entrepreneurship skills development and access to land and agriculture water for irrigation.
- v) Promotion of provision of early community childhood care facilities to free women and give them time to engage in other economic activities as well as rest.
- vi) Promotion and support of production of women's crops so as to increase production of diverse crops, especially traditional orphan crops which are more nutritious.
- vii) Ensuring women have equal access to formal employment opportunities to improve availability of income to purchase nutritious foods.





## Policy environment

Policy measures allow interventions to have impact at scale and are one of the major pathways to nutrition-sensitive agriculture and food systems. Some of the measures that policy makers may deploy include the following:

- i) Increase incentives (and decrease disincentives) for availability, access and consumption of diverse, nutritious and safe foods through environmentally sustainable production, trade and distribution policies.
- ii) Monitor the performance of policies on dietary consumption and access to safe, diverse and nutritious foods, e.g. food price data, consumption data and build capacity of relevant agencies to conduct impact assessments.
- iii) Promote measures to protect and empower women and the poor through social safety nets, land reform and access to land by women and vulnerable groups and access to local procurement schemes for produce from smallholder farmers.
- iv) Develop human resources capacity among relevant institutions to support NSA interventions, e.g. recruiting nutritionists in ministries, include nutrition curricula in training institutions, provide basic training on nutrition and NSA to extension service staff and others responsible for implementing frontline programmes.
- v) Support multi-sectoral strategies to improve nutrition within local, regional and national government structures for effective coordination and create joint institutional structures across sectors, e.g. agriculture, health, social services, rural development, education etc.
- vi) Implement tariff regimes that encourage import/export of nutritious foods (Trade for nutrition).
- vii) Promote private sector to engage in nutritious value chain development by creative use of the fiscal incentives.

## How to Select, Design and Implement NSIs

The following steps are necessary to make agriculture development projects/programmes nutrition-sensitive:

- i) Incorporate explicit nutrition objectives and indicators into project/programme design.
- ii) Assess context and causes of malnutrition at local level through a situation analysis (desk study and rapid formative research).
- iii) Identify, screen and design nutrition-sensitive interventions:
  - Review the situation analysis report to assess the food and nutrition security policy and institutional environment, opportunities for and barriers to possible interventions;
  - Assess nutrition status of communities served by project and their contextual circumstances; and
  - Convene stakeholder workshop to identify and select nutrition-sensitive interventions, prepare results framework, identify impact evaluation and process indicators, and develop M&E and implementation plans.
- (iv) Design and elaborate selected nutrition-sensitive interventions in a participatory manner.
- (v) Identify and train country implementation partners to implement nutrition-sensitive interventions.
- (vi) You may use the results from the situation analysis as baseline values for different nutrition variables, e.g. nutrition status, dietary diversity, food and nutrition security.
- (vii) Implement the nutrition-sensitive interventions.
- (viii) Monitor implementation process and conduct impact evaluation.
- (ix) Document and communicate results and lessons.
- (x) Do no harm - avoid possible negative impacts of any intervention, that is “Do no harm!”, e.g.
  - New crops with high labour requirements, especially for women;
  - Subsidies of specific crops which can result in reduced crop diversity and monocultures, e.g. maize subsidies;
  - Promotion of cash crops and other commodities, for example through contract farming, resulting in farmers selling all their produce and leaving nothing for home consumption;
  - Promotion of “male” crops, resulting in marginalisation of women;
  - Free distribution of chemical inputs resulting in soil contamination and risk of poisoning people;
  - Irrigation projects not accompanied by malaria control can result in health problems; and
  - Trade policies favouring import of highly processed food which is not good nutritionally.





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### About FANRPAN

The Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) is an autonomous regional stakeholder driven policy research, analysis and implementation network that was formally established by Ministers of Agriculture from Eastern and Southern Africa in 1997. FANRPAN was borne out of the need for comprehensive policies and strategies required to resuscitate agriculture. FANRPAN is mandated to work in all African countries and currently has activities in 17 countries namely Angola, Benin, Botswana, Democratic Republic of Congo, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

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