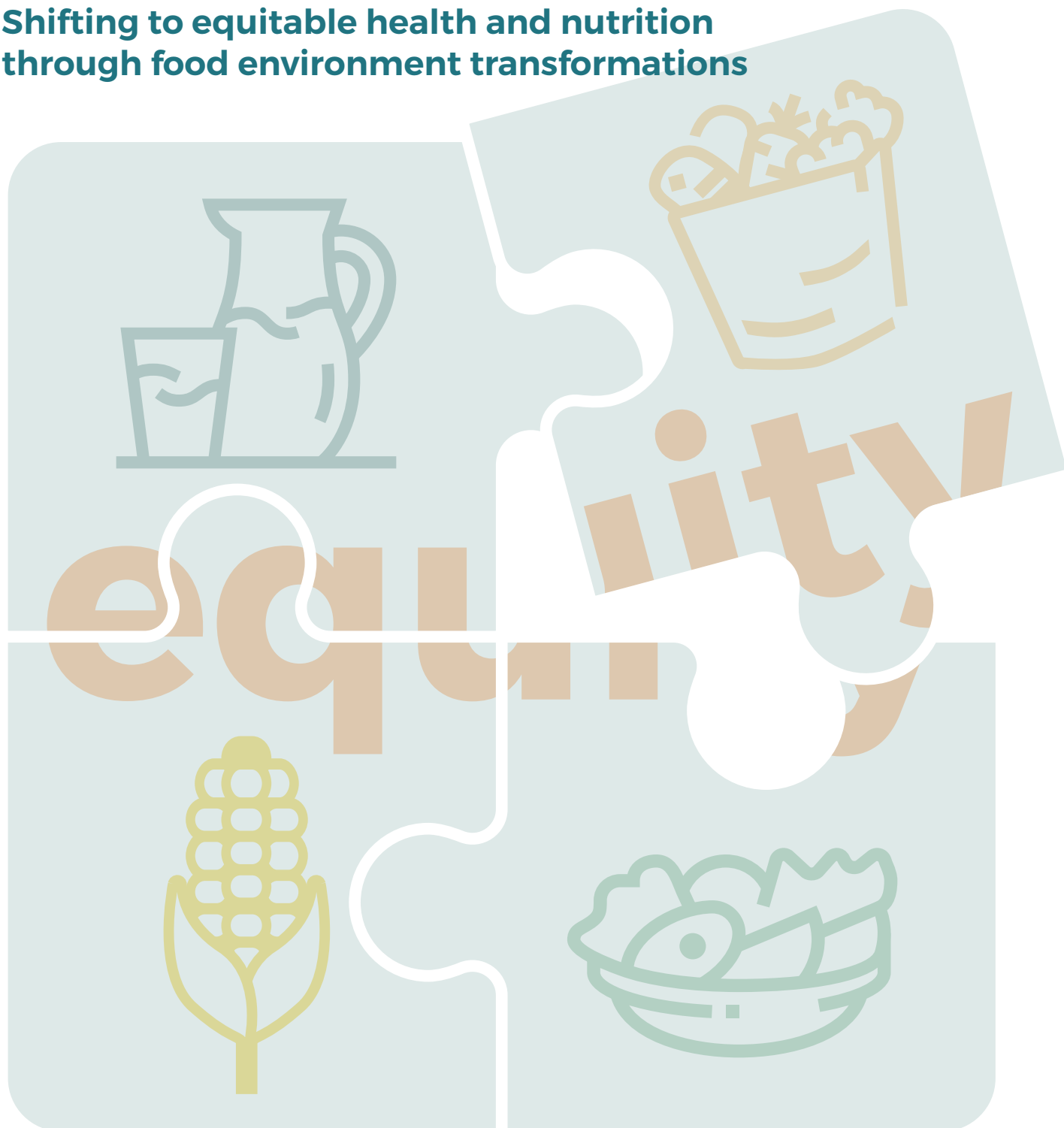


SHIFT Framework



Shifting to equitable health and nutrition
through food environment transformations



Brief for programme developers and managers working on health and nutrition



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Healthy food, good health for all

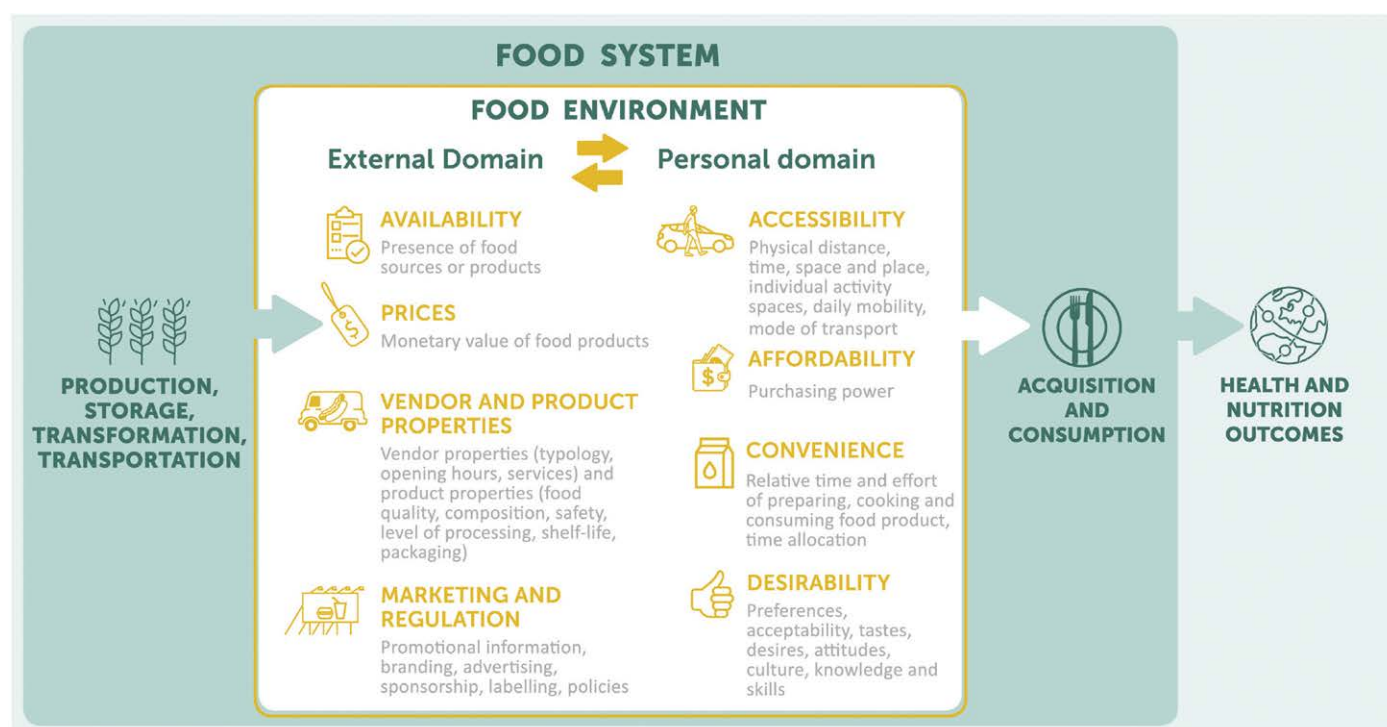
The global population is struggling with malnutrition in unprecedented ways. Co-existing problems of underweight, overweight and micro-nutrient deficiencies are interacting with climate-change, conflicts and other human and planetary factors that challenge health. A transformative change of our food environment is urgently needed to improve human and planetary health and well-being and to meet the [Sustainable Development Goals](#) (SDGs) ¹⁻³.

In particular the SDGs directly related to nutrition include zero hunger (SDG2), good health and well-being (SDG3), gender equality (SDG5), planetary health and the revitalization of the global partnership for sustainable development (SDG4, SDG17) ⁴. Food environments are of vital importance to achieve these SDGs. This brief aims to assist technical staff, such as programme developers and managers working on reaching the SDG goals.



Food environment refers to “the interface that mediates people’s food acquisition and consumption within the wider food system. It encompasses external dimensions such as the availability, prices, vendor and product

properties, and promotional information; and personal dimensions such as the accessibility, affordability, convenience and desirability of food sources and products” ⁵.

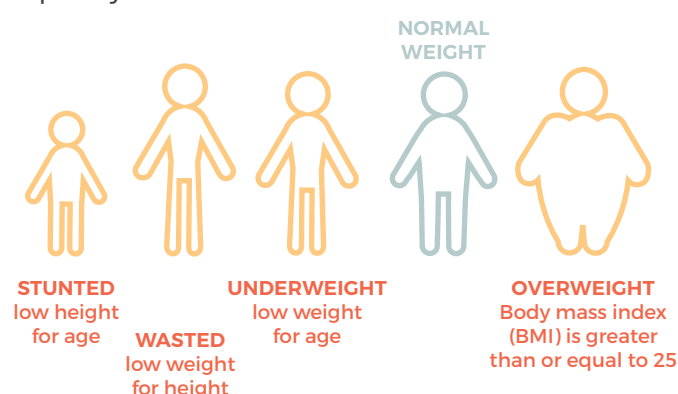


Conceptual framework of the food environment by the Agriculture, Nutrition and Health Academy Food Environment Working Group. The conceptual framework depicts the food environment as the interface within the wider food system. Key dimensions are mapped to external and personal domains. Interactions between these domains and dimensions shape people’s food acquisition and consumption. Source: Turner 2018. <https://doi.org/10.1016/j.gfs.2018.08.003>

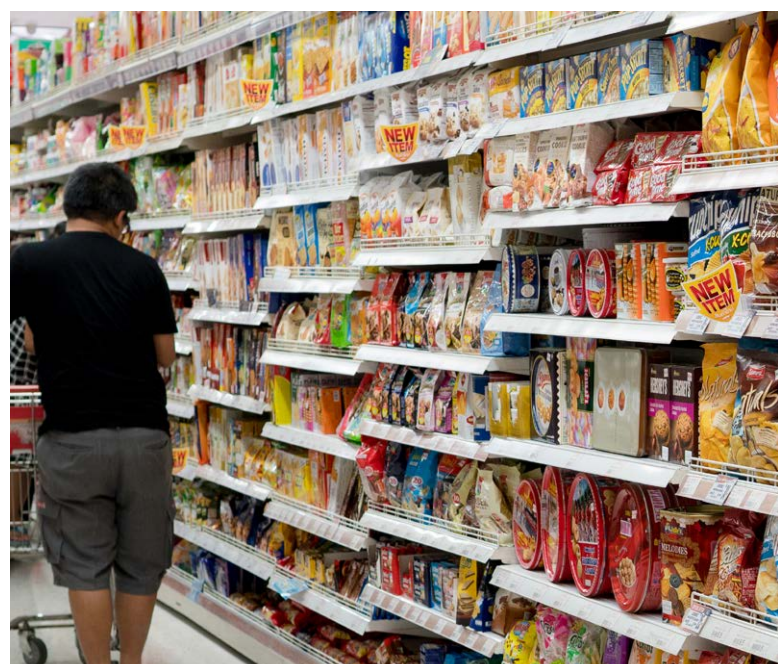


Currently, 1 in 9 people – 820 million worldwide – are hungry or undernourished⁶, and simultaneously, one-third of the world's adult population is overweight or obese⁷. In addition, there exists an unequal burden in terms of disease incidence, morbidity, mortality, survival, and quality of life between subgroups, related to the food environment. Persons at risk are those with diets that are high in unhealthy fats, low in fruit, vegetables, and whole grains, and high in salt. Combining nutritional adequacy with planetary health has been on the global health agenda for some time now, as emphasized by the [EAT-Lancet Commission on Food, Planet and Health](#). However, whether such a planet healthy diet, “the universal healthy reference diet” is affordable⁸ for the poorest across the globe or whether it is even nutritionally adequate⁹, especially with respect to animal-source foods for the under-nourished populations are some of the controversial questions that have been considered in this framework. These issues call for equity-focused action with respect to diets and food environments to ensure that the needs of the most vulnerable are explicitly considered.

Food environments are intricately related to the health and economic development of countries¹⁰. Investing in interventions to improve food environments for human health can therefore yield co-benefits for sustainable development¹¹; for example, providing free, healthy lunches to school children may support their educational performance, which in turn leads to better future employment opportunities and a stronger workforce. Transforming local food environments with such actions contributes to the food system transformation needed for improved planetary (e.g. climate change and pollution) and human health globally. A key success factor in this transformation is identifying the agents and factors with the greatest relative impact on facilitating change, premised on sustainable and equitable practices in local contexts¹².



There are different forms of malnutrition.



Why is food environment transformation an equity issue?

The food that people consume, particularly amongst the most vulnerable, is primarily determined by their food environments and not by 'choice'¹³. Food environments have different impacts on the health of populations, both positive and negative. Some groups are more exposed to unhealthy food environments than others. A lack of financial resources for example, decreases access to fresh fruit and vegetables. Therefore, inexpensive, low-nutrient, energy-dense food may be perceived as more attractive, placing low-income groups at a higher risk of diet-related diseases.

The right to equitable health and nutrition is based on a human rights framework that recognizes each person has the right to adequate and nutritious food. This involves access to the resources necessary to produce, earn and purchase food, not only to prevent hunger, but also to ensure good health and well-being. Food security policies and programmes require major paradigm shifts to elevate agency and sustainability

as essential dimensions of food for all, together with availability, access, utilization and stability¹⁴

Health equity is the notion that all people should have a fair opportunity to attain their full health potential, and that no one should be prevented from achieving this potential. Differences in health and nutrition status between groups are socially produced, systematic in their unequal distribution, avoidable and unfair.

“Policies that promote a radical transformation of food systems need to be empowering, equitable, regenerative, productive, prosperous and must boldly reshape the underlying principles from production to consumption. These include stronger measures to promote equity among food system participants by promoting agency and the right to food, especially for vulnerable and marginalized people.”¹⁵



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Promoting equity is therefore essential to delivering on the SDG promise of 'leaving no one behind'. Equity in health refers to fair access to resources and opportunities to achieve the best possible physical, emotional, and social well-being¹⁶. This translates to addressing the needs of vulnerable groups through actions that consider and evaluate equity^{17,18}. It also means involving representatives from vulnerable communities in the decision-making process to improve their food environments for better health and nutrition for all¹⁹.

SHIFT Framework

The SHIFT Framework was developed by an international [team of researchers](#) committed to assisting technical staff such as programme developers and managers to improve health and nutrition equity. The Framework seeks to mobilize high level commitment and promote coordinated multi-stakeholder processes throughout, including the review of progress and sharing of lessons learnt. This process complements existing initiatives and actions addressing malnutrition and diet-related noncommunicable diseases such as the WHO Global Noncommunicable Diseases Action Plan, Double Duty Actions, Global Nutrition Reports and the Healthy Food Index.

The SHIFT Framework consists of four steps: Step 1 is to **Map**, Step 2 is to **Engage**, Step 3 is to **Transform**, and Step 4 is to **Monitor**. For each step there is a yes or no question for making the decision as to what action to take and/or the next step to follow to move forward in the process.

The user can start and end at any of the four steps, depending on what step is most appropriate for the specific setting. Click on each green box in [figure 1](#) to see corresponding guiding questions.

To complement the steps, **good practice interventions** have been linked to each step (see the framework search tool on the [SHIFT Framework website](#)).

It is crucial to have a supportive environment for intersectoral action on health and nutrition. This requires stakeholder involvement as emphasised throughout the process. A [list of selected indicators](#) is provided for Step 1. Map.

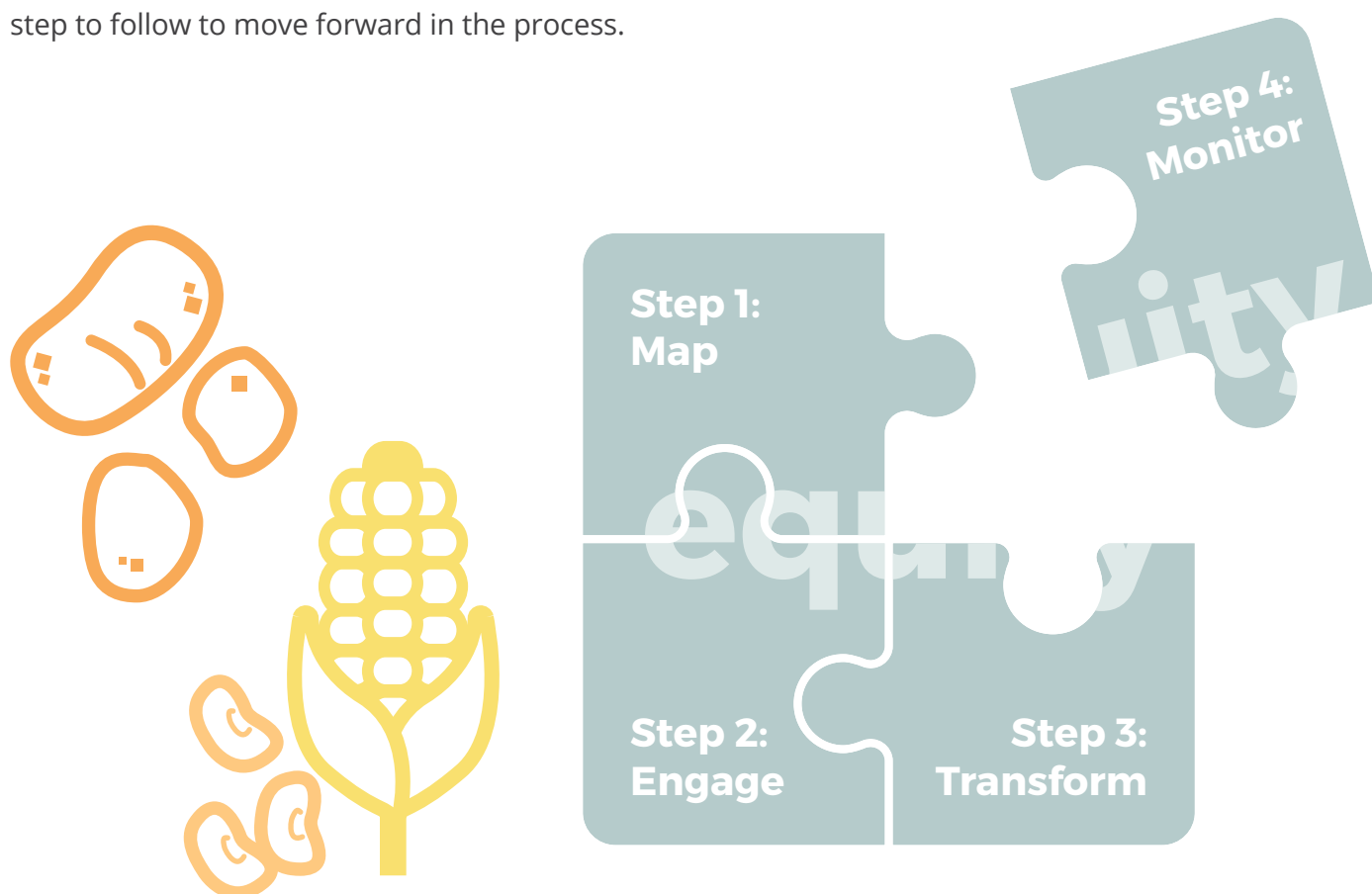
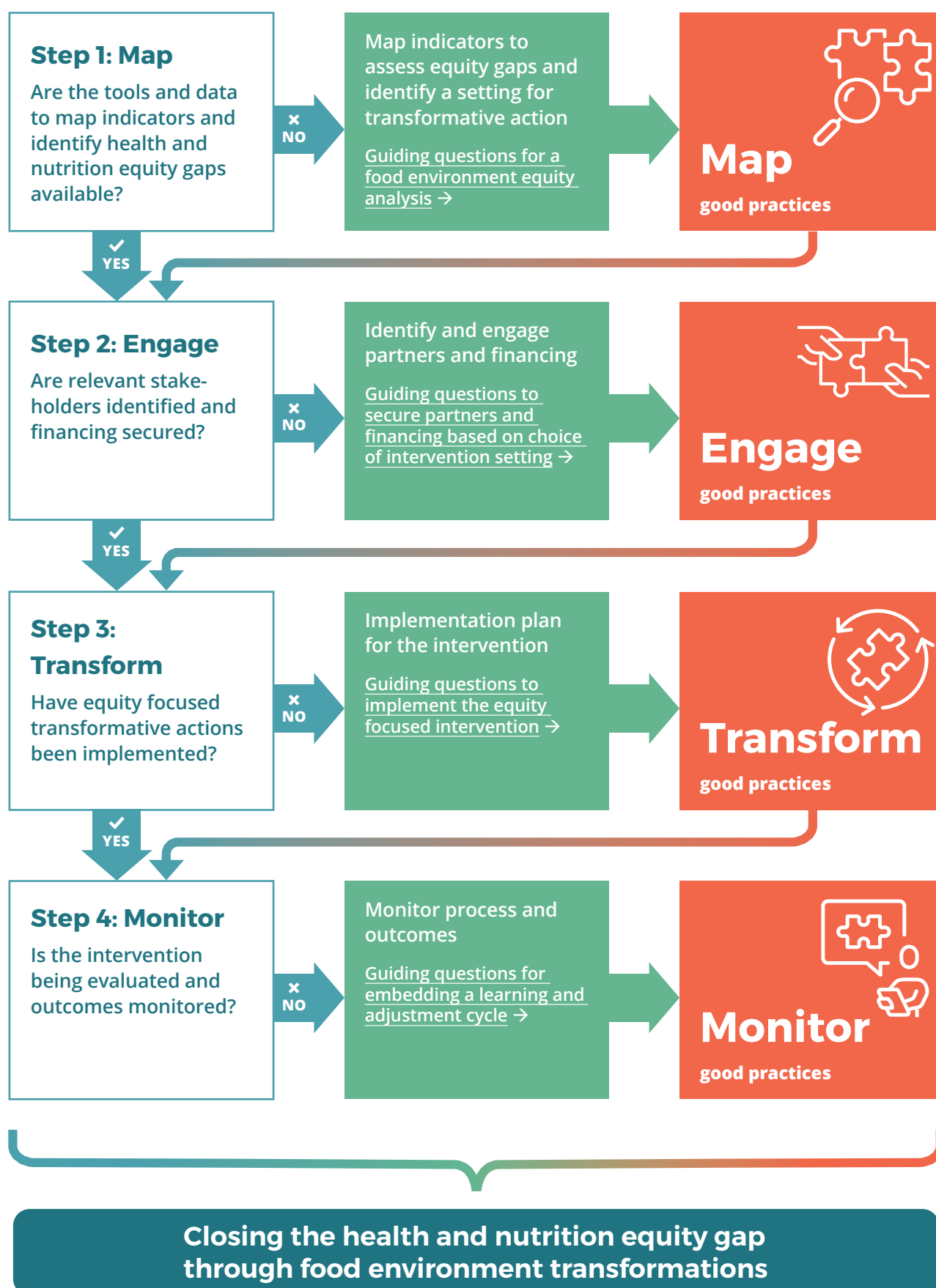


FIGURE 1. SHIFT Framework steps and good practices to identify and transform local food environments for equitable health and nutrition

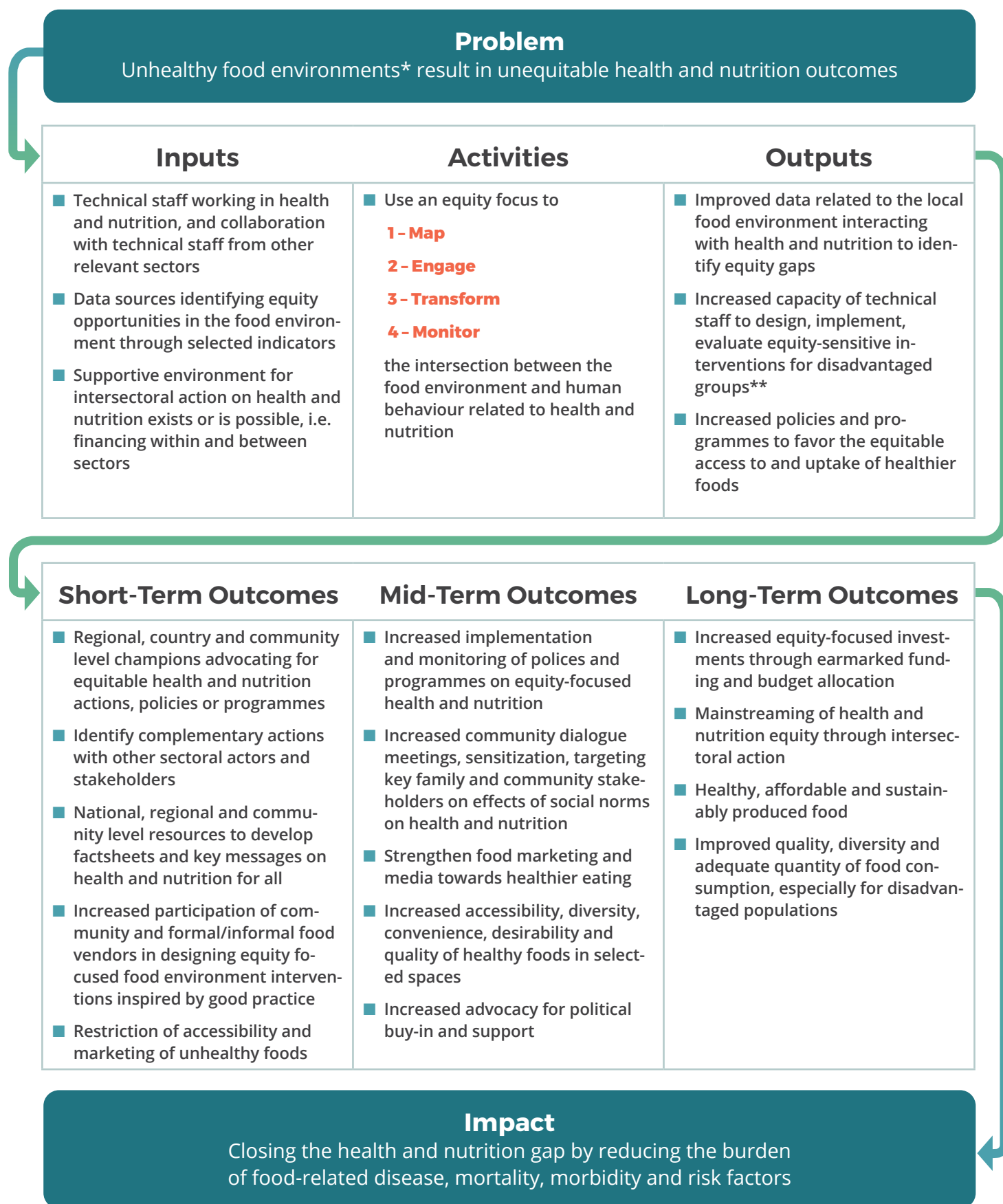


The Framework is based on a **Theory of Change** (ToC) focusing on the intersection between the food environment and human behaviour using an equity focus. The SHIFT ToC consists of a series of interconnected and interrelated steps

that are grouped into three phases. **Equity is the main focus**, and it can be approached through targeting settings such as schools, workplaces or community hubs, or through targeting specific vulnerable groups for transformative action.



FIGURE 2. SHIFT Framework – Theory of Change (ToC)



* Food environment: 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;

** Disadvantaged groups: populations at higher risk for unhealthy diets and poor health due to unfavorable social, political and environmental conditions (for example women, children, indigenous populations, disadvantaged migrants)

Guiding questions





Step 1: Map – guiding questions for undertaking a food environment equity analysis

Write your reflections in each box

<p>What is a health and nutrition problem affecting a disadvantaged group* in your setting?</p> <p>Perform an analysis of which health and nutrition problems exist in your context</p>	
<p>What is needed to measure progress?</p> <p>Choose relevant indicators to evaluate the problem e. g. prevalence of diet-related non-communicable diseases, consumption of fruit and vegetables</p>	
<p>What are the differences between groups and what determinants are involved in creating these differences?</p> <p>Analyse data and compare: are there differences between groups in terms of accessibility to and availability of healthy foods and what are the reasons, e.g- geographical location</p>	
<p>Who do we need to influence?</p> <p>Identify 2–3 actions that technical staff such as programme managers can do to help achieve the overall objective</p>	
<p>What is the impact you are aiming to achieve?</p> <p>Identify process indicators and short, midterm and longterm outcomes</p>	

* Disadvantaged groups are at higher risk for unhealthy diets and poor health due to unfavorable social, political and environmental conditions



Step 2: Engage – guiding questions to identify and engage with partners using an equity lens

Write your reflections in each box

What stakeholders are relevant to involve?

Identify stakeholders and reflect upon the importance of each stakeholder as well as their capacities, needs, power to influence and current openness to engagement based on how they can gain from participating.

Examples of stakeholders: national government, sub-national governments and independent actors (accountability institutions, civil society, community-based organizations, media)

How can these stakeholders contribute to achieve the objective?

Consider who should lead, and who could usefully assist with key activities.

Are financing structures in place to pay for the time and contribution of identified stakeholders and sectors?

What needs to be done to ensure that time and resources can be financed or exchanged smoothly between sectors or partners for defined activities?

How should an engaging partnership be designed?

Partnerships should be tactical and strategic, focusing on the common space between partners. Ideally partners are involved in all aspects of advocacy. Often the best partners are the ones that have been engaged right from the beginning, already in the mapping phase.



Step 3: Transform – guiding questions to structure financing and implement an evidence-based/informed health and nutrition equity intervention

Write your reflections in each box

<p>What evidence-based intervention will you implement?</p> <p>Consider different policy actions, such as empowerment, integration in programming, incentivization or regulation.</p>	
<p>What are the steps needed for the intervention?</p> <p>Define steps of action that ensure the intervention is implemented and anticipate what the potential barriers may be.</p>	
<p>What tools for communicating the objective and scope of the intervention will be used?</p> <p>Describe statements and goals. Consider the different audiences, their concerns and possible messages to them, as well as supporting materials and tools to facilitate uptake.</p>	
<p>What resources are needed for implementation?</p> <p>Consider both financial and human resources and whether political support is needed to ensure long-term financing. Existing task forces, stakeholder groups and coordination mechanisms should be identified and their capacities assessed. Existing budgets, both from national finances and donor resources, should also be reflected upon.</p>	



Step 4: Monitor – guiding questions for embedding a learning and adjustment cycle in the equity focused intervention

Write your reflections in each box

<p>What mechanism is in place for learning and adjusting the intervention based on lessons learned?</p> <p>Consider what feedback loops you can establish to ensure feedback is heard and addressed, including staff supervision and quality assurance.</p>	
<p>What are the components of the process flowchart to a nutritious diet?</p> <p>Consider the process flows i.e., identify barriers, facilitators and supportive actions in the activity flow required for people to consume a nutritious diet.</p>	
<p>Who will monitor how and if the intervention shows effectiveness?</p> <p>Consider that monitoring has to be done systematically to gather objective data to show whether or not the intervention is being implemented according to plan.</p>	
<p>How will you evaluate the intervention process to identify problems?</p> <p>Consider at what time intervals you will evaluate whether there is a need to change course in order to make the desired progress?</p>	
<p>How often will the intervention be evaluated and adapted?</p> <p>Consider that an evaluation needs to take place in the short, medium and long term. This process needs to be transparent in order to ensure sustainability in the future.</p>	

Selected Indicators





Selected indicators for **Step 1: Map**

Here are sample indicators that technical staff can consider for mapping health and nutrition equity and the local food environment:

Nutrition-related health

Domains	Indicators
Health and nutrition	<p>Potential end-line health and nutrition indicators (Demographic and Health Services (DHS) Program):</p> <ul style="list-style-type: none"> ■ Prevalence of stunting (low height-for-age) in children under 5 years of age ■ Prevalence of wasting (low weight-for-height) in children under 5 years of age ■ % infants born with low birth weight ■ % women of reproductive age (15–49 years) with anaemia ■ % persons overweight <p>Potential intermediate health and nutrition indicators:</p> <ul style="list-style-type: none"> ■ Minimum Acceptable Diet (MAD) for children 6-23 months old 1 of 8 core indicators for assessing infant and young child feeding (IYCF) practices, composite indicator composed of the Minimum Dietary Diversity (MDD) and Minimum Meal Frequency calculated separately for breastfed and non-breastfed children ■ Dietary diversity Scores (choose the relevant one): Household Dietary Diversity Score (HDDS); Individual Dietary Diversity Score (IDDS); Minimum Dietary Diversity Score for Women (MDD-W). ■ Nutrition literacy & Maternal nutrition literacy ■ Food and nutrition literacy (FNLIT) in elementary school children ■ Educational attainment of women of reproductive age (National equity atlas) ■ Food security index based on food affordability, availability, quality and safety
Economic vitality at country level	<p>Potential indicators:</p> <ul style="list-style-type: none"> ■ Poverty (National equity atlas) ■ Unemployment (National equity atlas) ■ Median household income/expenditure (DHS)

Food environment

INFORMAS (International Network for Food and Obesity / Noncommunicable Diseases (NCDs) Research, Monitoring and Action Support) is a global network of public-interest organisations and researchers that aims to monitor, benchmark and support public and private sector actions to increase healthy food environments and reduce obesity and NCDs and their related inequalities.

Domains	Indicators
Food composition (Nutrition profile)	<p>Nutrition profile of sentinel foods (i.e. the 20 most consumed foods among a particular population with a focus on disadvantaged groups):</p> <ul style="list-style-type: none"> ■ Energy density: amount of energy or calories in a particular weight of food; generally presented as the number of calories per gram ■ Salt ■ Sugar ■ Trans fats <p> Case study of the food supply in New Zealand Case study in 12 countries Case study California Case study Montreal and Quebec city </p>
Food labelling	<p>Key question: What is the impact of health-related labelling for foods and non-alcoholic beverages on different population groups?</p> <p>Potential indicators:</p> <ul style="list-style-type: none"> ■ Proportion of foods with a list of ingredients ■ Proportion of foods with a nutrient declaration ■ Proportion of foods with supplementary nutrition information (SNI) ■ Proportion of foods making a nutrition claim ■ Proportion of foods with nutrition claims referencing noncommunicable diseases ■ Proportion of foods making a health claim <p>Case study Thailand</p>
Food promotion	<p>Key question: What is the exposure and power of promotion of unhealthy foods and non-alcoholic beverages to different population groups?</p> <p>Potential indicators:</p> <ul style="list-style-type: none"> ■ Rate of unhealthy food advertising per 100m² within 500 metres from the school boundary ■ Mean rate or frequency of advertisements (all advertisements) per channel per hour ■ Mean rate or frequency of food vs non-food advertisements per channel per hour ■ Mean rate or frequency of core vs non-core food advertisements per channel per hour ■ Proportion of food advertisements by major food categories <p>Case study Costa Rica</p>

Food provision	<p>Key question: What is the nutritional profile of foods and non-alcoholic beverages provided in different settings (e.g. schools, hospitals, workplaces)?</p> <p>Potential indicators:</p> <ul style="list-style-type: none"> ■ Number of nutrition policies/programmes that exist within the country ■ Quality assessment of foods provided or sold in public sector settings relative to existing national or sub-national nutrition standards or voluntary guidelines ■ Percent of schools or other publicly funded institutions that implemented the policy or programme ■ Percent of schools or other publicly funded institutions complying with the policy or programme <p>Case study hospital patient menus Canada</p>
Food retail	<p>Key question: What is the availability of healthy and unhealthy foods and non-alcoholic beverages in communities and within retail outlets?</p> <p>Potential indicators:</p> <ul style="list-style-type: none"> ■ Density of healthy and unhealthy food outlets ■ Proximity of healthy and unhealthy food outlets to homes/schools ■ Availability of healthy and unhealthy foods in-store ■ Compliance with local policies, guidelines or voluntary codes of practice ■ Impact of changes to retail food environments on health outcomes, such as obesity <p>Case study Malta</p>
Food prices	<p>Key question: What is the relative price and affordability of 'less healthy' vs 'healthy' foods, meals and diets? What is the cost of a healthy food basket?</p> <p>Guiding notes:</p> <ul style="list-style-type: none"> ■ Minimal: price difference between of 'healthy' and 'less healthy' foods ■ Expanded: price difference between 'healthy' and 'less healthy' diets ■ Optimal: monitor food affordability by taking into account household income <p>Case study Argentina</p>
Food trade & investment	<p>Key question: What are the impacts of trade and investment agreements on the healthiness of food environments?</p> <p>Guiding notes:</p> <ul style="list-style-type: none"> ■ Set up guiding principles and recommended procedures for data collection and analysis, and quantifiable 'minimal', 'expanded' and 'optimal' measurement indicators to be tailored to national priorities, capacity and resources <p>Case study Fiji</p>

Good practice examples





Good practice example for **Step 1: Map**

For more examples of good practices, see the full [Compendium](#).



Guatemalan school food environment: impact on schoolchildren's risk of both undernutrition and overweight/obesity

Country

Guatemala

WHO region

Americas

Step

Map

Country income level

Middle-income

Study setting

Low-income

Action area

Selected spaces,
Vulnerable groups

Case summary

In this good practice the school food environment was mapped through observations and interviews in low-income elementary schools in Guatemala. In the country, children are affected by unhealthy and insufficient food and there is a problem of increasing childhood overweight and obesity and at the same time there are high rates of undernutrition. In order to understand the school food environment's impact on undernutrition and overweight, the investigators mapped the food bought from school kiosks, food brought from home, food bought in the street, and food provided to the children by the school, through observations in the schools and in interviews with school principals, food kiosk vendors and children. The aim was to see if the environment is appropriate given the risk of overweight and undernutrition.

Lessons learned

- **Programs** must be implemented during infancy and early childhood to prevent undernutrition
- **Policies** focused on nutrition standards of the school food programs to prevent overweight/obesity is recommended
- **Policies** regulating the products being sold on school grounds to prevent overweight/obesity is recommended
- **Educating** parents and students on nutrition is useful

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[Link to scientific publication \(English\)](#)

Year published

2015

Equity focus

targets low-income elementary schools in Guatemala, both undernutrition and overweight/obesity; includes input from children and food environment



Good practice example for **Step 2: Engage**

For more examples of good practices, see the full [Compendium](#).



Increasing knowledge of food deserts in Brazil: The contributions of an interactive and digital mosaic produced in the context of an integrated education for sustainability program

Country

Brazil

WHO region

Americas

Step

Engage, Map

Country income level

Middle-income

Study setting

Middle-income

Action area

Selected spaces

Case summary

Educational institutions can play an important role in spreading knowledge about major social challenges, such as poor diets leading to poor health. In Brazil, business and public administration students enrolled in an undergraduate course called “Integrated Education for Sustainability” got to conduct a project on food deserts. Through challenging them to develop a method to map the situation of food deserts, the students developed a digital and interactive mosaic, to uncover the situation of food deserts in the city. The project resulted in increased knowledge about food deserts and a free website on the topic.

Lessons learned

- **A pedagogical approach** that helps students to build higher quality relationships and extend the paradigm of perception and interpretation of reality, which is crucial to deal with multifaceted problem such as food deserts

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[Link to report \(English\)](#)

Year published

2018

Equity focus

targets food deserts in a middle-income urban setting, digital and interactive mosaic by undergraduate students



Good practice example for **Step 3: Transform**

For more examples of good practices, see the full [Compendium](#).



Advancing healthy and sustainable food environments: The Flathead Reservation case study

Country

United States

WHO region

Americas

Step

Transform, Map

Country income level

High-income

Study setting

Low-income

Action area

Vulnerable groups

Case summary

In this good practice from the United States, an approach to evaluate and improve food environments in a indigenous community is described. A research community partnership was built and the food environment was evaluated. The findings of the evaluation guided the design and implementation of contextualized, multifaceted food environment interventions to improve the food environment.

Lessons learned

- **Food environment measurements** should be multifaceted and context-specific
- **Food desirability**, including sensory attributes, diversity and phytonutrient quality, are important but overlooked aspects of the food environment
- **Successful food-environment interventions** are community-based and incremental
- **Food-environment interventions** should seek to forge links with existing institutional structures to influence policy
- Findings from food-environment interventions should be disseminated in various ways to **diverse stakeholders**.

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[Link to scientific publication \(English\)](#)

Year published

2019

Equity focus

targets an indigenous community to improve the food environment based on a research community partnership



Good practice example for **Step 4: Monitor**

For more examples of good practices, see the full [Compendium](#).



Extent of implementation of food environment policies by the Malaysian government: gaps and priority recommendations

Country

Malaysia

WHO region

Western Pacific

Step

Monitor, Map

Country income level

Middle-income

Study setting

Middle-income

Action area

Selected spaces,
Vulnerable groups

Case summary

In this good practice from Malaysia, the local government's implementation of food environment policies was compared to international good practice and policy action proposed to improve the food environment. The Healthy Food-Environment Policy Index (Food-EPI) is a tool comprising 47 indicators of government policy practice related to the food environment.

Lessons learned

- **A number of gaps** in implementation of key policies to promote healthy food environments were identified

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[Link to report \(English\)](#)

Year published

2018

Equity focus

targets gaps in the food environment policy by the Malaysian government as a means to improve the food environment for all citizens

Glossary, references, contributors



Glossary of terms¹

Action settings: Physical spaces defined by geographic, functional and regulatory boundaries where interventions can disproportionately reach target populations and equity can have larger gains such as, schools, workplaces, elderly homes, community hubs, etc.

Double-duty actions: Interventions, programmes and policies that have the potential to simultaneously impact both ends of the malnutrition spectrum, i.e., reduce the risk or burden of both undernutrition (including wasting, stunting and micronutrient deficiency or insufficiency) and overweight, obesity or diet-related NCDs. For more information, [link](#).

Equity-focused actions: Equity-focused actions refer to interventions and policies that aim at reducing inequalities in order to level up outcomes. This can be done by focusing on the most vulnerable groups (targeting) and by policies that are universal but implemented at a scale and intensity according to the level of need (proportionate universalism).

Food environment: 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.

Food security: Food security exists when all people, at all times, have physical, economic and social access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Food systems: encompass 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.

Good practice: an exemplary intervention that through experience in a real life setting has proven to reliably achieve results in terms of adequacy (ethics and evidence) and equity as well as effectiveness and efficiency related to process and outcomes. These interventions may be contextualized and scaled up so as to benefit more people. This process of expansion and scaling up of successfully tested best practices requires strategic planning.

Health: State of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of ethnicity, religion, political belief, economic or social condition.

Health equity: Absence of avoidable or remediable differences in health within and between groups of people, whether those groups are defined socially, economically, demographically or geographically.

Malnutrition: Both ends of the nutrition spectrum from undernutrition (including stunting, wasting, underweight and micronutrient deficiencies) to overweight and obesity, both predisposing to and co-existing with diet-related NCDs.

¹ Adapted from the [Food and Agricultural Organization of the United Nations](#) and the [Global Nutrition Report](#)

Noncommunicable diseases (NCDs): diseases that are the result of a combination of genetic, physiological, environmental and behavioural factors, often of long duration and referred to as chronic diseases. The five NCDs in focus in the WHO's 5x5 matrix are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma), diabetes, and mental and neurological conditions. Four of five NCDs are directly related to four of ten global nutrition targets adopted at the World Health Assembly in 2013, to be attained by 2025.

Nutrition: Nourishment or energy that is obtained from food consumed; the process of consuming the proper amount of nourishment and energy.

Nutrition equity: Equal access to nutritious and culturally appropriate food, regardless of geographic location, age, gender, ethnicity, education and wealth.

Socio-economic determinants of health: Many factors combined affect the health of individuals and communities. Health outcomes and health inequalities are influenced by the social, cultural, economic, environmental and political determinants of health – the conditions in which we are born, grow, live, work and age. Collectively these are called Social Determinants of Health.

Sustainable food system: 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; it is profitable throughout (economic sustainability), has broad-based benefits for society (social sustainability) and a positive or neutral impact on the natural environment (environmental sustainability).

Vulnerable populations: Populations at a higher risk for unhealthy diets and poor health due to unfavourable social, political and environmental conditions, such as women, children, indigenous populations, disadvantaged migrants, etc.



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