



Thinking Strategically About Nutrition

An Introduction to Key Issues in the
Context of HIV and Tuberculosis

April 2019



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ABBREVIATIONS

ART	antiretroviral treatment
CD4	cluster of differentiation 4—type of T cells
CMAM	community-based management of acute malnutrition
EBF	exclusive breastfeeding
IYCF	infant and young child feeding
LiST	Lives Saved Tool
MAM	moderate acute malnutrition
M&E	monitoring and evaluation
NACS	nutrition assessment, counseling, and support
PHFS	Partnership for HIV-Free Survival
PLHIV	people living with HIV
PMTCT	prevention of mother to child transmission (of HIV)
RUTF	ready-to-use therapeutic food
SAM	severe acute malnutrition
SDG	Sustainable Developments Goals
TB	tuberculosis
WASH	water, sanitation, and hygiene
WBCi	World Breastfeeding Cost Initiative
WHO	World Health Organization

INTRODUCTION

The primary purpose of this document is to encourage a more robust dialogue on the value and process of thinking strategically about nutrition, particularly at the national level. This dialogue should involve the full range of stakeholders who have—or should have—an interest in the multisectoral benefits of an effective national nutrition program: government representatives from relevant ministries (e.g., health, agriculture, social services, and economic development), civil society representatives, funding organizations, and individual and community beneficiaries of nutrition programs.

A more robust dialogue is needed for three fundamental reasons. First, the world is not on course to meet the global nutrition targets for mothers, infants, and young children, which the World Health Assembly adopted in 2012 (World Health Organization [WHO], 2014). Second, nutrition is a cornerstone of the Sustainable Development Goals (SDGs), which were adopted by the international community in 2015 (United Nations, 2015). And third, nutrition remains an under-recognized and underused tool to improve the health and well-being of national populations, which in turn has a direct impact on a country's socioeconomic prosperity.

The core objective of a robust national dialogue is to support the development of practical, proactive, and long-term nutrition programs that not only will enable a country to meet the World Health Assembly targets and the SDGs but also leverage the power of nutrition to improve the overall quality of life for individuals, families, and communities.

MEASURE Evaluation, funded by the United States Agency for International Development (USAID), originally designed this document to explore the links between nutrition and HIV and tuberculosis (TB), because such a significant amount of development funding flows to these two diseases. However, as the global response to HIV and TB continued to evolve, it became increasingly clear that looking beyond these links to the larger strategic role of nutrition was equally important. References to the links between nutrition and HIV and TB are included in this document, because they are valuable examples of how an integrated approach is inherently more strategic, beneficial, and cost-effective.

This document is not prescriptive. It acknowledges that national context, national capacity, and national priorities are fundamental to any discussion about the strategic role of nutrition in a country. It recognizes that strong national leadership and broad engagement with country stakeholders are vital to the development and implementation of a practical and productive strategy. It also acknowledges that many countries have nutrition strategies in place but are grappling with how to move them forward.

When thinking strategically about nutrition, it is essential to consider national context, national capacity, and national priorities.

A challenge for many countries in thinking strategically about nutrition is that funding for nutrition projects tends to be both limited and narrowly focused, owing largely to the fragmented and/or short-term approaches to nutrition that have limited its reach and impact, particularly considering the long-standing siloed approach to diseases such as HIV and TB. Available monies are often allocated to specific—and, in many cases, emergency—projects that are a priority for the funding partners, making it difficult for nutrition to gain any traction as a core component of national health strategies and programs.

Developing, adopting, and implementing a more comprehensive and crosscutting national nutrition strategy is likely to be an iterative process that requires collecting and using credible data, implementing activities, demonstrating results, and building consensus. That process also requires planners to think openly and innovatively about the issues, recognizing that the emerging nexus of

nutrition, health, agriculture, education, environment, and industry presents unprecedented opportunities for long-term, high-impact improvements.

The issues, questions, and discussion points presented here are designed to help spark more-strategic discussions about the larger role of nutrition in improving the overall quality of life for individuals, families, and communities. They can also facilitate discussions about specific approaches to engage stakeholders and build broader support for nutrition, including the design and implementation of multilateral and bilateral initiatives.

Readers are encouraged to think about how the issues and approaches in this document might apply to their situation and how they could be adapted to work best in their setting. Readers are also encouraged to take full advantage of existing mechanisms and methods to advance the agenda in their countries. For example, if an effective approach to stakeholder engagement is already in place, use it. Don't waste resources on developing an alternative approach. Similarly, if a functioning donor network exists in your country, tap into it. There is no need to develop a parallel one.

The principles for conducting a Joint Assessment of National Health Strategies (JANS) as agreed by the partners in International Health Partnership plus (IHP+) are useful points of reference for thinking strategically about nutrition:

- Be driven and led by the country
- Build on existing in-country processes and experiences
- Have a strong independent element
- Be inclusive, involving civil society and other stakeholders in the health sector

Source: World Health Organization, 2015.

WHY IS IT IMPORTANT TO THINK STRATEGICALLY ABOUT NUTRITION?

Nutrition has a significant impact on the health and quality of life of all people. This impact is most profound when an integrated and sustained national-level nutrition program that focuses squarely on beneficiaries acknowledges the importance of nutrition to people's health and well-being. To ensure a national program has the necessary level of integration and sustainability, it must follow a strategic approach that is thoughtful and comprehensive. Specifically, this means identifying the long-term goals and the critical priorities of an effective program as well as the means of achieving these goals and priorities, including broad political support, strong technical capacity, and adequate funding.

The ability to develop, implement, and monitor a practical, relevant, and coordinated strategy is particularly important when making a case for external/donor support of a nutrition program. Activities across the strategy should be aligned, linked, and leveraged, to ensure resources allocated to nutrition lead to positive and sustained outcomes. An emphasis on integration also focuses attention on opportunities to combine activities, both within the nutrition arena and extending across other areas, such as agriculture, education, and environment. This approach is in direct contrast to strategies designed around short-term initiatives, narrowly focused approaches, and pilot projects, which historically have not led to the lasting improvements in health outcomes that nutrition programs can and should provide.

Box 1. A few reasons to think strategically about nutrition

- Malnutrition and poor diets are **the primary drivers** of the global burden of disease.
- **Forty-five percent of deaths of children under age five** are linked to undernutrition.
- Out of 667 million children under the age of five, **150.8 million children (22.2%) are stunted**, 50.5 million children (7.5%) are wasted, and 38.3 million (5.6%) are overweight.
- Twenty-nine percent of countries face **high levels of all three types of malnutrition**: childhood stunting, anaemia in women of reproductive age and overweight among women.
- Estimates suggest that malnutrition in all its forms could cost society up to US\$3.5 trillion per year.
- Preventing malnutrition delivers **\$16 in return on investment for every dollar spent**.
- Out of 169 total targets in the SDGs, there is **only one nutrition target**.

Sources: Development Initiative, 2018 and International Food Policy Research Institute, 2015 and 2016.

Box 2. Stand-alone or distributed strategy?

When thinking strategically about nutrition, decide whether a stand-alone or distributed strategy is better suited to your situation. **A stand-alone strategy** tries to encapsulate the critical issues in a master plan with responsibilities allocated centrally to different stakeholders. Conversely, **a distributed strategy** tackles critical issues, by recognizing that needs and opportunities are best addressed where they occur by the most capable and credible stakeholder.

Development challenges have historically been tackled using stand-alone strategies that focus on specific issues or sectors. In many cases, stand-alone strategies have led to dramatic improvements in their targeted areas. However, in recent years, the focus on specific issues has, in many settings, led to a glut of stand-alone strategies at the national level, many of which have limited value outside of the political arena. For example, these strategies may include goals or guiding principles, but they are not translated into practical or actionable plans. As a result, many of them are not implemented or they are implemented poorly.

One challenge associated with a stand-alone strategy is that the consensus required to finalize it can be difficult and time-consuming to reach. The compromises required to reach a consensus may also undermine the accuracy and integrity of the strategy. At a minimum, the inevitable negotiations over a stand-alone strategy can lead to a more generic end product, which limits its value and utility. In addition, stand-alone strategies often require formal approval, which can itself be a drawn-out process, further delaying the implementation of key activities.

A distributed strategy is built on the premise that different stakeholders in a specific issue have different mandates, priorities, timetables, resources, etc. These differences make it difficult—and potentially unproductive—to align stakeholders' interests and capacity in a single, stand-alone strategy. As mentioned above, a distributed strategy recognizes that needs and opportunities are best addressed where they occur.

For example, a distributed strategy for nutrition could include the nutrition-related components of the core strategies of each of the key stakeholders (e.g., ministries, departments, multilateral organizations, funding partners, and implementing partners). It is essentially a network of strategic nodes that collectively addresses the full range of needs and opportunities.

A fundamental challenge with a distributed strategy is to ensure its quality across the different stakeholders. It is equally challenging to minimize overlaps and integrate activities into a cohesive program without the centralized control that typically comes with a stand-alone strategy. Despite these challenges, a distributed strategy can be highly effective in mobilizing stakeholders to act, because they retain more direct control over their decisions, actions, and resources.

Distributed strategies are particularly well suited for tackling multisectoral issues, given the intrinsic diversity and disparities associated with these issues. For example, a distributed strategy is more flexible and responsive, because it empowers stakeholders in the different nodes; it respects their knowledge and experience; and it leverages their resources and capacity. A distributed strategy can easily and effectively be implemented in stages within and across sectors, based on the short- and long-term needs and opportunities within the different nodes. It also encourages communication and collaboration across nodes, which are vital for improving the performance, quality, and coverage of critical interventions.

Nutrition is fundamentally a multisectoral issue. It can positively influence outcomes in a wide range of sectors, including agriculture, education, environment, health, and industry. In addition, effective nutrition programs are inherently collaborative ventures, which are more successful and more sustainable when coordinated with complementary programs in areas such as water, sanitation, and hygiene. Consequently, **nutrition is an excellent arena for a distributed strategy.**

The Essential Role of Nutrition in Health

Nutrition is not an adjunct to health nor should it be seen solely as an add-on or supplemental component of health-related programs. Nutrition has a fundamental and essential role in the health of individuals and populations and this role should be at the core of a national health strategy, regardless of the country. Its scope ranges from addressing malnutrition and obesity to preventing and treating infectious diseases, noncommunicable diseases, and chronic diseases.

An effective nutrition strategy and program should include both nutrition-specific and nutrition-sensitive elements. Fundamentally, nutrition-specific interventions focus on the immediate determinants of malnutrition, and nutrition-sensitive interventions address the underlying causes of malnutrition. Both types of interventions are well-documented, and their contributions are widely acknowledged.

Table 1. Examples of nutrition-specific versus nutrition-sensitive interventions

Nutrition-specific	Nutrition-sensitive
Addressing the immediate determinants of undernutrition and overnutrition	Addressing the underlying causes of undernutrition and overnutrition
Balanced energy and protein supplementation	Child protection
Dietary diversification	Education
Folic acid supplementation or fortification	Food security
Management of SAM and MAM	Health services
Multiple micronutrient supplementation	Social safety nets
Promotion of breastfeeding	Water and sanitation

SAM: severe acute malnutrition
MAM: moderate acute malnutrition

An inclusive and integrated nutrition strategy can have significant operational benefits for national health programs. For example, nutrition assessments and referrals are non-stigmatizing and they are not gender-specific, which makes them inherently more welcoming and less intimidating than other entry points to the health sector. For example, a nutrition assessment can be an opportunity to encourage people to be tested for HIV early—far earlier than an AIDS-defining event, which continues to be the trigger in many cases. In addition, a basic nutrition assessment can open the door to other vital tests at the clinic level (e.g., blood pressure or blood sugar tests). In terms of health outcomes, nutrition-related factors such as weight, body mass index (BMI), and diet are also important considerations when designing and following various treatment regimens, including those for HIV and TB.

To continue to build the case for developing, funding, and implementing a comprehensive national strategy, countries should develop and strengthen systems to collect more and better data on the many contributions of nutrition.

An inclusive approach to a national nutrition strategy is also an opportunity to remind stakeholders and decision makers about the fundamental importance of nutrition and its wide-ranging contributions to individual and population-level health and well-being. Many existing nutrition strategies focus primarily on mothers and children, because of the level of need and the vulnerability of these groups; however, an inclusive strategy recognizes the importance of nutrition to the health and well-being of all people, including mothers and children.

In resource-constrained settings, it is unlikely that funds will be available to support every aspect of a broad nutrition strategy, but it is still important to include a complete set of relevant issues and initiatives in the strategy. In fact, it would be a serious mistake to create a nutrition strategy that only includes fundable elements. If nutrition is to be an integral part of a national commitment to healthy and productive people, the nutrition strategy must make a strong case for the essential—and encompassing—role of nutrition in health, even if the capacity to implement it or the resources to fund it does not currently exist.

Utility of a Strategic Approach in Designing, Implementing, and Sustaining an Effective National Nutrition Program

An effective nutrition strategy is not theoretical. It is a practical approach to use nutrition to improve and maintain the health and well-being of a country's citizens. The strategy should be based on a sensible assessment of the issues and backed by credible evidence. It should have clearly defined goals, and it should include a realistic action plan to achieve them. The action plan should be built around a focused list of objectives linked to core activities and based on sound logic models or theories of change. The action plan should also include critical details, such as the target population and key implementing partners.

If a distributed approach to a nutrition strategy is used, it is important that these basic elements apply to each node of the distributed strategy. In other words, each of the stakeholders in the distributed strategy who will be implementing nutrition-related activities should have a basic strategy that includes the critical elements: assessment, evidence, goal or goals, action plan, etc.

The fact that a national strategy is inclusive and integrated does not mean components of the strategy cannot be prioritized. The ability to prioritize goals, objectives, and activities is important and should be an integral part of developing and implementing a strategy. One advantage of a distributed strategy is that priorities can and should be identified by sector, stakeholder, and node, as well as across the overall strategy.

A good strategy is never developed and then set aside; it is used to guide thought and action around a program, from the earliest stages of planning through implementation, assessment, improvement, and ensuring sustainability. It is used to track whether the necessary activities are being implemented and specific objectives and goals are being achieved. A good strategy is used to direct and track resource flows. This includes assessing their effectiveness and understanding how they are being leveraged and coordinated. Ultimately, the measure of a good strategy is its ability to improve the health and well-being of a population.

A good strategy is also reviewed regularly and updated as necessary to ensure it reflects changing circumstances and evidence. Although it is vital for a strategy to have a longer-term perspective, it must not be unchangeable. There is a growing awareness that traditional “five-year” strategies must be flexible if they are going to remain relevant in a world of ever-evolving situations and circumstances.

In addition, the importance of thinking strategically about implementation should not be overlooked or underestimated. A good strategy demands good execution. This is why it is essential to engage with beneficiaries, to listen to implementers, and to learn from what has and hasn't worked in the clinics, schools, offices, factories, farms, etc. where activities are going to be conducted. If the strategy cannot be directly linked to improvements in the lives of the intended beneficiaries, the strategy—and the actions that flow from it—should be rethought. (This approach mirrors quality-improvement practices, currently being implemented in health settings, which identify practical changes in approach or process that improve outputs, outcomes, and impact.)

One benefit of a good nutrition strategy is that it demonstrates a long-term commitment to addressing an issue (or set of issues) while also mapping out, in general terms, what will be done. For countries looking for external

support for programs, a good strategy is an essential component of any justification, rationale, or “business case” for this support.

A country’s commitment to a national nutrition strategy must be matched by a commitment to effective monitoring and evaluation (M&E) of the strategy and its implementation. This requires identifying practical ways to collect meaningful data and ensuring the capacity exists to properly analyze and use the data to understand and improve the performance of nutrition programs. The approach to M&E should be straightforward, relying as much as possible on existing registers, indicators, and systems to collect data and minimize the reporting burden on frontline staff. The approach should also take full advantage of other M&E tools, such as surveys and special studies to collect relevant data points. Ultimately, the value of M&E is its ability to help stakeholders and decision makers understand what is being done, why it matters, and how it can be improved.

Box 3. Considerations in setting targets for a national nutrition strategy

In general, a national strategy should be **aligned with international norms, standards, and agreements**, including relevant guidelines, best practices, and targets.

One example is the 2025 global targets for improving maternal, infant, and young child nutrition, which were endorsed by the World Health Assembly in 2012:

- 40% reduction in the number of under-5 children who are **stunted**
- 50% reduction of **anaemia** in women of reproductive age
- 30% reduction in **low birth weight**
- No increase in **childhood overweight**
- Increase the rate of **exclusive breastfeeding** in the first 6 months up to at least 50%
- Reduce and maintain **childhood wasting** to less than 5%

When considering these targets as part of a national nutrition strategy, it is also important to look at the performance of countries against them. Data available on the five targets that can be tracked with existing systems indicate that **key indicators are still off-course** among countries with data.^a In addition, a high percentage of countries have **no data**. The 2018 Global Nutrition Report (Development Initiatives, 2018), which looked at the **194 United Nations member nations committed to achieving the targets by 2025, reported:**

- **Only 51 countries are on course or have made some progress to reduce stunting**, compared to 16 countries that have made no progress or are worsening. (127 countries have no data.)
- **Only 49 countries have made some progress to reduce anaemia**, compared to 138 countries that have made no progress or are worsening. (Seven countries have no data.)
- **Only 38 countries are on course to prevent childhood overweight**, compared to 23 countries that have had no progress or are worsening. (133 countries have no data.)
- **Only 44 countries are on course or have made some progress to increase the rate of exclusive breastfeeding** compared with 20 countries that have made no progress or are worsening. (130 countries have no data.)
- **Only 49 countries are on course or have made some progress to cut wasting** compared to 24 countries that have made no progress or are worsening. (121 countries have no data.)

As of March 2019, there are no internationally agreed nutrition targets for people other than mothers, infants, and young children. However, this should not deter countries from developing strategies that recognize and address the impact of nutrition on all people. In addition, there are no internationally agreed nutrition targets in sectors outside of health (e.g., economy, education, environment, and social development). Again, the lack of targets should not deter countries from looking at nutrition more broadly.

^a Reduction in low birth weight is difficult to track/calculate, because many newborns are not weighed at birth.

Ability of Nutrition to Enhance Disease Programs: The HIV and TB Example

A country should be committed to nutrition as a sustained national priority for its entire population, including anyone affected by or living with HIV and TB. Although people who are affected by or living with these two diseases face specific challenges related to nutrition, a separate nutrition program focused only on these individuals and families is not the best approach. Vertical or siloed programs that ignore general needs and do

When nutrition is a national priority for all people, there is a more credible and compelling case for ensuring it is a component of the national HIV and TB response.

not leverage broader knowledge, experience, and capacity can be less equitable, less valuable, and less sustainable. A better way forward is a strategic, interconnected, and inclusive approach that benefits all people affected by nutrition issues while also acknowledging and addressing specific challenges linked to different diseases.

Ignoring the ways that nutrition overlaps with HIV and TB can undermine the effectiveness of the disease response. It can also have devastating consequences for individuals, families, and communities. For example:

- Undernutrition and overnutrition can suppress a person's immune system, which increases the likelihood of both the acquisition and the progression of HIV and TB.
- Undernutrition is a critical determinant of HIV and TB, which reinforces the value of testing undernourished individuals (e.g., SAM and MAM cases) for both diseases.
- Loss of appetite is common among people living with HIV and/or TB, which contributes to undernutrition in these people and, in turn, makes them less able to tackle the disease and tolerate the treatment.
- HIV and TB infections typically increase a patient's energy requirements while simultaneously compromising their body's ability to absorb and utilize nutrients; the combination of factors can compromise the nutritional status of these patients.
- All-cause mortality among overweight people living with HIV (PLHIV) on antiretroviral therapy (ART) is higher than it is for PLHIV on ART whose weight is normal.
- People with diabetes, which is closely linked to obesity, are at greater risk of TB infection and are more difficult to treat.
- Malnutrition can trigger active TB in people with latent TB.
- People living with HIV and/or TB are susceptible to food insecurity due to various factors, including stigma and discrimination, reduced income/resources, and deteriorating living conditions.
- HIV and TB drugs are less effective if a patient is poorly nourished.
- Undernourished people living with HIV and/or TB have an increased risk of death.

When a strong national nutrition program is in place, it can have an exponentially positive effect on the HIV and TB response. Breaking the destructive cycle of poor nutrition and disease acquisition and progression will help with prevention, diagnosis, drug efficacy, treatment adherence, and retention in care.

The overlap of nutrition with HIV and TB is only one aspect of a comprehensive national nutrition strategy. There are nutrition implications in every disease-specific program in a country's health portfolio. Consequently, in resource-constrained settings, it may be necessary to prioritize specific nutrition interventions for different population groups or for different health programs.

Strategic Issues Related to the Role of Nutrition in Care and Treatment for HIV and TB

Multiple issues are strategically relevant when integrating nutrition in the care and treatment of HIV and TB. These issues include: the links between nutrition and the diseases, the components of a national nutrition program, gender and gender equity, and global partners in nutrition programs.

HIV and nutrition are inextricably linked. First and foremost, HIV is directly connected to undernutrition and food insecurity. It can lead to and exacerbate undernutrition and weight loss, by increasing people's energy requirements and reducing their ability to absorb nutrients. Severe and moderate malnutrition is common among people with advanced HIV infection, including people with a late diagnosis of HIV (e.g., CD4 count ≤ 200 cells/mm³). For people living with HIV who are initiating ART, nutrition status is an important predictor of mortality. In addition, HIV-related illnesses can seriously undermine individual and family livelihoods and economic security, which are critical factors related to food insecurity and proper nutrition.

Given the interplay between HIV and malnutrition, they must be addressed concurrently.

Well-nourished people respond better to ART.

Healthy diets play a vital role in improving the health of people living with HIV, including those who are and are not on ART. For example, early mortality can be reduced with targeted nutritional interventions at the time of ART initiation. Although the goal is for all people living with HIV to have access to ART, data show that adequate nutrition can help slow the progression of disease and prevent opportunistic infections in people who are not yet on treatment.

TB and nutrition are also closely linked. Like HIV, active TB infection increases the risk of undernutrition by increasing energy expenditure, decreasing nutrient absorption, and depressing appetite, which lead to weight loss and micronutrient deficiencies. Data analysis has shown that people with severe or moderate acute malnutrition (SAM/MAM) have a higher incidence of active TB, most of it resulting from the activation of latent TB caused by the physiological stress of undernutrition. SAM and MAM are also associated with a doubling of the mortality risk in people with TB. In addition, people with TB can face serious challenges in maintaining livelihoods and a secure food supply.

It is crucial to understand and leverage the links between the national HIV and TB strategies and the national nutrition strategy.

As is the case with HIV, proper nutrition plays an important role in improving the health of people with TB. For example, it can help reduce the likelihood that latent TB becomes active TB. For people with HIV and TB coinfections, the importance of proper nutrition is magnified, given its potential impact on wasting, thinness, and treatment outcomes for both diseases.

The **components of a national nutrition program** should be based on the state of affairs in the country, including the links between nutrition and high-burden diseases such as HIV and TB. It is critical that the issues have been properly assessed and are well understood, so that the program can be tailored to best meet the needs of people who would benefit from nutrition activities.

Box 4. Relevant issues and/or data to consider

- **Critical epidemiological data, including nutrition- and disease-specific data**
What are the strengths and weaknesses of the data: On nutrition? On HIV? On TB? Other diseases? What are the gaps? Are data available to address the gaps (e.g., program data)?
- **Structure, scope, capacity, and effectiveness of existing nutrition activities**
What are the strengths and weaknesses? Are there gaps generally? Are there gaps related to specific diseases? If gaps exist, what are they and how can they be addressed?
- **M&E capacity**
How extensive and effective is national and subnational M&E of the nutrition program? How can it be improved to capture more and better data on nutrition and its contributions to health and/or disease programs?
- **Collaborations and/or links to different partners and/or initiatives**
How is the national program collaborating and/or linking with different partners and/or initiatives? How can the collaborations/linkages be improved? What needs to be done for a comprehensive national nutrition strategy to effectively leverage partners and initiatives?

With the analysis of the current situation in hand, the next challenge is to determine how to integrate nutrition with HIV and TB programs. Historically, they have been integrated in three general areas: (1) nutrition care and support for HIV-positive pregnant women and new mothers, integrated with maternal and child health nutrition programs; (2) nutrition care and support for people living with HIV and people with active TB; and (3) food security through impact mitigation and livelihood promotion.

Multiple countries have used the nutrition assessment, counseling, and support (NACS) approach to guide the integration of nutrition services with other health services. NACS is a useful framework for strengthening the links between vital nutrition-related activities and promoting integration of these activities with other health services, particularly in the context of HIV and TB care and support. NACS is also the foundation of the Partnership for HIV-Free Survival (PHFS), which worked in six countries in Africa between 2013 to 2017 to improve national programs to eliminate mother-to-child transmission of HIV, by focusing on maternal and child nutrition.

Box 5. Core components of NACS

- **Nutrition assessment and classification**, including anthropometric assessment of all clients during all clinic visits; and biochemical, clinical, dietary, and food security assessments of some clients, based on client needs and clinic capacity
- **Nutrition counseling** in which a client and counselor identify nutrition-related needs and agree on concrete steps to address them, based on the nutrition assessment and client preferences and constraints
- **Nutrition support** based on client needs and available resources, including provision of specialized food products (fortified blended food and ready-to-use therapeutic food (RUTF), point-of-use water purification products, and micronutrient supplements
- **Referrals** to water, sanitation, and hygiene (WASH) support and to economic strengthening, livelihood, and food security services for clients from food insecure households
- **Quality improvement systems** that support and facilitate high-quality implementation
- **Linkages between clinical and community nutrition services**, including community follow-up of clients receiving clinical care, tracing of clients lost to follow-up, and outreach and screening by community workers to identify individuals requiring clinical assessment
- **National policies, strategies, guidelines, training courses, job aids, and other resources** that create an enabling environment for effective integration of nutrition services into the continuum of health care

Source: Castleman and Diene, 2015.

Issues of **gender and gender equity** must also be addressed when planning and implementing nutrition programs. Fundamentally, the challenge is to ensure that these programs are available to all people in need, regardless of their gender. For example, given issues of gender inequity facing women and girls in many parts of the world, it is essential to assess and address any issues preventing them from having equal access to nutrition programs, which further reinforces the value of looking at nutrition programs and outcomes more comprehensively.

Box 6. Why is it important to think strategically about nutrition?

Key issues to consider:

The essential role of nutrition in health

- Is the essential role of nutrition in health broadly understood and accepted in your country?
- Is your country committed to nutrition as a sustained national priority for its entire population?

Utility of a strategic approach to designing, implementing, and sustaining an effective national nutrition program

- Is there an evidence-based nutrition strategy in place in your country?
 - If yes, is the strategy used to guide the thinking that is done and the actions that are taken? If no, it is essential that one be developed; see the section above entitled "Utility of a Strategic Approach in Designing, Implementing and Sustaining an Effective National Nutrition Program."
 - Does the strategy include an action plan with objectives and core activities that are based on sound logic models?
 - Is the national nutrition strategy aligned with international norms, standards, and agreements?
 - Is an M&E approach in place to track whether the strategy is contributing to improved health and well-being?

Ability of nutrition programs to enhance the national HIV and TB response

- Are the links between food insecurity, malnutrition, and HIV and TB broadly understood and accepted?
 - If yes, are these links reflected in the nutrition and HIV and TB strategies as well as programs and projects being implemented in the country?

Strategic issues related to the role of nutrition in care and treatment for HIV and TB

- Are the links between nutrition and HIV and TB care and treatment broadly understood and accepted?
 - If yes, are these links reflected in the national strategy as well as programs being implemented at the patient level in the country?
- Is the national nutrition program, which is linked to HIV and TB care and support, based on the specific state of affairs in your country?
- Is the NACS approach used in your country?
 - If yes, could it be expanded and strengthened?
 - If no, would it be useful to introduce it?
- Are issues of gender and gender equity addressed when planning and implementing your country's food and nutrition programs?
- Are the roles of global partners who are active in your country and able/interested in supporting nutrition initiatives understood and leveraged?

WHAT IS THE NATIONAL COMMITMENT TO NUTRITION?

The long-term impact of an effective national program, regardless of the sector, typically hinges on a strong and broad commitment by key constituents, including political leaders, financing organizations, technical experts, implementing partners, and program beneficiaries. These are the stakeholders who help ensure a favorable political, policy, and legal environment and sufficient implementation capacity to deliver a substantive national program. The stakeholders also have critical roles in developing, endorsing, or advocating for a sensible national strategy and ensuring the strategy is implemented effectively.

Building and maintaining a national commitment to nutrition are essential tasks if nutrition is going to be effectively and sustainably addressed in ways that will benefit everyone in need in a country, including people living with HIV and TB.

“Undernutrition has a complex set of political, social, and economic causes, none of which are amenable to easy solutions that fit within the timeframe of a single political cycle.”

—The Lancet, 2013

A fundamental challenge facing nutrition is its low priority among key decision makers in most countries. In part, this is due to a lack of knowledge about nutrition’s essential role in health. It is also a result of the complexities of the issue and the extended time required for many nutrition programs to demonstrate impact.

Limited capacity to implement programs undermines the national commitment to nutrition in many settings. Deficiencies in any of the following three core implementation areas weaken the commitment and must be addressed if there is going to be a sustained national nutrition program: (1) technical capacity; (2) data availability; and (3) funding.

Supportive Political, Policy, and Legal Environment

At the core of a national commitment to nutrition is a supportive political, policy, and legal environment, which reduces barriers related to planning, funding, and implementation and promotes active participation in those processes.

The centerpiece of a supportive policy environment is a practical, credible, and viable strategy that has strong and effective champions. A national nutrition strategy—whether it is stand-alone or distributed—should reflect the knowledge and experience of the relevant stakeholders, including government officials, civil society representatives, and technical experts. These same stakeholders should also work together to ensure solid political support for the strategy. In addition, they should make sure there are no legal or regulatory barriers in the country that could potentially interfere with the ability to implement the strategy. Ideally, they would also champion a legal and regulatory framework that supports and facilitates the implementation of the strategy.

A country should be committed to nutrition as a national priority for its entire population, including people living with HIV and TB and people affected by these diseases.

Strong political support and a positive legal and regulatory framework are critical for securing the philosophical and financial commitments to nutrition from government that are at the core of sustainability. Political support also demonstrates to other constituents—as diverse as the general public and external funders—that nutrition is a vital issue on the national agenda.

Box 7. Developing a new national nutrition strategy and assessing an existing one

In countries where a national nutrition strategy is not in place: The process of developing a strategy should be a high priority and should be moved forward as quickly as possible. An advantage of a distributed strategy is that it can be quicker and easier to mobilize stakeholders in a specific sector, ministry, department, etc. than to engage on a national level. (See Box 2 for an introduction to stand-alone and distributed strategies.)

In terms of process, there are hundreds of different approaches available to guide the development of a strategy. It is important to use one that is both efficient and effective. Regardless of the exact approach used, it is essential to have reliable, evidence-based inputs (e.g., international standards, logic models for activities, relevant national policies and plans, existing data points, and local knowledge and experience); to identify the objective(s); to outline a credible and practical action plan; and to secure participation of key stakeholders, including both government and civil society.

In countries where a national nutrition strategy is already in place: It may be useful to review the strategy to assess its scope and relevance. It may also be useful to assess whether the strategy is being implemented and, if it is, whether the activities are leading to improved health and well-being. Based on the findings of this assessment—and given the extended lifecycle of national strategies (e.g., five years)—it may be constructive to develop a *de facto* plan that incorporates emerging priorities in nutrition (e.g., greater integration of nutrition and health) in key sectors, ministries, departments, etc. and provides a practical way forward until the formal strategy can be revised.

Sufficient Implementation Capacity

Ultimately, a national nutrition strategy is only as good as a country's ability to implement it. A strategy without sufficient implementation capacity—or, at a minimum, a robust commitment and a clear plan to build or strengthen implementation capacity—can undermine the national commitment to nutrition.

In many countries, implementation capacity is limited as national nutrition strategies are developed and rolled out. (With a distributed strategy, it is likely that some stakeholders will have more capacity than others, which is an opportunity to move forward more quickly in certain areas.) It is important, during this phase, to focus existing and planned implementation capacity on priority activities. This includes all three types of implementation capacity: technical, informational, and financial.

Technical capacity refers to such assets as qualified and knowledgeable human resources as well as facilities, equipment, and/or supplies necessary to implement priority activities. Informational capacity includes issues such as the availability of relevant data to ensure decisions and activities are guided by evidence and the capacity to collect and analyze the requisite data. Financial capacity is largely the ability to provide and account for the funding required to support effective implementation.

The ability to forecast and build implementation capacity will remain important as a nutrition program grows and additional elements of the national strategy are launched.

HIV and TB Component in the National Nutrition Strategy

In the context of HIV and TB, a stand-alone approach to nutrition and the two diseases is more difficult to justify and sustain without the larger framework of a national strategy. The most sustainable approach to integrating nutrition in a country's HIV and TB response is to ensure the national nutrition strategy specifically cites a commitment to proper nutrition for people living with HIV or TB. It would also be sensible to include a reference about nutrition in the national HIV and TB strategy/strategies.

The HIV and TB component of the national nutrition strategy should clearly and concisely identify the central issues. For example, the 2013–2018 national nutrition strategy for Tanzania focuses on “the nutritional care of persons living with HIV and AIDS (PLHIV) and the prevention of mother-to-child transmission (PMTCT) of HIV.” Brief paragraphs in the Tanzanian strategy provide additional information on critical aspects of these two issues, including delaying the progression of HIV to AIDS, optimizing the benefits of antiretroviral drugs, and minimizing the risk of HIV infection among infants with proper feeding practices.

Keys to Building and Maintaining a National Commitment to Nutrition

In principle, most countries recognize a national commitment to nutrition is important for the health of their people. However, building and maintaining this commitment can be challenging work, due partly to the fact that other issues are higher priorities or have higher profiles.

Although many factors contribute to a sustained national commitment to nutrition, the following four proactive steps can be highly effective in securing this commitment:

1. Establish and/or maintain a credible, influential, inclusive, and active working group that is committed to an effective national nutrition program
2. Ensure existing projects are delivering the right services to the right people in the right way (measured by improved health and well-being)
3. Identify gaps in the national commitment and develop practical plans for addressing them
4. Identify existing and available sources of funding for the national nutrition program

There is not a fixed list of mandatory activities that must be done to complete each of the four steps. How they are executed is highly dependent on the situation in each country. There are, however, different issues related to each step that should be considered when deciding how to build and maintain support for a national commitment to nutrition.

1. Establish and/or maintain a credible, influential, inclusive, and active working group. The primary purpose of a working group is to highlight issues related to the policy, political, and legal environment among key influencers and decision makers. Even if there are senior officials and key organizations responsible for day-to-day oversight and implementation of national nutrition policies and programs, a qualified and committed working group, which can include the aforementioned officials and organizations, can make important contributions in terms of strategy and tactics. The group can play an invaluable role as both champion and workhorse, focusing on a sustained commitment to nutrition and the national strategy.

CHAMPIONS play a key role in advocacy, resource mobilization, communication, and coordination with stakeholders. They provide the enthusiasm and drive to convince stakeholders of the importance of a national commitment to nutrition. In addition, their ability to reach out to stakeholders, build and maintain productive working relationships, and ensure effective communication and coordination between multiple partners is essential to the short- and long-term success of the initiative.

WORKHORSES play an equally important role, because they do the critical background, backstop, “hands-on” work to collect and analyze the substantive information needed to promote nutrition as a national priority. In countries where a national strategy does not exist, the working group can also play an important role in the strategy-development process. And in countries where there is a need to assess the scope and relevance of an existing strategy, the group can help expedite that review process.

Depending on the country context, the working group could be housed, organized, and operated in several different ways. For example, the group could sit in the government or non-government sector. It could have an official charter, mission statement, et cetera, or it could be organized less formally. Regardless of the structure or the mechanism, the group should have the freedom, flexibility, and responsibility to do what needs to be done to build and maintain a national commitment to nutrition, with as few bureaucratic obstacles as possible. It is important to reinforce the point that the working group is not an implementing body. Its role is to ensure implementers are operating under the auspices of a strong national commitment, which will support their efforts to provide the necessary programs.

In every context, the most important concerns are: (a) the group is highly credible (i.e., its members have directly applicable knowledge and expertise and their integrity is above reproach); (b) the group has and can wield influence (i.e., its members can shape change); (c) the group includes representatives from the primary constituents involved in nutrition, ranging from policymakers to implementers; and (d) the group does meaningful and significant work (i.e., it is actively involved in substantive issues).

Ideally, the working group will include senior officials and key organizations currently engaged in nutrition policies and programs. However, whether they are part of the working group or not, it is vital that the group coordinate and collaborate with the people and organizations working in this arena and not usurp their authority or position. This coordination and collaboration is also critical to the success of the remaining three steps.

Does the working group advise or act? The answer to this question depends on how the group is envisioned, organized, and governed. However, if the group is going to play a significant role in advancing nutrition issues in the country, it needs to do more than advise. A purely advisory working group with no ability to act or no stake in the actions that are taken will be a less effective champion, particularly in countries where the comprehensive integration of nutrition into health programs is non-existent, nascent, underdeveloped, or limited.

2. Ensure that quality services are delivered to the beneficiaries. One of the most effective ways to build and maintain a national commitment to nutrition is to ensure existing projects are providing the right services to the right people in the right way. This is true whether the existing projects are large or small; whether they are funded with domestic or international resources; and whether they are implemented by government, civil society, domestic, or international partners.

Determining the merit of existing nutrition projects hinges on the availability of relevant data, including performance data (e.g., efficiency, effectiveness, reach, and coverage) as well as data on related issues, such as the types and quality of services offered, the demographics of people served, and coverage.

The 2014, 2015, 2016, and 2018 Global Nutrition Reports are a rich source of information, including valuable national data on the global targets endorsed by the World Health Assembly.
<http://globalnutritionreport.org/>

Whenever possible, existing measures of performance and existing data should be used to assess the contributions of existing projects; the measures and sources of data can include indicators, surveys, and special studies. If key data are not available, beginning to collect and analyze them as quickly as possible should be a priority. There is a chronic shortage of quality data on nutrition interventions, which is one of the main reasons that nutrition's contributions to health often go unrecognized or underappreciated.

If there are concerns about existing nutrition projects—including questions about their utility, value, focus, quality, equity, and/or impact—it will be considerably more difficult to gain the support required to fully integrate nutrition into the national agenda. This is particularly true given the historically limited support that nutrition has received from politicians and policymakers.

One challenge will be to decide what actions to take if existing projects are seen to be under-performing. Funders and implementers have primary responsibility for the effectiveness of projects, so concerns about performance should be raised directly with them. This is an area where the working group can play a role by encouraging key stakeholders to honestly assess and, where necessary, work to strengthen projects as part of a broader effort to build a national commitment to nutrition. The working group should also use examples of outcome data from effective projects to demonstrate how and why nutrition should be a central element of the national health portfolio.

3. Identify gaps and develop practical plans for addressing them. It is likely that a country's nutrition program has multiple gaps that undermine the ability to effectively implement it. Gaps can include low coverage and/or poor prioritization of critical interventions, marginalized or difficult-to-reach populations who are not able to access services, geographic areas that are underserved or unserved, inadequate technical capacity, limited data on the current situation/response, and minimal funding.

A list of key gaps and practical plans for addressing those gaps—in the context of a country's current nutrition situation—can provide stakeholders, influencers, decision makers, and current and potential funding partners with a better picture of what needs to be done to improve the situation. It may seem counterintuitive to publicly acknowledge shortcomings but the first step toward filling a gap is acknowledging one exists. In addition, one of the fundamental reasons to build and maintain a national commitment to nutrition is to ensure the nutrition needs of all people are met, which, in most cases, will mean identifying and addressing gaps.

The list of key gaps—and plans for addressing them—should correlate with the national nutrition strategy. As mentioned above, the strategy should be comprehensive, which means including issues and areas where there may currently be gaps. Highlighting where gaps exist in the national strategy is a useful way of calling

attention to existing shortcomings as well as opportunities for improvement. Acknowledging gaps is also a way to ensure that the strategy is both realistic and forward-thinking.

4. Identify existing and available sources of funding for the national nutrition program. Limited funding for nutrition programs is a common problem—both in countries that receive external support for health and nutrition programs and those that do not. In resource-constrained settings, limited funding is likely to be one of the most significant gaps in the national commitment to nutrition. The persistent and pervasive shortfall of funds demands special attention. Ideally, the full range of stakeholders in a national nutrition program should work together to identify where existing funds are coming from and where additional funds could be obtained, including domestic and international sources.

Two important caveats apply to the process of identifying available sources of funding:

- (a) Tracking funding sources is an ongoing process that will require near constant attention to ensure the information is up-to-date. Tracking these sources accurately will also include regular outreach to external partners and collaborators, ranging from international funding organizations to national institutions in other countries that are also tracking funding sources.
- (b) Estimates of the shortfall of funds for a national nutrition program should be realistic, using accurate and credible costing data. Given the history of chronic underfunding for nutrition programs, it is important to present an accurate picture of financial need when building the case for new or expanded funding. Gross overestimates or underestimates make it more difficult for funders and recipients to have an open and honest dialogue about financing.

The process of tracking funding sources must lead to a sustained dialogue about nutrition priorities, health benefits, and funding needs with the organizations that are providing or could provide funds to support the national nutrition program. The fundamental point of this dialogue is to demonstrate how and why increased funding for a strategic nutrition program would positively affect health outcomes at the individual, family, community, and national levels.

National or subnational: The basic approach used to build and maintain a national commitment to nutrition can be used to build a similar commitment at subnational levels. In some settings, a subnational approach may be a more pragmatic way to demonstrate the value of nutrition's contribution to health generally and to the HIV/TB response specifically. Success at a subnational level can open the door for success at the national level.

Box 8. What is the national commitment to nutrition?

Key issues to consider:

Supportive political, policy, and legal environment

- In your country, are there supportive political, policy, and legal environments?
 - If the answer is “no” in any area, what are the key barriers? What can be done to address them?
- Is there an evidence-based nutrition strategy in place?
 - If there is, is it relevant in the context of a comprehensive and integrated approach to nutrition or does it need to be updated?
 - If not, it is essential that one be developed; see the section entitled “Utility of a Strategic Approach in Designing, Implementing and Sustaining an Effective National Nutrition Program” for brief guidance.

Sufficient implementation capacity

- In your country, is there sufficient technical capacity, informational capacity, and financial capacity?
 - If not, in any area, what steps must be taken to strengthen capacity?
- Is existing and planned implementation capacity focused on priority activities?

HIV and TB component in the national nutrition strategy

- Is a commitment to proper nutrition for people living with HIV and/or TB included in the national nutrition strategy?
- Is a reference to nutrition included in the national HIV and TB strategy or strategies?

Keys to building and maintaining a national commitment to nutrition

- Does a credible, influential, and inclusive working group that is committed to an effective national nutrition program exist? Will such a working group exist?
 - If such a group does or will exist, does the group include champions who can promote the national commitment to nutrition among key stakeholders and decision makers?
- Is sufficient data available to determine if existing nutrition projects deliver the right services to the right people in the right way?
 - If not, what steps must be taken to improve the situation?
 - Are systems in place to strengthen underperforming projects?
- Have gaps in the existing national nutrition program been identified and assessed?
 - Are systems in place to address any gaps?
 - Have the gaps been correlated with the updated national nutrition strategy?
- Have existing and available sources of funding for the national nutrition program been identified?
 - Have sound cases been made to funders about the value of supporting a strong national nutrition program?

HOW CAN NUTRITION FUNDS BE USED MOST EFFECTIVELY?

Until the case for comprehensive and integrated nutrition programs gains momentum among key stakeholders, funding is unlikely to be available to support every aspect of a broad nutrition strategy. In resource-constrained settings, funds may not be sufficient to support the identified priorities in the national strategy. Consequently, it is important to identify how to use the available funds most effectively; that is, how can the funds be allocated to generate the greatest impact and provide the greatest value?

Decision makers at the country level should think carefully about the full range of options, including practical experience from existing or previous nutrition projects in their country or in other countries with similar situations. They will want to consider the nature and scope of the nutrition situation and the benefits and cost-effectiveness of different interventions and scale-up strategies.

In the context of HIV and TB, decision makers should consider how to leverage the different funding streams for nutrition and the two diseases. They should think about how integrated approaches such as NACS could affect their spending decisions, and they should be mindful of demographic and geographic factors (i.e., key populations and key locations), to ensure people and places with critical needs are not overlooked.

Aggregated Funding for a Strategic Program

An essential first step is to identify the full range of financial resources that could be used to support nutrition activities during a specific time frame (e.g., a two- to three-year period). This inventory of funding streams should include domestic and international sources for both nutrition-specific and disease-specific programs. The goal is to create a *de facto* “funding umbrella,” which aggregates and directs funds—regardless of their source—to the most effective activities. For example, funders could be asked to support specific activities that, collectively, constitute a coordinated approach to implementing the national strategy. Or domestic funds could be allocated for certain core activities—with funds from different international partners used to support complementary activities, particularly critical gaps in the domestic-funded programs and projects.

Funders are less likely to balk at coordinating their funding when countries have developed a clear and compelling case for how and why a strategic, country-led approach will yield better results. However, this does place the onus on countries to demonstrate the merits of a thoughtful, integrated approach compared with approaches historically pursued by funders, which are population-specific, region- or district-specific, or disease-specific.

Activity Costs

A basic understanding of activity costs is an invaluable prerequisite for any discussion of how nutrition funds can be used most effectively. It is particularly important to assess recurrent costs in light of their impact on sustainability. Depending on the situation, it may also be necessary to consider start-up costs.

Lower-cost activities are not necessarily cost-effective activities; conversely, higher-cost activities are not necessarily better-quality activities.

In many cases, decisions about effectiveness will hinge on the coverage and frequency of the activities required to achieve a certain objective. Consequently, it can be useful to look at activity costs by different variables, including by site, by individual, and/or by unique contact (e.g., what does it cost to operate a site providing this service; what is the per-person cost of the service; or what is the per-contact cost).

The assessment of funding effectiveness should not focus solely on activities that are the lowest cost. It is essential to correlate cost with outcome. There may be situations where higher-cost activities have

significantly better outcomes than lower-cost ones (i.e., higher-cost activities may have greater value for money). The challenge is to find the right balance between cost and outcome that maximizes the effectiveness of the available funds. Additional information about activity costs can be found in the section on how funds can be used for sustainable nutrition investments; see the “Sustainable Opportunities” section below.

The Value of a Consultative Process

The process of identifying funding priorities should be a consultative one. Given that implementing an effective nutrition program requires the participation of a range of stakeholders, these individuals and organizations should have an opportunity to provide input on how and where funds are allocated. These same stakeholders should also be consulted on what projects and activities are most effective and why. As a matter of principle, stakeholders should be strongly encouraged to support their input with evidence that validates their perspective.

The working group can be an effective body for collecting and aggregating input on funding priorities.

While it is possible—even likely—that different stakeholders will disagree on different issues, these differences do not diminish the importance of collecting their various perspectives. In fact, these differences can be useful in highlighting what should be funded. For example, a genuine consultative approach will reduce the likelihood that politically popular projects of potentially questionable value will be supported. In addition, a consultative approach will reinforce the national dialogue on the importance of nutrition and its impact on health.

Box 9. Issues to consider during the consultative process

The consultative process should consider a wide range of issues and/or factors applicable to funding priorities (for both existing and planned activities):

- What are the stated priorities in the national nutrition strategy?
 - Are there any new data that affect these priorities?
 - If the current strategy does not have priorities, what should they be?
 - What evidence exists to validate the priorities?
- What is the current situation vis-à-vis the national priorities?
 - Are activities under way or planned to address all, any, or some of these priorities?
 - If activities are under way, are they based on sound logic models? Are they improving people's health and well-being? Are they providing good value for money?
 - If activities are planned, are they based on sound logic models? What are the expected results, including value for money?
 - If activities are not under way or planned, why not? What is needed to launch them?
- What are the available technical resources?
 - Who are the key government and civil society implementers? Do they have the capacity to implement priority activities? What are their current or potential roles in implementing the national strategy?
 - What funding is available or could be? From what sources? Are restrictions attached to any of the funds?
- What are the priority implementation gaps or opportunities in the current nutrition program?

Implementation Matrix

The responses to these background questions can be the basis of an implementation matrix, which identifies the priorities, the activities being implemented, where they are being implemented, their estimated coverage, who is implementing them, the funds allocated to these activities, and the source of the funds. The matrix can be a useful tool for reaching basic agreements with key stakeholders, including funders and implementers, and understanding the integration of the national program. It can also be a valuable supplement to a proper and thorough budgeting process.

Table 2. Implementation matrix

Priorities	What activities are being implemented (or are scheduled to be implemented)?	Are the activities based on a sound logic model or theory of change? (Y/N)	Where are activities being implemented (or where could they be implemented)?	What is the actual or estimated coverage?	Who is implementing them? (Or could?)	What funds are allocated or available for these activities?	What is the source of the funds?	What is the time frame for the funding?	Is there evidence of benefits to citizens? (Y/N) If yes, what is it?
Priority A	Activity A1								
	Activity A2								
	Activity A3								
Priority B	Activity B1								
	Activity B2								
Priority C	Activity B1								
	Activity B2								
						TOTAL			

What are the priority implementation gaps or opportunities in the current nutrition program?

Leverage Points and Tipping Points

When considering how to use funds for nutrition most effectively, look for leverage points and tipping points. A **leverage point** is a specific place, time, and/or activity where implementing a change will lead to an improved outcome. A **tipping point** is when/where incremental change reaches a critical mass and creates significantly larger, more important change.

The ability to identify and capitalize on possible leverage points hinges on having good data about the situation, including data on the specific state of affairs and data on program performance (i.e., what works and what doesn't work). When identifying and capitalizing on leverage points, the importance of understanding the context cannot be underestimated. However, core opportunities and similarities exist in different settings that can and should be explored and leveraged when looking for leverage points.

During the implementation of the Partnership for HIV-Free Survival (2013-2016), the PMTCT program in Uganda identified a simple way to link the patient records for a mother and her baby: They stapled them together, rather than keeping them in two separate files. This was a critical leverage point that had an immediate and dramatic impact on retention of the mother-baby pair in care, which led to improvements in breastfeeding and complementary feeding practices. It also contributed to another leverage point, which was

the decision to launch HIV-focused mother-baby care points in health facilities, so that both patients were seen at the same appointment. These two changes were so effective, they lead to a tipping point when the Ministry of Health adopted them as national policies and protocols (Hales, Davis, Munson, & Bobrow, 2019).

Widespread recognition that nutrition has an essential role in the health of individuals and populations would be a powerful tipping point.

It is always important to think strategically about leverage points, given their ability to contribute to a tipping point, and the importance of allocating funds as efficiently as possible. The following are examples of questions that can help identify leverage points: Where can limited funds lead to outsized improvements? Are there straightforward, low-risk leverage points that can yield a “quick win” for nutrition and strengthen the national commitment to

expanding the national nutrition program? Are there focused leverage points that can dramatically improve the health outcomes for an underserved population? Are there leverage points that engage key stakeholders in ways that will make them more vocal advocates or champions for nutrition?

Even when adequate resources are available, look at the evidence and act on the strategic priorities, including critical leverage points. More resources—including more funding—does not eliminate or reduce the importance of focusing investments on activities that are most effective.

Box 10. How can nutrition funds be used most effectively?

KEY ISSUES TO CONSIDER:

Aggregated funding for a strategic program

- Has the full range of financial resources that are available to support nutrition for a given time frame, including funding from domestic and international sources, been identified?
- Have funders been briefed on the advantages of aggregating funding for a strategic nutrition program in your country? Do they acknowledge the benefits?
- Have they been asked directly to support a coordinated approach to funding? If they have reservations about this approach, how can they be addressed?

Activity costs

- Is data available on activity costs?
 - If not, it is essential to collect accurate data on these costs.
 - If they are, is it clear which activities provide the best value for money?
- Have the data been analyzed by different variables (e.g., by site, by individual, and/or by unique contact)?
- Are there activities that do not benefit citizens and could be eliminated or reduced?

The value of a consultative process

- Are broad-based consultations an important part of the process of determining how nutrition funds are used?
- Does the consultation consider the wide range of issues and/or factors applicable to funding priorities? (See the next section for a list of possible issues and/or factors.)

Implementation matrix

- Has a matrix been developed to help assess critical issues related to activities that are being implemented currently or are planned for implementation?
- What lessons can be drawn from the matrix?

Leverage points and tipping points

- What potential leverage and tipping points exist in your country that could be used to accelerate improvements in the national nutrition program?
- Are sufficient data available to identify and capitalize on leverage and tipping points?

HOW CAN FUNDS BE USED FOR STRATEGIC AND SUSTAINABLE NUTRITION INVESTMENTS?

By definition, a **strategic nutrition program must also be a sustainable nutrition program**. If nutrition is going to have a long-term impact on the health and well-being of a country's population, nutrition policy must be part of a sustained program (i.e., it must continue without interruption for an extended period). Short-term interventions have their place—particularly in emergency situations—but a sustained program is essential for nutrition to make a significant and lasting contribution to achieving the goals and objectives of the national health strategy. Consequently, it is vital for the nutrition program to be sustainable; in other words, it must have the support (e.g., political will, financing, and human resources) to maintain its activities over the long run.

In resource-constrained settings, it is unlikely that funds will always be available to support every aspect of a broad nutrition strategy. The challenge is to identify where key investments can be made to ensure nutrition will be an integral and sustained program. In countries that rely on external resources for their nutrition programs, there will be the additional challenge of demonstrating to funding partners how, why, and to what extent national nutrition priorities should be supported financially.

Until the many contributions of nutrition programs are better and more broadly understood by policymakers and decision makers, most countries will face resource constraints with their nutrition strategy.

Funding Landscape

The importance of a thorough understanding of the funding landscape for nutrition has been cited several times in this publication. To ensure they have this understanding, stakeholders in a nutrition strategy should:

- Understand what funding exists and what funding may be available.
- Use data when engaging with funding partners, to demonstrate how and why increased funding for a strategic nutrition program would be beneficial.
- Aggregate resources from multiple sources under a single funding umbrella that supports a strategic program.
- Work closely with funding partners, to ensure that financial resources under the funding umbrella are used for strategic and sustainable nutrition investments.

The main challenge in identifying and coordinating these types of nutrition investments will be to find the common ground between national priorities and funding streams. For example, in some scenarios, funding partners may only have funds available for narrow or vertical projects, with specific objectives that are not fully aligned with the national plan. In other scenarios, they will be the principle advocates of a strategic and sustainable approach. In still other scenarios, they may only be interested in funding emergency responses.

The funding landscape includes international and domestic sources of financial support. Even in countries that receive a majority of their funds from international partners, it is likely that some domestically generated or controlled monies will be available.

In general, major funding partners in the development sector focus on strategic and sustainable approaches, and this focus needs to be factored into national strategies and action plans. Although there will continue to be links to specific diseases (i.e., HIV and TB), the goal should be to leverage the shift from short-term interventions

(e.g., procurement and distribution of emergency commodities) to long-term investments in nutrition-related infrastructure, including providing in-service and pre-service training for frontline health care providers on integrating nutrition into health services; building and strengthening domestic capacity to produce key commodities; and enhancing national capacity to collect, aggregate, analyze, and use nutrition-related data to expand or improve program components. As nutrition programs become increasingly strategic, these long-term investments could also encompass broader shifts in national nutrition policy, including the adoption of evidence-based and regionally specific dietary guidelines, agricultural programs that incentivize the production of nutrient-dense crops and enhance small producers' access to local markets, and prevention approaches to address noncommunicable diseases.

It is important to recognize that crisis situations (e.g., drought, crop failure, conflict, or migration / displacement) will continue to require immediate attention in many countries. However, emergency needs—and the financial support received from funding partners to respond to these needs—should not drive the overall national nutrition strategy. In countries where crises are either frequent or ongoing, it will be necessary to factor these situations into both the national strategy and the assessment of the funding landscape. However, it is equally important to look at systemic solutions to these types of nutrition crises, including solutions requiring supranational actions or interventions.

Sustainable Opportunities

When considering sustainable opportunities, it is critical to clarify how the term “sustainable” is being used. As mentioned above, a *sustained* program—one that continues without interruption for an extended period—is essential if nutrition is going to have a long-term impact on health and well-being. A *sustainable* program must have the necessary buy-in and support—including political will, financing, and human resources—to maintain its activities over an extended period.

One important caveat about sustainability: in the development sector, sustainability increasingly implies “self-sustaining” or “sustainable without outside support.” In many countries, “self-sustaining” is a distant goal for health programs of all types: nutrition programs as well as disease-specific programs. However, “self-sustaining” is an important objective and, if reached, can give countries flexibility to shape the future of their health and nutrition programs.

Nutrition programs can be highly cost-effective, which makes them inherently more sustainable and better able to contribute to the cost-effectiveness and sustainability of health and development programs more broadly. For example, better nutrition during a child's first 1,000 days has long-term implications for the child's physical health, mental capacity, and economic opportunity. More broadly, the link between nutrition and the prevention or control of noncommunicable diseases is an underexploited opportunity to improve public health and manage health care costs. These types of long-term, population-wide benefits magnify the importance of identifying and implementing sustained—and sustainable—opportunities in nutrition.

A report published by the World Bank outlined a simple and practical paradigm for categorizing opportunities to improve nutrition: short routes and long routes (World Bank, 2006). Short routes focus on direct actions that affect inadequate or inappropriate dietary intake, including micronutrient supplementation, food fortification, and nutrition education (e.g., appropriate breastfeeding and complementary feeding practices). Long routes address the underlying causes of malnutrition, ranging from economic growth to women's status and workload and from food production to water and sanitation. In general, the short routes are nutrition-specific, whereas the long routes are nutrition-sensitive; see Table 1 for more examples.

Within the short and long routes, it is important to note there are also supply-side and demand-side approaches. Examples of short-route *supply-side* approaches are increasing the availability of nutritious and affordable foods and improving the delivery of community-based and facility-based nutrition services. Long-

route *supply-side* approaches include enacting nutrition-based food and agriculture policies and increasing production of nutritious foods. Short-route *demand-side* approaches include supplementary food, cash transfers, vouchers, and microcredit. Long-route *demand-side* approaches include economic growth and employment opportunities.

Some approaches, such as improving nutrition education, knowledge, and behaviors, straddle the supply and demand sides. In settings where nutrition knowledge among the general population is low, increasing the “supply” of information (e.g., through community outreach, clinic-based programs, or mass media) may be necessary to create demand for that information and corresponding services. Similarly, the demand for better nutrition education in medical, nursing, and public health programs is often low, because of the historic under-appreciation of the role of nutrition in health; increasing the “supply” of nutrition education in those settings is a precursor to creating demand.

The challenge when developing a strategy and identifying sustainable opportunities to implement that strategy is to find the right balance between all the critical factors. Short-route supply-side approaches are generally the most efficient, producing results more rapidly than other approaches. But focusing solely on short-route supply-side approaches is unlikely to lead to the sustainable impact envisioned by a well-crafted national nutrition strategy. As stated in the same World Bank report, “Each country needs to decide on the appropriate balance between the long route and the short route and between supply-side and demand-side approaches to improving nutrition, depending on their capacities, the epidemiology of the problem, and political and institutional considerations” (World Bank, 2006).

Ultimately, the goal is to identify a mix of sustainable opportunities that yields measurable improvements in nutrition’s contribution to the health and well-being of a country’s population. The opportunities should match the strategy, the action plan, and the underlying logic model or theory of change that links activities to outcomes.

Planning Tools

There are various planning tools that can help stakeholders assess how best to structure nutrition programs and allocate funds for them. The tools listed below have been used successfully in dozens of countries to explore implementation and funding scenarios based on the critical factors in a given setting. While these are some of the better-known tools, many others—both formal and informal—can be used to understand design and costing issues related to nutrition programs.

Keep in mind that different tools have different strengths and are more or less useful in different contexts. Consequently, it is important to carefully evaluate a tool carefully before using it, possibly conducting a trial run. The evaluation should also include discussions with experts who know the tool and with end users who have firsthand experience working with it.

- The **CMAM Costing Tool** is a program planning and budgeting tool for community-based management of acute malnutrition (CMAM). It is an Excel-based application, which uses the full range of cost drivers to develop comprehensive estimates of the cost of establishing, maintaining, and expanding services for CMAM at the national, subnational, and district levels. Unlike tools such as OneHealth and LiST (see below), which look across different health interventions, this tool focuses exclusively on the management of severe acute malnutrition (FANTA, 2012).
- The **Lives Saved Tool (LiST)** can be used to estimate the impact and cost implications of scaling up different health and nutrition interventions related to neonatal and child mortality, maternal mortality, stillbirths, birth outcomes (preterm, small-for-gestational-age, or low birth weight) and nutrition outcomes (stunting, wasting, or anemia). LiST, which can be used in tandem with the OneHealth tool, is designed to

work across multiple health interventions. Its nutrition component is built around high-impact nutrition interventions. The tool can be used for prospective program planning as well as retrospective program evaluation (Institute for International Programs, 2019).

- The **NACS Planning and Costing Tool** is an Excel-based tool designed primarily to identify the resources needed to establish and maintain NACS services within a health system. The tool can be used to generate estimates at district, provincial, and national levels. It enables users to develop costings for up to five years over 50 different activities (FANTA, 2016).
- The **OneHealth Tool** uses an integrated, health-systems approach to strategic planning, which can be used to correlate investment with potential impact. The tool has a modular structure, which allows it to integrate components of other existing tools. The tool is designed to work across multiple health interventions; however, it contains a specific nutrition module, which is built around high-impact nutrition interventions. According to the International Health Partnership, OneHealth gives planners “a single framework for planning, costing, impact analysis, budgeting, and financing of strategies for all major diseases and health system components” (Futures Institute/Avenir Health, 2016).
- **Optima Nutrition** is designed to help national decision makers, program managers, and funding partners achieve maximum impact with the available nutrition funding. It has a number of different features to inform policy and financing decisions related to nutrition, including the ability to assess a range of interventions, to link costs to program coverage, and to forecast health and economic outcomes. An additional feature of Optima Nutrition is the optimization function that is used to calculate the optimal allocation of resources to different program areas to minimize adverse outcomes (Optima Consortium for Decision Science, 2019).
- **PROFILES** is an advocacy tool for estimating the health and economic impact of improving the nutritional status of women and children. According to the FANTA III project, PROFILES “consists of a set of computer-based models that calculate consequences if malnutrition does not improve over a defined time period and the benefits of improved nutrition over the same time period.” PROFILES is also linked to the **Nutrition Costing** instrument, which “estimates the costs of implementing a comprehensive set of nutrition programs in a country or prioritized geographic area over a specific time period” (Sethuraman, Kovach, Oot, Sommerfelt, & Ross, 2018).
- The **World Breastfeeding Costing initiative (WBCi) Financial Planning Tool** is designed to assist governments in planning and budgeting essential infant and young child feeding (IYCF) activities that are consistent with the global strategy for IYCF. This Excel-based tool is built around a comprehensive list of exclusive breastfeeding (EBF) interventions, and it can be used to form general annual IYCF financial plans, multiyear estimates, and budget proposals (IBFAN/The World Breastfeeding Costing Initiative, 2016).

Box 11. How can funds be used for strategic and sustainable nutrition investments?

Key issues to consider:

Funding landscape

- Are funding partners committed to strategic and sustainable nutrition investments?
- Are funding partners willing to broadly invest in nutrition priorities identified by the country, or do they have fixed nutrition programs/approaches that they prefer to support?
- Do funding partners prefer to invest in short-term/emergency programs or long-term/strategic programs?

Sustainable opportunities

- How do stakeholders, including funding partners, define “sustained?” Is there agreement on its definition, value, and realizability?
- How do stakeholders define “sustainable” and/or “sustainability?” Is there agreement on its definition, value, and realizability?
- Do stakeholders think short- or long-routes (or a mix) is the best way forward? Specifically, what routes are seen to be the priority, and what evidence exists to support the priorities?
 - What about supply-side versus demand-side approaches and their links to short and long routes?

Planning tools

- Have one or more planning tools been identified and used to help stakeholders assess how best to structure nutrition programs and allocate funds for them?
 - If yes, what tools were used and what were the outputs?
 - If no, what steps need to be taken to use an existing tool or some other process to generate the needed outputs?

CONCLUSION

Every day, nutrition has a direct effect on the health and well-being of every person in the world. The role of nutrition is so fundamental, it was enshrined in the Universal Declaration of Human Rights (United Nations General Assembly, 1948). While the gender language reflects the time in which it was written, the message about nutrition in Article 25 continues to resonate:

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services.

Food, nutrition, health, and well-being are inseparable. And yet, nutrition continues to be an underappreciated and underleveraged component of health strategies. For nutrition to live up to its potential to improve individual, community, national, and global health and well-being, it is time for experts, advocates, policymakers and implementers, and public and private sectors to consistently think and act strategically about the positive contributions of nutrition.

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APPENDIX A. STRATEGIC PARTNERS IN NUTRITION

INTERGOVERNMENTAL ORGANIZATIONS

African Development Bank
CIDA: Canadian International Development Agency
DANIDA: Danish International Development Agency
DFID: United Kingdom Department for International Development
European Union
FAO: Food and Agriculture Organization of the United Nations
GFATM: Global Fund for AIDS, TB and Malaria
GIZ: *Deutsche Gesellschaft für Internationale Zusammenarbeit*
JICA: Japan International Cooperation Agency
NORAD: Norwegian Agency for Development Cooperation
Pan American Health Organization
PEPFAR: United States President's Emergency Plan for AIDS Relief
SIDA: Swedish International Development Cooperation Agency
Standing Committee on Nutrition
SUN: Scaling up Nutrition
United Nations (Food and Agriculture Organization, UNICEF, United Nations Development Programme, World Food Programme, World Health Organization)
Unitaid
USAID: United States Agency for International Development
World Bank Group

NONGOVERNMENTAL ORGANIZATIONS

1,000 Days
Action Against Hunger
Bread for the World
Catholic Relief Services
CARE
EAT
FHI360
Food Fortification Initiative
Heifer International, Helen Keller International
International Food Policy Research Institute
Global Alliance for Improved Nutrition
Micronutrient Forum, Nutrition International
PATH
Population Services International
Results for Development
Save the Children
Scaling Up Nutrition
World Vision International

DONORS

Bill & Melinda Gates Foundation
Children's Investment Fund Foundation
Eleanor Crook Foundation
Sight and Life Foundation
Wellcome Trust

Source: Beaudreault, 2019, plus relevant additions

APPENDIX B. GLOSSARY OF TERMS

Activity cost. The aggregate cost of a specific activity implemented by program or project. The activity cost should include all the relevant financial drivers, such as labor, commodities, transportation and communications.

Acute malnutrition. See Wasting.

AIDS. Acquired immune deficiency syndrome. AIDS is the most severe phase of infection caused by HIV.

Anemia. In a nutrition context, the primary concern is anemia caused by insufficient iron in the diet. Iron-deficiency anemia can cause serious problems for pregnant women but it is highly preventable through nutrition-related interventions.

ART. Antiretroviral therapy. ART uses antiretroviral drugs to lower the HIV viral load in patients, improving their health and reducing their ability to spread the disease.

CD4 cells. A type of T cell that plays an important role in the human immune system.

CD4 count. Low numbers of CD4 blood cells increase the likelihood of a failure of the immune system in HIV patients, leading to life-threatening infections and cancers.

Childhood overweight and obesity. “The prevalence of overweight and obesity in adolescents is defined according to the WHO growth reference for school-aged children and adolescents (overweight = one standard deviation body mass index for age and sex, and obese = two standard deviations body mass index for age and sex),” retrieved from <https://www.who.int/dietphysicalactivity/childhood/en/>.

CMAM. Community-based management of acute malnutrition. The approach brings together facility- and community-based support to improve the implementation and outcomes of treatment for severe and moderate acute malnutrition.

Demand-side approaches. Driven by demand in the market for goods and services. In the context of nutrition and health, these would be approaches driven by the needs, desires and/or preferences of patients and prospective patients. Generally perceived as the opposite of supply-side approaches, which are driven by the decisions or options preferred by the supplier and/or provider.

Evidence-based. Tends to rely on quantitative research studies to provide a high level of evidence for planning and implementing interventions or approaches. (Evidence-based and evidence-informed are often used interchangeably. No rigid or widely agreed definitions for either term exist.)

Evidence-informed. Tends to balance people-centered concerns with available quantitative data when planning and implementing interventions or approaches. (Evidence-based and evidence-informed are often used interchangeably. No rigid or widely agreed definitions for either term exist.)

Exclusive breastfeeding. According to WHO, exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines. The WHO recommendation is that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. After the first six months, infants should receive nutritionally adequate and safe complementary foods to meet their evolving nutritional requirements, while continuing to breastfeed for up to two years and possibly beyond.

Food fortification. Foods that have been fortified have nutrients added to them that don’t naturally occur in the food. Diseases caused by nutrient deficiencies can be effectively addressed using fortified foods.

Food insecurity. Occurs when there is not consistent access to sufficient food for a healthy life. Food insecurity can range from reduced quality and variety of food to disrupted eating patterns and reduced food intake.

Food security. No problems or limitations accessing food. In some case, there may be some concerns about food (e.g., anxiety about the quantity food in a household) but there will be little or no change in diet or food intake.

Funding umbrella. A *de facto* or organized funding umbrella would consider all the available sources of funds for nutrition and encourage or require a strategic allocation of those funds to maximize the effectiveness of those funds. This is in contrast to narrower allocations of funds that are prioritized by individual institutions without coordination with other funders.

Gender. A culturally-defined set of economic, social, and political roles, responsibilities, rights, entitlements, and obligations associated with being female and male, as well as the power relations between and among women and men, and boys and girls. The definition and expectations of what it means to be a woman or girl and a man or boy, and sanctions for not adhering to those expectations, vary across cultures and over time, and often intersect with other factors such as race, class, religion, age and sexual orientation. Transgender individuals, no matter where they identify along a continuum of female to male, are subject to the same set of expectations and sanctions.

Gender equity. The process of being fair to women and men, boys and girls. To ensure fairness, measures must be taken to compensate for cumulative economic, social, and political disadvantages that prevent women and men, boys and girls from operating on a level playing field.

Gender equality. The state or condition that affords women and men equal enjoyment of human rights, socially valued goods, opportunities, and resources. Genuine equality means more than parity in numbers or laws on the books; it means expanded freedoms and improved overall quality of life for all people.

Gross national product. The total value of goods produced and services provided by a country during one year, equal to the gross domestic product plus the net income from foreign investments.

HIV. Human immunodeficiency virus. HIV, which attacks the immune system, is the retrovirus that causes AIDS.

JANS. Joint Assessment of National Health Strategies; according to WHO, JANS is a shared approach to assessing the strengths and weaknesses of a national strategy. Ideally, it is accepted by multiple stakeholders and can be used as the basis for technical and financial support.

Leverage point. A place within a system or approach where a small or focused change in one area or activity may produce a larger change in multiple areas, activities or outcomes. (See Tipping point.)

Low birth weight. Defined by WHO as an infant birth weight of 2,499 grams or less, regardless of gestational age.

Malnutrition. Lack of proper nutrition, including undernutrition and overnutrition.

MAM. Moderate acute malnutrition

Micronutrient supplementation. Micronutrients (i.e., vitamins and minerals) are essential for human health. However, approximately two billion people worldwide have deficiencies in micronutrients. According to UNICEF, the most common deficiencies are iodine, iron, vitamin A, and zinc. Pregnant women can also face deficiencies in calcium, folate, and vitamin D, which can have serious consequences for both the mother and the child. Micronutrient supplements are one way to address these deficiencies. Other options are improvements in dietary diversity and food fortification programs.

NACS. Nutrition Assessment, Counseling and Support. An integrated approach to nutrition interventions designed to improve nutrition's contribution to improved health in the HIV response.

Noncommunicable disease (NCD). A non-communicable disease is not directly transmissible from one person to another (e.g., diabetes, heart disease, high blood pressure).

Nutrition-sensitive interventions. Nutrition-sensitive interventions address the underlying causes of malnutrition; for example, child protection, education and social safety nets.

Nutrition-specific interventions. Nutrition-specific interventions focus on the immediate determinants of malnutrition; for example, dietary diversification, food fortification and promotion of breastfeeding.

Overnutrition. Excessive consumption of nutrients, which exceeds the amount required for normal growth, development and metabolism. Leads to overweight and obesity.

Performance, coverage. Number/percentage of people in a given area (e.g., district, province, national) in need of nutrition-related services who access to those services. Coverage is generally a subset of people who know about the services (i.e., reach).

Performance, efficiency. Making the most of the resources available for nutrition-related services with a minimum of wasted effort or expense. An efficient program is more likely to be a sustainable program.

Performance, effectiveness. Achieving the intended results of the nutrition-related intervention.

Performance, reach. Number/percentage of people in a given area (e.g., district, province, national) in need of nutrition-related services who have been reached with information about the available services.

PMTCT. Prevention of mother-to-child transmission. An integrated package of interventions for mothers and babies, including psychosocial support, counseling and drugs, to reduce the likelihood of vertical transmission of HIV from an infected mother to her child.

RUTF. Ready-to-use therapeutic food; a ready-to-use paste, using a peanut butter base mixed with dried skimmed milk, vitamins and minerals that can be used to achieve rapid weight gain in severely undernourished children.

SAM. Severe acute malnutrition; defined by very low weight for height, visible severe wasting, or the presence of nutritional edema.

SDG. Sustainable Development Goals; 17 global goals, including 169 targets and 232 indicators, agreed by the United Nations General Assembly in 2015 to be reached by 2030.

Stunting. Impaired growth and development in children caused by poor nutrition and recurrent infections (e.g., diarrhea).

Supply-side approaches. Driven by the supply of goods and services in the market. In the context of nutrition and health, these would be approaches driven by the priorities and/or preferences of providers (e.g., government, NGOs). Generally perceived as the opposite of demand-side approaches, which are driven by the needs, desires and/or preferences of patients and prospective patients.

Sustainable. In the context of public health programs, a sustainable program is one that can be maintained for an extended period. Determining factors include implementation capacity (e.g., human resources, technical knowledge and skills, facilities) and funding.

Sustained. In the context of public health programs, a sustained program is one that has been maintained for an extended period. Sustained programs are particularly important because of the continuity they provide for patients/clients and the ability to track their effectiveness over time.

TB. Tuberculosis; can be categorized as active or latent TB. Active TB, which is contagious, has obvious symptoms, including chronic cough, bloody sputum, weight loss, fatigue, and fever. Latent TB (i.e., inactive TB)

has no systems but it can turn into active TB. Tuberculosis can be successfully treated but it is a long-term treatment. For example, the treatment for active TB can require taking antibiotics for at least six to nine months.

Tipping point. A critical point in a situation, process, or system beyond which a significant and often unstoppable effect or change takes place. (See Leverage point.)

Undernutrition. Lack of proper nutrition caused by not having enough food or not eating enough food containing substances necessary for growth and health.

Universal Declaration of Human Rights (UDHR). A comprehensive declaration adopted by the United Nations in 1948 on fundamental human rights (e.g., dignity, liberty, equality, freedom of movement, freedom of thought, and the right to a standard of living adequate for health and well-being).

WASH. Acronym for water, sanitation and hygiene. Used broadly to describe programs that address these types of interventions.

Wasting. Acute undernutrition that leads to the rapid deterioration of muscle and fat tissue. Untreated HIV and TB can contribute to wasting in patients who are undernourished.

APPENDIX C. LINKS

2008 Lancet Series on Maternal and Child Nutrition

<http://www.thelancet.com/series/maternal-and-child-undernutrition>

2013 Lancet Series on Maternal and Child Nutrition

<http://www.thelancet.com/series/maternal-and-child-nutrition>

Global Nutrition Report 2014

<http://globalnutritionreport.org/2014/11/13/global-nutrition-report-2014/>

Global Nutrition Report 2015

<http://www.globalnutritionreport.org/the-report/the-report-2015/>

Global Nutrition Report 2016

<http://www.globalnutritionreport.org/the-report/>

Global Nutrition Report 2018

<https://globalnutritionreport.org/reports/global-nutrition-report-2018/>

JANS: Joint Assessment of National Health Strategies

<https://www.internationalhealthpartnership.net/en/tools/jans-tool-and-guidelines/>

NACS: Nutrition Assessment, Counseling and Support

<http://www.fantaproject.org/tools/NACS-users-guide-modules-nutrition-assessment-counseling-support>

<http://www.fantaproject.org/tools/tanzania-nutrition-assessment-counseling-and-support-nacs-tools>

PHFS: Partnership for HIV-Free Survival

<https://www.usaidassist.org/toolkits/partnership-hiv-free-survival-learning-platform>

Repositioning Nutrition as Central to Development: A Strategy for Large Scale Action

<https://openknowledge.worldbank.org/handle/10986/7409>

Sustainable Development Goals

<https://sustainabledevelopment.un.org/sdgs>

Sustainable Development Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

<https://sustainabledevelopment.un.org/sdg2>

Universal Declaration of Human Rights

<http://www.un.org/en/universal-declaration-human-rights/>

World Health Assembly: 2025 Targets

<http://www.who.int/nutrition/global-target-2025/en/>

APPENDIX D. TOOLS

CMAM Costing Tool

<http://www.fantaproject.org/tools/cmam-costing-tool>

Lives Saved Tool (LiST)

<http://livessavedtool.org>

OneHealth Tool

<http://www.who.int/choice/onehealthtool/en/>

<http://www.avenirhealth.org/software-onehealth>

<https://www.internationalhealthpartnership.net/en/tools/one-health-tool/>

Optima Nutrition

<http://optimamodel.com/nutrition/>

PROFILES

http://pdf.usaid.gov/pdf_docs/PA00KR3C.pdf

<http://www.fantaproject.org/focus-areas/country-level-nutrition-advocacy>

World Breastfeeding Costing Initiative (WBCi) Financial Planning Tool

<http://www.worldbreastfeedingcosting.org/wbci-tool.html>

<http://www.worldbreastfeedingcosting.org/wbci/IYCF-WBCi-Brochure.pdf>

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