Approaches for Nutrition Costing and Financial Tracking in SUN Countries

MQSUN⁺ Guidance Note

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About MQSUN⁺

MQSUN⁺ aims to provide the UK Department for International Development (DFID) with technical services to improve the quality of nutrition-specific and nutrition-sensitive programmes. The project is resourced by a consortium of five leading nonstate organisations working on nutrition. The consortium is led by PATH.

The group is committed to:

- Expanding the evidence base on the causes of undernutrition.
- Enhancing skills and capacity to support scaling up of nutrition-specific and nutrition-sensitive programmes.
- Providing the best guidance available to support programme design, implementation, monitoring and evaluation.
- Increasing innovation in nutrition programmes.
- Knowledge sharing to ensure lessons are learnt across DFID and beyond.

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About this publication

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Abbreviations

ABC	activity-based costing
ACF	Action Contre la Faim (Action Against Hunger)
AMP	Aid Management Program
CHAI	Clinton Health Access Initiative
CMAM	community-based management of acute malnutrition
CRF	common results framework
DFID	UK Department for International Development
DI	Development Initiatives
EDP	external development partner
EQUIST	Equitable Impact Sensitive Tool
FANTA	Food and Nutrition Technical Assistance
IYCF	infant and young child feeding
LiST	Lives Saved Tool
MCH	maternal and child health
MINIMOD	Micronutrient Intervention Modeling
MQSUN(+)	Maximising the Quality of Scaling Up Nutrition (Plus)
NACS	nutrition assessment, counselling and support
NGOs	nongovernmental organisations
NN(A)P	National Nutrition (Action) Plan
OPM	Oxford Policy Management
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Survey
PF4N	Public Finance for Nutrition
R4D	Results for Development
SMS	SUN Movement Secretariat
SPRING	Strengthening Partnerships, Results, and Innovations in Nutrition Globally
SUN	Scaling Up Nutrition
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
WASH	water, sanitation and hygiene
WBCi	World Breastfeeding Costing initiative
WFP	World Food Programme
WHO	World Health Organization

Executive Summary

Since 2013, Scaling Up Nutrition (SUN) Movement countries have made major strides to bring together different stakeholders from multiple sectors to align national efforts to end malnutrition. There is growing understanding of the importance of estimating the financial costs of national nutrition programmes and tracking the financing for nutrition interventions at the country level, as well as having a better understanding of the composition of this financing, particularly the budgets allocated by governments to nutrition-specific and nutrition-sensitive interventions. Costing of individual nutrition investments at the country level is an essential step in the process of mobilising resources, whilst tracking these investments informs advocacy and helps ensure they are used to best effect. Costing and tracking of investments in nutrition are important parts of the policy planning, implementation and monitoring cycle. The purpose of this guidance note is to provide a collection of approaches for costing and financial tracking, including budget analysis, of nutrition actions at the country level. The primary target audience is nutrition programme personnel and policymakers in SUN countries at the national or subnational level.

For the purpose of this guidance note, 'costing for nutrition' is the estimation of the value of resources required for nutrition services and interventions in a given setting, such as nutrition-specific or nutrition-sensitive services or programmes at the country level. The nutrition costing emphasises government-level costing for planning and budgeting and does not include economic evaluations such as cost effectiveness, cost-benefit analysis or technical-efficiency analysis. Nutrition financial tracking at the country level is a continuous and iterative cycle of collecting, reviewing and monitoring financial resources for nutrition. This covers a broad spectrum of actions along the SUN planning and implementation cycle, which can be grouped into the two main areas of budget and expenditure analysis and resource and expenditure tracking and monitoring exercises.

Several costing and financial-tracking methods and tools are presented herein, highlighting budget analysis in particular because it has been shown to be a simple but effective tool for SUN countries to begin looking at their nutrition finances. Costing and financial tracking for nutrition poses a number of challenges, particularly related to the multisectoral nature of nutrition actions. This guidance note reviews challenges such as the inadequate quantity and quality of data, inadequate personnel time and resources and the tight timescale and budget for performing analysis, amongst others, along with some options and recommendations for proceeding in a realistic manner.

When it comes to costing a nutrition plan and tracking government and donor investments for nutrition, one size does not fit all. Every country is different in terms of its nutrition needs, programmes, government structure and financial management system. When utilising this document, it is important to evaluate which tools and methods will be appropriate for each particular context. Countries with limited experience in this area may choose to begin with a very simple costing-and-budget-analysis exercise, whilst those with greater experience, resources or time or more integrated financial management systems may undertake more detailed costing exercises and financial tracking.

The hope is that this guidance note will highlight the importance of planning and tracking nutrition financing at the country level and offer tangible and realistic tools and options for carrying out this work and overcoming challenges along the way. When nutrition financial tracking improves, the contribution of this work translates into increased funding and efficient spending for nutrition and can have an important impact on advancing efforts for improved nutrition outcomes in countries where they are needed most.

Introduction

The need to better cost and track nutrition funding in low- and middle-income countries has been recognised as a priority since the inception of the Scaling up Nutrition (SUN) Movement and continues to be central to ensuring that investments in nutrition are not just well accounted for but also directed to their best effect. Costing and tracking of nutrition investments are not only important for policymakers but also for citizens, the private sector and donors. Costing is important for estimating the quantities of financing needed for nutrition-specific, nutrition-sensitive and nutrition-related governance activities. Governments require reliable data to cost programmes, prioritise, plan and make decisions on financial allocations, as well as to monitor and evaluate actual expenditures and policy implementation ¹. The purpose of this guidance note is to provide a collection of approaches for costing and financial tracking, including budget analysis, of nutrition actions at the country level.

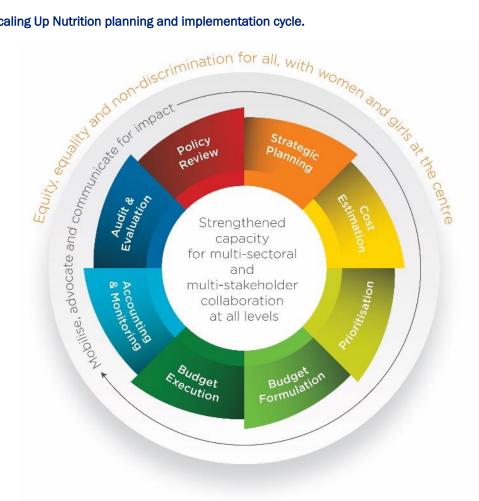
Funded by the UK Department for International Development, Maximising the Quality of Scaling Up Nutrition Plus (MQSUN⁺) supports the SUN Movement in scaling up nutrition efforts at both global and national levels by providing technical expertise on the design, implementation and evaluation of evidence-based, nutrition-specific and nutrition-sensitive programming and policies. The SUN Movement Secretariat (SMS) requested that MQSUN⁺ utilise the technical expertise of the Nutrition Financing Consultation Group, now convened by MQSUN⁺, to collate guidance on nutrition costing and financial tracking. As such, the specific objective of this guidance note is to summarise a collection of approaches and tools that can be used by countries at the national or subnational level to cost national nutrition plans (NNPs) and budgets and track financial resources for nutrition.

The SUN planning and implementation cycle is a guide for continually improving country processes for ending malnutrition (Figure 1). A guiding principle of the plan is to strengthen country capacity by encouraging all to start with what exists and to continuously improve for impact by using adaptive and innovative approaches ². Costing of national and subnational plans generally occurs near the beginning of the planning and implementation cycle, whilst financial tracking occurs throughout the cycle. Strategic planning is a systematic process of envisioning the desired future for nutrition status in a country and translating this vision into a framework for coordinated implementation by defining goals and objectives and the steps needed to achieve them. This is when multisectoral plans, such as common results frameworks (CRFs) and the more detailed NNPs, are defined or updated. Plans are then costed using a vetted and agreed methodology. The costed plans can then be prioritised based on need and available funds. Budget formulation allows for projecting revenue and allocation of expenditures based on the agreed costed plans. Budget execution then sees the implementation and expenditure of costed plans. Accounting and monitoring ensure accurate reporting on actual expenditure and service delivery, followed by evaluation of the use of funds and measurement of results. Whilst multisectoral NNPs generally cover a five-year period, the planning and implementation cycle relates to the annual planning process for sectors to budget, allocate and disburse funding. As the cycle continues, costs, budgets and, eventually, policies and plans can be reviewed and updated based on evaluation of the previous years' results with regard to success in reaching goals, accuracy of estimated costs and actual expenditures.

The guiding principle of strengthening country capacity by encouraging all to start with what exists and to continuously improve for impact by using adaptive and innovative approaches also applies to the cyclical steps of costing, financial tracking and budget analysis. 'Costing', for the purposes of this guidance note, is used for estimating resource requirements and for budgeting, not for technical efficiency or economic evaluation. Costing a CRF or NNP is vital to the process of prioritising fundamental nutrition actions and identifying the most efficient sequence in which they should occur. A costed plan is not an end in itself but a tool in the process of conceptualising, planning and initiating nutrition actions.

As is also shown in Figure 1 and will be described in this guidance note, financial tracking is a cyclical, iterative and evolving process that naturally improves as plans are refined, data are improved, outcomes are reported and stakeholders become accountable for decisions and actions. It is important to distinguish between government or domestic (on-budget) planning of funds and development partner (off-budget) assistance. Whilst five-year multisectoral nutrition plans may include off-budget funding, donors generally operate on their own funding cycles and are often not part of government annual planning, which is the focus of financial tracking herein.

Figure 1. Scaling Up Nutrition planning and implementation cycle.



Costing for Nutrition

Nutrition costing methodologies

For the purpose of this guidance note, 'costing for nutrition' is the estimation of the value of resources required for nutrition services and interventions in a given setting, such as nutrition-specific or nutrition-sensitive services or programmes at the country level. Budgeting, on the other hand, values the resources or the nutrition services or programmes that are within a funding allocation. Cost budgeting includes the estimation of costs, setting of a fixed budget, and management and control of the actual costs or expenditures (compared to the estimated or allocated ones). Narrowly defined, the budget is the government's forecast of revenue and planned expenditure, usually provided on an annual basis. Nutrition activities may be spread across various government-sector budgets, such as health, agriculture, education, social protection and water, sanitation and hygiene (WASH). This section focuses on costing for the purposes of financial planning and resource-requirement estimation, as well as budgeting and price setting (for example, what it costs to scale up or implement programmes, using existing estimates of unit costs). This is distinct from research to compare intervention costs with outputs and outcomes and from economic evaluations such as cost-benefit analyses.

In the SUN planning and implementation cycle, costing explicitly enters into the 'cost-estimation' step; however, it will be important to have costing information for many of the other steps, such as determination of how much to allocate in a budget, ongoing monitoring and evaluation and then back to policy review and planning. These steps are not necessarily distinct but are meant to build on each other. For example, outputs from the cost-estimation step are used in the budgeting process to help decide how funds are allocated based on costs and available resources.

Costing can be done for activities, larger programmes/interventions or full CRFs/NNPs. This document focuses on costing for two main purposes: (1) financial planning and resource-requirement estimation and (2) budgeting and price setting ³. The former may include such things as informing budgets for national planning (NNP or CRF), whilst the latter may be used for predicting expenditures by budget holders, budget setting by managers and setting prices for specific services. The nutrition costing emphasises government-level costing for planning and budgeting and does not include an economic evaluation, such as cost effectiveness, cost-benefit analysis or technical-efficiency analysis^{i 3}.

There have been several reviews and global exercises in nutrition costing in the past several years, and it is important to note that these have built on years of costing work in other sectors, such as health.ⁱⁱ Nutrition-costing reviews have come from such organisations as the World Bank, the US Agency for International Development (USAID) and the SUN Movement ^{4–7}. The SUN 2014 Annual Progress Report provides guidance for the broader objective of costing a NNP and mentions the importance of setting priorities and targets, understanding scale-up and ensuring harmonisation with stakeholders across sectors ⁵.

¹ For additional information on economic evaluations for nutrition, please refer to (a) the <u>ANH Academy Technical Brief:</u> <u>Economic Evaluations of Multisectoral Actions for Health and Nutrition</u> (2019); (b) <u>A Guide to the Fundamentals of</u> <u>Economic Evaluation in Public Health</u> by Moreland et al. (2019); and (c) the Strengthening Economic Evaluation for Multisectoral Strategies for Nutrition (<u>SEEMS-Nutrition</u>) project.

[&]quot; Refer to the seminal work, Cost Analysis in Primary Health Care, by Creese & Parker (1994).

There are a number of possible approaches for estimating costs; Moreland et al. (2019) provide a detailed summary in *A Guide to the Fundamentals of Economic Evaluation in Public Health*. One common way to categorise costing estimates is by top-down and bottom-up approaches. Top-down approaches are done by disaggregating high-level expenditures into cost categories or facilities, whilst bottom-up approaches aggregate individual cost elements⁸. Bottom-up costing approaches are generally more time intensive but have the advantage of providing more detailed, accurate and reliable cost estimates ⁸. Ultimately, the decision about which costing approach to use is contextual and based on the amount of time, resources and data available. In many cases, a mix of different costing approaches is used; however, examples from country-level costing exercises for planning and budgeting and a review of methods used in models/tools appears to favour bottom-up approaches.

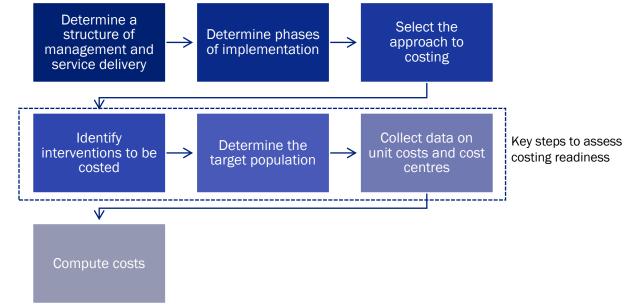
A common method of data collection for bottom-up costing is the ingredients-based approach, an approach often used for many types of planning. The ingredients-based approach estimates the quantity and price of all the resources needed for a given intervention or programme ⁸. Another bottom-up approach commonly used in costing tools and for clinical services is activity-based costing (ABC).^{III} ABC is a more nuanced form of ingredients-based costing and assesses costs of activities identified for each service, or 'priority area', and objectives in a multisectoral nutrition plan. ABC first establishes a comprehensive list of 'cost centres', which are the categories of the activities and interventions to be undertaken, and it is important that they are mutually exclusive to avoid double counting.^{IV} With information at the level of cost centre, it is then easy to identify where costs are falling, where costs increase or where cuts may be most useful ⁹. A related approach that is not usually classified as either top-down or bottom-up is to take the costs that exist for a current, similar programme and make relevant adjustments ⁹. Multiple costing approaches can be used or combined for a more nuanced or tailored method.

Regardless of the method or approach used, some key steps to performing a nutrition costing exercise have been outlined by Howlader et al. (2012) and are further described in a USAID technical guidance brief on nutrition costing ¹⁰. **Figure 2** highlights the steps that are most appropriate for costing financial plans and budgeting at the country level and further identifies the three key steps for assessing costing readiness, as described by MQSUN^{+ 11}.

^{III} Note that costing approaches have been defined and described in various ways in the literature. Some references describe activity-based costing as a bottom-up approach while others describe it as a hybrid form of micro-costing that is not strictly bottom-up or top-down ³.

^{iv} Examples of cost centres in a paper evaluating a health care delivery intervention are as follows: transportation, information technology, equipment and security ⁵³.

Figure 2. Key steps in nutrition costing.



Source: Adapted from 9 and 10.

Assessing Costing Readiness

Assessing 'costing readiness' should be an additional step before undertaking costing of a CRF or NNP. This may be done with the help of the <u>MQSUN+ Costing Readiness Assessment Template</u>, which is an Excel-based template and accompanying guidance note to help determine whether a CRF or NNP is ready for a detailed and accurate costing exercise ¹¹. In this framework, there are three aspects to assessing costing readiness:

- Logical flow of the activities.
- Detailed description of the activities.
- Coverage rates for both the current and future periods.

A Maximising the Quality of Scaling Up Nutrition (MQSUN) <u>guidance note</u> on costing finds several important elements to consider for guiding the costing process ¹². These include ensuring that there is an operational plan in place before undertaking costing and including all relevant stakeholders: ministries, implementers and funding sources. For the cost-estimation stage, the MQSUN guidance note highlights that costs should be based on the actual cost of delivering the interventions and that the following information should be included:

- 1. Clear and exhaustive understanding of each action in the plan.
- 2. Implementation targets for specific actions in the plan.
- 3. Target coverage.
- 4. Current implementation and spending.
- 5. Recurrent and other costs.
- 6. Shared (indirect) costs.

An important consideration when carrying out a costing exercise is comparing cost data over time and doing so by discounting capital goods and annualising adjustments, which help reflect the timing with which resources (capital and recurrent) are consumed in a programme or intervention. Discounting accounts for a time preference—that future costs are worth less and thus should be discounted more. Annualisation allows for the calculation of an annual equivalent cost when there will be recurrent costs over the lifetime of a programme and helps to illustrate how capital goods are actually used during the lifetime of that programme or intervention ¹³. Walker and Kumaranayake (2002) detail methods for both discounting and annualising costs and discuss some rule-of-thumb for deciding when each of these types of adjustments should be made. Deciding whether to undertake these adjustments and which methods to use will ultimately depend on how the data will be used—for example, adjustments for budgeting purposes will be different than those for cost-effectiveness analysis ¹³. It is important to note that costing exercises for NNPs do not always include amortisation;^v this can be discussed and agreed by stakeholders prior to carrying out the exercise.

Whilst much of the nutrition costing guidance consists of nutrition-specific interventions, the MQSUN guidance note on costing attempts to lay out some of the issues for nutrition-sensitive costing ¹². Nutrition-sensitive interventions will likely be more difficult to cost since they are more distal to the nutrition outcomes. They can consist of interventions that are subcomponents of larger interventions or parts of wider/integrated programmes. Not all nutrition-sensitive activities may be directly related to nutrition; therefore, consultations and assumptions will be needed to decide which activities are nutrition relevant and, thus, need to be costed.

Further, there are several principles that should be adhered to when undertaking costing: the costs should be transparent, exhaustive, user driven (consultative with stakeholders) and iterative.

Costing tools

Costing exercises can be conducted either from scratch or with available costing tools. **Table 1** describes various tools that can be used for strategic planning, costing and, in some cases, budgeting and tracking. They may be explicitly focused on costing, or they may include a costing component or module. Whilst the scope of many of these tools is focused on the health sector, they also include a nutrition component (most commonly a nutrition-specific one) or can help cost and track nutrition-related activities or interventions, depending on the relevant sector (e.g. health, social protection, WASH, education, agriculture). Some tools include the benefits of single interventions, whilst others incorporate the effects of multiple interventions simultaneously. The potential users vary by tool but may include planners at national, subnational and district levels. It is important to note that many of these tools require training prior to use, and default data may be outdated and need review and updating by users to improve accuracy and applicability to the country context.

More information about costing tools, with a specific focus on maternal, newborn and child health, can be found through The Partnership for Maternal, Newborn & Child Health's costing tools review. Additionally, the Sackler Institute for Nutrition Science and the Micronutrient Forum have completed a review of eight nutrition modelling tools that are used for advocacy, programme decision-making and costing by low- and middle-income countries, and this group plans to develop a series of products to increase understanding of the tools and promote their uptake ¹⁴.

^v Amortisation is the process of using **discounting** and **annualisation** to spread payments of a good or service over its useful life. **Annualisation** is a technique used to spread the cost of a good or service over its useful life years (i.e. the value of the good or service is divided by the annualisation factor); the annualisation factor is as follows: 1/(1+r)n, where r= discount rate and n = number of years of useful life. **Discounting** is the approach used when conducting annualisation of a good and service to adjust for time preference for economic costs (i.e. that the time value of money is worth more today than it would be in the future).

Table 1. Tools for planning and costing with a nutrition component.

Tool	Description	Scope	Costing Approach	Things to Consider
	Stra	tegic Planning and Prioritisation Tools		
Lives Saved Tool (LiST)	A software tool that estimates the financial and human resources required to deliver a package of services and can evaluate intervention scenarios based on the impact on maternal and child mortality and morbidity and the cost associated with delivering the package of services.	Includes more than 70 maternal, newborn and child health and nutrition interventions; was updated for increased use in the nutrition community; includes stunting, wasting and some specific nutrition outcomes (low birth weight and maternal anaemia).	Ingredients-based approach.	 Is mainly an impact tool for planning, evaluation and advocacy. Includes high-impact interventions. Links with OneHealth.
WHO <u>OneHealth</u> Tool	A software tool for government planners that determines the financial costs associated with activities and targets outlined in a health plan and assesses estimated health impact.	Includes reproductive, maternal, newborn and child health; vaccination; malaria; tuberculosis; HIV/AIDS; nutrition; and WASH.	Ingredients-based approach which multiplies quantities by prices.	 Includes sector-wide planning, such as scenario and bottleneck analysis, programme costing, health impact analysis, budgeting and financing of strategies. Links to health targets. Links with impact models (such as LiST).
UNICEF EQUIST	A web-based free-access, analytical platform designed that helps decision makers develop equitable strategies to improve health and nutrition for the most vulnerable children and women.	Includes high-impact reproductive, maternal, newborn, child and adolescent health and nutrition interventions.	Incremental costing based on 'Marginal Budgeting for Bottlenecks'.	 Uses integrated consideration of inequalities. Links with LiST and OneHealth tools. Costing approach less apparent
Marginal Budgeting for Bottlenecks	A result-based planning and budgeting tool for identifying implementation constraints and estimating the marginal costs of overcoming them.	Originally designed for maternal, newborn and child health but includes 3 nutrition interventions.	N/A	 Used by UNICEF EQUIST and the World Bank. Has costing approach that is less apparent.
Optima Nutrition	A quantitative tool for governments that assists with the allocation of current or projected budgets across nutrition programmes.	Includes vitamin supplementation programmes, IYCF education, treatment of severe acute malnutrition, treatment and prevention of diarrhoea, fortification of foods, WASH, family planning and malaria-prevention interventions.	'Cost functions' relating to the cost of service delivery, the coverage amongst targeted populations and the influence on behavioural, clinical and epidemiological outcomes.	 Includes optimisation.^{vi} Has underlying framework based on LiST. Focuses outcomes on stunting and mortality in children under five years old.

^{vi} Optimisation refers to 'mathematical programming' where the costs and cost-effectiveness of all potential interventions are assessed within the limits of the budget or other system constraints, after which the most appropriate options can then be selected.

Tool	Description	Scope	Costing Approach	Things to Consider
MINIMOD (Micronutrient Intervention Medaling)	A planning and management tool for cost- effective micronutrient interventions in developing countries.	Includes micronutrient deficiencies.	Activity-based costing.	 Includes optimisation. Looks at effective coverage of interventions.
Modeling)				Can calculate number of child deaths averted.
		Costing Preparation Tools		
MQSUN+ Nutrition Costing Readiness Assessment Tool	An Excel template and related guidance that assesses whether NNPs contain the details and information required for costing.	Includes country CRFs and NNPs.	N/A	 Requires a CRF or NNP to be already in place. Is Excel based and easy to use. Provides concrete examples.
		Costing Tools		· Howaes concrete examples.
FANTA CMAM Costing Tool	An Excel-based tool for estimating the costs of establishing, maintaining and/or expanding services for CMAM at the national, subnational and district levels.	Includes interventions for CMAM in children.	Activity-based costing.	• Looks at a single type of intervention (CMAM) without impact, cost effectiveness or optimisation.
FANTA NACS Planning and Costing Tool	An Excel-based based tool to help policymakers, programme managers and implementers plan for the design, financing, and management of NACS at national and subnational levels.	Includes priority nutrition interventions.	Activity-based costing.	• Looks at a single type of intervention (NACS) without impact, cost effectiveness or optimisation.
WBCi IYCF financial planning tool	An Excel-based tool to estimate the cost of exclusive breastfeeding.	Includes exclusive breastfeeding.	'Programme experience approach' ^{vii}	 Does not include default data, impact, cost effectiveness or optimisation.

Abbreviations: CMAM, community-based management of acute malnutrition; CRF, common results framework; EQUIST, Equitable Impact Sensitive Tool; FANTA, Food and Nutrition Technical Assistance; IYCF, infant and young child feeding; NACS, nutrition assessment, counselling and support; NNP, National Nutrition Plan; UNICEF, United Nations Children's Fund; WASH, water, sanitation and hygiene; WBCi, World Breastfeeding Costing initiative; WHO, World Health Organization.

^{vii} The 'programme experience' approach here appears similar to other bottom-up approaches; that is, it takes unit costs for all necessary resources and activities and scales it to the needed population. The costing is undertaken from the governmental perspective and includes such items as one-off costs of developing legislation ¹⁸.

Lives Saved Tool (LiST)

LiST is a strategic planning software tool for evaluating intervention scenarios. The costing module takes an ingredients-based approach to determine the financial resources required for a designated package of services. The tool has been reviewed in a paper by Bollinger et al. where it is compared to the OneHealth tool, as well as to the United Nations Children's Fund's (UNICEF's) Equitable Impact Sensitive Tool, or EQUIST, described below ¹⁵. In the paper, the LiST costing module is recommended for users who are more focused on maternal and child health (MCH) interventions. The LiST costing module, along with the OneHealth Tool, is linked to the LiST impact model to assess the health impact of MCH interventions in terms of lives saved.

OneHealth

In the World Health Organization's (WHO's) strategic planning OneHealth tool, ingredients-based costing can be conducted from the health system perspective. The tool also provides many default data inputs, such as health service costs from the WHO-CHOICE database (varying by country), and is able to answer questions about costing across the health system. For nutrition interventions, OneHealth guidance mentions the following as being included for nutrition: all WHO Essential Nutrition Actions to target the 1,000-day window of opportunity from conception to two years old and other nutrition-specific and nutrition-sensitive interventions recommended by WHO and delivered through the health sector, such as WASH, optimal timing of cord clamping and deworming ¹⁶. It is notable that the tool does not allow users to include nutrition-sensitive interventions that are delivered outside of the health sector, such as those from the agricultural or social protection sectors.

EQUIST and Marginal Budgeting for Bottlenecks

UNICEF's EQUIST tool is an evidence-based and equity-focused planning tool to prioritise country strategies for raising the coverage of high-impact reproductive, maternal, newborn, child and adolescent health and nutrition interventions. The EQUIST tool utilises the LiST impact model and the World Bank's Marginal Budgeting for Bottlenecks costing approach, which is designed for medium-to long-term planning and for understanding the costs of health system constraints. Both the EQUIST and Marginal Budgeting for Bottlenecks tools are capable of including some nutrition interventions, but the tools are primarily focused on a basic package of MCH interventions.

Optima Nutrition and MINIMOD (Micronutrient Intervention Modeling)

Optima Nutrition is principally a resource-allocation optimisation tool for answering questions about how to (a) allocate funding in a way that maximises nutrition outcomes, (b) estimate the cost of scaling up nutrition interventions and (c) assess which interventions are the most cost-effective. Optima Nutrition has been used in 11 countries and is currently focused on the outcomes of stunting and mortality in children under five years old. The University of California Davis's MINIMOD is also an economic optimisation tool but focuses specifically on identifying cost-effective solutions to micronutrient-related problems. MINIMOD can measure success in various terms, depending on priorities, such as the change in effective coverage of micronutrient interventions (i.e., the percentage of individuals with inadequate dietary intake who achieve adequate intake) ¹⁴.

Costing Readiness Assessment Tool

The purpose of the Costing Readiness Assessment Tool, recently developed by MQSUN⁺, is to determine if a CRF or NNP includes enough details in its activities to be able to conduct a full costing exercise ¹¹. The tool consists of an Excel template and guidance note and is intended for use by country-level nutrition planners. MQSUN⁺

Food and Nutrition Technical Assistance (FANTA) tools

As part of USAID's FANTA and FANTA-2 projects, there are two different tools that have been developed specifically for nutrition costing. One is the CMAM [community-based management of acute malnutrition] Costing Tool. This costing tool is designed to be relatively easy to use and to have a large amount of prepopulated data. The second tool is the NACS [nutrition assessment, counselling and support] Planning and Costing Tool. Each of these tools focuses on a specific intervention (CMAM and NACS, respectively), and each uses an activity-based costing approach. The NACS tool, for example, has been successfully used by the Malawian Ministry of Health to develop its five-year operational plan for scaling up NACS.

World Breastfeeding Costing initiative (WBCi) Infant and Young Child Feeding Financial Costing Tool

This financial costing tool uses what is called a 'programme experience' approach to estimate costs. The total costs are included, but the costs of delivery are excluded—assuming that delivery channels are already operational. In a review of the WBCi methodology, Carroll et al. compares the costing approach from the WBCi to that taken in a World Bank–led effort to estimate the global cost to reach targets for stunting, anaemia, breastfeeding and wasting, a costing which also takes a 'programme experience' approach. They find that the WBCi methodology is better for incorporating one-time and recurrent implementation costs; however, overall the World Bank approach was superior due to the inclusion of a time dynamic, where the time of scale-up and the costing of different phases of programme scale-up and maintenance could be incorporated ^{7,17,18}.

Costing challenges and recommendations

Costing can be particularly challenging in the case of nutrition because, for many countries, formal nutrition services may not exist in the national programme, and there may not be any CRF or NNP to be costed. Where plans do exist, they may be limited in scope or incomplete, making costing exercises difficult. Additionally, nutrition services often exist across multiple government agencies and sectors therefor maintaining consistency in costing methods and data across these sectors may be challenging ¹⁰.

The challenges outlined in this section are often echoed for financial tracking and budget analysis, and vice versa. Refer to the subsections on challenges in <u>financial tracking</u> and <u>budget analysis</u> for more information and recommendations.

Selection of the most appropriate costing method for the context

Understanding the various costing methods and selecting the most appropriate one for the given country context can be challenging ¹⁹. In some cases, using various methods or approaches may be

an appropriate way to move forward. It can also be helpful to review what has been done in other similar contexts—sharing experiences across countries can help improve selection and use of these methods—and to link national economics and finance experts with regional and global specialists ¹⁹.

Data availability

The availability of cost and contextual data remains a large challenge for conducting costing of nutrition activities for national planning and budgeting and therefore will drive some methodological decisions and assumptions. There are two types of data challenges: (1) having the data needed for costing interventions and (2) having data relevant to the context, including geography, such as subnational budgets. It is also often the case that there is more data for nutrition-specific activities than for nutrition-sensitive ones. Without adequate data, some key parameters will be hard to estimate. Addressing data gaps can involve making educated assumptions, eliciting values from experts and translating information from other settings. Many costs and mark-ups are either difficult to measure or are not included in standard surveys, if one is done at all. Filling this gap may require using global default prices or standard multipliers taken from previous work. Furthermore, with less costing information there will be a lower level of certainty in the cost estimate, and conducting appropriate sensitivity analysis to measure that level of uncertainty will be even more critical.

Quality of costing estimates

Costing estimates are affected by reliability, accuracy, thoroughness, uniformity, consistency and validity of data and assumptions, which can be challenging to gather and define. Even the most rigorous costing efforts rely on key assumptions. For example, costs of scale-up and targeting are notoriously difficult to estimate. By not including these costs, there is the potential that estimates may be inaccurate. The bias, however, could be in either direction. For example, not accounting for economies of scale could bias cost estimates upwards, whilst not accounting for the costs of targeting could bias cost estimates downwards. Additionally, there is some evidence that scaling up nutrition interventions has the potential for reduced effectiveness at scale ^{20,21}. Horton et al. mentions this as justification for only including coverage up to 90 percent and for allowing an increased cost to reach the 'hard-to-reach' populations ^{6,7}. Forecasting these last-mile costs is challenging but can be ameliorated by learning from experience in other sectors and from other contexts.

Integration of services across health system delivery platforms

Whilst integration of services across system delivery platforms is a critical issue to consider when undertaking costing analyses ²², it can make the costing exercise more complicated and difficult. In terms of costing, integration across platforms means that there will be shared costs to consider and that resource use across other areas of the health system and other sectors will be important to consider, including the opportunity costs of investment in certain sets of interventions, and also often means that costs will decrease. It is important to be clear about what is being costed and within which platform a new programme is being implemented or scaled up, because there are cost implications depending on what already exists in the platform and the true incremental cost of the additional activity.

Costing of a subnational or national nutrition plan

There are several challenges with costing nutrition plans, such as have an appropriately formatted plan for proceeding with costing, having the ability to adjust the plan in line with budget realities and having access to the needed information and personnel at both national and subnational agencies. It may be helpful to ensure that the costing of a plan does not start after the people who wrote the plan have completed their work. The plan might not be written in a costing-friendly manner, or preliminary costing results could indicate the need to revise proposed activities if the budget looks to be unrealistic for the country. If the people who developed the plan are not available anymore when the costing is being conducted, it could be a challenge to make the needed adjustments ²³. The 2013 SUN Movement workshop on costing provided several recommendations for ways to move forward with nutrition costing in national and subnational nutrition plans ¹⁹. The report provides different steps for countries depending on what stage they are in with regards to costing. For example, a country without a costed plan should begin by identifying current activities and budget allocations, whilst a country with a costed plan should assess capacity and expenditure and calibrate estimates with a view towards implementation. The 2013 SUN costing workshop also recommended that costing methodologies and tools should depend on country context and resources. It is recommended to adhere to the principles of understanding implementation realities, building on existing progress, sharing experiences, linking with experts, taking a multisectoral perspective, establishing budget codes and ensuring nongovernmental organisations (NGOs) are transparent about their programming. Menon et al. conducted subnational costing in India and highlight three issues that their findings can address: accounting for local unit costs, accounting for intervention synergies and accounting for delivery platforms. However, the authors also highlight that there is a lack of subnational cost data for delivery and that some costs are for small programmes and so do not account for costs at scale ²⁴.

Financial Tracking for Nutrition

Nutrition financial tracking at the country level is a continuous and iterative cycle of collecting, reviewing and monitoring financial resources for nutrition. This covers a broad spectrum of actions along the SUN planning and implementation cycle, which can be grouped into two main areas:

- i) Budget and expenditure analysis. This is an approach that assesses government nutrition budget (and sometimes off-budget) allocations and expenditures. Often the goal is to look at budget commitments and disbursements, comparing them and mapping each against funding need. In addition, qualitative analysis has been produced around institutional and human resource challenges in budgetary processes that impact efficient disbursements of funds.
- ii) **Resource-/expenditure-tracking and monitoring exercises.** These forms of analysis look to track funding after disbursement through the respective delivery agents to specific outputs. They can help governments understand the effectiveness and efficiency of funding and can be quantitatively measured within a specific project (e.g. success in delivery of school feeding to a target population) or qualitatively through user/staff feedback.

Within these two main areas there have been several tools and methods developed to support analysis that are either specifically tailored to nutrition or have certain areas within them focused on nutrition. The aim of this section is to outline these different nutrition financial-tracking methods and tools, as well as highlight certain challenges faced. Following this section there is a more detailed review of nutrition budget analysis, given that it has been a simple but effective tool for many SUN countries to begin looking at their nutrition finances.

Nutrition financial-tracking methodologies and tools

Financial tracking for nutrition is a relatively new phenomena in the nutrition arena, particularly for low- and middle-income countries. The first reference to tracking and reporting on nutrition-specific and nutrition-sensitive government expenditures appears in 2013 with a request from the SUN Movement and UNICEF to produce a background paper for a Workshop on Costing and Financial Tracking of Nutrition Investments. The purpose was to review the state of tracking and reporting on expenditures and highlight how they are best used by countries in sub-Saharan Africa. The findings of the paper were presented in Nairobi in November 2013 and published online as a <u>SUN Working Paper</u> in January 2014. This was the first time in the nutrition field that financial resources flowing into and within a system' ¹. In this way, financial tracking was shown to be a continuous process that needs to happen throughout the planning and implementation cycle. Financial tracking is thus critical throughout the SUN planning and implementation cycle. It is worth noting that financial tracking has been undertaken for a long time in other sectors; much of the concepts and terms used in nutrition draw on what has been established elsewhere.

The desired features of a financial-tracking system identified in Picanyol (2014b) include the following: comprehensiveness, timeliness, user-friendliness, alignment and harmonisation, ownership and incentives.^{viii} **Box 1** further defines each of these features.

viii These criteria draw upon the principles of good practice in Public Financial Management, as well as the principle of aid effectiveness. They also draw on Wylde, E and C. Picanyol (2009). "Budgeting for Children and the Role of Parliament in the Arab World", paper presented at the Arab Parliamentarian's Union - League of Arab States Child Protection Meeting in Cairo organised by UNICEF in May 2009.

Box 1. Desired features of a financial-tracking system

Comprehensiveness: The financial-tracking system should encompass all activities of all levels of government and extra-budgetary funds, such as donor funding, to get a complete picture of government resources and expenditures. It is also important that the system cover both capital and recurrent expenditures, such as maintenance, to ensure investments can be maintained and services sustained.

Timeliness: Both financial and nonfinancial information should be made available on a regular and timely basis so that governments have the relevant information to guide their actions and legislators have information to hold the executive accountable.

User-friendliness: Individuals should have the ability and means required to use the system. This includes not only individual capacities such as knowledge and 'know-how' but also system capacity, such as rules and regulations for engagement and the ability to generate pertinent information on inputs and outputs.

Alignment and harmonisation: Alignment with existing structures makes a financial-tracking system more user-friendly and increases efficiency. A tracking system should be supportive of government structures and harmonised with donor efforts. It should improve coordination, simplify procedures and share information to avoid duplications. This also means that, in cases where a certain tool is already used to track resources more generally (e.g. Public Expenditure Reviews in Tanzania, the Clinton Health Access Initiative tool in Malawi, Ethiopia's resource mapping per sector), it should be examined as a possible mechanism for tracking nutrition financing.

Ownership: The system must be owned by those authorised to use it and by those responsible for overseeing it, including donors. It will, therefore, need to be owned by all ministries with some responsibility in the implementation of nutrition interventions, as well as by local-level service delivery units, such as health clinics.

Incentives: Individuals must have incentives to carry out their responsibilities. Reporting mechanisms, such as a financial-tracking system, should be used to ensure responsibility (e.g. by a line ministry from local units, by the centre of government from line ministries, by parliament from the centre of government, mutually between donors and recipient countries), and if they are fostered through sanctions and rewards, the incentives to deliver are much higher.

Source: Adapted from ¹.

The starting point for tracking financial resources is to define and delineate what is to be tracked (i.e. the area of relevance for tracking). In countries where there is a multisectoral CRF or NNP, this will delineate the nutrition priorities and interventions or programmes in the country and the resources needed to address them (see costing section above), and together this forms the basis of what should be tracked financially. If the country does not have an NNP (costed or not), there may be particular challenges tracking finances devoted to nutrition, such as clearly defining nutrition-sensitive interventions and accounting for multisectoral nutrition initiatives, including those that cut across traditional sector boundaries, like health, education, WASH, agriculture and social protection. Once the boundaries of nutrition interventions have been defined, the subsequent steps will depend on which methodology or tool the country chooses to use¹.

There are five main globally developed tools for tracking financial resources that are specifically focused on nutrition or have nutrition elements within them.^{ix} These tools vary in terms of coverage, frequency of data collection, time and financial resources needed to use them: analysis of the national budget, Public Expenditure Review, National Health Accounts, the Clinton Health Access Initiative Resource Mapping Tool and the Public Expenditure Tracking Survey¹. **Table 2** summarises these financial-tracking tools.

^{ix} Governments will have a range of other tools that can support nutrition financial tracking—including Public Financial Management, health and education management systems or other monitoring and evaluation functions—but are not specifically focused on nutrition.

Table 2. Financial-tracking tools for nutrition.

Tool	Nutrition covered/excluded	Frequency of data collection	Guidance for countries	Country use
Nutrition Budget Analysis	National budget allocations and expenditures when available, by ministry, department, agency and subnational. The possibility of isolating relevant nutrition budget lines depends on details of the budget structure, which generally stops at the programme level. Only in a few countries is it currently possible to isolate dedicated nutrition budget lines. The budget analysis is multisectoral.	Performed annually. In some cases, it can be more frequent if there are quarterly or mid-year execution reports.	 Guidance can be found at the following links: SUN Budget Analysis Guidance Note. SPRING Nutrition Budget Analysis Tool. ACF, Save the Children and SUN Nutrition Budget Advocacy. 	Over 50 countries by 2019
Nutrition Public Expenditure Reviews (PERs)	Typically, government expenditures (not private investments) and, where possible, investments from external sources (foreign assistance). A PER defines its own classification boundaries and can therefore cover multisectoral interventions such as nutrition. PERs can assess issues of funding efficiency (e.g. planned/actual, institutional challenges).	Usually designed as a 'one- off' study; not institutionalised or carried out with a certain regularity.	No specific guidance is available for nutrition. Some general guidance is available from <u>the World Bank PER tools</u> .	Tanzania (2011/12 and 2017/18); Bangladesh (2018), Pakistan (2019, forthcoming); Uganda (2019, forthcoming); Sri Lanka (2019 forthcoming); Ethiopia
System of Health Accounts	Public and private nutrition expenditures with a health purpose, including those from various sectors and external sources. Where possible it uses actual expenditure (not budget allocations or commitments). Spending on nutrition is focused on 'nutrition deficiencies' where data are available from health expenditure by disease indictors and where locally defined (e.g. nutrition agencies in spending by institution type)	Intended to be produced annually where possible. However, detailed nutrition expenditure tracking covering health-related nutrition expenditures may be done less regularly.	Nutrition activities within the health sector are covered in the <u>Guidelines on the</u> <u>implementation of the System</u> <u>of Health Accounts</u> .	Global Health Expenditure Database data on nutrition for <u>38 countries</u> .
CHAI Resource Mapping Tool	Design that covers health expenditures from the national budget and from donor resources, with the possibility of importing private expenditures. It includes budget allocations as well as actual expenditures. Boundaries are loosely defined and can be adapted to cover nutrition within health but the tool is not multisectoral.	Designed to be carried out regularly. Three out of the five countries using this tool have done annual iterations.	None is available.	Malawi, Rwanda, Liberia, Lesotho, Zimbabwe

Tool	Nutrition covered/excluded	Frequency of data collection	Guidance for countries	Country use
Public Expenditure Tracking Survey (PETS)	Tool for public (and nonpublic in the case of subcontracting) units that are involved in service delivery. PETS relies heavily on administrative and accounting records, and as such, the possibility to isolate nutrition expenditures depends on the extent to which these are isolated in the administrative units.	Usually designed as a 'one- off' study; not institutionalised or carried out with a certain regularity.	 Guidance can be found at the following links: <u>PETS overview</u>. <u>PETS Tools and Practices</u>. 	29 countries worldwide as of 2009 ²⁵

Source: Adapted from 1,26

Abbreviations: ACF, Action Contre Ia Faim, CHAI, Clinton Health Access Initiative; SPRING, Strengthening Partnerships, Results, and Innovations in Nutrition Globally; SUN, Scaling Up Nutrition.

Nutrition financial-tracking challenges and recommendations

Financial tracking for nutrition poses a number of challenges, particularly related to the multisectoral nature of nutrition actions. As can be seen in **Table 2**, many methods and tools designed to assist countries in tracking their domestic and external finances are limited to those health-related nutrition areas. Since nutrition outcomes are linked to many different sectors (e.g. agriculture, education, social protection, WASH, etc.), tracking nutrition-related finances solely within health will lead to an inadequate picture of total nutrition financing. Many challenges for this area are also seen in both <u>costing</u> and <u>nutrition budget-analysis</u> exercises, which are highlighted elsewhere in this document.

Tracking at the subnational level

A key area of interest is how to track nutrition finances at the subnational level, which can account for a substantial proportion of government nutrition expenditures. Restricting the tracking exercise to the federal government risks grossly underestimating the total amount of nutrition expenditure. It is clear that a significant proportion of nutrition spending takes place at the subnational level ^{27,28}. Subnational governments are responsible for the delivery of primary services often relevant or specific to nutrition. Even when the proportion of subnational expenditures may be low, large amounts may be nutrition relevant. **Table 3** provide an overview of subnational financing in SUN countries.

Prior to undertaking the (potentially lengthy) process of tracking at the subnational level, it is important to define what the purpose or goal of subnational tracking is, how the information will be used, and what process it will inform. Two main challenges have been identified with tracking subnational nutrition finances. First, the costs of tracking budgets at the subnational level could be considerably higher, as it would often mean repeating the central-level exercise by as many times as there are subnational units. The second challenge relates to the risks of double counting because expenditures at the subnational level will often be financed through central-level transfers. A pragmatic approach is to start with making a considered judgement at the outset of the financial-tracking exercise regarding the likely percentage of nutrition spending that would be captured at the subnational level ²⁷. There is relatively little literature on the experience of countries tracking financial resources at the subnational level for not only nutrition but also for many other social sectors. A recent paper by Overseas Development Institute and Development Initiatives ²⁹ shows the extraordinary lack of data on how finance is allocated at the subnational level. They found that only one in seven countries publish adequate budget data.

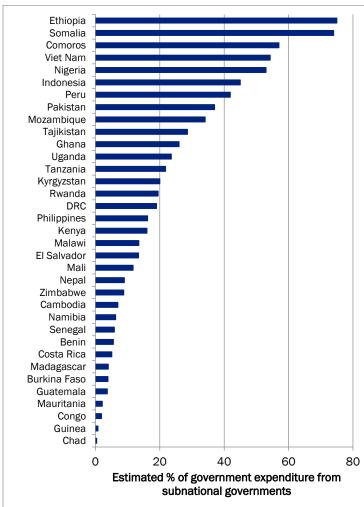


Figure 3. Estimated subnational financing in SUN countries.

% of government health spending at subnational level 70.0 Indonesia 51.3 Kenya 8.5 Kyrgyzstan Malawi 18.4 Peru 35.5 44.9 Philippines Rwanda 22.0 Uganda 19.2 Viet Nam 50.1

Table 3. Percent of subnational financing.

Source: 28

Nutrition budget-analysis methodologies and approaches

The most common starting point to tracking investments in nutrition is to undertake a budgetary analysis. Having reliable finance data is essential to policymakers to prioritise, to plan and to make decisions on resource allocation, as well as to monitor and evaluate policy implementation. Budget analysis consists of tabulating relevant budget data and comparing budget allocations (and expenditures when available) across years and sectors, such as health, education, agriculture, social protection and WASH. It usually covers budget allocations and, when available, actual expenditures to estimate execution rates (allocated versus actual expenditures). The depth of the analysis depends on the level of detail in which the budget data are presented. For example, in some countries, budget data are limited to the main economic classifications in each department—for example, personnel, overhead and capital expenditures within each department—whereas other countries provide budget details by programme and input within each department ¹. When planning for nutrition budget analysis, it is important to be realistic and to time the data collection and analysis to relevant events when data can be presented and used by decision makers to affect funding allocations and expenditures.

In the drafting of the 2014 Global Nutrition Report, experts in the field noted that there was need to push for improved recording of nutrition expenditures by national governments because it was one of the biggest data gaps in the sector ³⁰. Further work and analysis led to the first iteration of the 3-Step Approach to tracking nutrition allocations and expenditures at the country level ³¹. Review of the national budget became the starting point for those countries that did not have any mechanisms in place to track investments in nutrition due to the fact that the national budget is a comprehensive statement of government financial plans, the main economic policy document for the country, and the law indicating how a government intends to use public resources to meet policy goals.

The three steps were originally based largely on the methodology from the Donor Network of the SUN Movement ³². In 2015, more than 30 countries responded to a Call for Action to report on domestic investments on nutrition, which were then included in the Global Nutrition Report. Since then, over 50 countries have conducted a nutrition budget analysis at least once (and in some cases several times). The approach has evolved rapidly, incorporating feedback and comments from numerous stakeholders, and resulted in an annual *Guidance Note for Countries on Budget Analysis for Nutrition*, with the latest iteration being distributed to countries in March 2019 ³³. This current SUN budget-analysis 3-Step Approach guidance consists of:

- Step 1: Identification. Identify the relevant budget line items (e.g. programmes or departments) based on the NNP (where available) and through a search of key terms. The existence of a common results financial management systems framework for nutrition can guide sectors to decide which budget line items to include or not.
- Step 2: Categorisation. Assess whether the programmes or departments found fall under the category of 'nutrition-specific' or 'nutrition-sensitive' investments. Nutrition-specific budget line items would be those that reflect a nutrition department, a nutrition programme or a nutrition intervention. To be nutrition-sensitive, a budget line item would need to include a programme that addresses underlying causes of malnutrition and, especially, is beneficial to the most vulnerable populations, including children and women.
- Step 3: Weighting (optional)^x. Attribute a percentage of the allocated budget to nutrition (weighting). This percentage should be based not only on categorisation (step 2) but also on a judgement call by national experts to estimate investments towards nutrition components or activities in the programme. In its simplest form, countries may choose to allocate 100 percent of the amount in the case of budget line items that have been categorised as 'nutrition-specific', whilst a reasonable amount decided by the stakeholders (e.g. 25 percent) would be allocated in the case of budget line items that have been categorised as 'nutrition-sensitive'. Whether or not a 'weight' is applied, it is necessary to consider how best to interpret this data and the policy implications. ³³

The SUN guidance note on *Budget Analysis for Nutrition* stresses the importance of defining the purpose and objectives of the analysis in the preplanning stages and also provides an indication as to who should be involved in the process. The starting point should be the multi-stakeholder platform for nutrition. In addition, it is helpful to have nutrition technical staff and budget and planning technical staff, as well as, in some cases, external support that can be facilitated by the SMS ³³.

This represents a simple, flexible approach for analysing the budget, which can be adapted at the country level depending on the amount of data available and purpose of the exercise. A budget analysis is therefore a first simple taking-stock to estimate how much governments are investing in

^x Note that, moving forward, arbitrary or normative weighting (e.g., 25%, 50%, 75%) will no longer be recommended. Countries wishing to weight will be advised to do a detailed evidence-based weighting exercise.

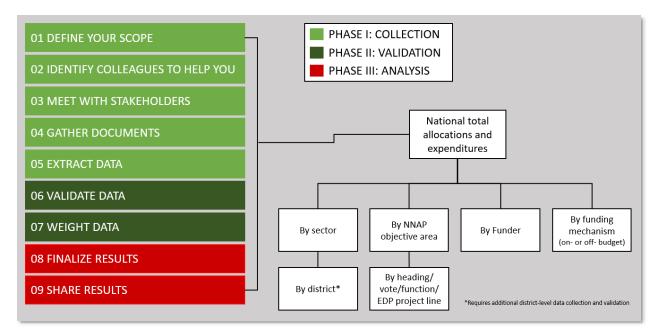
nutrition through their national budget. From here, more sophisticated and complete mechanisms could evolve to routinely collect financial data on nutrition investments. An example would be the case of Guatemala. Their Public Financial Management system allows for all financial flows to be tracked live across the country through all levels of government, as well as the outputs towards which they are contributing.

In *Quick Intro to Budget Analysis*, Bagnall-Oakeley puts it bluntly: 'In budget analysis, following the money is precisely the intention. The money in this case is the government budget' ³⁴.

There are advantages to this approach in terms of transparency, affordability and replicability, but at the expense of accuracy, among other limitations. Importantly, there is a strong need to avoid comparisons across countries, as it could lead to misinterpretation; the added value is on being able to make comparisons over time within a country ³¹.

In 2015 USAID's Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project published its first edition of a Nutrition Budget Analysis Tool and a User's Guide, later updated in 2018 as a second edition ³⁵. The USAID-funded project developed a tool to help nutrition stakeholders learn where the funding is. The User's Guide provides the background information for undertaking the budget-analysis process using a Microsoft Excel-based Budget Analysis Tool that can be downloaded from the SPRING website. The User's Guide is presented as an option to track nutrition financing commitments and recommends forming a budget-analysis team to carry out the exercise. The Guide includes a list of budget terminology, a technical background, a section on the budget-analysis process and a format that takes the reader step-by-step through the use of the Excel-based tool. It proposes three broad stages, further broken down into steps: collection, validation and analysis (Figure 4). The experience of using the SPRING Nutrition Budget Analysis Tool in Nepal and Uganda has been published with a presentation of the list of challenges and adjustments made. Some of the challenges mentioned include highly aggregated budget lines, lack of budget expertise amongst nutrition technical staff, lack of national-level data on central transfers to districts, off-budget data accessible only in NGO-reporting databases and variations between costing and budget exercises ³⁶. Almost all of these challenges are experiences shared by countries undertaking the SUN budget analysis using the 3-Step Approach and also found in costing work for national nutrition planning. The costing section above further describes these challenges.

Figure 4. SPRING's budget tool methodology.



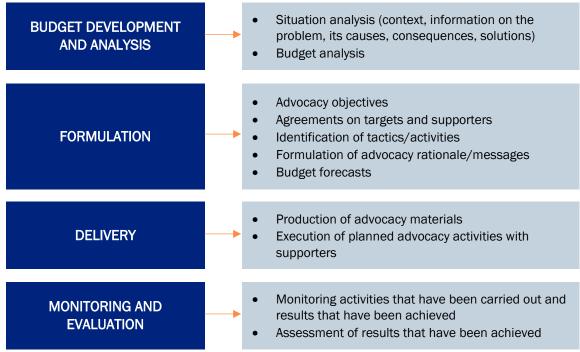
Source: Adapted from 36

Abbreviations: EDP, external development partner; NNAP, National Nutrition Action Plan; SPRING, Strengthening Partnerships, Results, and Innovations in Nutrition Globally.

Civil society has played an important role in pushing forward the agenda on financial tracking. In 2017, the SUN Civil Society Network published its own guide, *A Handbook on Nutrition Budget Advocacy for Civil Society*. The handbook aims to provide an improved understanding of nutrition budget advocacy targeting civil society organisations. It provides guidance and examples on preparing, delivering and monitoring budget advocacy and defines budget advocacy as 'the structured lobbying of fiscal policies by an organisation or group of people'. Lobbying can be for more resources to be allocated to nutrition, for their transparency and effective management, for greater financing accountability for government and partners and for influencing the national budget policy's decision-making process. The handbook also provides an extensive explanation about how to develop a budget advocacy strategy and on what various challenges countries have encountered in analysing budgets for nutrition, as described below. It draws on extensive experience from civil society in carrying out these exercises in Nigeria, Malawi, Sierra Leone, Senegal, Burkina Faso and Chad, amongst others ³⁷.

The handbook identifies the following prerequisites for conducting a budget analysis: understanding the institutional and political framework of nutrition financing, estimating the cost of delivering the plan, understanding the budget cycle, understanding the budget timetable, providing specific training for stakeholders and conducting a strengths, weaknesses, opportunities and threats analysis on the structure. The basic steps to developing a budget advocacy strategy are identified and summarised in **Figure 5**³⁷.

Figure 5. Phases of a budget advocacy strategy.



Source: 37

With SPRING, Action Against Hunger and SUN, budget analysis has become the commonly used method for tracking financial investments in nutrition at the country level ^{33,35,37}.

By 2019, 50 countries in the SUN Movement had each conducted an analysis of its national budget and reported the data, providing an overview of what each had budgeted towards nutrition-specific and nutrition-sensitive investments in relevant sectors.^{xi} Twenty-five countries have done the exercise two or more times, with Benin, Burundi, the Democratic Republic of the Congo, Guatemala, Mauritania, Pakistan, Tajikistan and Vietnam having done it regularly since 2015. In terms of richness of information, 33 countries could track the source of the funding for each investment (domestic, external or mixed), 18 countries could track both allocations and actual expenditures, and 4 countries provided a detailed overview of the spending at the subnational level (Lao People's Democratic Republic, Lesotho, Mali and Pakistan). The SUN Monitoring, Evaluation, Accountability and Learning (MEAL) country dashboards aim to assess progress and identify patterns in performance across all SUN countries for a standard set of indicators, including financial data for nutrition. The <u>2018 dataset</u> includes data from each country's most recent budget-analysis exercise, such as nutrition-specific budget allocations.

In *Putting Budget Data to Work*, SPRING focuses on the use of the data collected through the nutrition budget-analysis exercise ³⁸. The study gathered and synthesised information from 11 countries on how they have used findings from the budget analysis. Three complementary ways were identified for how the budget-analysis activities have been used:

1. To identify and coordinate nutrition across sectors, with evidence from the Republic of Congo, Tanzania, Cote d'Ivoire, Papa New Guinea and the Philippines.

^{xi} SUN uses five thematic sectors to capture budget data for nutrition: health, education, agriculture, social protection and WASH.

- 2. To advocate for increased funding for nutrition, with testimonies from Senegal, Madagascar, Malawi and Nepal.
- 3. To track and manage the use of nutrition funding, based on feedback from Madagascar, Malawi, Nepal and Guatemala.

Analysing the government's budget is thus a powerful tool for demonstrating how much money is being used to provide nutrition-related goods and services, and it shows how the government prioritises different strategies and programmes through the sums of money allocated. The allocation size defines the government's intention to pursue a particular policy or strategic objective ³⁴.

Figure 6 summarises SPRING's further six key lessons for the budget-analysis exercise.

Figure 6. SPRING key lessons for budget-analysis exercise.

Data Use • There are various ways to use the data from nutrition budget and expenditure analysis, such as for advocacy and accountability-data use should fit the country's needs. Process Financial tracking is often an iterative, evolving process, and the availability and use of data often improves with each subsequent round of analysis. Timing Knowing when to use the findings is an important part of the process and should inform the timing of data collection. Stakeholders Involving a range of stakeholders in budget analysis and dissemination broadens perspectives and increases buy-in and use of findings. Targeted Dissemination •Target the dissemination of findings, using language and evidence appropriate for each appropriate audience. **Routine Tracking** •Consider adopting systems to make monitoring and tracking routine.



Budget-analysis challenges and recommendations

A number of challenges have been identified with the current nutrition budget-analysis approaches. The SUN Budget Analysis Guidance Note and the Action Against Hunger Nutrition Budget Advocacy Handbook have done an exceptional job defining these challenges and related recommendations ^{33,37}.

Tight timescale and limited budget to perform budget analysis

The time scheduled for a budget analysis is often underestimated, because there can be long delays with accessing key stakeholders (ministries in particular). A great deal of back and forth is required because just one meeting with a ministerial contact or department is rarely enough. Usually the interviews (conducted to understand the main nutrition-related programmes) and the collection of budgetary data take a great deal of time. The data-collection phase can be prolonged by schedules, holidays, fiscal year calendars and travel ³⁷. This challenge is often true the first time a country conducts a budget-analysis exercise. Afterwards, it is necessarily easier. One recommendation is to ensure that the analysis is a good fit for the purpose; the goals and use of the results should be clear from the outset to promote efficiency. Following the first budget-analysis exercise, countries just have to update the information with new data points, which makes the task of incorporating new stakeholders and sensitising them to the relevance of nutrition in their budgets easier. The SMS always suggests that a country start 'small' in the first year, develop a baseline and then engage stakeholders strategically in the following years to get a bigger picture. Too often countries want to include everyone from the first year, and that becomes burdensome and overwhelming. Additionally, the timetable for the budget studies should be carefully defined and attention paid to holiday periods. If too many challenges are encountered and the consultancy period cannot be extended to organise, for example, a consultation workshop with stakeholders, then the expectations of the analysis may need to be lowered in order to precisely evaluate the expenditure allocated to nutrition. Several options are available, including shortening the time period covered by the study or not including the expenditure of technical and financial partners. Additionally, if the time and budget available are very tight, an option would be to only include expenditure by the Ministry of Health ³⁷.

Limited data to perform the analysis

The scope of the analysis should be adaptable to countries based on data and capacity. Some countries may decide to start by only looking at one sector and a limited set of interventions, perhaps with more disaggregated data, whilst other countries may be ready to convene multiple sectors and use the budget analysis as an opportunity to discuss nutrition in a coordinated way. A consultation with the members of the Multi-Stakeholder Platform for Nutrition is essential to define the overall scope and goals of the budget analysis, and members can provide essential information in the preparatory phase of the budget analysis. When meeting with stakeholders, such as ministry staff, development partners, the private sector, civil society, etc., meetings should be arranged in advance (at the start of the budget analysis) because there are many stakeholders, and they are often very busy. Prepare for meetings by noting any questions that need to be asked and any requests for data. Present the budget-analysis project in an effective way (explain the goal, purpose, value and expected output) to attendees who are often unsure what a nutrition budget analysis is. Remember that the long-term objective is for the various stakeholders to take ownership of the analysis and its results and to then regularly and systematically monitor nutrition expenditure themselves. The work can be facilitated by cooperating with other NGOs that are working on the budget or with the SMS, collaborating partners and consultants. Civil society ownership of the CRF or the multisectoral NNP and the different budgets and programmes by civil society can help facilitate the analysis 33,37.

Nonalignment of budget lines or codes with the activities in the multisectoral NNP or CRF

In an ideal world, the targets adopted would be SMART (specific, measurable, achievable, relevant, time-bound); the national plans would be detailed, realistic and developed based on current spending with a clear understanding of required changes (e.g. integration of new interventions and

innovations); the costs would be directly linked to plans; the nutrition interventions would be prioritised and reflected in the national budget; the budget would be delivered and spent as approved by the government; and monitoring reports would be complete and published at the right time. However, in reality, in most cases plans and budgets are not fully aligned. For example, the NNP may not be reflected in the national budget, or there may be programmes in the national budget that are not covered in the NNP. More specifically, the activities in the multisectoral plan are often not reflected in the budget codes or lines. Consequently, it is more difficult to find out whether the plan has been effectively financed by the government and, if it has, to what extent (accountability is very limited). A short-term solution (as part of the budget-analysis exercise) would be to identify the budget lines that come closest to the plan's activities and estimate the plan's level of financing on this basis. It would need to make clear, however, that this is purely an estimate. In the long term, it is important to push for the budget lines/codes to be aligned with the plan's activities (this is very ambitious) or, at the very least, the plan's pillars/major priorities (this is a bit more realistic) ³⁷.

Management of highly aggregated budget line items

Depending on the structure and format of the budget, the line items may represent very high-level allocations, possibly even at the ministry level. Some budget line items may represent capital costs (e.g. infrastructure, facilities or physical assets) or be sector-wide in nature (e.g. drinking water supply or rural infrastructures). These activities have the potential to address key underlying determinants of malnutrition, but it is not possible to determine or directly measure their impact on nutrition outcomes, as no information is provided as to who will benefit from these allocations (e.g. whether these are the people who need the intervention and receive it). These activities will also be further removed from the impact pathway (i.e. not possible to measure their impact on nutrition outcomes). If information on reach, coverage or potential outcome is not available, it is deemed better to exclude the budget line item from the analysis ³³.

Lack of expertise amongst nutrition technical staff to perform the analysis

Countries doing their budget analysis for the first time may need technical support. In some cases, countries that repeat their analysis may require specific expertise if they wish to have a more detailed scope—for example, including off-budget spending, expenditures in addition to allocations and subnational budget data. The SMS has been assisting countries in conducting nutrition budget analysis since 2014. It has a roster of experts available to support countries in the process. The SMS contacts most countries at the outset of the budget-analysis exercise. Each country that is contacted receives a particular 'strategy' of what to do based on previous experience, or if they are new to the exercise, the SMS provides remote support by sharing the country-specific Excel template to assist in developing a country profile. Country teams that repeat the finance data collection will receive a cover email that explains what was done with the data from the previous year (country profile) and what pieces of information should be updated in the Excel template (i.e. any additional data points and/or expenditures and/or missing information, such as sources of funding). The expected deliverables are derived on a case-by-case basis, ensuring realistic objectives for a given country ³³.

Lack of national-level data on central transfers to districts (subnational spending)

Allocation and expenditures at subnational levels are often not included in the main national budget document. If transfers from the national government are in the form of block grants or something similar, the budget data will not provide details on sector or programme spending. Public spending in health or in water supply might be higher at the local level. In water and sanitation, public spending is mostly decentralised to the county/municipal budget. Despite decentralisation and apart from

federal states, national governments, in many cases, remain responsible for the largest part of government spending. Careful investigation and engagement at multiple levels might be useful in the beginning, especially for advocacy purposes. However, tracking of budget allocations and expenditures at national and subnational levels might require a focus on a priority set of ministries, departments or agencies and budget items to be tenable in the long term. The experience of the SMS is that, if roughly 20 percent or less of funding occurs at the subnational level, it is not worthwhile tracking it—it is too time consuming and costly to undertake the analysis for this level of subnational spending.

Tracking off-budget data

Off-budget data are allocations and expenditures that are not included in national government finance documents. Off-budget data are harder to track, but countries may be able to find estimates of donor and/or implementing partner investments with the following resources:

- <u>Aid Management Program (AMP)</u> (25 countries). If accessible, the AMP database should be the first source for off-budget data, as it is endorsed by the ministries of finance.
- <u>Development Assistance Committee (DAC) Creditor Reporting System (CRS)</u> of the Organisation for Economic Co-operation and Development.

Both AMP and the Development Assistance Committee Creditor Reporting System report aid data using Gregorian calendars, which should be noted if a country has a unique fiscal year calendar ³³.

Accounting for nutrition personnel costs and salaries

One of the challenges in conducting a budget analysis is how to identify and assess personnel costs such as salaries and benefits for nutrition-related staff. Tracking personnel costs and salaries in country budgets is very difficult. Prior to carrying out the budget-analysis exercise, countries should identify whether it is important for them to assess the amount allocated in the budget for nutrition-related personnel and salaries. There is limited guidance on how to account for such salaries. It can be difficult to find nutrition-related human capital within a national budget (i.e. which budget lines contain the personnel costs of this human capital?), and it can be difficult to assess or estimate the amount of time personnel in various sectors spend on nutrition-related activities. The nutrition community is clear on the need to integrate nutrition into other services (health, education, agriculture, etc.), so countries should be cautious about the fact that calculating the amount of time staff spend on nutrition could be detrimental to the push for integration ^{33,37}.

If information regarding personnel costs (such as overhead and salaries) for nutrition-related staff is available in a disaggregated country budget, then a country may choose to include it in the analysis. In some cases, personnel costs and salaries are included in programme/activity (operational) budget lines and are not separated out, with the exception of governance staff who are not directly programme related. If this is the case, caution should be taken to not double count. In this case countries may want to assume that personnel costs and salaries would already be included in their analysis through the line items for programmes or activities.

If personnel and salary information is not fully disaggregated but also not bundled with programme/activity budget lines (e.g. there is a separate line for 'health staff' or 'education staff salaries'), the country can decide if it is important for them to calculate the staff time in these line items that is related to nutrition. It is not recommended to take an extremely granular, detailed or lengthy assessment of nutrition staff time unless this is of interest to the country and the budget-analysis objectives.

Countries may wish to consider the following options for assessing nutrition-related personnel costs and salaries:

- a) Exclude personnel costs, staff time and salaries from the analysis but revisit them in the future.
- b) Only include personnel and staff time for nutrition-specific activities, since these may be clearer and easier to calculate.
- c) Attempt to calculate the amount of budget allocated to all nutrition-related personnel and salaries by, for example, taking the proportion of the total ministry budget that is allocated to nutrition and applying that proportion to line items for human capital in the appropriate thematic sectors/ministries. Governance staff for nutrition would be considered under 'enabling environment'³⁹.

Accounting for nutrition governance activities

Governance activities, such as coordination and communication, can be considered essential for having an enabling environment for nutrition actions, which is one reason why it may be important for countries to consider tracking them in the budget analysis. Governance refers to any activity that impacts on the system and service provision more broadly, such as information management, monitoring and evaluation, surveillance, research, coordination, advocacy, communication, capacity building and policy development ⁴⁰. Governance activities may be included in country operational or national plans but can be very difficult to track, mainly due to lack of disaggregated budget data.

A recent nutrition financing consultation convened by MQSUN⁺ resulted in the following recommendations regarding tracking nutrition governance:

- 1) The term 'governance' may not be the most appropriate for the activities in this area/category. The donor community uses the term 'above-service delivery', whilst others suggest 'enabling environment' or 'support system'.
- 2) Regardless of the term, these activities, which include information management, coordination, advocacy, communication, system capacity building and policy development, are important for nutrition and should be tracked when information/data allows but should be excluded from the analysis if tracking them becomes burdensome or difficult for countries.
- 3) Governance-related activities may fall within the nutrition thematic sectors or ministries (e.g. information management related to a particular nutrition programme in the agriculture sector), and these could be labelled as 'above-service delivery'. Governance activities that are more high-level, overarching or at a national level may be considered 'crosscutting' or part of the broader 'enabling environment' and may be found in national budgets or Ministry of Finance and Planning budgets as opposed to sector ministry budgets ³⁹.

Ways to handle theoretical weighting

Step 3 of the <u>SUN 3-Step Approach</u> is the weighting of budget line items. Weighting refers to the proportion of a budget item that is theoretically nutrition relevant.^{xii} The current guidance to countries is that the weighting is optional. Weighting is never required when national budgets are disaggregated to a sufficient level to allow a clear delineation of the budget amounts contributing to nutrition outcomes, but it has been helpful for some countries when budget data are highly aggregated. Though some countries have expressed that weighting is critical for an accurate budget analysis, technical expert participants at a recent MQSUN⁺ consultation felt that **weighting should not**

xii 'Nutrition relevant' is anything related to nutrition; it may be nutrition specific or nutrition sensitive.

be recommended as part of the SUN budget-analysis exercise because it is subjective, imprecise and difficult. Countries without a highly disaggregated budget should be prescriptive about only including budget lines that are very clearly nutrition specific or nutrition sensitive by reviewing the objectives of the programmes more directly to determine whether they have nutrition goals, objectives and indicators and target those with greatest need (e.g. women and children in the first-1,000-days window). They can then include all of these budget lines in their analysis with no need for weighting. Budget lines that are not very clearly identifiable as nutrition specific or nutrition sensitive should be excluded from the analysis, and countries should then work to improve their data quality and availability in the future ³⁹.

Those countries without a highly disaggregated budget that have the time, resources and data available may choose to do an **'evidence-based weighting** exercise where they utilise significant documentation and stakeholder interviews to estimate how much of a line item or programme is related to nutrition and include that amount in the budget analysis.^{xiii} The evidence-based weighting would be a thorough, thoughtful and collaborative exercise amongst all nutrition stakeholders, where there is agreement on the impact pathway that defines the estimates. Countries can decide to what extent they wish to apply the evidence-based weighting and be clear in their reporting for transparency and replicability (**Box 2**).

Box 2. Evidence-based weighting

Considerations for countries:

- Defining the overall objective of the exercise and its relevance for advocacy purposes.
- Identifying the potential credibility of the estimated disaggregation with stakeholders.
- Identifying the degree of decentralization and availability of subnational plans and budgets.
- Having a good amount and quality of background documentation, such as:
 - Previous year's budgets.
 - NNP, CRF or similar multisectoral plan.
 - Sector or ministry budgets.
 - Subnational plans and budgets.
 - Off-budget data (e.g. Aid Management Platform / Dev Tracker / other).
 - \circ $\;$ Auditor general's report (for comparing allocations with expenditures).
 - o Cost-effectiveness reviews or allocation studies.
- Having the time and resources needed to:
 - Meet with relevant stakeholders, including:
 - Line ministries, ministries of finance, subnational governments.
 - Implementing partners (e.g. WHO, UNICEF, NGOs, donors, civil society).
 - SUN Focal Point and associates.
 - o Decide questions around resource allocation when engaging with stakeholders.
 - \circ $\;$ Agree on the impact pathway that defines the estimated disaggregation.

Source: 39

xⁱⁱⁱ This is most closely related to a fully 'customised weighting' exercise, as opposed to 'normative' or arbitrary weighting (25 percent, 50 percent, 75 percent).

Conclusion

Since 2013 SUN countries have made major strides to bring together different stakeholders from multiple sectors to align national efforts to end malnutrition. Nutrition costing and financial tracking at the country level is a continuous and iterative cycle of collecting, reviewing and monitoring financial resources for nutrition. This covers a broad spectrum of actions along the SUN planning and implementation cycle. Helping countries better plan, cost and track financial investments for nutrition has been and will continue to be a priority for ensuring the effective and efficient use of resources and implementation of key actions. In order to aid in this effort, MQSUN⁺ has compiled the available information for nutrition personnel, policymakers, and technical consultants to use when costing programmes and national plans and monitoring or tracking nutrition financial investments and budgets over time. This has been informed by the experience that MQSUN⁺ has gathered from helping SUN countries to cost and track their nutrition finances. The objective of this guidance note is to summarise a collection of approaches and tools that can be used by nutrition programme personnel and policymakers in SUN countries at the national or subnational level to cost NNPs and budgets and track financial resources for nutrition.

When it comes to costing a nutrition plan and tracking government and donor investments for nutrition, one size does not fit all. Every country is different in terms of its nutrition needs, programmes, government structure and financial management system. When utilising this document, it is important to evaluate which tools and methods will be appropriate for each particular context. Countries with limited experience in this area may choose to begin with a very simple costing-and-budget-analysis exercise, whilst those with greater experience, resources or time or more integrated financial management systems may undertake more detailed costing exercises and financial tracking.

The hope is that this guidance note will highlight the importance of planning and tracking nutrition financing at the country level and offer tangible and realistic tools and options for carrying out this work and overcoming challenges along the way. When nutrition financial tracking improves, the contribution of this work translates into increased funding and efficient spending for nutrition and can have an important impact on advancing efforts for improved nutrition outcomes in countries where they are needed most.

Annex 1: Glossary of Terms

Table 4. Glossary of terms.

Term	Definition	Source
Activity-based costing (ABC)	ABC is a dynamic approach to determining costs by assigning them to the principal activities performed within an organisation. ABC differs from traditional approaches in that it allocates, or traces, indirect costs to products and services by first defining the main activities on which personnel in an organisation spend their time. ABC considers primary activities as the main functions performed by a department or an organisation.	41
Allocation	Allocation refers to planned funds approved for release by the ministry of finance or other central financial planning body.	42
Annualisation	The process of annualisation adds capital and recurrent costs together in a consistent fashion in order to compute an equivalent annual cost. It is beneficial when large capital costs occur in the first year of a programme.	13
Bottom-up approach	The bottom-up, or ingredients-based, approach refers to a costing methodology that uses detailed information of the resources needed to produce a given service. After each component is costed, the total number of components is summed and then multiplied by the individual cost to obtain an overall cost.	43-45
Budget	A budget is the national or organisational document that aligns resources with objectives; it uses cost estimates and expected revenues to allocate resources for all government activities. The government or national budget is a comprehensive statement of government financial plans, including allocations, expenditures, revenues, deficit or surplus and debt. The national budget is the government's main economic policy document, indicating how the government plans to use public resources to meet policy goals. Cost budgeting includes estimating costs, setting a fixed budget and managing and controlling the actual costs or expenditures (compared to the estimated or allocated ones).	31
Budget advocacy	Budget advocacy refers to the structured lobbying of fiscal policies by an organisation or group of people.	37
Budget analysis	This is the process of tabulating relevant budget data and comparing funding allocated to implement nutrition activities and expenditures across years and sectors, such as health, education, agriculture, social protection and WASH. It provides insight into where to budget for nutrition within ministerial budget line items. It is important in the creation of a budget and takes into account the current and past financial context that would influence the creation of a budget.	10,38
Budget lines	These are lines of a programme, project or department that denote the budget based on use and sources. The lines are used to identify the amounts included in the key elements of the budget (e.g. personnel, equipment, training, contracts, miscellaneous) by objective, duration and estimated cost.	37
Capital costs	Capital costs are one-time costs for items that have a useful life of over one year, such as buildings, vehicles or medical equipment.	3
Cost	The cost refers to the value of resources used to produce something, including a specific health service or a set of services. Costs can refer to financial, economic, unit/average or other types of costs, depending on the ingredients included. Costs may be incurred by health care providers (provider costs) but may also include costs incurred by patients or society (societal costs).	3,46
Discounting	The present value of all costs is calculated by taking into account when the costs occurred and what the opportunity cost is. This accounts for time preference (future costs are worth less and, hence, discounted more to reflect the preference to have resources and money now rather than in the future). Generally, a standard discount rate is applied to future costs.	13

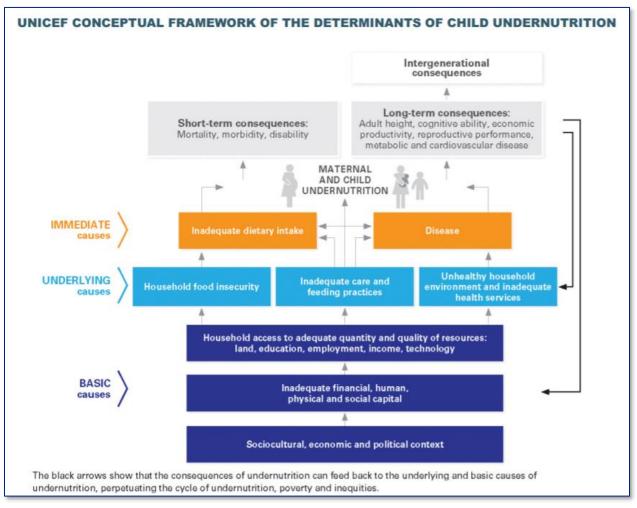
Term	Definition	Source
Economic costs	Economic costs reflect the value of all resources used for a good or service, including ones that don't have a financial outlay such as volunteer time or donated goods. These resources have an opportunity cost and are important to use when the user is interested in getting a full assessment of resources required for an activity (e.g. in economic evaluations or interventions with in- kind personnel time costs). Economic costs are generally not included in costing exercises for budgeting purposes at the country level.	13
Expenditure	This refers to funds actually spent on planned activities by the ministry or implementing agency.	42
Expenditure analysis	Often using the same methodology as budget analysis, this process estimates what percentage of allocated funds was actually spent by tabulating relevant expenditure data across different dimensions (e.g. sector, year).	42
Financial costs	Financial costs reflect financial outlays for goods and services needed to carry out a public health or medical intervention (in the context of global health) and, as such, are similar to expenditures. However, in contrast to expenditure data, financial costs depreciate capital expenditures over time. Budgetary costs (which are financial costs) are planned whilst expenditures are actual.	3
Financial tracking (nutrition)	This refers to the process of routinely collecting, analysing and monitoring resources flowing into and within a system, as well as tracking the availability of robust and regular finance data to inform decisions, to increase accountability and to advocate for better nutrition. Financial tracking is an integral part of the broader policy and budget management cycle. Tracking nutrition-relevant investments can help to bring stakeholders together to increase the performance and efficiency of budget allocations and spending. It can empower governments to make evidence-based decisions on nutrition spending, inform the public and allow civil society advocates to engage in meaningful debate. Budget analysis is a form of financial tracking.	1,47
Fixed costs	Fixed costs are those costs that do not vary with scale (changes in the level of output). These costs would be incurred even if the output were zero. Common examples include items such as buildings and equipment, but 'fixity' depends on context, even for personnel, as noted in the text.	3
Marginal Budgeting for Bottlenecks	^{'Marginal} Budgeting for Bottlenecks' is a result-based planning, budgeting and costing approach that utilises knowledge about the impact of interventions, identifies implementation constraints and estimates the marginal costs of overcoming these constraints. It assesses the cost of investments in systems needed to remove the barriers to achieve a health (or other) objective (e.g. increased service coverage).	48,48,49
Markup	This is the amount added to the cost price of goods to cover overhead and general administrative costs such as labour, recurrent, and capital costs (see overhead costs). Markup may include governance costs (stewardship of nutrition) and monitoring and evaluation, if not separately identifiable.	50
Nutrition-sensitive interventions	Nutrition-sensitive interventions and programmes address the underlying determinants of foetal and child nutrition and development—food security; adequate caregiving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment— and incorporate specific nutrition goals and actions. Nutrition-sensitive programmes can serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage and effectiveness. (See Annex 2 for the UNICEF conceptual framework for nutrition.)	51
Nutrition-specific interventions	 Nutrition-specific interventions and programmes address the immediate determinants of foetal and child nutrition and development—adequate food and nutrient intake, feeding, caregiving and parenting practices, low burden of infectious diseases—and includes the following 13 high-impact nutrition actions: Breastfeeding promotion and support. Complementary feeding promotion (provision of food is outlined in intervention 12). Handwashing with soap and promotion of hygiene behaviours. Vitamin A supplementation. Therapeutic zinc supplements. Multiple micronutrient powders. 	51

Term	Definition	Source
	 7. Deworming. 8. Iron-folic acid supplements for pregnant women. 9. Iron fortification of staples. 10. Salt iodisation. 11. lodine supplements. 12. Prevention or treatment of moderate malnutrition in children 6–23 months old. 13. Treatment of severe acute malnutrition. 	
Off-budget	This refers to allocations and expenditures that are run outside of the treasury and are not included in the national government finance documents.	33
On-budget	This refers to allocations and expenditures that are reported in official government finance documents.	33
Overhead costs	Overhead costs refer to costs that cannot be directly traced to the provision of a service, such as administration, security personnel, buildings and general equipment. These costs may be referred to in some texts as indirect costs (see also 'Markup').	3
Recurrent costs	Recurrent costs are the value of resources/inputs with useful lives of less than one year. This includes supplies and personnel.	3
Start-up costs	Start-up costs are the one-time commitment of resources required to establish a programme to the point where service delivery can begin. Some of these resources may be donated or subsidised; thus, the financial costs may be less than the full economic costs. Start-up costs typically include some capital costs but also include activities related to planning, staff training, materials development, infrastructure expansion, legal fees or personnel recruitment. Some start-up costs should be amortised; for example, if staff training needs to be repeated every five years, training costs would be spread over five years.	3

Abbreviations: MQSUN+, Maximising the Quality of Nutrition Plus; PF4N, Public Finance for Nutrition; SPRING, Strengthening Partnerships, Results, and Innovations in Nutrition Globally; SUN, Scaling Up Nutrition; UNICEF, United Nations Children's Fund; USAID, US Agency for International Development; WASH, water, sanitation and hygiene.

Annex 2: UNICEF Conceptual Framework

Figure 7. UNICEF conceptual framework.



Source: 52

Abbreviation: UNICEF, United Nations Children's Fund.

MQSUN+ GUIDANCE NOTI

- 1. Picanyol C. *Tracking Investments on Nutrition*.; 2014. http://scalingupnutrition.org/wp-content/uploads/2013/02/140120-Tracking-Investments-on-Nutrition.pdf.
- 2. SUN. SUN Movement Strategy and Roadmap (2016-2020).; 2016. https://scalingupnutrition.org/wpcontent/uploads/2016/09/SR_20160901_ENG_web_pages.pdf.
- 3. Vassall A, Sweeney S, Kahn J, et al. *Reference Case for Estimating the Costs of Global Health Services and Interventions.*; 2017. https://ghcosting.org/pages/standards/reference_case.
- 4. SPRING. Comprehensive Costing in Micronutrient Supplementation. 2016:14. https://www.spring-nutrition.org/sites/default/files/publications/briefs/spring-cost-efficiencymnp-dist-brief.pdf.
- 5. SUN Movement. *Planning and Costing for the Acceleration of Actions for Nutrition: Experiences of Countries in the Movement for Scaling Up Nutrition.*; 2014. https://scalingupnutrition.org/wp-content/uploads/2014/05/Final-Synthesis-Report.pdf.
- 6. Horton S, Shekar M, McDonald C, Mahal A, Brooks JK. *Scaling Up Nutrition What Will It Cost?*; 2010. http://docs.scalingupnutrition.org/wp-content/uploads/2015/06/What-Will-it-Cost.pdf.
- 7. Shekar M, Kakietek J, Dayton EJ, Walters D. An Investment Framework for Nutrition: Reaching the Global Targets for Stunting, Anemia, Breastfeeding, and Wasting.; 2017. doi:10.1596/25292
- 8. Moreland S, Foley S, Morris L. A Guide to the Fundamentals of Economic Evaluation in Public Health.; 2019. https://www.measureevaluation.org/resources/publications/ms-19-162.
- Ranjan Howlader S, Sethuraman K, Begum F, Paul D, Elisabeth Sommerfelt A, Kovach T. Investing in Nutrition Now: A Smart Start for Our Children, Our Future. Estimates of Benefits and Costs of a Comprehensive Program for Nutrition in Bangladesh, 2011-2021. PROFILES and Nutrition Costing Technical Report. Washington, DC; 2012. https://www.fantaproject.org/sites/default/files/resources/Bangladesh-PROFILES-Costing-June2012.pdf. Accessed April 5, 2019.
- 10. USAID. Nutrition Costing: Technical Guidance Brief.; 2016. https://www.usaid.gov/sites/default/files/documents/1864/Nutrition-Costing-USAID-Brief-508_0.pdf.
- 11. MQSUN⁺. Assessing Readiness for Costing of a Common Results Framework or National Nutrition Plan.; 2019. https://mqsunplus.path.org/resources/assessing-readiness-for-costing-of-a-common-results-framework-or-national-nutrition-plan-guidance-note/.
- 12. Connolly H, Kagel R, Meeker J, et al. *How to Estimate the Costs of Nutrition-Sensitive Actions in a Common Results Framework A Guidance Note.*; 2016. https://mqsunplus.path.org/resources/how-to-estimate-the-costs-of-nutrition-sensitive-actions-in-a-common-results-framework-a-guidance-note/.
- 13. Walker D, Kumaranayake L. Allowing for differential timing in cost analyses: discounting and annualization. *Health Policy and Planning*. 2002;17(1):112-118. doi:10.1093/heapol/17.1.112

- 14. The Sackler Institute for Nutrition Science. *Nutrition Modeling Tools for Advocacy, Decision-Making & Costing: A Workshop to Support Adoption & Utilization.*; 2017. https://micronutrientforum.org/wp-content/uploads/2017/10/2017-04NutritionModelingTools-FinalReport.pdf.
- 15. Bollinger LA, Sanders R, Winfrey W, Adesina A. Lives Saved Tool (LiST) costing: a module to examine costs and prioritize interventions. *BMC Public Health*. 2017;17(Suppl 4):782. doi:10.1186/S12889-017-4738-1
- 16. WHO. OneHealth Tool : Supporting integrated strategic health planning , costing and health impact analysis OneHealth Tool. 2013;(December):1-12. https://www.who.int/choice/onehealthtool/OneHealth_Tool_Supporting_integrated_strategic _health_planning.pdf?ua=1.
- 17. Carroll GJ, Buccini GS, Pérez-Escamilla R. Perspective: What will it cost to scale-up breastfeeding programs? A comparison of current global costing methodologies. *Advances in Nutrition*. 2018;9(5):572-580. doi:10.1093/ADVANCES/NMY041
- 18. Holla-Bhar R, lellamo A, Gupta A, Smith JP, Dadhich JP. Investing in breastfeeding the world breastfeeding costing initiative. *International Breastfeeding Journal*. 2015;10(1):8. doi:10.1186/s13006-015-0032-y
- 19. SUN. Workshop on Costing and Tracking Investments in Support of Scaling Up Nutrition. Nairobi, Kenya; 2014.
- 20. Gillespie S, Menon P, Kennedy AL. Scaling Up Impact on Nutrition: What Will It Take? *Advances in Nutrition.* 2015;6(4):440-451. doi:10.3945/an.115.008276
- 21. Weber AM, Galasso E, Fernald LCH. Perils of scaling up: Effects of expanding a nutrition programme in Madagascar. *Maternal & child nutrition*. 2019;15 Suppl 1:e12715. doi:10.1111/mcn.12715
- 22. Pérez-Escamilla R, Engmann C. Integrating nutrition services into health care systems platforms: Where are we and where do we go from here. *Maternal and Child Nutrition*. 2019;15(October 2018):1-5. doi:10.1111/mcn.12743
- 23. Hemminger C. Looking at nutrition financing in practice: a perspective from MQSUN⁺'s costing consultant for Francophone African countries. https://mqsunplus.path.org/blog/looking-at-nutrition-financing-in-practice-a-perspective-from-mqsuns-costing-consultant-for-francophone-african-countries/. Published 2019. Accessed September 12, 2019.
- 24. Menon P, McDonald CM, Chakrabarti S. Estimating the cost of delivering direct nutrition interventions at scale: national and subnational level insights from India. *Maternal & Child Nutrition*. 2016;12:169-185. doi:10.1111/mcn.12257
- Gurkan A, Kaiser K, Voorbraak D. Implementing Public Expenditure Tracking Surveys for Results: Lessons from a Decade of Global Experience. *The World Bank: PREMnotes Public Sector*. 2009;(145):16. http://documents.vsemirnyjbank.org/curated/ru/798931468163470166/pdf/528200BRI0 prem10Box345583B01PUBLIC1.pdf.
- 26. Picanyol C, Horton S, Chautala A, et al. *Tracking Investments in Nutrition in Africa: Experience from Four Countries.*; 2015. http://www.opml.co.uk/publications/tracking-investments-nutrition-africa.
- 27. MQSUN⁺. Subnational Budget Analysis for Scaling Up Nutrition: Tracking Nutrition

Expenditures at the Subnational Level.; 2018.

https://mqsunplus.path.org/resources/guidance-note-subnational-budget-analysis-for-scaling-up-nutrition/.

- MQSUN⁺. Subnational Budget Analysis for Scaling Up Nutrition: An Overview of Subnational Government Financing in SUN Countries.; 2018. https://mqsunplus.path.org/resources/guidance-note-subnational-budget-analysis-forscaling-up-nutrition/.
- 29. Manuel M, Coppard D, Dodd A, et al. *Subnational Investment in Human Capital.*; 2019. https://www.odi.org/sites/odi.org.uk/files/resource-documents/12663.pdf. Accessed May 8, 2019.
- Picanyol C. Is There a Better Way to Track Nutrition Spending? In Global Nutrition Report 2014: Actions and Accountability to Accelerate the World's Progress on Nutrition. Supplementary Online Material.; 2014. http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/128484/filename/128695.pdf %0Ahttp://dx.doi.org/10.7910/DVN/27857.
- 31. Fracassi P, Picanyol C. *Tracking Government Investments for Nutrition at Country Level.*; 2014. http://scalingupnutrition.org/wp-content/uploads/2014/08/140703_EN_SUMMARY-3-STEP-APPROACH_Tracking_Domestic_Investments_for_Nutrition.pdf.
- 32. SUN Donor Network. SUN DONOR NETWORK Methodology and Guidance Note to Track Global Investments in Nutrition.; 2014. https://scalingupnutrition.org/wpcontent/uploads/2013/12/RESOURCE_TRACKING_METHODOLOGY_SUN_DONOR_NETWORK .pdf.
- 33. Fracassi P, Picanyol C, Knechtel W, et al. *Budget Analysis for Nutrition: A Guidance Note for Countries (2018).*; 2018. http://scalingupnutrition.org/wp-content/uploads/2018/05/2018-Guidance-for-Budget-Analysis.pdf.
- 34. Bagnall-Oakeley H. Follow the Money: A Quick Intro to Budget Analysis. https://blogs.savethechildren.org.uk/2016/08/follow-the-money-a-quick-introduction-tobudget-analysis/. Published 2016. Accessed August 20, 2019.
- 35. SPRING. *Nutrition Budget Analysis Tool: User's Guide 2nd Edition.*; 2018. https://www.springnutrition.org/sites/default/files/publications/series/nutrition_budget_analysis_guide_2nd_e d.pdf.
- 36. Pomeroy-Stevens A, D'Agostino A, Shrestha MB, Muzoora A. A Multisector Approach to Monitoring Planned and Actual Nutrition Spending.; 2017. http://files.ennonline.net/attachments/2660/FEX-55-.
- 37. Action Against Hunger; Save the Children; SUN Senegal. *Nutrition Budget Advocacy: Handbook for Civil Society.*; 2017. https://www.actioncontrelafaim.org/wpcontent/uploads/2018/01/exe_2_bdef_handbook_nba.pdf.
- 38. SPRING. *Putting Budget Data to Work for Nutrition.*; 2018. https://www.springnutrition.org/sites/default/files/publications/briefs/budget_data_nutrition_brief.pdf.
- 39. MQSUN⁺. In-Person Technical Consultation for the Nutrition-Sensitive Methodology of the SUN Budget Analysis, 30 September & 1 October 2019. Meeting Report. Forthcoming.; 2019.
- 40. SUN. Guidance for the Use of the Common Results Framework (CRF) Planning Tool.; 2015. http://scalingupnutrition.org/wp-content/uploads/2015/06/CRF-TOOL-Guidance-Notes.pdf.

- 41. Waters H, Abdallah H, Santillán D. Application of activity-based costing (ABC) for a Peruvian NGO healthcare provider. *The International Journal of Health Planning and Management*. 2001;16(1):3-18. doi:10.1002/hpm.606
- 42. USAID. Introduction To Nutrition Budget and Expenditure Analysis: Technical Guidance Brief.; 2014. https://www.usaid.gov/sites/default/files/documents/1864/budgeting-expenditure-brief-final-May2018-508v3.pdf.
- 43. Chapko MK, Liu C-F, Perkins M, Li Y-F, Fortney JC, Maciejewski ML. Equivalence of two healthcare costing methods: bottom-up and top-down. *Health Economics*. 2009;18(10):1188-1201. doi:10.1002/hec.1422
- 44. Cunnama L, Sinanovic E, Ramma L, et al. Using Top-down and Bottom-up Costing Approaches in LMICs: The Case for Using Both to Assess the Incremental Costs of New Technologies at Scale. *Health Economics*. 2016;25(11):53-66. doi:10.1002/hec.3295
- 45. Hendriks ME, Kundu P, Boers AC, et al. Step-by-step guideline for disease-specific costing studies in low- and middle-income countries: A mixed methodology. *Global Health Action*. 2014;7(1):1-10. doi:10.3402/gha.v7.23573
- 46. Creese A, Parker D. Cost Analysis in Primary Health Care: A Training Manual for Programme Managers. WHO; 1994. https://apps.who.int/iris/bitstream/handle/10665/40030/9241544708.pdf?sequence=1&i sAllowed=y.
- 47. SUN, PF4N, UNICEF. Workshop on Public Finance For Nutrition in Asia. In: ; 2016:36. www.scalingupnutrition.org.
- 48. UNICEF. *Marginal Budgeting for Bottlenecks*.; 2010. https://www.unicef.org/sowc08/docs/sowc08_panel_4_2.pdf.
- 49. Soucat A, Lerberghe W Van, Diop F, Nguyen SN, Knippenberg R. *Marginal Budgeting for* Bottlenecks: A New Costing and Resource Allocation Practice to Buy Health Results.; 2002.
- 50. MQSUN. *How to Estimate the Costs of Nutrition-Sensitive Actions in a Common Results Framework – A Guidance Note.*; 2016. https://mqsunplus.path.org/resources/how-toestimate-the-costs-of-nutrition-sensitive-actions-in-a-common-results-framework-a-guidancenote/.
- 51. Maternal and Child Nutrition Study Group. Executive Summary of The Lancet Maternal and Child Nutrition Series. *The Lancet*. 2013;5(1):1-12. doi:10.1016/S0140-6736(13)62319-3
- 52. UNICEF. UNICEF's Approach to Scaling up Nutrition for Mothers and Their Children.; 2012. https://www.unicef.org/nutrition/files/Unicef_Nutrition_Strategy.pdf.
- 53. McBain RK, Jerome G, Leandre F, et al. Activity-based costing of health-care delivery, Haiti. *Bulletin of the World Health Organization*. 2018;96(1):10-17. doi:10.2471/BLT.17.198663