



MULTI-SECTORAL NUTRITION STRATEGY  
2014–2025

NUTRITION COSTING

Technical Guidance Brief

**INTRODUCTION: WHAT IS NUTRITION COSTING AND WHY IS IT RELEVANT?**

Various forms of malnutrition remain highly prevalent in developing countries and in order for there to be substantive reductions globally, there is a need to invest more in nutrition-specific and nutrition-sensitive interventions. To reduce malnutrition in developing countries, nutrition costing allows a country to calculate how much it would cost to provide nutrition services or interventions and subsequently how much to invest to make those nutrition services or interventions available. This is important because whether a country is centrally governed or decentralized, multiple entities are engaging in developing and approving budgets. As such, governments must know how much to request for nutrition in the annual budget process in order to allocate and invest adequate funds to assure nutrition interventions are implemented and reach the targeted population. Nutrition costing, like health costing, estimates what it will cost to implement nutrition programs or interventions in a given country or prioritized geographic area over a specified time period (see Box 1 for how costing differs from other commonly used terms). Costing is an important exercise undertaken to accurately forecast and plan budget allocations required for specific services. The results are also a useful tool to advocate for adequate budget.

For many years nutrition was not prioritized by governments and as a consequence there has been significant under-investment in this sector. The slow rate of reduction in the prevalence of stunting and anemia, for example, is a reflection of that under-investment. As a result, global advocacy efforts advocated for the creation of the Scaling Up Nutrition (SUN) Movement, which aims to unite governments, civil society, businesses, and citizens to end under-nutrition (SUN 2012; Horton 2010). Fifty-seven member countries have joined this global movement, and each has now elevated nutrition to a national priority. Despite this, resource allocation for nutrition is still lagging (SUN 2013). This is one reason why there is growing interest in costing nutrition interventions and programs—because nutrition costing

**Box 1. Key Terms and Definitions**

Costing is the approach used to develop cost estimates. This can be a first step towards developing a budget. By determining how much things cost, countries can then adequately allocate resources and track how those resources are spent.

Term	Definition
Costing	The process of calculating how much a product or service will cost.
Budgeting	The process of expressing quantified resource requirements (amount of capital, amount of material, number of people) into time-phased goals and milestones.
Budget analysis	The process of tabulating relevant budget data across different dimensions, (e.g., economic or functional classification) and comparing expenditures across years and sectors. Budget analysis 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.
Budget tracking	The process of making a comparison of the actuals to date to what was budgeted at the beginning of the period.
Resource tracking	The process of routinely collecting, analyzing, and monitoring resources flowing into and within a system.
Public Expenditure Review	An assessment of, and recommendations on, the level and composition of actual public expenditures over a period covering the previous three to five years, against a predetermined set of policy goals and outputs in a national plan.

can help governments decide how much to allocate to achieve national nutrition goals and objectives. SUN member countries were asked to develop nutrition plans of action and to cost these plans (SUN 2013).

Different costing approaches exist, as shown in Box 2; which approach is used and whether it is used in combination with other approaches depends on the country context, and specifically on the current state of nutrition service delivery. In the case of nutrition, for many countries costing can be a challenge because nutrition services may not exist, may only partially exist, or may exist across multiple government agencies and sectors. In cases where nutrition service delivery is fragmented, in order to effectively cost nutrition services, there is a need for a coherent plan that specifies which nutrition interventions should be prioritized and costed. Another reason resources are difficult to track and cost is the lack of standard definitions for nutrition-sensitive interventions through budget codes; this is an issue that governments and other entities like the Organization for Economic Cooperation and Development (OECD) are examining.

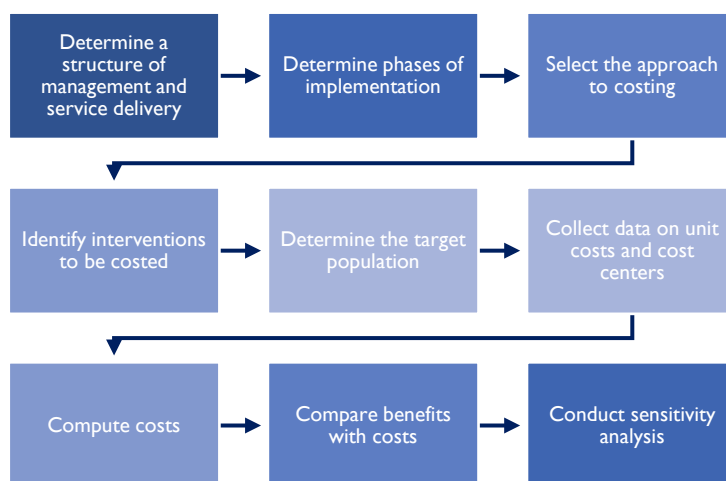
### Box 2. Commonly Used Costing Approaches

- **Activity-Based Costing or Ingredient Approach.** This approach is used when a program does not exist or exists but is inadequate. In this approach, the program to be implemented is divided, based on *a priori* reasoning and limited experience, into its components and subcomponents by the activities to be undertaken (Fiedler 2003; Fiedler et al. 2008; Matz et al. 1984; Baker 1998). The inputs are identified for each activity and the input coefficients and the amounts of inputs required to produce the target outputs are appropriately assessed. The information on the price of inputs is collected from the competitive markets (or the shadow prices—the calculated price of a good or service for which no market price exists—are entered), and finally the total cost is estimated by component and cost center (the basic unit of responsibility in an organization for which costs are accumulated).
- **Adaptation Approach.** This approach is used when a program similar to the proposed one already exists. Under this approach, most of the cost data of the existing program are used after properly adjusting them for the new program (Baker 1998; Horngren et al. 1993).
- **Mark-Up Approach.** This is the most widely used approach, but also the crudest of the three. In this approach, the entire data set of cost incurred in the previous year (for a program that already exists and remains unchanged) is escalated using a rule of thumb. The rate of escalation includes the rate of inflation (Baker 1998; Layne and Rickwood 1984).

These approaches can be used independently or in combination, depending on what is known about the proposed activities of the program, method of implementation, coverage, inputs, and resources.

Key steps in the process of arriving at nutrition cost estimates are presented in Figure 1. The first steps include determining a proposed structure for the entire nutrition program,<sup>1</sup> how the nutrition program will be managed, how the nutrition program will be phased in and scaled up, and, based on the context, which costing approach should be used, which nutrition interventions should be prioritized and costed, and who the target population is. Once these are determined, the next step is to collect the data to calculate the unit costs for each intervention (cost center), followed by aggregating these costs and projecting the cost given the target population to be reached, for potentially one year or multiple years. The last two steps test the robustness of the

**Figure 1. Key Steps for Nutrition Costing**



Source: Howlader et al. 2012

<sup>1</sup> *Nutrition program* refers to all the nutrition interventions that may be prioritized and implemented. For example, a nutrition program may include the provision of nutrition counseling in antenatal care and postnatal care, iron-folate distribution, growth monitoring and promotion, etc., which are referred to as nutrition interventions or for the purpose of costing, cost centers.

costing model in terms of comparing benefits with costs and conducting sensitivity analysis.

## NUTRITION COSTING AS IT RELATES TO THE USAID MULTI-SECTORAL NUTRITION STRATEGY

The U.S. Agency for International Development's (USAID's) Multi-Sectoral Nutrition Strategy aims to scale up effective, integrated, nutrition-specific, and nutrition-sensitive interventions, programs, and systems across humanitarian and development contexts. A key impact indicator of progress is to reduce the prevalence of stunting globally by 20 percent over five years. Nutrition costing is an approach that is directly relevant to achieving this objective. Specifically, nutrition costing can support USAID's Multi-Sectoral Nutrition Strategy's intermediate results (IRs) 1.2, 2.2, 2.3, 2.4, and 3.2 (see Box 3). Nutrition costing can:

- Enable countries to calculate how much they need to invest in nutrition programs to make high-quality nutrition services and commodities available and accessible (IR2.2, IR1.2).
- Engage national stakeholders to rally around national nutrition goals (IR2.3), encourage national, bilateral, and multi-lateral stakeholders in a country to work in a coordinated manner toward improved nutrition outcomes (IR3.2), and hone in on what nutrition services will be prioritized, costed, and provided (IR 2.4). The process of nutrition costing requires a vision and plan for how nutrition services will be delivered.
- Be used in national nutrition advocacy efforts to negotiate with the legislative branch of government to increase funding for nutrition by targeting audiences such as parliament, the media, and civil society, with an overall aim of increasing commitment to and political will and accountability for nutrition (IR2).

### Box 3. The Intermediate Results under which Nutrition Costing Fits in the USAID Multi-Sectoral Nutrition Strategy

- IR1. Increased equitable provision and utilization of high-quality nutrition services
  - IR1.2 Increased availability of and access to high-quality nutrition services and commodities
- IR2. Increased country capacity and commitment to nutrition
  - IR2.2 Increased political will and resources for nutrition programs
  - IR2.3 Increased stakeholder engagement around national nutrition goals
  - IR2.4 Improved systems to plan, manage, and evaluate nutrition programs
- IR3. Increased multi-sectoral programming and coordination for improved nutrition outcomes
  - IR3.2 Strengthened coordinated multi-sectoral programming and planning among nutrition stakeholders within the U.S. Government and at the country level

Source: USAID 2014

## HOW CAN NUTRITION COSTING SUPPORT USAID MISSION EFFORTS TO STRENGTHEN, IMPROVE AND EXPAND HOST-COUNTRY PLANNING AND BUDGETING FOR NUTRITION SERVICE DELIVERY?

Nutrition costing is a sound investment for USAID to consider when providing host countries with support for nutrition, and if done thoroughly, can:

- Encourage the host country governments to think critically about nutrition priorities and needs, and develop a detailed plan of action for nutrition that can then be costed
- Provide national stakeholders with an understanding of the funding gap in nutrition, when national projected budget allocations for nutrition are compared with actual nutrition cost estimates
- Provide government decision makers, such as a parliamentary budget committee or a ministry of finance, with the necessary financial information to ensure nutrition is adequately funded in annual national budgets
- Be used by parliament, the ministry of finance, and civil society to track and monitor investment and spending in nutrition by undertaking budget analysis exercises based on the costing; in turn, this can help hold the

government accountable to nutrition by ensuring that the funds required to implement nutrition interventions are both allocated and spent

- Be used for nutrition advocacy by civil society to ensure government allocates adequate funds to nutrition; advocacy can center on budgeting more for nutrition, creating a budget line for nutrition, increasing the budget ceiling for nutrition, and ensuring greater prominence of nutrition in the national five-year economic development plans

## KEY CONSIDERATIONS FOR NUTRITION COSTING

There are a few key considerations when a country wants to undertake nutrition costing (see Box 4). Ideally nutrition costing should be done at the request of the country and consider the country-specific context. Because the nature of multi-sectoral nutrition services is fragmented, it is necessary to use a collaborative and participatory process to engage multi-sectoral stakeholders to define the assumptions upon which nutrition costing is based. Using a consultative process promotes ownership of the final nutrition plan and cost estimates among stakeholders in the country; the stakeholders themselves lend credibility to the process and the results; and it creates a shared vision for priority nutrition interventions.

An important lesson learned from a review of 20 SUN member country costed plans was that “effective scale up is only possible when all costs associated with an intervention are included in the total cost of a plan” (Pittore and Barker 2014). This finding supports taking the time to develop a thorough costed plan to ensure that the scale up of nutrition interventions is adequately planned and funded.

While SUN member countries produced nutrition plans of action and costed plans, the quality of both the action plans and the related costed plans were variable. One reason is that the process used to develop the action plan and the extent to which stakeholders in a country were engaged varied. In several cases action plans were developed without a more detailed common results framework that prioritized specific nutrition interventions, and the resulting costed plans were superficial (SUN 2014, Mokoro 2015, Pittore and Barker 2014, Connolly 2014).

### Box 4. Key Considerations When Developing a Nutrition Plan and Undertaking Nutrition Costing

*When developing a plan for nutrition (a prerequisite for nutrition costing):*

- Engage multi-sectoral stakeholders from the beginning of the process to ensure ownership and a shared vision for prioritized nutrition interventions
- Develop a detailed plan that includes a common results framework against which all stakeholders can be held accountable
- Aim to have annual targets to track progress
- Consider the country context with regard to how nutrition interventions can be scaled up

*When undertaking nutrition costing:*

- Engage multi-sectoral stakeholders throughout to guide the process of costing based on the detailed nutrition plan
- Undertake a comprehensive costing exercise that takes into account all costs related to prioritized nutrition interventions, as effective scale up of interventions depends on adequate resources based on sound cost estimates
- Specify a clear coordination and management structure for nutrition; this is important to be able to identify required activities and costs
- Select costing methods based on the country context and current state of nutrition interventions and services
- Plan adequate time to undertake a comprehensive costing exercise; this type of exercise can take one year or more to complete, depending on data availability, but estimates can be projected for multiple years

**Source:** Adapted from Howlader et al. 2012, FANTA 2015, Pittore and Barker 2014, Connolly 2014

## COUNTRY EXAMPLES OF NUTRITION COSTING

Two country examples where detailed nutrition costing was undertaken include Bangladesh and Guatemala (see Table I). In both instances, nutrition costing focused on costs in the health sector. In Bangladesh, the focus of the government was on mainstreaming nutrition, and as such the nutrition costing exercise determined the cost of adding

nutrition service delivery through the Ministry of Health and Family Welfare (MOHFW) to complement the existing health and family planning services that the government provides (Howlader et al. 2012). In Guatemala, nutrition costing was undertaken in partnership with the Ministry of Finance (MINFIN) to determine the cost of undertaking the government's Zero Hunger Plan, an initiative to reduce stunting. Nutrition costing focused on the health sector, but included two nutrition-sensitive interventions identified by the government in the Zero Hunger Plan. Both costing efforts used the activity-based costing approach. The results of both these nutrition costing exercises have been considered in government planning and budgeting for nutrition service delivery and scale up, and by non-government stakeholders for nutrition advocacy to ensure both governments remain committed to adequate and continued funding for nutrition to improve the nutrition situation.

**Table 1. Country Examples of Nutrition Costing: Bangladesh and Guatemala**

	<b>Bangladesh 2012</b>	<b>Guatemala 2014</b>
<i>What was costed?</i>	<p>In collaboration with the MOHFW of the Government of Bangladesh, a proposed plan for mainstreaming nutrition by adding nutrition service delivery that included the following interventions (cost centers):</p> <ul style="list-style-type: none"> <li>• Social behavior change communication and community nutrition promotion</li> <li>• Targeted food supplementation</li> <li>• Management of severe acute malnutrition in children</li> <li>• Micronutrient supplementation</li> <li>• System strengthening</li> <li>• Management and coordination</li> <li>• Deworming</li> <li>• Food fortification</li> <li>• Promotion of household food security through agriculture</li> </ul>	<p>In collaboration with the MINFIN of the Government of Guatemala, the nutrition interventions identified in the Zero Hunger Plan, included:</p> <p><u>Nutrition-Specific Interventions</u></p> <ul style="list-style-type: none"> <li>• Maternal nutrition during prenatal care</li> <li>• Exclusive and continued breastfeeding</li> <li>• Complementary feeding for infants and small children and providing complementary food</li> <li>• Dietary diversity</li> <li>• Micronutrients for children</li> <li>• Growth monitoring and promotion</li> <li>• Feeding sick children</li> <li>• Management of acute malnutrition at the community level</li> </ul> <p><u>Other Health Interventions</u></p> <ul style="list-style-type: none"> <li>• Water quality surveillance</li> <li>• Vaccinations</li> </ul>
<i>How was it costed?</i>	<p>The methodology used was the activity-based costing approach. A consultative process engaged government and nongovernment stakeholders to develop the proposed plan for nutrition service delivery and prioritize the nutrition interventions within the health sector that should be costed.</p>	<p>The methodology used was the activity-based costing approach. A consultative process engaged MINFIN. Data was collected on the time providers spent on nutrition service delivery to estimate the unit costs of each intervention (cost center).</p>
<i>What were the results?</i>	<ul style="list-style-type: none"> <li>• The average cost per year of a nutrition program at scale was found to be US\$130 million–170 million (900–1,200 Crore Taka), and this is within the means of the national budget.</li> <li>• The results of the costing exercise indicated that the health sector budget for health and nutrition was low relative to the need and should be increased from 6 percent to at least 8 percent of the national budget, of which 2 percent should be devoted to nutrition-specific interventions.</li> </ul>	<ul style="list-style-type: none"> <li>• The average cost per year of a nutrition program at scale was found to be US\$356 million (2,778 million Quetzales).</li> <li>• The government's projected budget allocation for nutrition was only one-third of the amount required for implementing nutrition interventions at scale.</li> <li>• The investment gap for nutrition in 2013 was US\$156 million (1,196 million Quetzales), and by 2021 the investment gap would grow to US\$389 million (2,988 million Quetzals).</li> <li>• Cost estimates indicated that 77 percent of the projected required funding should be invested in nutrition-specific interventions, because this has previously been under-invested, and 23 percent should be invested in nutrition-sensitive interventions.</li> </ul>
<i>What resulted</i>	<p>The cost estimates were used:</p> <ul style="list-style-type: none"> <li>• To inform the budget allocation for nutrition in</li> </ul>	<ul style="list-style-type: none"> <li>• The costing methodology is being adopted by MINFIN to better allocate budgets in the government system.</li> </ul>

<p><i>from the cost estimates for nutrition?</i></p> <p><i>How were the cost estimates used?</i></p>	<p>the design of the Health Population and Nutrition Sector Development Plan 2011–2016</p> <ul style="list-style-type: none"> <li>• By the MOHFW for planning and budgeting resource allocation for nutrition</li> <li>• By the SUN Movement and non-government stakeholders for advocacy purposes</li> </ul>	<p>Training and capacity building of central-level staff from the Ministry of Health and MINFIN in the use of activity-based costing has been undertaken.</p> <ul style="list-style-type: none"> <li>• The cost estimates are being used by non-government stakeholders to advocate for the need to increase funding for nutrition among decision makers at the Ministry of Health and MINFIN.</li> <li>• The cost estimates have been used in advocacy materials such as briefs for key target audiences (the Government of Guatemala and civil society) and a video (which has been shared with USAID, its partners, and civil society).</li> </ul>
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## TECHNICAL RESOURCES ON NUTRITION COSTING

- The World Bank has undertaken global nutrition costing activities, namely “Scaling up Nutrition: What will it cost?” Available at: <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/Peer-Reviewed-Publications/ScalingUpNutrition.pdf>
- The SUN movement has resources on their website, available at: <http://scalingupnutrition.org/>
- The Community of Practice on Planning, Costing, Implementing, and Financing Multi-Sectoral Actions for Improved Nutrition
  - “Scaling up SUN Country capacity to deliver sustainable reductions in malnutrition with four communities of practice,” available at: <http://scalingupnutrition.org/about/how-is-the-movement-supported/strengthening-capacity-to-deliver>
  - “Costing and Tracking Investment in Nutrition Workshop: November 2013,” available at: <http://scalingupnutrition.org/news/costing-and-tracking-investment-in-nutrition-workshop-november-2013#.VvGbmVUrKUL>
- Maximizing the Quality of Scaling Up Nutrition Programmes Framework has resources on its webpage, available at: <http://www.ids.ac.uk/project/maximising-the-quality-of-scaling-up-nutrition-programmes-framework-mqsun>
- Global Nutrition Reports provide overviews and country experiences of nutrition costing, available at: <http://globalnutritionreport.org/>
- The Food and Nutrition Technical Assistance III Project has country examples and reports on nutrition costing, available at: <http://www.fantaproject.org/>
- The Strengthening Partnerships, Results, and Innovations in Nutrition Globally Project has a webpage with information and resources on nutrition budgeting and financial analysis at: <https://www.spring-nutrition.org/technical-areas/systems/budgeting>

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*This Technical Brief will be periodically updated. Comments from readers are welcome, especially comments to help clarify the information provided or where additional information may be useful (last updated April 2016).*