

ESTIMATING THE COST OF SCALING UP NUTRITION

NOTES PREPARED FOR A WORKSHOP PRESENTATION IN

NAIROBI, KENYA, NOVEMBER 2013

SUMMARY PREPARED OCTOBER 2014



ABOUT MQSUN

MQSUN aims to provide the 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 seven leading non-state 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.

MQSUN PARTNERS

Aga Khan University
 Agribusiness Systems International
 ICF International
 Institute for Development Studies
 Health Partners International, Inc.
 PATH
 Save the Children UK

CONTACT

PATH, 455 Massachusetts Avenue NW, Suite 1000
 Washington, DC 20001 USA
 Tel: (202) 822-0033
 Fax: (202) 457-1466

ABOUT THIS PUBLICATION

This report was produced by ICF International to summarise methodologies and identify methods for estimating costs of nutrition programming as part of the UK Government's Department for International Development (DFID)-funded MQSUN project.

This document was produced through support provided by UKaid from the Department for International Development. The opinions herein are those of the author(s) and do not necessarily reflect the views of the Department for International Development.



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ACKNOWLEDGEMENTS

The presentation on which this summary was based was first given in Nairobi, Kenya, at the Workshop on Costing and Tracking Investments in Support of Scaling Up Nutrition, 12-14 November 2013, by Helen Connolly, ICF International, and Susan Horton, University of Waterloo, who summarised the presentation for this report. The workshop was the product of collaboration between committed organisations and people including UNICEF and the SUN Movement Secretariat. We would like to thank all participants including country representatives, governments, expert consultants, development partners, and staff for their contributions and participation.

LIST OF ABBREVIATIONS

CHW Community Health Worker

MAM Moderate Acute Malnutrition

MU Monetary Unit

RUTF Ready-to-Use Therapeutic Food

SAM Severe Acute Malnutrition

SUN Scaling Up Nutrition

1.0 INTRODUCTION

1.1 The Process of Planning

Undertaking cost estimation (“costing”) is an important component of planning. Developing a costing plan starts from a vision of what is expected to be accomplished. A well-developed costing tool is important for moving from conceptualising what we want to achieve to understanding how to get there. In order to plan for appropriate country costing, key questions need to be addressed:

- What is the scope of the plan (what activities and stakeholders are included, and what are excluded)?
- What is the level of detail required (intervention cost for one target unit or detailed costs of all resources)?
- When will spending occur (what is the timeframe for the plan)?
- Which costs occur once only (setup costs or irregular costs) and which costs recur on a regular basis?
- What specialized resources are needed (including personnel, imported commodities, infrastructure, transportation, and training)?
- Who will pay the costs (domestic sources, international donors)?

While there are tools available to assist in costing, the best tool for the job depends on the purpose of the costing exercise (e.g., estimate the full cost of nutrition programming, estimate government costs, use in cost-effectiveness analysis). The use of a specific tool is not mandatory. In fact, the most appropriate tool may be designed specifically for the purposes and goals of the country. A few of the available tools are described at the end of this document.

Planning is a process. The purpose of planning and costing is not to produce a static document, but to help guide action. Understanding the planning process can help focus the requirements of the cost estimation. Figure A illustrates the planning cycle. Cost estimation is a key element in accounting, monitoring, audit, and evaluation. Understanding and setting goals for evaluation will help to inform the necessary elements of cost estimation.

The process of planning helps to determine who is involved and requires a consultation among those involved in order to negotiate goals and details of elements in the process. A national nutrition plan generally requires planning at sub-national levels in addition to multi-sectoral involvement. Engagement of different groups and sectors needs to occur at both the national and sub-national levels. Planning processes that involve the participation of key stakeholder are more likely to succeed than “top-down” plans.

Figure A. The planning cycle.



1.2 An Analysis of 20 Costed National Nutrition Plans

In spring 2013, MQSUN initiated an analysis of 20 costed nutrition plans from those SUN member countries whose plans were at the time sufficiently far advanced (SUN movement, 2013). Components of nutrition plans fell into three broad categories, namely specific nutrition actions, nutrition-sensitive actions, and actions involving governance across sectors. Reviewing what other countries are doing is one useful way to think about nutrition planning.

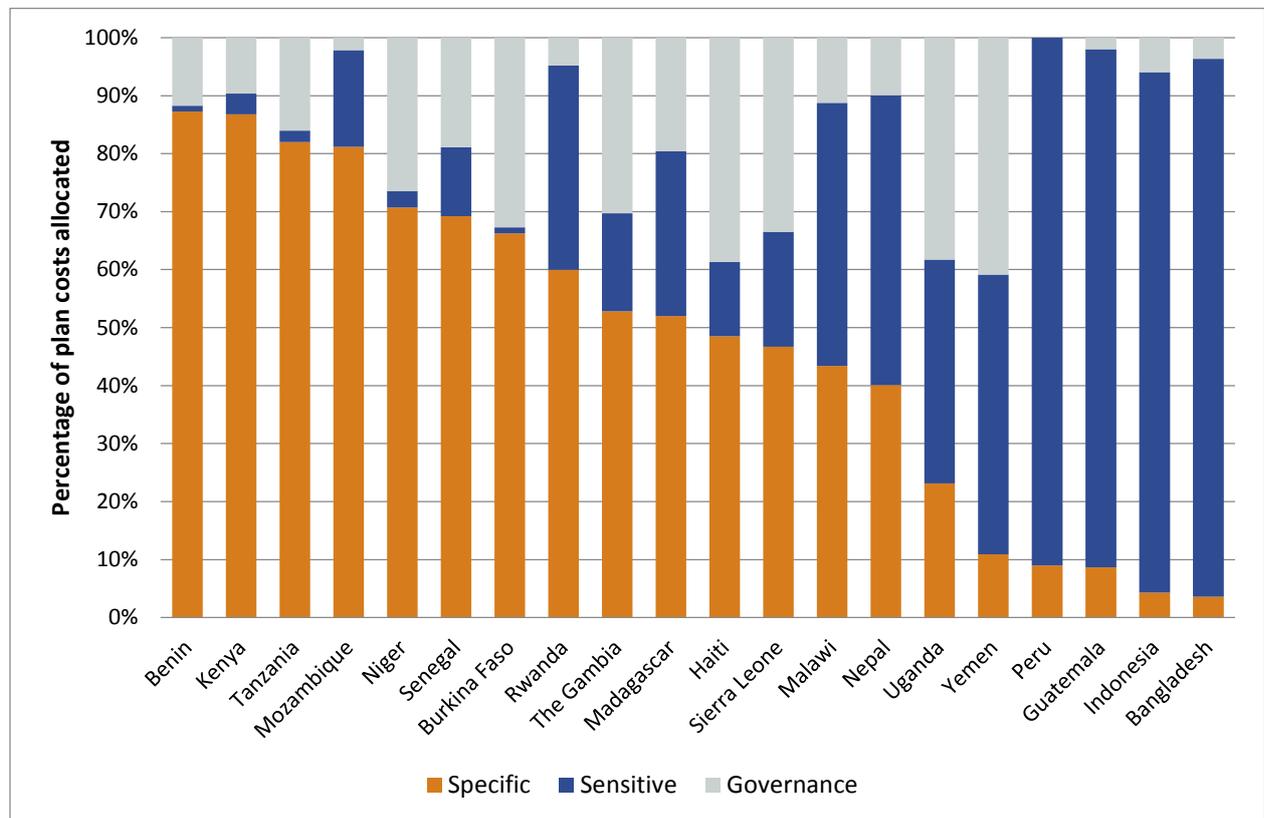
Nutrition-specific actions are those actions intended to have quicker and more direct impact on improving nutrition, such as interventions focusing on micronutrients (vitamins and minerals), community management of Severe Acute Malnutrition (SAM), programs improving knowledge of nutrition to enable families to make healthy choices, and providing nutritious food supplements to pregnant and lactating women and children in the 6-23 month age group.

Nutrition-sensitive actions are actions aimed at improving the underlying determinants of good nutrition, which might take longer for impacts to be realised (and might also have other positive outcomes in addition to improved nutrition). For example, interventions in agriculture and food security benefit nutrition as well as benefiting income and potentially reducing poverty. Improved care for small children improves nutrition as well as cognitive development of children. Water and sanitation investments have multiple benefits, among them improved nutrition and health outcomes.

Governance improvements provide the enabling environment for improving nutrition. Governments provide policies, legislation, and coordination that are important in public messaging, building capacity, and playing a key role in coordinating activities leading to national social goals.

As of July 2013, costing plans were available for 20 Scaling Up Nutrition (SUN) member countries. The distribution of costs across the three categories are shown in Figure B.

Figure B. Distribution of national nutrition plan cost estimates by cost category.



Countries vary in their plans, from Benin (which focused heavily on specific nutrition interventions), to Bangladesh (which concentrated primarily on nutrition-sensitive actions). Yemen and Uganda devoted 40% of their planned expenditures to issues of nutrition governance.

At the time of the analysis, good nutrition practices accounted for more than half of spending across all plans within the “nutrition-specific” interventions (through promoting good nutrition behaviors). Agriculture was a key player in nutrition-sensitive actions. Just over half of the nutrition-sensitive activities were devoted to increasing the availability of food (via agriculture and small-scale gardens, post-harvest actions, and measures for food safety). Just under half of nutrition-sensitive interventions focused on access to food by vulnerable groups (food for work programs, income generation, school feeding, and provision of food directly to vulnerable groups). Nutrition-sensitive actions in public health included promotion of WASH and nutrition counseling for particular vulnerable groups such as those living with HIV/AIDS. The largest share of nutrition governance activities planned at that time were for capacity building at various levels.

2.0 CALCULATING PLAN COSTS

Minimum criteria for estimating plan costs depend on the goals and resources available in each country. In estimating plan costs some key decisions have to be made, including the following:

- Will costs include all existing expenditures on nutrition, or only the new/additional costs?
- From whose perspective will the plan be costed? Will it be the costs from one sector (e.g., Health) or will it incorporate costs incurred in other government sectors?
- Will the costs be those incurred only by the government, or will contributions from international sources or CSOs be included?
- What method of calculating costs will be used? Will it be a fairly basic estimate, or will a costing tool be used? Will it be a unit cost approach or will it look at all the resources needed to provide the intervention?
- Additionally, all costing involves some basic steps:
 - What activities/interventions are contemplated (this comes from the planning process)?
 - What is the cost to provide the activity/intervention to one additional target unit (unit cost)?
 - How many additional targets will receive the benefit?
 - What other overarching costs (e.g., governance, policy and legislation costs) need to be included to ensure completion of the intervention?

2.1 Program unit cost approach

Suppose we wanted to estimate the cost of extending community management of severe acute malnutrition (SAM), to an additional group of children. We can make a rough estimate, by estimating the cost per child in similar countries, and then taking an average (e.g., mean or median) or relying on the cost in the country that is deemed as most similar. This was the method used to generate a global estimate of what it would cost to scale up nutrition (Horton et al., 2009). While this is a useful way to start, the older the cost estimates and the more different the countries, the less reliable this method becomes. It requires effort to continually update unit cost data and ensure they are comparable. In addition, true scale up costs are harder to estimate for programs with high start-up costs (e.g., infrastructure), irregular costs (e.g., based on a unit of time, geography, or population that is not the same as the unit of the target population), or specialized programs.

2.2 Ingredients method

An alternative method is to break down activities into their components. This is the most precise and resource-intensive approach. It presumes that there are data sources that are updated, that individual components of activities can be enumerated, and that costs can be provided for the individual components. If individual resources can be identified, various agencies maintain price databases, which can be used to estimate overall costs. These include:

- UNICEF vaccine price database (http://www.unicef.org/supply/index_57476.html);
- UNICEF medicines price database (http://www.unicef.org/supply/index_ecd_drugs.html);
- UNICEF market updates on selected commodities used in nutrition programs (http://www.unicef.org/supply/index_59714.html);

- WHO database on health service delivery costs (http://www.who.int/choice/cost-effectiveness/inputs/health_service/en/);
- WHO-CHOICE database with salary data for health personnel at different skill levels, different subregions, and different years (not recently updated, and not currently available); and
- National cost information from exist budgeting or expenditure tracking sources.

If data on the cost of each “ingredient” is available, then it is possible to continuously update costs of various nutrition interventions. Additionally, once the programs are in place and budgets and expenditures have been completed, this information can be used to feed back into the planning cycle to update costs, as well as required resources.

2.2.1 EXAMPLE: INGREDIENTS FOR TREATMENT OF SAM

What are the “ingredients” for treating one child at the community level for severe acute malnutrition (SAM)? Suppose the ingredients for the treatment of one child are composed of:

- 8 weekly visits for outpatients, 10 minutes of time per visit of a community health nurse;
- 15 kg of Ready-to-Use-Therapeutic Food (RUTF), on average, over 8 weeks for each child;
- 5-day course of amoxicillin (1.5 x 250 mg/day);
- Additional costs for treating a child for SAM with complication
 - 10 days in hospital
 - medical staff time (proportion of salary that is equivalent to the proportion of time spent on the patient’s case)
 - specialised milks in hospital
 - additional medications required
- “Invisible” costs
 - lab tests
 - gasoline for vehicles
 - paper
 - administration
 - cleaning
 - other overhead

In order to calculate the “invisible” costs, a country needs to have a very good estimation of overhead and infrastructure costs and be able to allocate these across all relevant programs. If these cannot be adequately tracked within a country, we can use a general rule of thumb and apply a percentage markup to those costs to attribute additional costs. Based on one detailed study in Africa (Bhutta et al., 2013), the Lancet 2013 series used a 7% markup for “other direct” costs (e.g., paper, lab supplies) and 40% for indirect costs (e.g., use of lab equipment, personnel benefits, general administration).

One thing to consider in estimating costs of scaling up interventions is that different nutrition programs use very different proportions of “ingredients”. Fortification programs use a large proportion of commodities, large initial investments in equipment, and relatively little personnel time. Nutrition education programs require mainly personnel time, large investments in initial training (with some ongoing refresher training), and very few commodities (other than for transport and perhaps

educational materials). When estimating costs, the ingredients and the timing of their use in the program need to be considered, especially when considering scale up.

2.2.2 ADVANTAGES AND DISADVANTAGES OF INGREDIENTS METHODS

The ingredients method has a number of advantages over the program unit cost approach, including:

- Providing detailed cost information;
- Allowing direct calculation of resource requirements (number of nurses or community health workers required, number of commodities required);
- Providing a framework for thinking about initial set-up investments needed for a program and separating them from routine, ongoing costs; and
- Allowing for more precise resource tracking and, eventually, better measures of cost-effectiveness.

Disadvantages of the ingredients method include:

- Time-intensity required to break down all interventions into their components and identify the costs of all components; and
- Difficulty in estimating costs for all inputs if there is no national or global database (e.g., the WHO database on personnel costs is not currently updated/available).

In undertaking the initial protocol for scaling up nutrition plans at a country level, a number of different approaches have been used. Some have used the more ad-hoc method of taking program unit costs of activities from another similar activity and/or country and multiplying that cost by the number of people receiving the interventions. Other countries have used the more detailed ingredients approach, typically employing one of the costing tools or a spreadsheet program (such as Excel) to keep track of details.

One option is to begin with a more ad-hoc approach (use estimated unit costs of each activity, and numbers of beneficiaries) and update to a more structured approach as programs are implemented and more information is available. The global costing of nutrition interventions used this approach by updating global estimates to be more specific to context (e.g., regions) and linking to tracking of expenditures and resource use. An initial estimate was made using median data on unit costs (from surveys of different countries) combined with estimates of population in need (Horton et al, 2009). This was followed up with a more detailed estimate using the OneHealth tool, for which some new activities had to be constructed from the ground up, estimating ingredients needed (Bhutta et al, 2013). Once programs are in place and budget and expenditure data are available, this information can be used in the planning cycle to revisit the cost estimates going forward.

2.2.3 ESTIMATING COSTS OF SCALE-UP

Before costing the scale-up of a nutrition plan, plan goals must be set.

- What is the baseline? How many people (or villages or other target units) currently receive the intervention?
- What is the target? How many people (or villages or other target units) should receive the intervention by the end of the plan?
- For a multi-year plan, do the targets vary across years?

The scale-up cost is the cost of reaching the additional people (or villages or other target units) during the plan. If annual targets are set, then annual scale-up costs can be calculated according to the additional units of the intervention needed in each year.

EXAMPLE: ESTIMATING THE COST OF SCALE-UP OF COMMUNITY-BASED MANAGEMENT OF SEVERE-ACUTE-MALNUTRITION (SAM)

In this example, scale-up costs are calculated in a variety of ways depending on the goals or questions to be answered. These calculations include identifying:

- recurrent costs by year
- costs by region or other geographical area
- one-time (start-up) or irregular costs and recurrent costs
- additional required resources
- sources of support (who pays for what)

We start by revisiting in Section 2.2.1 using available information about the prevalence of SAM for the age-group concerned (6 months to 6 years) for a fictional country, using existing survey data.

Existing coverage of community-based management of SAM can usually be found from service records. (Typically the Ministry of Health is responsible for the front-line workers who are supervising the mothers caring for children with SAM.) Alternatively, SAM coverage can be estimated based on the volume of Ready-to-Use Therapeutic Food (RUTF) being consumed. Dividing the total volume per year by the average amount of RUTF required per child per treatment episode results in a rough estimate of the number of children currently being treated. (The amount of RUTF per episode varies by the age of the child, so estimates adjusted if there is more information about the age of the SAM population.)

Once existing (baseline) coverage is estimated, target coverage should be decided. Depending on the intervention, the target coverage will vary. (Further in the planning cycle, coverage may need to be adjusted based on costs, available resources, and/or the priority of the intervention.) The target coverage should be decided after careful thought about what is achievable within the timeline of the plan.¹

RUTF is relatively expensive, so we need to set a goal for scale-up that is somewhat ambitious, but also where there is a possibility of getting the necessary resources to achieve the goal. In this example, an average of 10,000 children (in the age range of 6 months to 6 years) in the country have SAM each year, but only 10% of them (1,000 children) receive treatment. The country's target goal is to reach 5,000 children each year by the end of the 2-year plan. Further, the intervention will be scaled up so that in Year 1 of the plan, 1,500 additional children receive treatment (so that 2,500 in total are treated in Year 1), and that in Year 2, an additional 2,500 children receive treatment (so that 5,000 in total are treated in Year 2).

¹ What is "achievable" may vary based on the goal of the plan. If one goal is to attract donors, achievability might be based on available resources (e.g., staff, products) and time, and not be dependent on total cost. If the goal is to understand what can be reasonably implemented with given national resources (and budget) then the targets may be set lower. Some countries produce more than one plan based on different target scenarios.

CALCULATING ANNUALLY RECURRING COSTS

In this fictional country, the total cost for SAM treatment (including the cost of RUTF, the cost of salary for health workers, the cost of monitoring, costs of refresher training each year for health workers, etc.) is 200 MU (money units). Tables 1a and 1b show the additional costs of scaled up treatment and the total costs of scaled up treatment, respectively. Additional costs are useful to illustrate additional financial or resource needs (Table 1a). However, for planning purposes, evaluation of the nutrition programs, and to highlight nutrition commitments, total costs should be calculated (Table 1b).

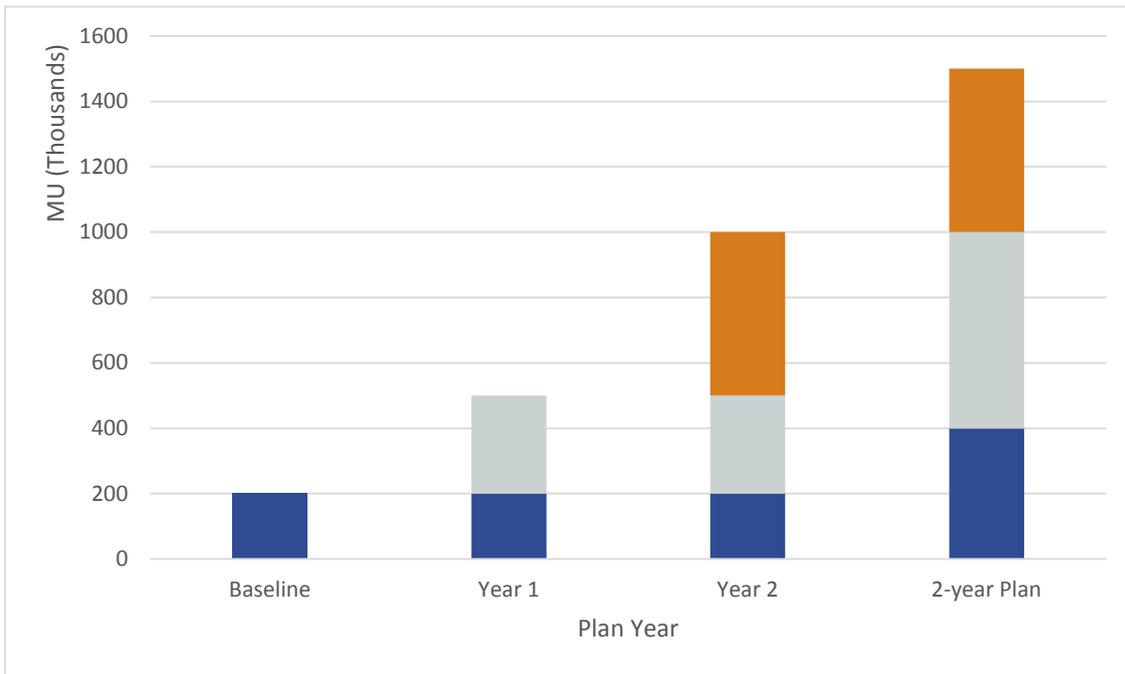
Table 1a. Estimating <i>additional</i> annual costs of scale up				
	Baseline	Year 1	Year 2	Additional Treatment over Baseline
Coverage	1,000	1,500	$1,500 + 2,500 = 4,000$	$1,500 + 4,000 = 5,500$
Cost	$1,000 \times 200 \text{ MU} = 200,000 \text{ MU}$	$1,500 \times 200 \text{ MU} = 300,000 \text{ MU}$	$4,000 \times 200 \text{ MU} = 800,000 \text{ MU}$	$5,500 \times 200 \text{ MU} = 1,100,000 \text{ MU}$

Table 1b. Estimating <i>total</i> annual costs of scale up				
	Baseline	Year 1	Year 2	Total Plan Treatment
Coverage	1,000	$1,000 + 1,500 = 2,500$	$2,500 + 2,500 = 5,000$	$2,500 + 5,000 = 7,500$
Cost	$1,000 \times 200 \text{ MU} = 200,000 \text{ MU}$	$2,500 \times 200 \text{ MU} = 500,000 \text{ MU}$	$5,000 \times 200 \text{ MU} = 1,000,000 \text{ MU}$	$7,500 \times 200 \text{ MU} = 1,500,000 \text{ MU}$

Note that the way this program was described, the plan costs shown above are recurrent program costs. Depending on the inputs needed for the intervention, there may be additional costs incurred. An example of this is described below.

Figure C shows the costs of scaling up the SAM intervention from treating 1,000 children annually to treating 5,000 children annually. Given no change to baseline activities, the baseline costs (the bottom portion of the bar) would have been incurred annually. The upper portions of the bars reflect the additional costs of scale-up.

Figure C. Recurrent cost of scale-up, by plan year.

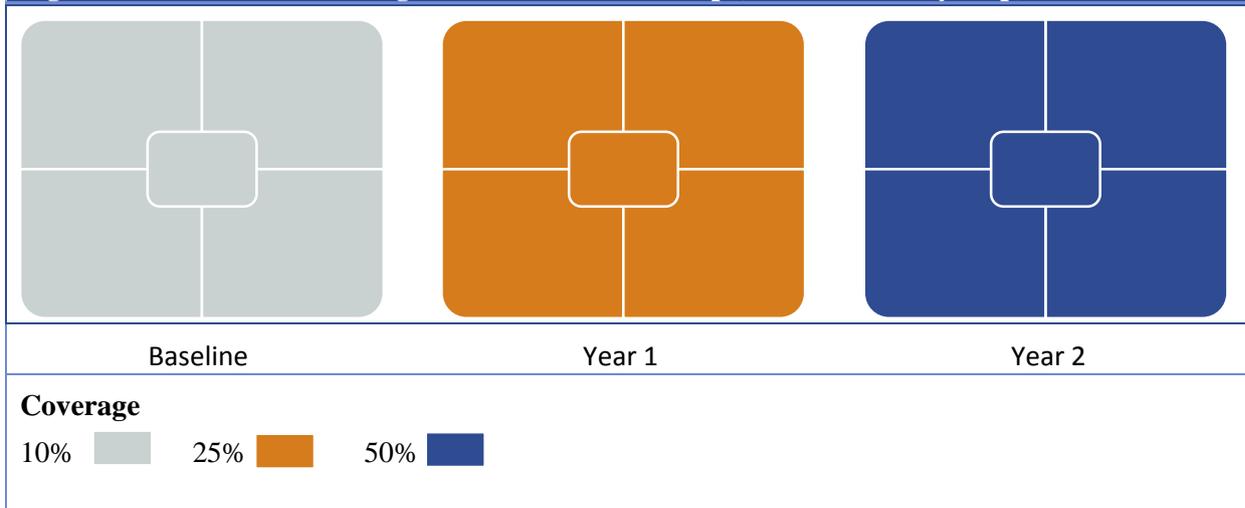


CALCULATING COSTS BASED ON GEOGRAPHICAL SCALE UP

Instead of considering scale-up based on total target population alone, it might be more useful to consider scaling up by geographical area. This may be the case if coverage need varies across regions or if resources are available only in certain areas at the start of the program.

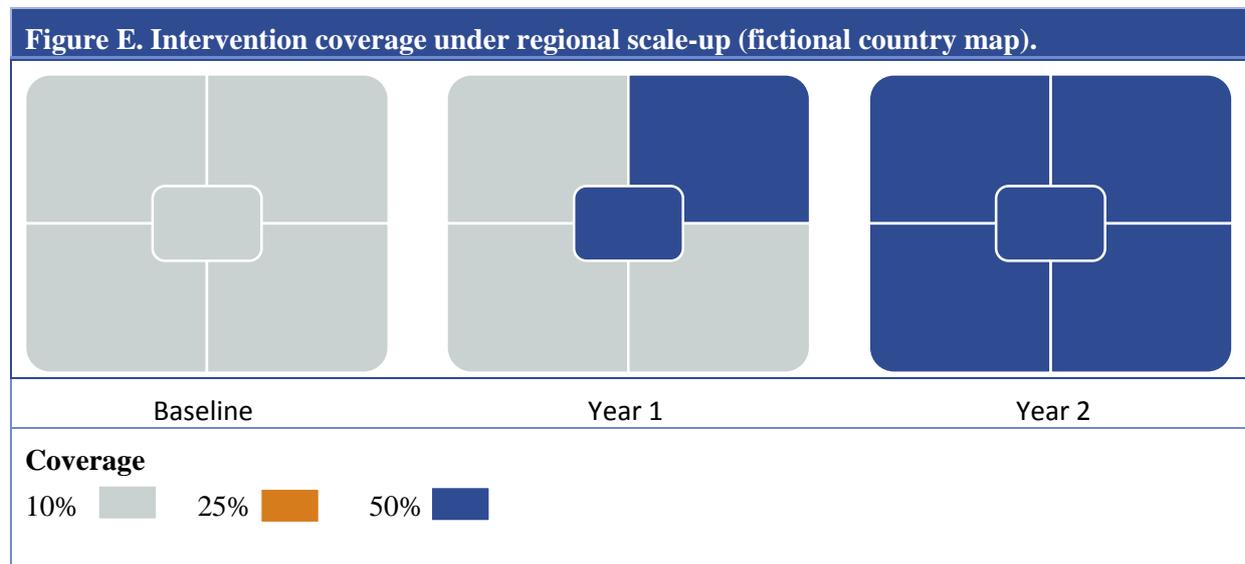
Figure D illustrates scale up in the example country when implementation is scaled up at the same rate in every region of the country. The coverage maps show the country at baseline (10% coverage), after Year 1 (25% coverage), and after Year 2 (50% coverage).

Figure D. Intervention coverage under national scale-up (fictional country map).



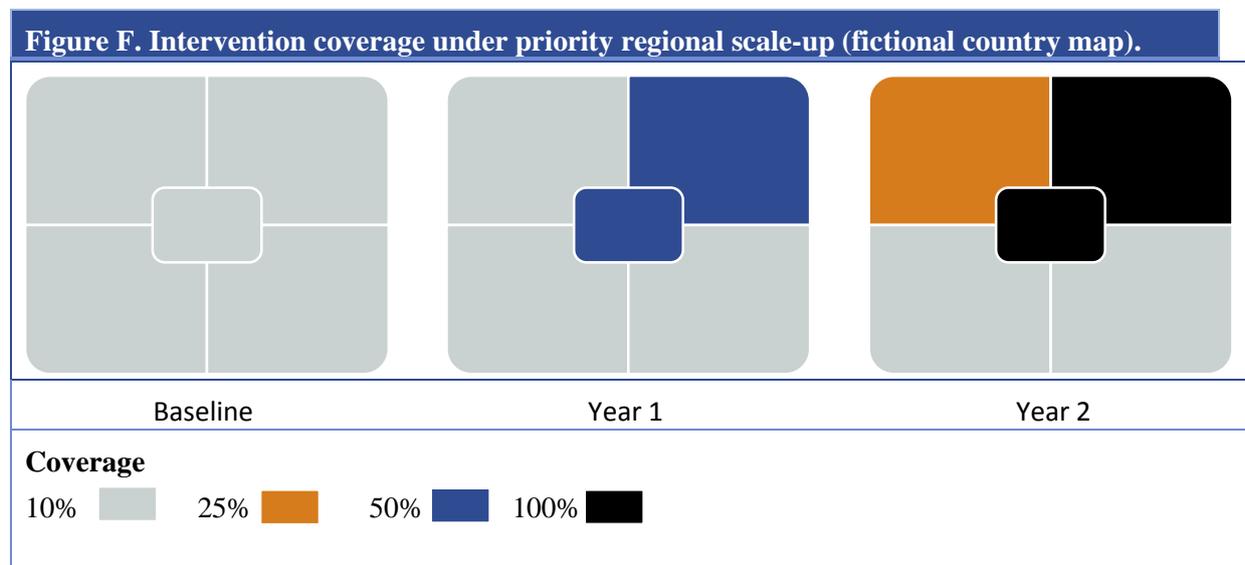
Instead of implementing the intervention equally across regions, however, it might be more feasible to implement pilot programs in a few districts before rolling out the program nationwide. If there are

priority districts where malnutrition is particularly high, targeting those areas first may be more sensible. Figure E shows how scale up could differ if the plan targets a city with poor areas and a poorer-than-average district with variable rainfall before scaling up nationwide.



If targets are chosen this way, then the target unit will need to be estimated based on the population covered in the pilot or priority regions and costs calculated accordingly.

A country may also opt not to scale up nationwide during the plan timeline. Instead, it may choose to concentrate on the priority regions and leave the remaining districts for a later plan. Figure F shows the scenario, where the intervention is piloted in the same regions as Figure E in Year 1, but scale up in Year 2 is concentrated in areas judge to be more in need. Again, the coverage will need to be estimated based on population at risk in those regions and the costs calculated accordingly.



ONE-TIME COSTS AND RECURRENT COSTS

Some costs occur only once, for example at the start of a new project. In this case, the costs need to be reflected when the costs are incurred, and not spread out across the plan years. Other costs may occur at irregular intervals or in ways that do not match the cost units for the target population. For example,

if an office needs to be opened for each district once they serve 500 children, the number of offices and the timing of the office openings will depend on how the intervention is scaled up. These costs should be attributed in the plan year when the offices are scheduled to be opened based on the scale up plan. Other costs may occur at regular intervals that do not match the plan years, such as regular replacement of laboratory equipment or vehicles, which should be attributed the plan year in which they are replaced.

Considering the examples for community management of SAM, the inputs that are needed to implement the intervention may include:

- RUTF
- Community health worker (CHW) salaries
- Bicycles for supervisors
- Small gifts or perks for volunteers
- Initial training for CHWs (5 days per worker)
- Refresher training for CHWs (1 day per worker per year)

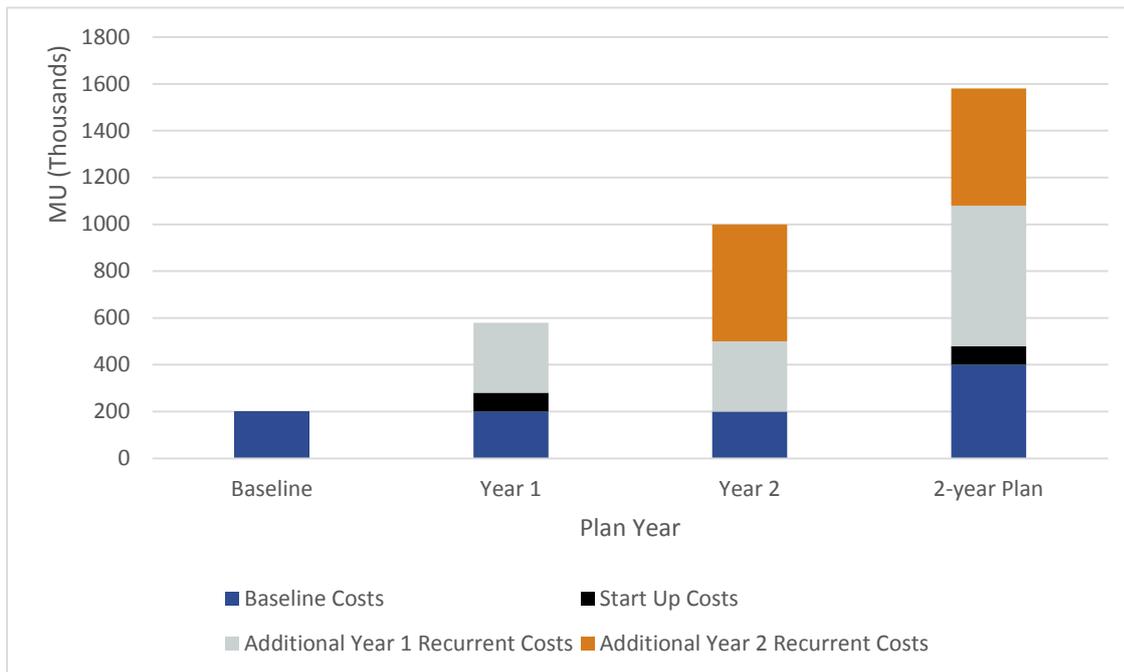
In considering project implementation, costs may be distributed as follows:

Table 2. Division of inputs between recurrent and irregular costs
Recurrent annual costs
• RUTF
• CHW salaries
• Refresher training for CHWs
Irregular costs
• Bicycles for supervisors
• Initial training for CHWs
• Small gifts or perks for volunteers

In addition to the recurrent costs of SAM (considered earlier), suppose that each health worker who is new to the program requires 5 days of initial training. The costs of initial training for each new health worker includes the cost of the trainer, trainer travel and per diem, and health worker travel and per diem.

Suppose one health worker can supervise 100 children with SAM per year, then scaling up to cover an additional 4,000 children, requires training 40 additional health workers. Further suppose the total cost of this initial training is 80,000 MU, then this must be added to the costs of scale-up. If the government undertakes all the training costs in Year 1, then the costs of the 2-year plan shown earlier should reflect this, as shown in Figure G.

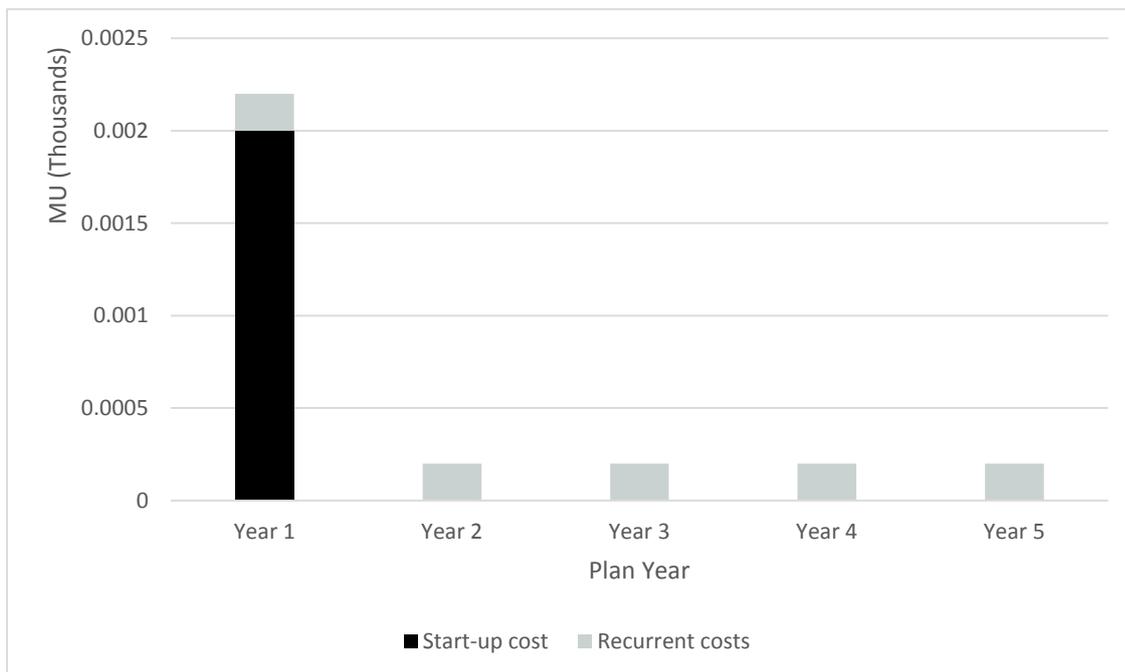
Figure G. Recurrent and start up cost of scale-up, by plan year.



In the SAM example, start-up costs were relatively modest compared to recurrent costs. But for some interventions, the start-up costs might be large relative to the recurrent costs. For example, consider fortification of (wheat) flour with iron. The cost of iron is relatively low (less than 0.10 MU/person/year), but the initial outlays (feeders for mills, required legislation, social marketing, setting up monitoring programs) might be costly.

Figure H shows how differently the costs can be spread across years depending on the inputs and timing of the inputs required.

Figure H. Recurrent and start up cost of scale-up when large up-front investment is required, by plan year.



ADDITIONAL REQUIRED RESOURCES

Careful costing requires that *all* the resources needed to implement an intervention are considered, regardless of when they utilised, how they are purchased, or what entity pays for them. To go back to our previous example, it is important to consider how a community health worker's time is used, since it has implications for the number of workers needed as well as the overall number of training days required.

Consider an example where one child with SAM is treated for 16 weeks, and requires 30 minutes of a CHW's time per week. Then treating 10,000 children requires 80,000² hours of time from a CHW. If a CHW works 40 hours each week for 50 weeks each year, then each CHW has 2,000 hours per year available. By simply assuming that all CHWs performing the intervention work solely with SAM children, then 40 CHWs would be required to treat the 10,000 children.

It is very unlikely, however, that these CHWs spend all of their work time on directly treating children with SAM. It is more likely that their time is divided among direct contact with SAM children, other direct health work, and administrative work (some which may be SAM-related, but some may involve other health programs).

² 10,000 children x 16 weeks/child x 0.5 hours/week = 80,000 hours.

Supposing that CHWs, on average, spend only half their work time with the children treating SAM, then 80 workers would be needed instead of 40.³

Community Health Workers also require supervision. Assuming that 1 supervisor is required for every 8 CHWs, then hiring 80 new CHWs also requires hiring 10 new supervisors. Additionally, some children have more complicated cases of SAM and cannot be treated by CHWs until their conditions stabilize. These children will first be referred to a hospital, which may require additional staff time and supplies. All these costs must be considered and included.⁴

SOURCES OF SUPPORT

Funding for nutrition interventions can come from a variety of sources, including government, international donors, private companies, and patient self-pay. International donors contribute on average 28.7% of the costs of health care for low income countries but only 0.7% of the costs for middle-income countries.⁵

International donors are more likely to contribute to the cost of imported inputs and are unlikely to contribute to ongoing personnel costs. To promote sustainable programming, donors may prefer to contribute to start-up costs for activities where the government has committed to maintain recurrent costs. A complete costed plan will include all activities that contribute to the common results framework to reduce malnutrition, regardless of how the activities are funded.

In the SAM example, RUTF is often imported either from Europe or one of the African countries certified to produce it. Other inputs include personnel (CHWs), indirect resources (general administration, supervision, management), and initial training costs. International donors are more likely to cover a portion of the cost of the RUTF and/or initial training costs.

Using the SAM example, assume that an international donor is willing to cover the costs of the RUTF (i.e., 1/3 of the recurrent costs) and the initial training costs, while the government commits to funding the remainder. The division between national government and the international donor funding is illustrated in Figure I.

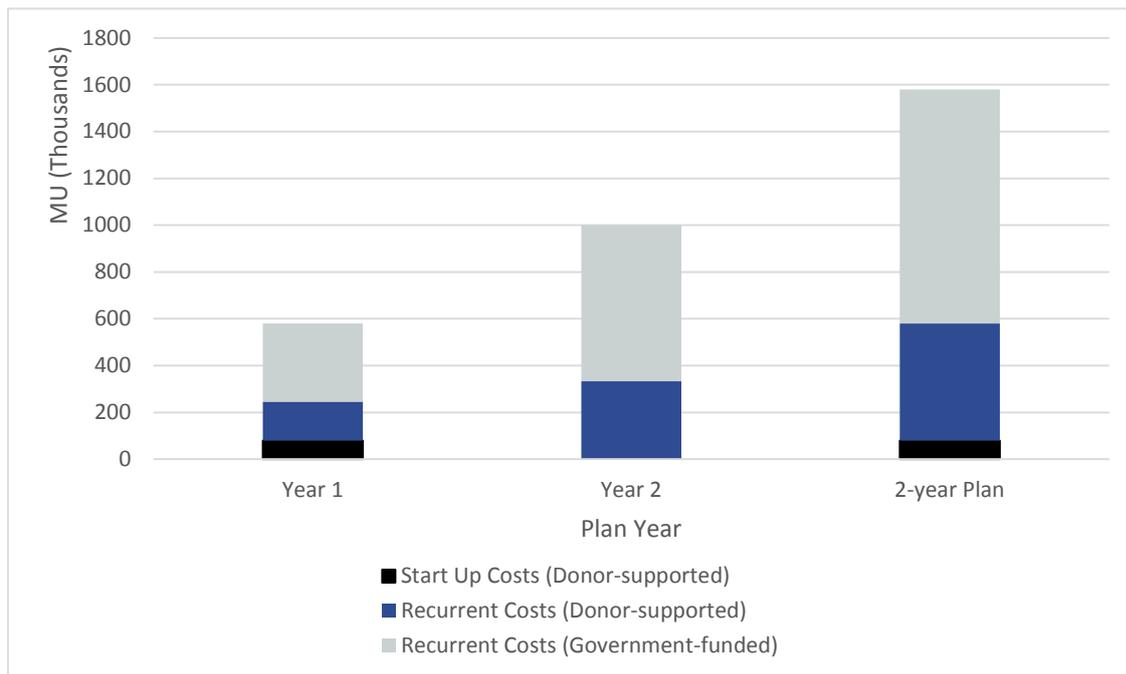
Sources of support can be further disaggregated into subnational (geographical) components, government sectors, specific donors, or any other identifiable source that would provide meaningful information in the planning cycle.

³ Note that in estimating costs, only the time devoted to the program, directly or indirectly, should be used to identify the proportion of salary to attribute to intervention costs. In this case, if 50% of the CHW time is devoted to SAM patient care and an additional 10% is used for other SAM-related tasks or administration, the 60% of the cost of the worker should be included in the cost estimation. Where possible, this would be 60% of the costs of employing the worker, including benefits and other general administrative expenses. Otherwise, a markup could be used to account for indirect costs (see Section 2.2.1).

⁴ One option is to consider treatment of typical SAM cases as one intervention and complicated cases as an additional intervention. The populations at risk and targets would then be adjusted accordingly.

⁵ World Bank World Development Indicators, Table 2.15, using 2012 data.

Figure I. Recurrent and start up cost of scale-up, by plan year and source of support.



3.0 APPROACHES TO ESTIMATING COSTS

Many countries have not used a specific tool to undertake costing, but have made simple estimates of program unit costs for initial estimates. Other countries have created their own tools and methodologies. There are, however, tools available for those countries looking for an option in between. Many of the available tools use the ingredients approach to create a program unit cost, which can then be combined with country-specific population information to estimate costs. In most of the tools, ingredients, costs, and/or assumptions can be modified to better adjust to country factors.

Three examples of tools used for costing and described here are:

- Activity-based costing
- Marginal Budgeting for Bottlenecks
- OneHealth tool

3.1 Activity-based costing

This is an approach that is widely used in North America for costing for health interventions. While initially created as a tool for improving efficiency, it can also be used for costing. This tool will be most accessible as a costing tool for countries that are already using it for other purposes. See Kaplan and Anderson (2007) for more information.

3.2 Marginal Budgeting for Bottlenecks

This approach is an Excel-based tool that was initially used in consultation with the World Bank. While it is no longer being rolled out to new countries, countries that have already used this approach in the past may wish to continue using it for nutrition costing. Originally designed for health, it includes three nutrition interventions. Information is available at <http://www.devinfolive.info/mbb/mbbsupport/>.

3.3 OneHealth Tool

The OneHealth tool is a comprehensive health systems tool that links to other tools the UN system has developed. It can link to System of Health Accounts (SHA) which can be used for tracking. It can also be linked to tools to estimate human resource needs. While developed to support countries to estimate the resource requirements for a comprehensive and integrated national health strategic plan, it contains a nutrition module with many nutrition interventions.

Documentation and software are available from

http://www.internationalhealthpartnership.net/en/working_groups/working_group_on_costing and <http://www.futuresinstitute.org/onehealth.aspx>.

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