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Incentivizing nutrition: how to apply incentive mechanisms to accelerate improved nutrition outcomes: a practitioner's compendium

Report

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A Practitioner's Compendium

INCENTIVIZING NUTRITION

How to Apply Incentive Mechanisms to Accelerate Improved Nutrition Outcomes

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Acronyms and Abbreviations

BMI	Body Mass Index	SUN	Scaling Up Nutrition
CBO	Community-Based Organization	TA	Technical Assistance
CCT	Conditional Cash Transfer	UCT	Unconditional Cash Transfer
CDD	Community Driven Development	UHC	Universal Health Care
DHS	Demographic and Health Surveys	WHA	World Health Assembly
DLI	Disbursement Linked Indicators		
DPF	Development Policy Financing		
GIS	Geographical Information System		
GMP	Growth Monitoring and Promotion		
GNR	Global Nutrition Report		
HMIS	Health Management Information System		
HR	Human Resource		
IYCF	Infant and Young Child Feeding		
MICS	Multiple Indicator Cluster Survey		
MOF	Ministry of Finance		
MOH	Ministry of Health		
MOU	Memorandum of Understanding		
PBB	Performance Based Budgeting		
PBC	Performance Based Contracting		
PBF	Performance Based Financing		
PBCC	Performance Based Community Contracting		
PforR	Program for Results		
PWP	Public Works Programs		
RBF	Results Based Financing		
SDG	Sustainable Development Goals		



Introduction and Purpose

Malnutrition is a driver of poverty. Reducing malnutrition is essential to achieving the World Bank's goals of eliminating extreme poverty and enhancing shared prosperity. This compendium offers practical information on how to plan, implement, and monitor incentivized operations for improving nutrition results for World Bank client countries. For more detailed background information, see the World Bank report *Incentivizing Nutrition: Incentive Mechanisms to Accelerate Improved Nutrition Outcomes*.

Why nutrition?

- Good nutrition reduces mortality and breaks the intergenerational cycle of poverty
- Malnutrition is a driver of disparities
- Nutrition is a vital aspect of a country's universal health coverage (UHC) policy
- Good nutrition is the result of a combination of factors and dependent on multiple sectors
- Malnutrition is a barrier to achieving a range of sectoral development objectives
- Cost-effective nutrition-specific interventions are highly successful in improving nutrition
- Evidence based nutrition interventions consistently appear in economic analyses as a high investment priority
- The right incentives are an important ingredient to successfully scaling up a country's multisectoral nutrition plans
- World Bank has extensive experience designing, implementing, and evaluating incentives

Well proven nutrition interventions exist and should be scaled up. In 2008 and 2013, The *Lancet*, a leading medical journal, published two groundbreaking nutrition-focused issues reviewing the current evidence for effective interventions to reduce child and maternal malnutrition in developing countries. The list of recommended high impact interventions is included in Table 1. They are all nutrition-specific interventions focused on the proximate causes of malnutrition.

Table 1. High-Impact Nutrition-Specific Interventions

NUTRITION INTERVENTION	WHAT DOES IT INVOLVE?	WHY DOES IT MATTER?
PROMOTION OF BREASTFEEDING	<ul style="list-style-type: none"> Community-based education and behavior change 	Early breastfeeding reduces all-cause and infection related neonatal mortality by 44–45%
COMPLEMENTARY FEEDING	<ul style="list-style-type: none"> Community-based education and behavior change Provision of complementary foods 	Complementary feeding results in increased height and weight
MANAGEMENT OF SEVERE ACUTE MALNUTRITION	<ul style="list-style-type: none"> Community-based therapeutic feeding using ready-to-use-foods 	Provision of ready-to-use-foods leads to faster weight gain, improved recovery, and reduced mortality
VITAMIN A SUPPLEMENTATION	<ul style="list-style-type: none"> Provision of supplements Delivery through existing healthcare platform e.g., child health days 	Vitamin A supplementation reduces all-cause and diarrhea related mortality
SALT IODIZATION	<ul style="list-style-type: none"> Iodization of salt at point of processing Targeted to pregnant women 	Salt iodization increases birth weight and leads to 10–20% higher developmental scores
HANDWASHING WITH SOAP	<ul style="list-style-type: none"> Community education and behavior change Communications e.g., mass media 	Handwashing with soap reduces the risk of diarrhea
THERAPEUTIC ZINC FOR DIARRHEA	<ul style="list-style-type: none"> Access to zinc supplements for children Delivery through existing antenatal care platforms 	Zinc treatment for diarrhea leads to a 46% reduction in all-cause mortality
IRON AND FOLIC ACID	<ul style="list-style-type: none"> Provision of supplements to pregnant women Delivery through existing antenatal care platforms 	Iron and folic acid supplementation for pregnant women leads to higher birth weight
MULTIPLE MICRONUTRIENT POWDERS	<ul style="list-style-type: none"> Provision of micronutrient powders to children Demand generation including strategic communication 	Significant reductions in anemia
DEWORMING	<ul style="list-style-type: none"> Delivery of deworming drugs School-based or through healthcare system 	Treating children infected with worms increases weight
IRON FORTIFICATION OF STAPLES	<ul style="list-style-type: none"> Product fortification at point of processing e.g., flours 	Iron fortification results in 41% reduction in the risks of anemia

Source: Children’s Investment Fund Foundation.

Financial incentive mechanisms are used to enhance nutrition results by motivating change. The incentive mechanisms are categorized by the levels at which they operate, i.e., government: national and sub-national, health facility, community, household / individual levels—see Figure 1. For each level, we document the following: a description of the incentive mechanism; the mechanism’s potential strengths; the potential challenges; and examples of countries that have tried the instruments. Non-financial incentives to improve nutrition are also presented.

What are incentive mechanisms?

In its simple form, an incentive is something that motivates an action. Incentive structures are a central feature of economics and are described as the interaction between a principal, who applies the incentive, and an agent, who receives the incentive. The basic tenet is that “higher incentives will lead to more effort and higher performance.”¹

Incentives can be classified into four categories:

- **FINANCIAL INCENTIVES:** when an agent can expect some form of material reward, e.g., money, in exchange for a particular behavior;²
- **MORAL INCENTIVES:** when a choice is widely regarded as the “right thing to do,” or particularly respectable, or conversely, when the failure to act in a certain way is unacceptable. An individual acting on a moral incentive obtains in return a sense of self-esteem, approval or even admiration from his community, or guilt, condemnation or ostracism if s/he acts against a moral incentive.³
- **COERCIVE INCENTIVES:** when failure to act a particular way results in physical force being used against the agent by others in the community.⁴
- **NATURAL OF INTRINSIC INCENTIVES:** this is a category of incentives that are driven from the personality of the agent, such as curiosity, fear, the pursuit of truth, wanting to contribute to society, etc.⁵

Financial incentives can have two kinds of effects: a direct price effect, which make the incentivized behavior more attractive, and an indirect psychological effect. The psychological effect can reinforce the price effect but can also sometimes work in an opposite direction to the price effect and crowd out the incentivized behavior.⁶

The *World Development Report 2015* argues that much of economic policy relies on a model of human behavior that takes little account of human sociality. Yet the fact that humans think socially “has enormous implications for decision making and behavior, and thus for development.”⁷ The report outlines the following four implications of human sociality on development interventions.

First, economic incentives are not necessarily the best or the only way to motivate individuals. The drive for status and social recognition means that in many situations, social incentives can be used alongside or even instead of economic incentives to elicit desired behaviors. Moreover, economic incentives can both “crowd out” intrinsic motivations and “crowd in” social preferences. The role for incentives in policy is more complicated than is generally recognized.

*Financial
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change.*

¹U. Gneezy, S. Meier, and P. Rey-Biel. 2011. When and Why Incentives (Don't) Work to Modify Behavior. *J Econ Perspect* 25 (4): 191.

²K. Dalkir. 2013. *Knowledge management in theory and practice*. New York: Routledge.

³Ibid.

⁴Ibid.

⁵D.C. McClelland. 1987. *Human Motivation*. Cambridge University Press Archive.

⁶Gneezy et al., 2011. 192.

⁷World Bank. 2015. *World Development Report 2015: Mind, Society, and Behavior*. Washington, DC. 54.

Second, humans act as members of groups. Interventions that increase interactions or create groups among individuals who have a common interest in goals such as breastfeeding may facilitate the achievement of these objectives.

Third, there is a widespread willingness of individuals to cooperate in the pursuit of shared goals. Most people prefer to cooperate as long as others are cooperating. This implies that making behavior more visible and “marketing” adherence to norms such as having men play an important role in child feeding practices may be a cost-effective means of increasing contributions to collective goods.

Finally, human societies develop social norms as a means of coordinating and regulating behavior. Societies can get stuck in collective patterns of behavior that do not serve their interest.

Since social norms are often taken for granted, socially appropriate behaviors by individuals can lead to suboptimal social outcomes. Norm change may sometimes be a necessary component of social change.⁸

Incentives vary across cultures and over time because social incentive structures are established by different forms of social interactions that take place within cultural norms and expectations that vary geographically and over time. What is valued or is deemed unacceptable in one culture may not be perceived the same way in other cultures or within the same culture over time. We tend to perceive the world around us through mental models that reflect the shared understandings of our community.⁹ For example, volunteerism by community health workers to improve nutrition may be valued—and therefore boost the worker’s self-esteem—in a country that recognizes that nutrition is a national development priority. In another setting where volunteerism is not as valued, or where wealth accumulation confers social status, and where malnutrition is not considered a social priority, financial incentives may be more effective or even necessary. Even for an individual, such as a community health worker, the relative importance of a certain type of incentive may change over the course of a lifetime, e.g., starting with the self-esteem related to the prestige of having been selected from the community, supplemented by intrinsic motivation and, over time, a potential gradual movement towards greater attention to financial incentives.

In this compendium, we focus primarily on financial incentive mechanisms, but we recommend that due attention also be given to non-financial incentives, i.e., moral, coercive and natural / intrinsic incentives. Depending on the core constraints that are defined in the theory of change analysis,¹⁰ a mix of financial and non-financial incentives will need to be used to achieve results. Part II of this compendium includes a discussion of some of the non-financial incentives that may be considered in scaling up nutrition programs. That section is not meant to be a comprehensive review. It serves to remind the reader that a balance between financial and non-financial incentives is required. We recommend consulting the *World Development Report 2015*, which contains a rich discussion on this topic.¹¹

Since social norms are often taken for granted, socially appropriate behaviors by individuals can lead to suboptimal social outcomes.

⁸ Ibid. 55.

⁹ Ibid. 62.

¹⁰ See C. Valters. 2015. *Theories of Change; Time for a Radical Approach to Learning in Development*. London, UK: Overseas Development Institute.

¹¹ World Bank, 2015.

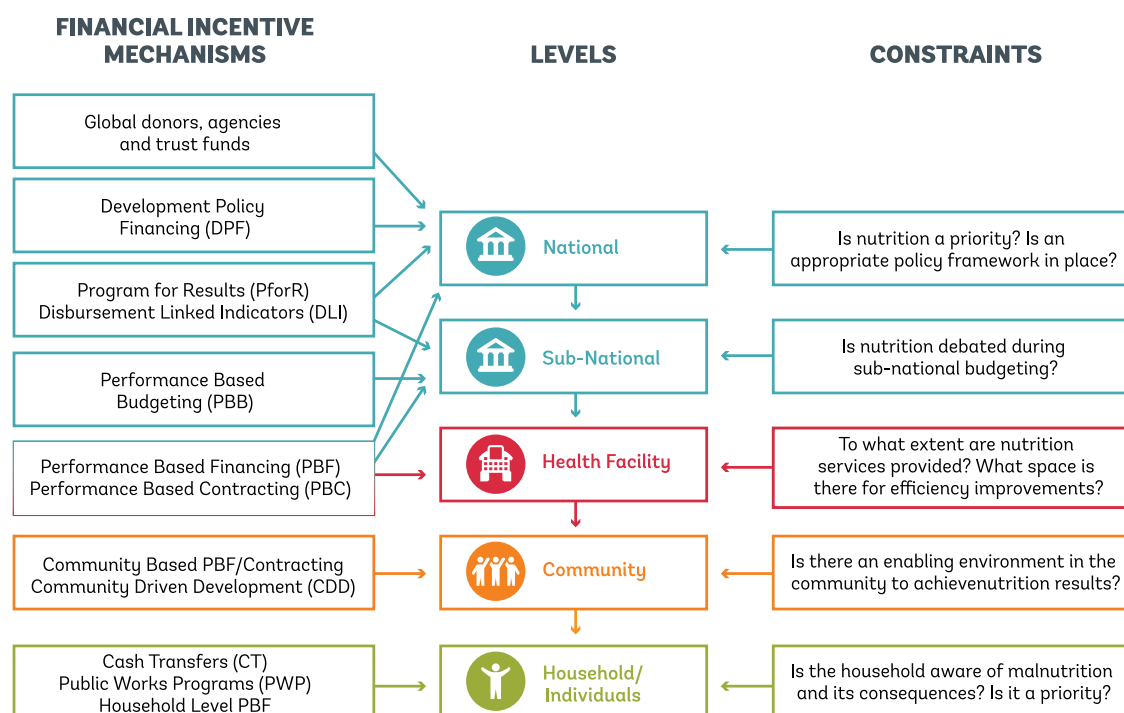
Because a range of incentives act on an individual at the same time and because human behavior is complex, it is very difficult to predict the effect that a specific incentive will have over the short, medium and long term. This risk highlights the importance of establishing strong monitoring systems—which track the results to be achieved as well as potential unintended consequences of certain incentives, e.g., its effect on motivation and self-esteem of workers.



Financial Incentive Mechanisms Applied at Different Levels

The incentive mechanisms are categorized by the levels at which they operate, i.e., government: national and sub-national, health facility, community, household, and individual levels (see Figure 1). For each level, we document the following: (1) a description of the mechanism; (2) the mechanism’s potential strengths; (3) the potential challenges; and (4) examples of countries that have tried the instruments.

Figure 1. Financial Incentive Mechanisms Applied at Different Levels



Source: Authors.



Government Level: National and Sub-National

⇒ *Development Policy Financing (DPF)*

Definition

- DPF combines the objective of reducing a government's fiscal deficit with sectoral or macro-level developmental objectives by incentivising policy reforms. Disbursements are based on predetermined policy triggers which are linked to the government completing reform actions.
- IDA / IBRD funds flow into the government budget and the country systems are used. The amount of IDA / IBRD financing is not necessarily linked to the cost of the reform.
- DPFs cannot be used to impose reforms without sufficient country ownership and commitment—an important prerequisite for success.
- The World Bank does not prescribe activities or inputs to be financed from the IDA / IBRD funds, which may be spent on anything as long as the agreed reforms are achieved—except a short negative list as may be agreed between the World Bank and the government.

Potential Strengths

- **Can unblock policy constraints.** DPFs could be useful to nutrition programs if the policy environment is the binding constraint to achieving nutrition outcomes, e.g., agricultural policies, food subsidies, gender policies, etc., and if strong government commitment exists (or could be developed) for specific reform measures to remove the constraint. Agriculture policies are closely linked to nutrition, and so are social safety net programs. A national policy on ensuring universal health coverage could have a beneficial impact on nutrition, if nutrition services are included in the benefits package. Food safety legislation, regulation of baby formula foods, and food fortification with micronutrients are other relevant policy areas for nutrition. A DPF could facilitate moving such policies in the right direction.
- **May generate greater ownership and sustainability.** DPFs entail no micromanagement by the World Bank in terms of activities carried out or expenditures incurred. The country's own systems are used. Well-designed DPFs usually ensure that the incentivised reforms have strong national ownership and commitment. The benefits are therefore likely to be systemic and more sustainable. Sustainability is critical to nutrition, which is a long-term and continual objective.
- **Potential to raise the profile of nutrition.** Adding nutrition into a DPF could help raise the importance of nutrition, positioning it as a national development priority at the same level as other policy reforms included in the DPF.
- **Attractive to governments.** DPFs are quick disbursing and contribute to the country's fiscal health and sector-specific goals. A DPF is attractive to ministries of finance, which typically are the World Bank's counterparts in negotiating the World Bank's country assistance. Adding a nutrition-related policy trigger to a DPF could be a smart strategy in an otherwise less than enthusiastic environment for stand-alone nutrition operations.

Potential Challenges

- **Does not address implementation challenges.** DPFs are not the instrument of choice when the main constraint to improved nutrition is implementation, rather than the policy environment, which is often the case. In such contexts, an operational level incentive instrument may be warranted, rather than a policy reform measure.
- **Requires that malnutrition be recognised as a national priority.** In order for a government to decide to include nutrition in a DPF, the country's malnutrition challenge and its economic implications will need to be understood by policy-makers (particularly in the central ministries such as finance and planning), which is often not the case.
- **Does not address socio-cultural or behavioral challenges.** In many countries, the core challenge to improving nutritional status may be socio-cultural or behavioral at the household or community level. A DPF alone would not be suitable instrument to address these constraints.
- **Reforms may be reversed.** Changes in the government or policymakers may result in the reversal of reforms if it was merely a high-level decision. The DPF must be designed carefully to ensure that the disbursement triggers fully institutionalize the reform and render a reversal difficult. Monitoring the trigger actions closely is an essential prerequisite for success.
- **No guarantee of increased allocations to nutrition.** There is no guarantee that IDA funds will be spent on nutrition services or programs since the World Bank does not track its funds separately under a DPF. The funds are comingled in the government budget. Therefore, unless the policy reform pertains directly to providing more nutrition resources, the DPF alone may not achieve an increased allocation.

Examples of Country Experience

India, Mozambique, Palestine, Peru

PERU P116264

RESULTS & ACCOUNTABILITY (REACT) PROGRAMMATIC DPL

Project development objective (PDO). Nutrition-specific objectives are to (i) increase demand for nutrition services by strengthening the operational effectiveness of the Juntos Conditional Cash Transfer (CCT) program; and (ii) improve coverage and quality of the supply of basic preventive health and nutrition services in the communities covered under the Articulated Nutritional Program (PAN), including Juntos.

Results of interest. REACT DPL series supports policies that are expected to lead to (i) improved parental understanding of expected outcomes in education, health, and nutrition; (ii) improved outcomes in second grade literacy, especially in rural schools; (iii) reduced maternal and neonatal

mortality; and (iv) better nutrition outcomes. The government set a target of reducing undernutrition by 5 percent in five years.

Indicators. As a DPL, this operation does not have “indicators” in the conventional sense of the term. However, it included the following “prior actions” specific to nutrition: MINSA has changed SIS norms to include the CRED (child growth and development) protocol; Goals for CRED production are agreed between the health sector and the PBB system for each health executing unit; Ministry of Finance increased the 2010 budget for CRED by 330 percent, compared to the 2009 budget, and allocated the additional funds to regions with a low level of CRED spending

relative to their malnutrition levels.

Operational modality. Activities to support both objectives include a strong emphasis on promoting good governance to monitor the impact of the government programs such as Juntos. A manual and supporting communication materials were developed for Community Nutrition Promoters, and the expected height gain in the first two years of life was popularized. The operation is adapted to respond to the country's results-based financing strategy and provides direct support to PAN. Evaluation: After 10 years, the results are remarkable—stunting decreased from 28 percent to 14 percent.

➤ *Program for Results (PforR) and Investment Project Financing with Disbursement Linked Indicators (DLIs)*

Definition

- PforR is a relatively new lending instrument which links IDA / IBRD development financing to results and moves from the “project approach” towards a “program approach”, whereby the World Bank is financing a “slice” of a government program. Prior to the PforR, to financially incentivise certain results, teams used Disbursement Linked Indicators (DLIs) within Investment Lending—currently called Investment Project Financing (IPF). Although many operations still use DLIs under IPFs, as a proxy for PforR, both instruments essentially adopt the same incentivising principle that seeks to finance outputs rather than inputs. Therefore, we treat PforR and DLI operations together.
- Under PforR and DLI, disbursements from the World Bank to the country are based on achieving predetermined targets or results, rather than inputs purchased. Results could be outputs or outcomes, but are usually defined in terms of outputs—sometimes called intermediate outcomes. In practice, many DLI operations use process milestones as “results” or “proxy results.”
- The World Bank does not prescribe the activities and expenditures for a PforR or DLI operation. The funds go to the treasury and may finance a specific program, e.g., the budget of the Ministry of Health or the HIV/AIDS or the maternal and child (MCH) programs. As long as the results are achieved, the money can be spent on anything within the program. In the case of an IPF with DLIs, disbursements are made against a list of pre-agreed “eligible expenditures.”
- Disbursements are based on achieving specific targets which are usually confirmed through independent verification. Within that framework, some prorate the disbursement proportionately to how much of the target is met, while others disburse on an all-or-none basis, i.e., partial achievement or underachievement of targets merits zero disbursement. A delayed achievement of targets can result in delayed disbursement or disqualification of the amount linked to the delayed result.
- PforR and DLI operations differ from DPF in that disbursements are results-based, rather than policy action based. They move the incentives beyond policy actions to program results.
- Although PforR and DLI operations tend to incentivize the national level, they can also be used directly at the sub-national level, e.g., in a province / state in a large country, or to incentivize national to sub-national transfers in a manner similar to performance-based budgeting.

Potential Strengths

- ***May lead to greater ownership and sustainability.*** PforR / DLI operations entail no micromanagement by the World Bank, like the DPF. In the case of the PforR, the country’s own systems are used. Therefore, the results are likely to be more systemic and sustainable.
- ***Provides flexibility in implementation.*** PforR / DLI operations place less focus on inputs and process. Although some level of attention is necessary at these stages of the development cycle to understand any problems in case the results are not achieved. This approach empowers managers, and provides flexibility on ways to achieve the results. Nutrition programs could particularly benefit from such delegation of authority, since they often require innovation at the grassroots level.

- **Enhances accountability for achieving results.** With the strong focus on results, the responsibility for achieving them is placed squarely on the government. If results are not achieved, the government does not receive the funds. If results are delayed, disbursements are also delayed or cancelled. The PforR / DLI instrument directly incentivises performance and enhances accountability by shifting the focus from project administration processes (e.g., volume of procurement transactions) to results.
- **Can increase the visibility of nutrition programs.** The focus on results (and on the resources that get released when the results are achieved) can provide additional visibility to nutrition within the wide range of priorities faced by governments in program implementation.
- **Can incentivise healthy competition.** It is possible to design these operations to introduce competition between sub-units of government (e.g. provinces, states or districts) on the timing for the achievement of results, such that the first few sub-units to achieve a particular result would get an additional financial incentive.
- **Greater likelihood of achieving results.** If the operation is well designed, i.e., appropriate indicators with realistic targets are selected, a clear verification protocol is agreed upon, and the necessary monitoring systems are established, the likelihood of successfully achieving the agreed upon results is high.

Potential Challenges

- **Capacity of the government to deliver.** As the World Bank focuses more on outputs and outcomes and leaves it largely to the government to reach the results using its own processes and inputs, PforR / DLI operations adopt a hands-off approach, which assumes robust governance systems and the government's capacity to plan and implement its programs to achieve the agreed results. These assumptions may not always hold true, especially for ministries responsible for nutrition which are often weaker. It is sometimes necessary to design "hybrid" operations in which the focus is mainly on incentivising results but which also contain a more traditional input-driven form of technical assistance to enhance capacity to deliver.
- **Reluctance by governments to accept the risk of non-performance.** Governments often may be reluctant to accept the risk of incurring expenditures without guaranteed financing. Often their systems are not very flexible to manage that risk. Even though the first year's disbursement are made as an advance, the subsequent year's financing depends on concrete targets being met, which means that there is a real risk of funds not flowing. In nutrition programs involving regular service delivery or cash distribution, such stoppage of fund-flow could be seriously detrimental to the population.
- **Complex operations.** PforR/DLI instrument may not be suited for very complex operations with too many monitored results. The more indicators, the less their monetary value since the total envelope is fixed and numerous indicators would be more difficult to monitor.
- **Selecting the right indicators.** Certain service-oriented indicators are easier to measure, report, and pay against, e.g., vitamin A supplementation, and growth monitoring. Certain others, especially community level indicators, like exclusive breastfeeding are difficult to measure, forcing us to settle for knowledge indicators rather than actual behaviors. More creativity is needed.
- **Limiting the number of indicators.** Typically, health and nutrition operations have numerous results of interest. To make the operation manageable, the list of indi-

cators must be kept short, usually less than 10. Some indicators of interest must be omitted from being linked to financing, which is feasible if a robust set of tracer indicators is sufficient for the absence of others. The omitted indicators can be included in the results framework and monitored without being linked to disbursement. This positioning, however, would affect the level of priority of those indicators.

- **Results must be achieved in a short timeframe.** The PforR / DLI approach cannot directly incentivise results that take longer than a year to manifest, e.g., behavior change or nutritional status improvements, because disbursements cannot wait for those results to be demonstrated. Therefore, establishing measurable intermediate results is critical and could serve as a good proxy for the ultimate outcome of interest. This challenge can be mitigated by “breaking down” results with longer gestation periods into specific intermediate results which can each be incentivised.
- **Potential to miss some important results.** Due to the necessary selectivity of indicators linked to financing, other important results could be neglected. This risk is particularly challenging for a complex area like nutrition, with a wide spectrum of results of interest.

Examples of Country Experience

Bangladesh, Ethiopia, India (national nutrition project as well as projects in the states of Uttar Pradesh, Karnataka and Andhra Pradesh), Indonesia, Laos, Morocco, Myanmar, Nepal, Niger, Nigeria, Sri Lanka, Tanzania

INDIA P121731

ICDS SYSTEM STRENGTHENING NUTRITION IMPROVEMENT PROJECT (ISSNIP)

Project development objective (PDO).

To (i) strengthen the Integrated Child Development Services (ICDS) policy framework, systems and capacities, and facilitate community engagement, to ensure greater focus on children under three years of age; and (ii) strengthen convergent actions for improved nutrition outcomes.

Results of interest. Improved systems in terms of planning, recording, reporting and monitoring of information, improved delivery of services, capacity-building of the frontline workers to improve maternal, infant, and young child feeding behaviors among pregnant and lactating women and their children.

Indicators. PDO indicators include: Anganwadi Centers (AWCs) implementing the inter-personal communication (IPC) activities focused on infant and young

child feeding (IYCF) practices; and project states in which pilots of “convergent nutrition action” have been implemented and evaluated in at least one district. Thirteen DLI milestones were set; all of them are system improvement indicators, e.g., real-time ICT-based M&E system with standardized operating procedures and specifications for hardware; people trained in the system or on specific nutrition modules, outreach and community-based processes such as monthly events held. Service delivery outputs are monitored as non-DLI, e.g., pregnant and lactating women, children (with proportion of female children amongst these), and adolescents who have benefited from the services. No behavioral outcomes are being measured.

Operational modality. Of the 13 DLI, six are under the responsibility of the central government and seven are at

the state level. The center has \$7 million for its six DLIs. Additional incentive: Flexifund / Challenge Fund (\$5 million) for the first three states that meet each of the DLIs. The seven that belong at the state level, \$25,000 per DLI, could be used for CCT or PBF or such approaches. The first three states to achieve each DLI get an additional incentive amount. Under the restructured design, interventions are focused on behavior change for nutrition primarily by building worker capacities to counsel for behavior change, through better outreach, and to focus on children 0–3 years of age, e.g., improved breastfeeding / complementary feeding practices. Innovations include the introduction of a mobile app that allows Anganwadi workers to enter data, generates due lists, helps daily work-planning, sends SMS alerts, promotes better growth-monitoring, generates the growth chart, and has BCC videos.

➤ Performance Based Budgeting (PBB)

Definition

- PBB is a mechanism by which a higher level of government allocates resources to a lower level of government, based on the latter's performance measured by agreed indicators and targets. For example, the Ministry of Finance might allocate the budget for the Ministry of Health based on the past year's performance. Or in a federal system, the central government might allocate the state, provincial or district budgets on the basis of past performance. PBB usually involves a MOU or similar arrangement between the financing entity and implementing entity.
- PBB is not the usual way of budgeting in most developing countries. Budgets are generally developed using historical data of allocations and expenditures and based on inputs rather than outputs. A reformist and forward looking government and leadership is critical for PBB to work.

Potential Strengths

- **Budgets reflect priorities and reforms.** If nutrition results are included in the performance measures that influence the budgetary allocation, sub-national priorities are likely to move in a direction favorable to nutrition programs.
- **Closer to service delivery and the needs of people.** PBB moves the incentives and risks to the sub-national levels, which are closer to the action. PBB empowers sub-national level managers and provides flexibility on ways to achieve the results. This devolved accountability and the related flexibility is important for nutrition given that the approaches may vary based on the specific determinants and the socio-economic composition of the populations.
- **Enhances accountability.** PBB is likely to be attractive to the ministries of finance (MOFs) because an enhanced level of accountability exists prior to budgetary allocation. PBB allows the MOF the flexibility to allocate resources to the ministries and departments that have demonstrated a record of producing better results. This may be particularly useful for nutrition programs, some of which have a legacy of poor performance, which has discouraged central ministries from further allocations.
- **Can incentivise healthy competition.** It is possible to design these operations to introduce competition between sub-units of government, e.g., provinces, states or districts.
- **Alignment with the policy framework.** PBB is suitable for achieving program results when the national policy environment is already conducive to program implementation at sub-national levels, and robust monitoring systems are available, along with the necessary information base. PBB can be used to incentivize shifts in delivery that are introduced in recent policy reforms.
- **Confirms and enhances commitment to nutrition.** Including nutrition results under PBB requires and indicates that the MOF and the MOH—and other implementing line ministries—have a higher level of commitment to nutrition results.
- **May increase financial allocations to nutrition.** Nutrition could benefit from PBB because often, a constraint is the insufficient resource allocation—a problem at the operational level rather than the policy level.

Potential Challenges

- **Requires a change in mindset and strong leadership.** PBB entails an entirely new way of planning, budgeting, and financial management, as most governments use

historical budgeting. Even though PBB has strong potential, it may be difficult to implement in some contexts since it involves a fundamental change in mindset and the way of doing business.

- **Requires strong capacity for implementation.** Implementation is not guaranteed and it may not affect behaviors at the service delivery or household levels, which are critical to nutrition results. On the other hand, if the incentive is sufficiently strong and there is sufficient autonomy, the receiving entities may be able to organize themselves to deliver, or a complementary technical assistance component could be designed into the World Bank operation to address specific implementation weaknesses.
- **Requires devolution of authority.** PBB requires a strong degree of authority to be devolved to the operational levels and the necessary capacity to be built, without which the incentives won't be empowering. PBB may not be suitable in countries where sub-national capacities or governance systems are weak or in which the necessary autonomy for delivery is not provided.
- **PBB could increase inequities since it rewards better performers.** Where sub-national capacities vary across states or districts, PBB could benefit the already better resourced states and districts, which may be the better performers. This could result in denying the low-performers the very resources that they need to build their capacities to perform better, thus perpetuating a vicious cycle of low resources → low capacity → low performance → further low resources. This scenario needs to be avoided by allocating a minimum level of resources based on need and by adding a bonus allocation for performance, rather than making the whole budget dependent on performance. Often the lowest performing provinces or districts are also where the highest proportions of malnourished people live. Another way to avoid this scenario is to allocate resources based on the rate of change, i.e., whereby sub-national units with the greatest improvements from the baseline would receive the largest allocations.
- **Risk of focusing on only a subset of results of interest.** PBB could skew program attention to selected results at the expense of other important ones, which is the case of PforR or any other incentivized financing system. This is a particular challenge for nutrition, which has a complex range of determinants requiring several results to be tracked.
- **A disconnect may exist between budget and execution.** If applied narrowly, this instrument's potential benefits could be limited to priority setting, since it may only impact the budget and not necessarily the execution. However, approaches could be designed that not only focus on allocations but also on execution of budgets.

Examples of Country Experience

Argentina, Peru

Health Facility Level

Performance Based Financing (PBF)

Definition

- While results-based financing (RBF) is used as a broad term encompassing several different types of incentivising results, performance based financing (PBF) usually refers to an approach that specifically pays financial incentives to the individual or institutional service providers. The payments are based on the quantity and quality

of outputs delivered. The terms such as “fee for service” or “pay-for-performance” are sometimes used to describe this instrument.

- The additional funds from PBF can be used to improve the facility or services, and / or to pay “bonuses” to the personnel. How these funds are distributed at the health facility level and what proportion could be paid as bonuses or salary supplements varies widely. In some countries, these decisions are left to the health facility level managers. Whereas in other countries, strict guidelines are sent from the central level.
- PBF works best when the unit being contracted (e.g., the health facility) has a high degree of autonomy as to how it delivers services. In most countries, however, this autonomy is circumscribed by some rules such as public service rules on hiring and firing of staff.
- PBF involves a separation of functions between the regulator, purchaser, and service provider. It involves contracting an external agency which is responsible for the verification and payment of services. A specific package of services is defined and rates are applied for each service. Both public and private health facilities can be contracted for service delivery, depending on the regulatory framework in the country and the availability of these providers. Specific catchment areas are defined for each service provider.
- Prior to payment, the quantity of services is verified, usually through the internal inspection service of the Ministry of Health. On a less frequent basis (e.g., quarterly) community-based organisations undertake counter-verification of the results. This counter-verification serves as a “check and balance” against collusion between service providers and the inspection services.
- While PBF has been applied mainly at the health facility level to date, the basic tenets of the approach are being increasingly applied at the community level as well as at all levels within a health system. The latter enables an alignment of incentives to improve service delivery. For example, World Bank projects that use a PBF approach in health are increasingly establishing performance contracts not only at the health facility level, but also at the other administrative levels of the system (e.g., district, provincial) all the way to the regulator at the national level.
- Some PBF approaches also provide a higher payment to a health facility for having reached pre-identified members of the community (through community-based targeting) with free services. These could be the poorest members of the community or people with special needs, such as people living with disabilities. It is likely that this targeting is reaching households with a higher likelihood of malnutrition.
- Increasingly, a quality checklist (some have approximately 200 indicators) is being used to assess the quality of services provided, and adjustments in payments (either negative or positive incentives) are applied based on the quality checklist score.

Potential Strengths

- **Closer to the beneficiary.** PBF moves the program resources, incentives, accountability, and risks mainly to the health facility level, thus making it more likely to succeed—if the binding constraints are at that level. In addition, in countries where elite capture is a challenge, PBF helps circumvent elite capture at the central level because the bulk of the financial resources are directed to frontline health facilities through payments directly to their bank accounts.
- **Greater social accountability.** The counter-verification carried out by community organizations is a practical way to empower communities to have oversight over service delivery. When nutrition is part of the services being counter-verified, this

enables communities to improve their understanding and sense of ownership of their malnutrition challenge.

- **Increased transparency.** The management information system for PBF (web portal) makes data available publicly about the performance of the health system. This could be a valuable source of “real-time” information on some aspects of nutrition services, which can be used to review health facility performance more regularly. Data on nutrition interventions in most countries is not collected often enough to provide regular monitoring and accountability.
- **Potential to increase the focus on nutrition.** By adding specific nutrition services to a PBF program, it is possible to enhance the focus and attention to those services, which could otherwise be neglected and subsumed under a broader package of maternal and child health services.
- **Increased monitoring and feedback.** While the verification of quality and quantity is primarily set up to confirm payments, the process also enables service providers to get regular feedback and to learn from their mistakes. This could be a useful means to increase capacity of service providers to deliver nutrition interventions, compensating somewhat for the often low level of nutrition training which the personnel of health facilities receive.
- **Sharper focus on the highest priority services.** The PBF package of services is a subset of the range of services offered by a facility. The services are chosen on the basis of their ability to address the highest burden of disease in the country. The sharper focus on the delivery of these interventions should increase the impact on the highest priority public health concerns.
- **Greater focus on quality.** PBF may improve the impact of some of the key nutrition-specific interventions that could have a significant impact, if they are delivered with high quality. For example, growth monitoring and promotion (GMP) has had limited impact to date because the focus tends to be on weighing children and the quality of the accompanying counseling when a child’s growth is faltering is weak. Through the quality checklist, PBF may be able to correct this.
- **Tends to improve access to services.** An important aspect of PBF is the initial business planning that takes place with health facilities to enable them to restructure their work so as to maximize their efficiency in service delivery. This can lead to a reduction in fees, which in turn increases demand and often not only increases access but also improves overall revenue for the health facility.
- **May lead to efficiencies in the supply chain.** Increasingly, PBF is used to improve the alignment of the functioning of the pharmaceutical supply chain with the needs of the service providers and clients. These efficiencies would be of benefit to nutrition services (independent of whether the service is one of those purchased through PBF or not) because breaks in the supply chain are often a major barrier for the delivery of nutrition programs. For this benefit to accrue to nutrition, all essential nutrition supplies must be included in the list that is assessed as part of the PBF quality checklist for the pharmaceutical system.
- **Encourages greater autonomy.** PBF is expected to empower local level managers and provide flexibility in ways to achieve the results. The effectiveness of PBF depends largely on autonomy being genuinely granted to health facility level managers. This autonomy is important for nutrition because different approaches may be needed to deliver effective services (especially those which require behavior change) depending on the socio-cultural composition of the community.

- **May encourage benchmarking and learning.** PBF could instill an environment of healthy competition among health facilities, especially if financial incentives are complemented by non-financial ones. Increasingly, PBF programs are developing web portals that contain performance information about each participating unit. In addition to increasing transparency, the data enables positive deviance analysis and opportunities to learn from the better performers. Positive deviance is an approach that has worked well for nutrition, but mainly at a relatively limited scale so far. PBF data systems may enable a scaling up.

Potential Challenges

- **Focus primarily on the supply of services.** While PBF could contribute significantly to increasing the quality and quantity of some of the nutrition-specific interventions, it is insufficient by itself to address malnutrition. So far, PBF's main limitation for nutrition is that it primarily incentivizes service delivery, i.e., the supply side. Nutrition interventions also require strong action on the demand side—at the household and community levels.
- **Possible resistance.** PBF entails a new way of compensating providers and could face resistance from staff and bureaucratic hurdles. For example, current rules may not allow for payment of bonuses to health care providers. In most settings this challenge has proven to be manageable, but has required important investments in time upfront to explain the benefits of the new approach.
- **Potential cost increase.** PBF would increase the cost of service provision, since the performance pay is in addition to existing compensation and there are additional costs related to verification, etc. Generally such additional costs to the system are not significant and are considered well worth the results of improved quantity and quality of services. Nonetheless, these additional costs need to be assessed against the fiscal space for health and the overall cost-effectiveness of the interventions. In the case of some preventive nutrition services (and some curative services), which concern a large number of individuals in the catchment area (as opposed to disease curative services where only the sick come to facilities), the large numbers can result in cost escalations, which has been why some nutrition services have not been included in the PBF package in the past. This challenge may require further targeting of nutrition services.
- **Balancing nutrition with other interventions in the package of services.** Only a limited number of services can be included in a PBF system, which poses a challenge as to how many and which nutrition indicators to include. Until recently, the PBF package that was most often used had focused on two nutrition services: a growth monitoring session (without necessarily focusing on the availability or quality of accompanying counseling) and treatment of severe acute malnutrition. Given the poor performance of growth monitoring globally and the small proportion of children that suffer from severe acute malnutrition (SAM) (compared to stunting), these two services are likely to have only limited direct impact on stunting. However, other basic health services such as antenatal care, treatment of malaria, treatment of diarrhea and child immunization, all of which are typically included in a standard PBF package, will have an indirect positive impact on nutrition.
- **Verification of certain nutrition services is difficult.** One of the strengths of PBF is the system of checks and balances through verification and counter-verification. Because some of the nutrition services relate to behavior change (e.g., exclusive breast-

HEALTH SECTOR SUPPORT INVESTMENT PROJECT

Project development objective (PDO).

To increase utilization and improve the quality of health services with a particular focus on child and maternal health and communicable diseases.

Results of interest. Health (improved utilization and quality of health services), with maternal and under-five nutrition results added subsequently.

Indicators. The original PDO indicators were (i) children immunized for DPT3 (< 12 months); (ii) births attended by skilled professional; (iii) children under five sleeping under insecticide treated bednets the night before the survey; (iv) tuberculosis treatment success rate (percentage of those who are smear positive who are successfully treated);

and (v) patients reporting satisfaction with health services. The following nutrition-specific indicators were included: under-five children with severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) treated respectively at the hospital and the primary health center (PHC) level; referrals and counter-referral for nutrition (teased out from the total list of referrals). At the community level: patients of SAM and MAM referred by the community health workers (CHW) to the facility (and confirmed); household visits by a team (CHW + facility staff) according to protocol. At the hospital level, the number of inpatient days for SAM.

Operational modality. Improving district level health services through PBF at the

primary health center and hospital level. Also extended PBF to the community level. Approved in 2009, the operation took two years to get off the ground in earnest. Between 2011 and 2014, pilots were tested and in 2014, additional financing enabled nationwide scale up. Nutrition indicators were added to the existing PBF program in one region. The operation is now financing the nutrition outputs throughout the country, although the problem primarily affects the north and the east. UNICEF pays for the nutrition results for one region and IDA finances for the other regions.

Evaluation showed. The provision of services increased, but it is too early to evaluate nutrition outcomes.

feeding, complementary feeding, compliance with a regime of iron supplements), which are difficult to verify, these high-impact services have tended to be excluded from the PBF package. However, some of the newer World Bank operations are testing the limits of the verification challenge. The positive aspect of community counter-verification of some of these services is that it could generate local involvement and the potential to change community norms related to certain behaviors.

- **Capacity to deliver nutrition services.** The PBF approach provides health facilities a high degree of autonomy to organize themselves to deliver the services which are incentivized. Most of these services are at the core of medical training, whereas nutrition often occupies a very limited space in the medical syllabus. It may be necessary initially to offer service providers technical assistance to ensure they have sufficient capacity to deliver nutrition services.
- **Potential bias against services that are not incentivized.** As in any instrument incentivizing specific services, other (non-incentivized) services may be neglected. As noted earlier, this may pose a problem for nutrition because the services that need to be delivered likely exceed the capacity for a PBF to absorb.
- **Ensuring equitable distribution of the incentive.** To avoid conflict among staff, often the additional funds are just equally shared rather than based on individual performance, even though the whole health facility receives the additional funds based on performance. It is much more difficult to institute performance-based rewards at the individual provider level without large-scale reform of the human resource (HR) systems.
- **Workload of community health workers.** Some programs are exploring using PBF to incentivize community outreach through community health workers. While this approach holds promise for nutrition, the community health workers' range of duties and work volume needs to be considered to assess the feasibility of assigning them more tasks.

Examples of Country Experience

Armenia, Benin, Burkina Faso, Cameroon, Central African Republic, Democratic Republic of Congo, Djibouti, Dominican Republic, Gambia, Ghana, Haiti, Kenya, Lao Peoples Democratic Republic, Lesotho, Liberia, Malawi, Nigeria, Tajikistan, Tanzania, Zimbabwe, Zambia

➔ Performance Based Contracting (PBC)

Definition

- PBC takes place when service delivery is contracted out (or contracted in) often using non-state actors, e.g., international or national nongovernmental organizations (NGOs) or community-based organizations or for-profit private sector providers, and the contracts are performance-based.
- The contracts focus on the outputs, quality, or outcomes that tie at least a portion of the contractor's payment, contract extensions, or contract renewals to achieving specific, measureable performance standards. Although any contract would be expected to have a performance clause—and could be terminated in the case of non-performance—PBC links payment to performance more explicitly and based on specific services and outputs to be delivered.
- A standard package of health services is defined in the contract, which could include nutrition services. Performance is usually assessed (and payment made) based on delivery of the full agreed package, as opposed to PBF where payments are tied to individual services. The verification is at a more macro level than PBF, such as independent coverage surveys.
- PBC is usually focused mainly on health facility based services, although it typically also includes community activities (e.g., screening for severe acute malnutrition) to create demand for facility-based services.

Potential Strengths

- **Competitive selection.** Contracted entities have to compete to be selected, and again to have their contracts renewed at regular intervals. This competition brings to the fore available capacity, which the government may not have been able to tap into previously.
- **Alignment.** Often the selected entities were already delivering similar services in the area (perhaps at a smaller scale) but with relative autonomy from government and with direct financing from donors. PBC can serve to align the work of these entities with government priorities.
- **More rigorous than traditional contracts.** By linking payment to the quantity and quality of services delivered, as per agreed checklists, PBC is a better remedy for non-performance than traditional contracts, which usually have only a blunt remedy: the early termination of the contract.
- **Rapid increase in provision of services.** Particularly in fragile settings where health service delivery is compromised and services reduced, PBC usually translates into a rapid increase in the availability of services.
- **Flexibility in service delivery.** Because the contracted NGOs use their own management policies and procedures, they have more flexibility than a government entity to organize themselves for the particular challenges of service delivery, including hiring and firing staff according to needs and offering salaries aligned with market rates to

attract qualified staff. This flexibility is potentially a significant advantage to deliver nutrition services because these often need to be adapted to the local context.

- **Multisectoral convergence for results.** Because PBC can be geographically based (i.e., a given geographical area is assigned to a particular contracted entity) and the entity is more flexible than traditional government ministries, the approach can facilitate multisectoral convergence to achieve certain results. This multisectoral convergence is particularly important for nutrition and has been a challenge when working through traditional ministries.
- **Local acceptability.** In areas of conflict, if the selection of the contracted entities places a strong emphasis on proof of having worked effectively in the particular context, it is likely that the entity will be better accepted by the local communities, as well as the parties in conflict. Often, an NGO with a long history of operating successfully in an area is selected and brings to the contract not only its technical and managerial capacity but also its positioning and knowledge of the local political economy.
- **Prioritization of services.** PBC involves defining a package of services (sometimes in tiers, such as a “basic package” an “enhanced package,” etc.), which is to be delivered under the contract. The process of defining the package (and adjusting it as needed) provides an opportunity to ensure that the health services offered are aligned with the burden of disease in the targeted area and with the latest evidence of what works to address that burden.

Potential Challenges

- **Government capacity to enforce contracts.** The PBC requires significant capacity for contract monitoring and enforcement, which can be lacking in some ministries of health. Technical assistance on contract management may be required as part of a World Bank operation using PBC.
- **Availability of providers.** In some settings where PBC has been used (e.g., fragile environments), a limited number of national organizations exist with the capacity to deliver good quality health services. The competitive selection process needs to include international entities, but also ensure that their knowledge and capacity to operate in the local environment is a key part of the selection process.
- **Challenging to terminate contracts.** Termination could be difficult to enforce because the government will need to find an alternative to continue service delivery and PBC can adjust for under-performance or higher performance. Termination requires unequivocal information.
- **Perceptions of government about beneficiary expectations.** In some settings, the government is uncomfortable not being seen by the population as the direct deliverer of services. It may be possible to alleviate this apprehension with an effective communication strategy explaining to the public the role of government is to regulate and purchase services.
- **Prioritizing nutrition.** In some settings, nutrition was not well defined in the package of services and was limited to a few interventions. For example, because some NGOs’ recent experience in implementing humanitarian assistance projects focused on the treatment of severe acute malnutrition, there can be a tendency to assume that this nutrition intervention is sufficient. It may be necessary to review the package to define a clear set of nutrition interventions along with indicators to track in the information system to determine performance.

TWO BACK-TO-BACK OPERATIONS INCORPORATED PBC AND PBF

P112446—STRENGTHENING HEALTH ACTIVITIES FOR THE RURAL POOR (SHARP)

Included contracting of NGOs with some performance based incentives complemented by PBF at the health facility level.

The project development objective (PDO) was to contribute to improving the health and nutritional status of the people of Afghanistan, with a greater focus on women and children and underserved areas of the country.

Results of interest. Improved service delivery coverage, including quality of care. Nutrition was part of the maternal and child health package. Health workers sent a report to the Ministry of Health, through NGOs, claiming payment for the delivery of health services. The request is now electronically submitted.

P129663—SYSTEM ENHANCEMENT FOR HEALTH ACTION IN TRANSITION (SEHAT).

The PDO is to expand the scope, quality, and coverage of health services provided to the population, particularly for the poor, in the project areas, and to enhance the stewardship functions of the Ministry of Public Health.

Indicators. Almost the same indicators are used for PBC and RBF, mainly for maternal and child health, such as skilled birth attendance and immunization coverage. But specific nutrition indicators have also been included, e.g., pregnant and lactating women receiving a package of infant and young child nutrition services; and under-five children with severe acute malnutrition who are receiving the requisite treatment. There is also one indicator on quality of care. Operational modality and the incentives remain the same as in SHARP

but performance payments are also made at the NGO level. Thus performance bonuses are paid not only to the individual providers but also to the NGOs (20 percent based on performance). The implementation of NGO contracting is through performance based partnership agreements. Significantly, in addition to financing the service delivery contracts, the operation has considerable amounts of resources allocated to capacity building and system strengthening at the central and provincial levels.

Evaluation. Afghanistan has possibly the largest PBC operation in health / nutrition. Evaluation shows that coverage of health services has improved, and child / infant mortality has decreased. Maternal mortality has also decreased significantly.

- **Timing of measurement.** In some cases, measurement of PBC performance has been done less frequently (i.e., every six or twelve months) than in PBF. Because the availability of data drives the performance reviews, the less frequent reviews results into slower corrections of bad performance and potentially weaker accountability.
- **Cost of measurement.** The surveys required to track performance, while useful beyond managing PBC contracts, can be costly. These surveys need to include a range of nutrition indicators and be well integrated into an overall national health management information system and nutrition surveillance system.

Examples of Country Experience

Afghanistan, Bangladesh, Cambodia, Pakistan, South Sudan

Community Level

➤ Performance Based Community Contracts (PBCC) / Community PBF

Definition

- More recently, in combination with Community Driven Development (CDD) platforms—or sometimes riding on other community mobilization efforts—some countries have started using performance based community contracts (PBCC) to incentivize nutrition results. That is a type of PBF at the community level.
- Performance based contracts are signed with community groups and payments are made on the basis of results achieved.

MATERNAL AND CHILD NUTRITION AND HEALTH RESULTS PROJECT

Project development objective (PDO).

To increase the utilization of community nutrition and primary maternal and child health services in selected regions in the country. The results of interest include both improved nutrition and health among women and children.

Results of interest. Improved knowledge about exclusive breastfeeding, postnatal care, etc., some indicators on hygiene, e.g., cleaning up the village, etc., and sanitation, such as building of latrines, etc. Nutrition-specific results included: pregnant / lactating women, adolescent girls and / or under-five

children reached by basic nutrition services; children between 6–59 months receiving vitamin A supplementation; pregnant women receiving iron and folic acid supplement; children under 24 months benefiting from improved IYCF practices; and under-five children treated for moderate or severe acute malnutrition. Under the additional financing, the following nutrition-specific results were added: Baby-Friendly Community Initiative villages in the region; vulnerable households supported in gardening; and communities supported in establishing food banks.

Indicators. PDO-level indicators were children 0–6 months who are exclusively breastfed; deliveries attended by certified midwives in the preceding year; children aged 6–59 months who received a dose of vitamin A within the past twelve months; women using modern methods of family planning in the preceding year. Under the additional financing, the following PDO-level indicator was added: children age 6–23 months consuming at least four out of six food groups.

- As for PPF, the results are verified before the payment is made and the results can include both quantitative and qualitative dimensions.
- Community-PBF can be either stand-alone or linked to operations that also establish performance contracts at other levels, e.g., facility, sub-national, and national.
- Unlike CDD, where the starting point is the community-expressed needs, with PBCC / community-based PBF, the starting point is a specific development objective (e.g., reducing child stunting). Intermediate results are selected based on a clear theory of change.

Potential Strengths

- **Collective action.** Community-based projects can facilitate collective action that would enable the removal of community-wide barriers that are creating nutrition problems. Some of these barriers can be social (e.g., social norms related to the role of men in caring for young children and / or about open defecation) or physical (e.g., building a bridge to ensure easier access to a health facility, or removing conditions that enable mosquitos to breed and transmit malaria). Nutrition programs have had success in using positive deviance (e.g., identifying which households have less malnutrition in a community and pinpointing which factors have led to that result) to identify priority key community barriers to better nutrition.
- **Multisectoral convergence.** Community-based projects, if well designed, can encourage communities to seek services from various ministries and enable the convergence to take place. This is important for nutrition, which requires a mix of sectoral interventions.
- **Flexibility of design.** The determinants of malnutrition and the socio-cultural barriers to change will vary by community. Community approaches enable communities to adapt global knowledge to their particular situations. However, that adaptation may require some external facilitation, e.g., through coaches.

- ***Flexible definition of community.*** Communities can be defined geographically, but particularly in countries where social exclusion is a challenge, communities can organize themselves and carry out projects on the basis of characteristics such as ethnicity, social class, caste, etc.
- ***Quality checklists.*** Quality checklists, which are generally associated with facility-level PBF, can also be used in PBCC or community-level PBF. The focus on quality, as seen earlier, is critical for the achievement of nutritional outcomes.
- ***Can promote utilization of services.*** Community-based contracts can be used to engage community groups to promote the use of health and nutrition services and even do referrals. One such nutrition approach is community screening to identify severe acutely malnourished children, an approach which significantly increases the use of free nutrition rehabilitation sessions. Some nutrition services, e.g., treatment of diarrhea with zinc supplements and oral rehydration solution can be effectively delivered in the communities themselves, thus reducing the need to consult a facility and addressing the financial barriers that limit access for the poor.
- ***Social accountability.*** Community involvement can create greater accountability at the local level, which can lead to a higher degree of transparency and consequently greater trust and program acceptance.

Potential Challenges

- ***Communities do not always recognize nutrition as a problem.*** Malnutrition may not be seen as a priority problem by communities partly because other pressing needs compete for attention, and partly because of lack of awareness about the magnitude of the malnutrition problem within the community, its causation, and available solutions. In communities where childhood undernutrition is widely prevalent, people may not recognize malnutrition as a critical problem since malnourished child are the norm. It may be beneficial to couple community-based PBF with awareness creation communications campaigns.
- ***Challenge of verifying certain nutrition results.*** The nutrition results that require community mobilization often include behaviors that are difficult to verify, e.g., exclusive breastfeeding or child complementary feeding behaviors. Because payments are linked to results, there is a risk that communities will learn to report the right results without the behaviors changing or changing behaviors but not to the extent reported. This challenge is not insurmountable, but it will require creativity of design.
- ***Potential conflict of interest and capacity constraints for verification.*** Community groups can also play a role in supervision and monitoring the PBCC operation—a watchdog function. But this requires intensive technical assistance, facilitation or coaching.
- ***Role / presence of the state.*** Community-based RBF programs need to have an effective accompanying communications strategy to ensure that communities are aware when a program is part of a government strategy to enhance service delivery. Otherwise, some governments may resist using the approach and risk being perceived as having been replaced by community-based organizations “to do the government’s job.”
- ***Capacity for nutrition.*** Even when community organizations and their members recognize nutrition as a priority, they do not always have the required knowledge to analyze the causes of malnutrition in their community or to select evidence-based interventions to reduce it. For example, communities sometimes decide to carry out growth monitoring, but this is insufficient to improve childhood malnutrition.

It must be complemented by appropriate nutrition counseling and / or supplementary feeding interventions demonstrated to caretakers, which is usually referred to as growth monitoring and promotion (GMP). This capacity challenge has been remedied in some World Bank operations by using tools (e.g., menus of options / decision trees) and coaches to facilitate community participation processes, specifically on nutrition.

- **Need local institutional capacity.** Though in principle, PBCC (PBF at the community level) could be used in the absence of a CDD operation, e.g., Cameroon, it is critically important to have some sort of community organization with which PBCC could operate. Often CDD operations provide the platform on which PBCC could be built, by establishing the requisite organizational framework through community mobilization efforts. In Djibouti, the existing CDD program provided a ready organizational platform. Without such preparatory efforts—either as part of CDD or not—or an existing community group such as women’s groups, a health promotion committee or a CBO, there would be no locus for PBCC.
- **Communities are not always cohesive.** Mobilizing communities could be a challenge, especially with governments that are reluctant to partner with NGOs and CBOs. Governments typically are not strong in community mobilization and need the help of NGOs or CBOs to accomplish it. Some geographic communities are not cohesive socially. In those cases, targeting by socially defined communities may be helpful or by introducing additional measures to improve social cohesion such as conflict prevention coaching in conflict-affected areas.

Examples of Country Experience

Afghanistan, Bangladesh, Benin, the Gambia, Ghana, India (state of Andhra Pradesh), Indonesia, Madagascar, Mauritania, Senegal, Nepal

➤ **Community Driven Development (CDD)**

Definition

- Community Driven Development (CDD) has been practiced for several decades, with a view to ensuring that development assistance is not just dictated from the top, but that the people’s voices are heard, and development efforts are responsive to their expressed needs. Through participatory rural appraisals and other such techniques, CDD increases the involvement and participation of the beneficiaries in the planning, implementation, and oversight.
- Financing is provided to communities based on their own plans, addressing their own priorities and local approaches. The funds are spent on programs implemented through community-based organizations with oversight by community leaders or committees.
- CDD requires strong community mobilization and capacity building, along with participatory planning and implementation. Most governments require technical support, and the involvement of community-based organizations.

Potential Strengths

- **Ownership and local relevance.** Community interventions in CDD programs are more likely to be locally relevant, socially acceptable, and successful due to strong community involvement and consequently heightened empowerment compared to other development programs. These aspects of CDD approaches are valuable in nu-

trition programs, which are highly dependent on behavior change to succeed, and those behaviors are anchored in local norms and traditions.

- **Social accountability.** Community involvement can create greater accountability at the local level, which can lead to a higher degree of transparency and consequently greater trust and program acceptance.
- **Community contribution.** Often communities provide a financial contribution as their “share” in the project. This helps build ownership and should enhance sustainability.
- **Collective action.** Community-based projects can facilitate collective action that would enable the removal of community-wide barriers that are creating nutrition problems. Some of these barriers can be social (e.g., social norms related to the role of men in caring for young children and / or about open defecation) or physical (e.g., building a bridge to ensure easier access to a health facility, removing conditions that enable mosquitos to breed and transmit malaria). Nutrition programs have had success in using positive deviance (e.g., identifying which households have less malnutrition in a community and pinpointing which factors have led to that result) to identify priority key community barriers to better nutrition.
- **Multisectoral convergence.** Community-based projects, if well designed, can encourage communities to seek services from various ministries and enable the convergence to take place. This is important for nutrition, which requires a mix of sectoral interventions.
- **Flexibility of design.** The determinants of malnutrition and the socio-cultural barriers to change will vary by community. CDD approaches enable communities to adapt global knowledge to their particular situations. However, that adaptation usually requires some external facilitation, e.g., through coaches.

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COMMUNITY ACTION FOR NUTRITION PROJECT

Project development objective (PDO).

The original PDO was “to improve attitudes and practices known to improve nutritional outcomes of women of reproductive age and children under the age of two.” The revised PDO is “to improve practices that contribute to reduced undernutrition of women of reproductive age and children under the age of two and to provide emergency nutrition and sanitation response to vulnerable populations in earthquake affected areas.” The project was restructured in 2015 to match the project’s results framework with community choices.

Results of interest. This project was developed specifically to address malnutrition in women of reproductive age and children under the age of two.

Indicators. PDO level indicators, revised during restructuring and dropping the indicators that sought to measure attitudes and refining others, include practices of pregnant women regarding iron and folic acid supplementation; breast-feeding practices of mothers with children 0–6 months of age; child feeding practices of households with children 6–24 months of age; households reporting no smoke in the room while cooking; pregnant women reporting consuming animal-sourced protein in the previous day; households reporting using improved toilet facilities; mothers (of children aged 0–2) reporting always washing hands at critical times.

Implementation modalities. At the ward level, there is a multisectoral committee to approve plans and account for results. Communities get financing which could include awards for households / individuals for their achievements, e.g., for households using the pit latrine most consistently. The Rapid Results Approach, i.e., results in 100 days, is being used. There is a social mobilizer / coach hired through the NGO and contracted by the government through the project in every village development council (VDC). Most of the coaches are from the local community and most of them are women. The coach guides the communities, assisting them in devising a proposal to reduce malnutrition in the community.

- ***Flexible definition of community.*** Communities can be defined geographically, but particularly in countries where social exclusion is a challenge, communities can organize themselves and carry out projects on the basis of characteristics such as ethnicity, social class, caste, etc. Because some nutrition-related behaviors and barriers are specific to some communities, the flexibility inherent in CDD approaches should lead to better nutritional outcomes. CDD might be particularly effective in nutrition because several factors affecting nutrition-related behaviors are socio-cultural. Those factors include gender discrimination, household resource distribution, women’s health-seeking behavior, and the feeding and eating practices during pregnancy and infancy.

Potential Challenges

- ***Communities do not always recognize nutrition as a problem.*** CDD programs support what communities select as priorities and this may not prioritize malnutrition as the most urgent community problem. Malnutrition may not be seen as a priority challenge partly because other pressing needs compete for attention, and partly because of lack of awareness about the magnitude of the malnutrition problem within the community, its causation, and available solutions. In communities where childhood undernutrition is widely prevalent, people may not recognize malnutrition as a critical problem since malnourished children are the norm.
- ***Risk of elite capture.*** CDD may not be suitable for communities where a feudal culture of leadership exists. In such communities, even so-called community engagement may be captured by the most powerful members, defeating the idea of giving voice to the poor and vulnerable sections of the society. While a consultative process may occur during participatory planning, the process may not be truly inclusive.
- ***Alignment with national plans.*** Often communities will request support to build physical infrastructure such as health centers and schools. Unless the programs are strongly anchored in coordination mechanisms (which are often weak in developing countries), there is a risk of building infrastructures when a better solution might have been to address transportation problems (e.g., a bridge) to increase access to the infrastructures in neighboring communities. Increasingly, countries are developing GIS-enabled infrastructure maps (e.g., national health map) that should help CDD programs align with national infrastructure plans. This is not a particular risk for nutrition programs because community actions for nutrition do not require physical infrastructure.
- ***Alignment with national systems.*** Similar to the infrastructure point made above, a CDD project may finance a school, but may not have the necessary linkages with the national system to ensure that teachers and a regular budget is assigned to operate the school.
- ***Role / presence of the state.*** CDD programs need to have an effective accompanying communications strategy to ensure that communities are aware when a CDD program is part of a government strategy to enhance service delivery. Otherwise, some governments may resist using the approach and risk being perceived as having been replaced by community-based organizations “to do the government’s job.”
- ***Community contribution.*** As noted above, the community’s financial contribution should help enhance ownership and sustainability, but when criteria are strictly applied (e.g., insisting on a financial contribution instead of in-kind contribution) the poorest communities or the poorest members of communities may be excluded. This potential exclusion is highly relevant for nutrition because the poorest households tend to be the most affected by malnutrition.

- **Capacity for nutrition.** Even when community organizations and their members recognize nutrition as a priority, they do not always have the required knowledge to analyze the causes of malnutrition in their community or to select evidence-based interventions to reduce it. For example, communities sometimes decide to carry out growth monitoring, but this is insufficient to improve childhood malnutrition. It must be complemented by appropriate nutrition counseling and / or supplementary feeding interventions demonstrated to caretakers, which is usually referred to as growth monitoring and promotion (GMP). This capacity challenge has been remedied in some World Bank operations by using tools (e.g., menus of options / decision trees) and coaches to facilitate community participation processes, specifically on nutrition.
- **Communities are not always cohesive.** Mobilizing communities could be a challenge, especially with governments that are reluctant to partner with NGOs and CBOs. Governments typically are not strong in community mobilization and need the help of NGOs or CBOs to accomplish it. Some geographic communities are not cohesive socially. In those cases, targeting by socially defined communities may be helpful or by introducing additional measures to improve social cohesion such as conflict prevention coaching in conflict-affected areas.
- **CDD programs are typically dispersed in thousands of small communities.** Many of them may not have the necessary institutional arrangements, such as a development committee or a women’s group to mobilize and articulate their priorities or the capacity to develop plans and manage programs. This often requires strong technical support, usually through NGOs or CBOs. Monitoring the expenditures and results could become difficult to manage when the program is dispersed. Information and communication technologies are increasingly used to address this challenge.

Examples of Country Experience

Afghanistan, Bangladesh, Benin, the Gambia, Ghana, India (state of Andhra Pradesh), Indonesia, Madagascar, Mauritania, Senegal, Nepal



Household/Individual Level

⇒ **Conditional Cash Transfer (CCT) and Unconditional Cash Transfers (UCT)**

Definition

- **Cash transfers** are provided directly to targeted (poor) individuals and households to reduce their vulnerability through consumption smoothing. When used for nutrition, a secondary objective is to encourage behavioral changes that should result in improved nutritional outcomes. Such behavioral changes generally revolve around feeding and eating practices, girls’ education, caring for infants and children, hygiene, and accessing health and nutrition services.
- Cash transfers can be conditional or unconditional, though the recent trend is toward the middle ground of soft conditions—behaviors are encouraged but compliance is not verified or enforced. When a nutritional objective is present, the transfers are combined with accompanying measures, such as communication campaigns and parenting classes, and the cash can be an effective “anchor” for nutrition messages.
 - **Conditional cash transfers (CCT)** involve disbursements based on verified compliance to the prescribed behavior, e.g., accessing institutional delivery, or bring-

EMERGENCY SAFETY NETS PROJECT (JIGISÉMÉJIRI)

Project development objective (PDO).

To provide targeted cash transfers to the poor and food insecure households and to establish the building blocks for a national safety net system.

Results of interest.

Poverty alleviation; safety net for the poor and food insecure; improving living conditions. Increasing access to social services. Nutrition is seen as a side effect. A nutrition program is being piloted as part of this operation. Every under-five child and pregnant women will receive a nutritional supplement (powdered milk + iron supplement + vitamin A),

along with nutrition education.

Indicators. Nutrition-specific indicators include poor households / children receiving the nutritional package, i.e., the powder + education; households participating in the nutritional information session; households improving food consumption score, i.e., weighted score of 20 categories of food.

Operational modality. Unconditional cash transfer (UCT) combined with behavior change communication (BCC) in the five regions of the south—105 to 110 communities of 703 communities in the country. The cash transferred

to poor household is accompanied by services and education / information. The operation is linked to the National Health Insurance. The UCT targets the poor, but non-poor households can participate in the information session at the community level. A total of 62,000 households have been identified to be reached by July 2016. Consideration is being given to linking the beneficiaries of the UCT with the health program so that growth monitoring could be added to the operation. On average, 70 percent of the transfer is spent on food.

ing the baby in for growth monitoring or immunization, or nutrition counselling sessions.

- **Unconditional cash transfers (UCT)** involve disbursements without a strict requirement for a specific behavior. This approach is more suitable for behaviors that are difficult to verify, e.g., exclusive breastfeeding, or increased food intake during pregnancy.
- **Soft conditionalities.** Even in operations designed as CCT, the conditionality is seldom strictly enforced. Beneficiaries are encouraged to attend parenting classes, growth monitoring and promotion sessions, cooking demonstrations and so on, but the payout is not conditioned upon their participation in such accompanying measures. Program evaluations suggest that soft conditionalities are just as effective as strict conditionalities.
- **Cash transfers have evolved over time,** going beyond risk management towards other development goals, such as reducing malnutrition. If nutrition objectives are to be formally superimposed on CCT / UCT operations, it is vitally important to apply the relevant knowledge and skills in preparation, implementation, and monitoring, and to target the all-important first 1,000 days.

Potential Strengths

- **Incentivizes behavior change.** Cash transfers move the incentive to the intended beneficiaries, i.e., the individuals in households whose behavior needs to change to improve nutrition (caretakers and those who influence them), and can be very effective—if designed and implemented well.
- **Targeting the most vulnerable.** Cash transfer programs rely on rigorous systems to target the most vulnerable, most often through a proxy means test that identifies the income poor. Household surveys have shown that these beneficiaries are more likely to be malnourished. Using the targeting system of cash transfer programs therefore could help to use more efficiently the scarce resources available for nutrition, especially for preventing undernutrition.

- **Filling a resource gap.** Cash transfers are an important part of a national nutrition strategy because— at least for the poorest and most vulnerable households—the availability of financial resources is a determinant of malnutrition. The cash will enable these households to purchase a balanced and safe diet (which is more expensive than the typical diets consumed by the poor) and health services. The cash could also free up time for caretakers to ensure children received adequate breastfeeding and complementary feeding.
- **Anchoring behavior change messages.** The cash transfer itself can serve as an “anchor” for nutrition messages, i.e., to capture the attention of household members to key nutrition messages that they might otherwise not notice due to competing priorities in their complex lives.
- **Addressing gender dynamics.** Cash transfer programs can be designed to correct household gender imbalances by empowering women. For example, the cash transfers are generally handed out to women rather than to the household head. This is likely to benefit nutrition (independent of whether or not nutrition messages are included with the cash transfer) because gender inequality is often a strong determinant of malnutrition.
- **Efficiency.** Direct transfers to individuals through cash transfer programs avoid elite capture and other inefficiencies that diminish the proportion of resources that reach households. For example, it may be more efficient to provide a household with a cash transfer and information encouraging them to purchase a product such as micronutrient powders or zinc tablets from the market rather than providing these same inputs for free through the public health system. The act of purchasing would create ownership for the effective use of the product.
- **Rapid response capability.** Cash transfer programs provide a platform for rapidly deploying an emergency response to crises such as floods, earthquakes, etc. Rapid deployment could help prevent or reduce the severity of the malnutrition which typically accompanies emergency situations.
- **Strong information systems.** Cash transfer programs require strong information systems to identify beneficiaries, track payments and, in the case of conditional transfers, to communicate the conditionalities or “co-responsibilities,” and to verify compliance. These same information systems can be used to communicate key nutrition messages.
- **Political visibility.** Cash transfer programs tend to be highly visible and usually benefit from strong political support. Adding a nutrition objective to a cash transfer program could also raise the profile of nutrition with policy-makers.

Potential Challenges

- **Requires strong management capacity and good governance.** Cash transfer programs require strong management arrangements to ensure effective administration of the cash transfer, mitigating moral hazard, preventing leakage of the cash, and monitoring actual compliance in the case of conditional cash transfers. This capacity requirement can be a challenge in some countries.
- **Limited feedback loops from UCTs.** While UCTs are easier to administer, they do not have built-in mechanisms to determine whether the desired behavior change has been achieved. Separate surveys or other ways of collecting data may therefore be required.
- **For CCTs, insure the service which constitutes the condition is available.** The supply of nutrition-related services is often a constraint in countries where malnutrition is highly prevalent. An incentive to the providers of the service in question may be help-

ful. In effect, such cases could combine a demand-side incentive through the CCT with PBF to incentivize the supply side. This increases the complexity and potentially the cost of the intervention.

- **Potential negative impact on intrinsic motivation.** When CCT is used to increase the utilization of predetermined services, the use of cash alone may affect what otherwise may have been an intrinsic motivation to seek a service. It may be possible that the prescribed services would not be highly valued by the community and that they may consider themselves to simply be paid to use the services, rather than fully valuing the usefulness of the service.
- **Sometimes financial incentives may not be enough to overcome entrenched beliefs and socio-cultural barriers.** It is often the case that the barriers to behavior change lie at the community level where norms are set. Therefore, information, education, and communication campaigns need to accompany any type of transfers that seek to change behaviors, and perhaps also community-based incentives.
- **Risk that the behavior change attained by a cash transfer program may not be sustained after the incentive stops.** In nutrition programs, if the cash was intended to finance food security and access to health services, it may be necessary to ensure continued availability of resources over relatively long periods. However, in a cash transfer program, which targeted households with children during the first 1,000 days, households could enter the program for a relatively shorter time. Cash transfer programs are increasingly focusing on concurrently building the capacity of households to become more productive so as to eventually “graduate” and become economically independent.

Examples of Country Experience

Bangladesh, Brazil, Burkina Faso, Cambodia, Djibouti, Ethiopia, Ghana, Guinea, Guatemala, India, Indonesia, Jamaica, Lao Peoples Democratic Republic, Lesotho, Madagascar, Mali, Nepal, Nicaragua, Pakistan, Republic of Congo, Rwanda, Sri Lanka, Tanzania

➤ **Public Works Programs (PWP)**

Definition

- A public works program (PWP) involves the provision of temporary paid employment by the creation of predominantly public goods for targeted beneficiaries. The works are generally labor intensive and require few or no skills.
- PWP have traditionally financed the construction or rehabilitation of infrastructure (e.g., feeder roads, small dams, etc.) as well as works to preserve the environment (e.g., reforestation, terracing, etc.). However, these programs have started financing other forms of employment, which are more directly relevant for nutrition, such as agriculture and child care.
- A PWP functions as a form of productive social safety net by providing an income to targeted households or individuals in exchange for their labor. Payments can be in-kind or, more frequently, in cash. Wages are set sufficiently low to avoid substitution effects with other employment. Targeting is done either on the basis of income measures (e.g., proxy means test) or by self-targeting, by setting the wage sufficiently low to attract only poor people. Some programs intentionally target women, or have women quotas, and provide complementary services (e.g., child care) to enable their participation.
- In light of the obvious limitations of temporary employment, PWP are increasingly pro-

- viding complementary services aimed at helping beneficiaries find sustainable livelihoods. They include various types of training, “forced” savings, and matching grants.
- The programs can be used as part of an overall national social protection strategy and / or provided in response to a humanitarian crisis.

Potential Strengths

- **Target the poor.** In addition to the poverty targeting (e.g., proxy means test), when the wages are set at the right level, PWPs create a self-targeting mechanism which tends to work well because only those poor enough to consider the low wages attractive will present themselves for work. Because of the link between poverty and nutrition, the participants of PWPs are more likely to belong to households with high levels of malnutrition.
- **Can provide a platform to transmit nutrition messages and build skills.** Increasingly, PWPs have a longer-term vision and contain skills development training to enable the individuals to overcome the barriers that are keeping them trapped in poverty. The training sessions offer a platform to transmit information about nutrition.
- **Could have sustainable livelihoods component linked to nutrition-related microenterprises.** The training and savings component of a PWP could encourage participants to develop microenterprises to meet specific nutrition needs of the community. For example, participants could develop local low-cost vitamin fortified complementary food for children.
- **Works can build nutrition-related infrastructure.** Even a more traditional PWP could apply a nutrition lens in the selection of the infrastructure that would be built or rehabilitated. Priorities could include, for example, latrines for girls at schools (to prolong school attendance for girls), infrastructure for irrigation, and storage of vitamin rich crops.
- **Good match with intrinsic motivation.** Because they have worked for their wage, the incentive may have less negative impact on intrinsic motivation. Participants would feel they have earned their incentive, thus enhancing the sense of pride and self-respect among the beneficiaries.
- **Could provide a platform for community processes.** Inasmuch as PWPs are opportunities for people to get together and work together, they could be used as a platform to start organizing the community for nutritionally minded collective action, e.g., removing conditions that enable mosquitos to breed and transmit malaria or improving access to water and the sanitary environment. The training provided by the program could provide a good starting point.
- **Potential for inter-sectoral convergence.** PWPs provide a great opportunity for inter-sectoral action. The benefits go beyond health or nutrition and could yield broader developmental impact. If a PWP sets itself an objective to contribute to improving nutrition, it can forge useful linkages with other relevant sectors. For example, the PWP can partner with the health system to identify malnourished kids in the families of the beneficiary workers, and provide nutrition services where required.
- **Flexibility for households.** If payments are in cash, households will dispose of additional income to spend freely. When combined with appropriate educational programs, the additional income could be put to good use and enhance food security and household nutrition status.
- **Non-controversial entry point for nutrition.** In countries that may have sensitivities related to their malnutrition rates, combining nutrition interventions into an existing PWP may be a good way to start remedying the problem.

PRODUCTIVE SAFETY NETS PROJECT 4 (PSNP-4)

Project development objective (PDO).

To increase access to safety net and disaster risk management systems, complementary livelihoods services and nutrition support for food insecure households in rural Ethiopia.

Results of interest. Improved household food security, livelihoods and nutrition, and enhanced household and community resilience to shocks.

Indicators. At the PDO-level, the project measures progress in transition to a social protection system; progress towards developing improved early warning triggers and agreed response mechanisms; the net number of months of food

insecurity for program participants; increase in average value of household assets; and access of client households to community-based nutrition services, including behavioral change communication provided under the national nutrition program. At the intermediate level, the project includes a few nutrition-specific indicators: clients reporting that they can provide adequate meals for their family for 12 months a year (male / female); transfers that have a value of at least 15 kg of cereals and 4 kg of pulses.

Operational modality. Public works program with cash or food is given. The cash component is the equivalent of 2,100 calories worth of food, cash or

e-payment. 80 percent of the households are paid in return for working in the public works. But these public works programs include attending behavior change sessions. Work requirements are exempted for pregnant women and those with young children. 20 percent of the households receive UCT (households without able-bodied members). The incentives are “soft” (encouraging) incentives / “nudges” not “hard” conditions. There has been an evolution of increasing attention to nutrition under PSNP. In the first PSNP, the only conditionality was that Ethiopia should have a nutrition policy. In PSNP-4, there is much more nutrition sensitivity.

Potential Challenges

- **Does not reach those who cannot work.** Those who are unable to work because of age, health status or family responsibilities are excluded from PWP. So, complementary programs such as cash transfers should be available to reach those households.
- **No guarantees that nutrition behaviors will improve.** Payments are generally given to the workers, which in most cases mean payments will go to men. While poor women tend to prioritize investments in human capital when they obtain additional income—including better quality food, education and health services (all critical inputs for good nutrition)—this is less true when the income is controlled by men, especially if the PWP does not include communication on nutrition as an accompanying measure.
- **Labor-intensive works can be energy intensive and could actually aggravate malnutrition.** Most PWPs require hard physical labor, and the additional food purchased with the wages may not offset the caloric loss (or the worker may simply not increase his / her food intake and use the extra money for something else). In this situation, aggravating a low body mass index situation is a risk for participants. This poses a problem especially for women of child bearing age and would lead to low birth weight babies.
- **May be difficult to change the mindset.** Some public works agencies are accustomed to infrastructure work. It is a mindset change to have them work on social sector activities.
- **Horizon tends to be short-term.** In most cases, beneficiaries of PWP only work for a few months (4–6). There is therefore a risk that beneficiaries will focus only on short-term employment and the current earning needs of their households.
- **Nutrition may not be recognized as a priority.** Many of these social safety net programs may not prioritize nutrition in their results monitoring. They therefore may not result in nutritional improvements even if income poverty is alleviated.

- ***Potential leakage and corruption.*** In some countries these PWPs are a source of corruption through measures such as falsification of worker lists, etc. The problem tends to be more acute when payment is in-kind rather than through cash payments made directly to individual bank accounts.

Examples of Country Experience

Argentina, Bangladesh, Djibouti, Ethiopia, Guatemala, Democratic Republic of Congo



Non-Financial Incentives

Effective interventions to achieve nutritional impact will require a mix of financial and non-financial incentives. This section provides examples of non-financial incentives that could be considered at each level of the system. This is not a comprehensive list of non-financial incentives. An important first step in selecting non-financial incentives, as well as financial incentives, is to define a clear theory of change.¹² It is also critical to understand the social environment in which the interventions will be introduced, including the norms and mental models of the stakeholders and beneficiaries. We recommend that readers consult the *World Development Report 2015: Mind, Society, and Behavior* for a more detailed discussion about this topic, which should inspire the selection of appropriate intervention design to best use non-financial incentives.

National and Sub-National

- **Global SUN movement:** Prestige of joining “Scaling Up Nutrition / SUN” movement and the personal satisfaction related to learning from the SUN tools and networks.
- **Costing data:** Information on cost-effectiveness of nutrition interventions motivates decision-makers to invest for good social returns, e.g., World Bank costing studies.
- **Social change campaigns:** Visibility of behavior change campaigns can provide social capital for political leaders.
- **Bilateral dialogue:** When international donors include nutrition as part of their overall bilateral political dialogue, high-level decision-makers may be motivated, or in some cases coerced, to take action.
- **Rankings:** International rankings, e.g., Human Development Index, can serve as motivators.
- **Visits from leaders / summits:** World leaders’ visits and international summits (e.g., World Bank meeting on stunting in October 2016) can draw attention to malnutrition and thus motivate policy-makers either to seek visibility or to avoid being shamed.
- **Campaigns and reports:** International campaigns and reports, e.g., Global Nutrition Report, can cast attention on the issue. Related in-country media coverage and debates can motivate leaders and policy-makers to take action.

¹² See Valters, 2015.

- **Global events:** Events such as World Food Day and the related media coverage can motivate leaders and policy-makers to show what they have achieved in nutrition.
- **Regular use of data:** Annual “nutrition report cards” can generate interest from a range of stakeholders and motivate action. These require more robust data systems for nutrition than those currently in place.
- **Brand recognition:** Private companies can get motivated to take action on malnutrition because it will boost their brand.
- **Learning opportunities:** Leaders, policy-makers and other stakeholders such as journalists can be motivated to take action on nutrition through learning events such as conferences and targeted training programs (e.g., programs targeted at parliamentarians and media leaders).
- **Supportive supervision:** Program implementers at the national and sub-national level could be motivated by the feedback they receive through supervision.
- **Recognition:** Awards, either to individual leaders or to countries, can be powerful motivators.



Health Facility

- **Information tools:** Having appealing information tools could motivate health workers to undertake good nutrition counseling.
- **Knowledge:** Well-trained health workers will be more motivated to include nutrition as part of a medical consultation. Too often, nutrition is missing from pre-service or in-service training of health workers.
- **Mass media campaigns:** While these campaigns are usually aimed primarily at households, they have been shown to also have a positive impact on the motivation of health workers.
- **Supportive supervision:** Health workers could be motivated by the feedback they receive through regular supervision.
- **Visibility:** A nutrition program could be designed to provide visibility for health facility workers, conferring them status in the community and possibilities of promotion into higher levels of the health system.
- **Recognition:** Awards are important motivators; these could be for individual workers or for entire health facilities.
- **Benchmarking:** The use of data to establish performance standards and then using these standards to compare health facilities, as done in PBF, could be a motivator for health facility workers.
- **Availability of supplies:** Without specific supplies, e.g., zinc supplements, some nutrition services cannot be offered. Long periods of stock outs of these supplies could demotivate workers to provide these services. Conversely, the availability of the supply could serve as a reminder that the services should be offered.



Community

- **Information tools:** Having appealing information tools could motivate the community health worker or other community platforms to undertake good nutrition counseling. ICT tools appear to boost the status of the community health worker in communities where tools such as tablets and smart phones are still a novelty.
- **Knowledge:** Community workers are more motivated when they feel they have knowledge they can bring to the community. For example, the community is motivated by knowledge

that they can take collective action in areas such as removing the conditions required for the transmission of malaria.

- **Shame:** Some social norms can be shifted through shaming, e.g., shifting the norms surrounding the role of men in child feeding practices, or the norms around open defecation.
- **Data:** Communities could be motivated by a sense of accomplishment that would come from knowing that their children are growing better or have lower levels of anemia. This would require having data platforms that send this signal to communities on a regular basis.
- **Positive deviance:** Positive deviance analysis, i.e., identifying households in the community where children are developing normally despite having access to similar resources, can be motivating to communities because it shows them that they have the ability to improve their situation with minimal need for external resources.
- **Visibility:** Highly visible programs, e.g., vitamin A distributions, can be motivating both for caretakers and for workers and thus reach high levels of coverage.
- **Priority access to services:** In some countries, community health workers may not receive a financial payment, but they have priority access to some free services such as health care and credit. This can serve as an important motivator, particularly if these services do not have the ability to cover the entire community.
- **Mass media campaigns:** While these campaigns are usually aimed primarily at households, they have been shown to also have a positive impact on the motivation of community workers.
- **Recognition:** Awards and other forms of recognition, either to individual workers or to entire communities, can serve as important motivators. An example is conferring on a community the status of being “open defecation free.”



Households

- **Information:** Parents who learn that well-nourished children perform better in school and earn more during their adult years are motivated to take action. Often caretakers are not performing certain behaviors because they do not know the benefits of the behavior.
- **Growth monitoring:** If accompanied by appropriate counseling, growth monitoring can be a powerful tool to motivate parents to take action when their child is growth faltering.
- **Mass media campaigns:** While these campaigns are usually aimed primarily at households, they have been shown to also have a positive impact on the motivation of health workers.
- **Nudges:** Encouraging households that receive a cash payment either as part of a cash transfer program or as part of a public works program could motivate parents to modify their consumption patterns in favor of services and food that improve the nutritional status of women and children in the household.
- **Availability of a product:** When a product such as micronutrient powders to fortify a child’s food directly on the plate is available in the household, it can serve as a motivator to change certain behaviors, in this case, starting complementary feeding at six-months of age.
- **Recognition of status:** Nutrition-related behaviors in a household involve several individuals, but in the past, most messages have been directed mainly at the mother. Recognizing that the grandmother and the father are important decision makers and directly involving them in interventions can serve as motivators for behavior change.
- **Gender:** Actions to increase the agency of women within the household are important motivators for these women, which can have an impact on malnutrition.



Gaps to Consider when Integrating Nutrition in World Bank Operations

In most countries, what will be needed to reinforce the nutrition system will exceed available resources. An important first step for a World Bank team is to assess the various aspects of the nutrition system to gauge the priority gaps and to determine where and how the World Bank could add the most value. In this process, it is important to clearly understand what other partners are currently doing or planning for nutrition programming.

Value Added of the World Bank

The World Bank's value proposition will depend on a range of factors, including the overall level of development of the nutrition system, the results of the gap analysis, the level of resources and government capacity, and the activities and plans of its development partners. Some areas that are often at the core of the World Bank's value proposition in nutrition include:

- i. Positioning nutrition at the highest levels as an economic development issue, e.g., Prime Minister, Minister of Finance
- ii. Convening a range of development partners, including the private sector
- iii. Supporting the design of large-scale programs
- iv. Strengthening service delivery systems, e.g., information systems, supply and logistics systems, procurement and financial management systems
- v. Financing large-scale programs
- vi. Supporting the use of evidence for decision making, including costing data and economic analysis
- vii. Drawing on global experience of what is effective in all the nutrition-related sectors

When conducting this analysis, World Bank teams may also find it useful to consult the tools developed by the Scaling Up Nutrition (SUN) movement (see Annex 2 references). While the specific decision pathway for prioritizing actions is highly dependent on the country context, questions that should be asked include the following.

POLICY ENVIRONMENT

- Is there sufficient political support for nutrition from a wide range of stakeholders?
 - Possible actions: stakeholder survey, advocacy strategy, strategic communications plan.
- Are there clear champions for nutrition? Are there opponents? What are their interests?
 - Possible actions: political economy analysis, advocacy strategy, strategic communications plan.
- Is there a common narrative on the causes of and solutions for malnutrition in the country?
 - Possible actions: develop a common narrative document based on the analysis of the determinants of malnutrition, e.g., secondary analysis of Demographic and Health Surveys (DHS) and other surveys; ensure full ownership of the narrative by all relevant stakeholders.
- Does the country have an evidence-based nutrition policy and strategy?
 - Possible actions: TA for development / updating the policy and strategy.
- Are the related legal instruments in place, e.g., regulations for food fortification?
 - Possible actions: TA for the development of the legal instruments.
- Is there sufficient willingness and capacity to enforce regulations for nutrition?
 - Possible actions: political economy analysis, TA to reinforce capacity for regulation.

GOVERNANCE AND INSTITUTIONAL

- Is there sufficiently strong accountability for achieving nutrition results?
 - Possible actions: annual scorecard, media engagement.
- How aware is the general population of nutrition issues?
 - Possible actions: national media campaign targeting the most critical nutrition-related behaviors.
- Do regulatory systems function well?
 - Possible actions: political economy analysis of specific regulatory systems, e.g., food fortification and food safety regulations, address specific barriers such as capacity, corruption, etc.

FINANCING

- Is nutrition sufficiently financed? Is the financing of nutrition well understood?
 - Possible action: Public expenditure review and fiscal space analysis.
- Have clear priorities been set for nutrition financing?
 - Possible action: Costing analysis that identifies cost and benefits of priority interventions and models various scenarios for scaling up.
- Is nutrition well reflected in the annual planning process, e.g., annual health plans, annual agriculture plans?
 - Possible actions: TA to support integration of nutrition in the planning process.
- Is adequate financing allocated to nutrition by the government and development partners?
 - Possible actions: advocacy, public expenditure review, TA for participatory budgeting.

PARTNERSHIPS

- Is there a common platform for coordination, led by a senior government official, optimally an individual above sectoral ministries, e.g., in the Prime Minister or President's Office?
 - Possible actions: advocacy to create the platform, e.g., obtain Prime Minister commitment, TA and financial support to establish a secretariat for coordination.
- Has the country joined the SUN movement? Are the SUN networks functional, i.e., donors, multilaterals, private sector, civil society?
 - Potential actions: advocacy to have the country join SUN, World Bank to join donors group, financing of TA for the coordination structure, e.g., a Secretariat.
- How engaged is the private sector in nutrition?
 - Possible actions: specific engagement strategy for the private sector, ensuring regulatory framework incentivizes the private sector to engage.
- Are national media engaged with the issue?
 - Potential actions: training for leading journalists on the fundamentals of nutrition, organizing media debates on the issue.
- Who are the leading academics generating knowledge on nutrition in the country? Are they aligned with global best practice in the field?
 - Potential actions: financing for key researchers to participate in global nutrition conferences, TA to support leading universities, e.g., developing or reinforcing the capacity of research and teaching programs on agriculture so they become nutrition-sensitive.
- What role is civil society playing?
 - Possible actions: TA to engage civil society organizations that are not working on the issue, e.g., sensitization, technical assistance for those who want to develop advocacy or programs, challenge fund to incentivize innovations in program delivery, contracting community-based organizations for service delivery, e.g., performance-based contracting or performance-based financing.

INFORMATION, MONITORING, AND LEARNING

- Is there a common results framework for nutrition?
 - Possible actions: TA to develop the common results framework, political analysis to understand the interests of different stakeholders.
- How recently was national / sub-national information collected on nutritional status and program implementation?
 - Possible actions: finance a national nutrition survey; ensure that nutrition is well covered in household surveys such as Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), poverty surveys, etc.
- What system is in place to produce routine data on nutrition, i.e., on nutritional status and on program implementation?
 - Potential actions: review which nutrition indicators are included in the health information management system (HMIS) and other sectoral management information systems, TA to enhance the utilization of the data for decision making, establishment of a "light" sentinel site data collection system for nutrition.
- Are there opportunities for the government and development partners to come together to learn about effective programs?
 - Potential actions: support a national institution, e.g., academic or civil society, to

undertake regular reviews of “good practices” and to organize workshops to share lessons. The good practice reviews can serve as an incentive for implementers to document more systematically their experience.

PLANNING AND IMPLEMENTATION CAPACITY

- Do officials at the national and sub-national, e.g., district, levels have sufficient capacity to plan and monitor nutrition interventions?
 - Possible actions: training, results-based contracts.
- Do health workers have sufficient capacity to implement nutrition interventions?
 - Possible actions: training and incentives for workers.
- Does the country have a cadre of community health and nutrition workers? Do other community platforms exist?
 - Possible actions: TA for policy and guidelines on community-based services; training and incentives for community workers.

SERVICE DELIVERY

- Is there consensus on a “priority package” of nutrition-specific and nutrition-sensitive interventions that needs to be financed and scaled up?
 - Possible actions: evidence review, taking into consideration specific characteristics of the country, costing of interventions and benefits, TA for the development of strategic and implementation plans, study tours / workshops to learn from other countries’ experiences.
- What is the current coverage of nutrition-specific interventions (see Table 1)?
 - Possible actions: support for the scale up of specific low coverage interventions. This is usually through the health sector, but some interventions could be implemented through other sectors.
- Are the agriculture / water and sanitation / education / social protection systems nutrition-sensitive? Has a theory of change for nutrition been developed in each sector? Does each system specifically track nutrition-related results?
 - Possible actions: develop theory of change, identify a key actions and support implementation, including measurement of nutrition-related results, support rigorous evaluation of interventions that are not yet supported by evidence.

SPECIFIC TARGETING MEASURES

- What is the social-economic composition of the population? Are there specific groups that tend to suffer from social exclusion? How many languages are required to communicate effectively with the population? How much cultural variation would be expected in the population, e.g., taboos related to maternal and child feeding?
 - Possible actions: build in flexibility in the interventions so they are delivered appropriately to different groups, e.g., materials in different languages, community-based approaches that leave the community flexibility on how to address certain challenges so they are appropriate for their own group, targeting of specific groups, which are often socially excluded (and tracking results separately).

- What are the gender dynamics in the population?
 - ⊕ Possible actions: ensure interventions are gender sensitive; include interventions to improve gender sensitivity; target interventions to specific genders, e.g., men’s groups to discuss malnutrition, targeting of grandmothers.

SUPPLIES AND LOGISTICS

- Do health facilities and community platforms have sufficient commodities e.g., supplements, information materials, and weighing scales, to deliver nutrition interventions?
 - ⊕ Possible actions: finance gaps in commodities, strengthening the supply and logistics system capacity to forecast requirements and manage stocks.
- Does the supply and logistics system need reinforcement to handle nutrition-related commodities?
 - ⊕ Possible actions: TA to strengthen the supply and logistics system, inclusion of nutrition commodities in performance-based contracts for the supply chain.

Issues to Consider when Prioritizing

How should a World Bank team prioritize the wide range of potential nutrition actions? There is not one simple answer, but some of the following principles could guide the prioritization.

Identify the results of interest, theory of change, and critical bottlenecks. The starting point for project planning should be (a) to identify clearly the project’s targeted results, e.g., improved behaviors for infant and young child feeding or increases in coverage of key nutrition services, (b) to articulate a clear theory of change on how to achieve the results, and then (c) to address the most critical bottlenecks to achieving the results. The results of interest could be directly related to beneficiaries in the critical 1,000 day window, or they could be other types of results, such as systems strengthening, political commitment, etc. The bottlenecks will vary based on the environment in which the project will be implemented. The list of questions above would help identify the main potential bottlenecks.

Focus on scaling up where the evidence is strongest. The evidence is currently strongest for nutrition-specific interventions but their coverage is often still suboptimal in many countries. Priority should be given to scaling up nutrition-specific interventions, while at the same time developing approaches to deliver nutrition-sensitive interventions. Particularly in the latter case, investments should be made to evaluate and document nutrition interventions to contribute to the operational evidence base.

Understand the political economy and be opportunistic. Be clear on the opportunities that may exist at different times to support specific aspects of nutrition in a country. Some influential actors may be pushing for health system reforms, e.g., strengthening of the supply system of the health management information system (HMIS), in which nutrition could be included. During some periods, such as during the lead up to elections, it tends to be politically easier to implement more visible initiatives, e.g., treatment of severe acute malnutrition, micronutrient supplementation campaigns, etc. It is important to understand and seize such opportunities to advance a nutrition agenda. It is also possible to conduct political economy analysis to help identify how to proactively create opportunities to implement nutrition advocacy strategies.

Achieve a balance between reaching target beneficiaries and systems strengthening. To reduce child stunting, maternal malnutrition, and micronutrient deficiencies, the quantity and quality of services—including messages—that reach the intended beneficiaries, e.g., women and chil-

dren during the first 1,000 days, will need to be the *main focus*. It is unlikely that nutrition services would be delivered in a void. Therefore, reinforcing the systems that deliver the services is also necessary. System strengthening will also help to enhance sustainability. Activities to strengthen systems should be balanced with activities enabling service delivery to the targeted beneficiaries. In nutrition, as in public health more broadly, a dichotomy exists between proponents of “campaign-style” delivery, which achieves high levels of equitable coverage, and advocates of systems strengthening. It may be more appropriate to merge the two positions, whereby campaigns at regular intervals become a routine outreach approach to extend the delivery of health services.

Harmonize with development partners and identify the value proposition for the World Bank.

The World Bank is just one of the development partners active in nutrition programming in developing countries (see section below). If the country is a member of the global Scaling Up Nutrition (SUN) movement, it is likely that the partners are organized into specific networks as follows: donors, including the World Bank, UN agencies, civil society, and business. An important step in prioritizing the focus of World Bank support is to map out what each development partner is doing and what is the Bank’s comparative advantage.

To the extent possible, nutrition interventions should be targeted to maximize efficiency.

Targeting of Nutrition Interventions

To the extent possible, nutrition interventions should be targeted to maximize efficiency. The following types of targeting need to be considered.

- **AGE:** Interventions need to target women and children during the first 1,000 days from conception to the child’s second birthday. Maternal nutrition interventions should include adolescent girls, e.g., to delay age of first pregnancy, address adolescent anemia before pregnancy, etc.
- **SOCIO-ECONOMIC:** While households from all income quintiles are affected by malnutrition, those from the poorest two quintiles are consistently more affected, and they also tend to have less access to health services. Special measures should be taken to ensure that services reach these poorer households. Similarly, communities who suffer from social exclusion should be targeted.
- **GENDER:** While there are no longer significant differences in nutritional status of young girls versus young boys, gender dynamics amongst adults in the household continue to be a strong determining factor of malnutrition for women and children in the household. In recent decades, much focus has been given to targeting women in gender empowerment interventions for nutrition, which has often left out men. The emphasis needs to be re-shifted to a “whole household” approach ensuring that those who wield the most power, often the men and the grandmothers, are included in the discussions.
- **OPINION LEADERS:** Behavior change is a core intervention to achieve most nutrition results. Community members are more likely to adopt new behaviors if a leader in their community— either their geographic or their social community —has already adopted the behavior. Programs should target these opinion leaders first. For example, it may be more effective to also target wealthier individuals in communications for a new product such as micronutrient powders, not only because their children would benefit, but also because of the demonstration effect they will have on less wealthy households.
- **INTERVENTIONS:** Some nutrition interventions, by their very nature, are targeted at specific groups. Iron tablets are targeted at pregnant women and adolescent girls, zinc sup-

plements for treating diarrhea are targeted at children suffering from diarrhea, vitamin A supplementation is targeted at children aged six to 59 months, etc.

- **GEOGRAPHIC:** Some areas within countries are often more heavily affected by malnutrition, and these could be targeted. When selecting geographic areas to target, other factors should also be considered, such as the presence of other development partners, the ease of implementation and thus likelihood of success, and the political interest in some areas, which would provide visibility for results.



Nutrition counselling



Indicators for Incentive-Based Operations with Nutrition Results

Monitoring indicators should be SMART: Specific, Measurable, Attributable, Realistic / Relevant and Time-Bound. This is even more important when incentive payments are linked to achieving results. Although indicators could connote outputs or outcomes, it is generally more appropriate to link incentive payments to outputs or intermediate outcomes—rather than to final nutritional status outcomes. Improvements in nutritional status take much longer to materialize, and could be affected by factors beyond the control of whoever is to be incentivized. While direct measures of nutrition results are preferable, proxies may have to be used.

To target the incentive instrument to the right behaviors, a clear theory of change needs to be formulated and borne in mind. The results chain should include actions / behaviors at various levels, so that appropriate behaviors are incentivized at the relevant levels. The theory of change would take account of policies and programs at the government levels, supply-side readiness at the service delivery levels, the social mobilization and empowerment at the community level, and the eating / feeding / caring behaviors at the household and individual level. The ability to verify the achievement of targets—and to counter verify independently as necessary—is often a critical factor in selecting financial incentive indicators.

The basic framework for the causation of malnutrition is the starting point for the theory of change. Three broad sets of determinants are often cited as resulting in good or bad nutrition. *They are household food security, access to quality health care services, and behavioral factors*—generally referred to as the triad of food, health, and care. Therefore, the policies, programs, services, and behaviors that affect any of these three sets of determinants need to be clearly identified, and the incentive instruments need to be applied at the appropriate levels where the instruments are expected to be effective.

Government Level

⇒ *Development policy financing*

Development policy financing indicators can incentivize behaviors relating to nutrition-sensitive policies, budgeting, and other stewardship functions, such as multisectoral coordination and accountability, as well as legislation, and achievement of plans. The incentive would “wedge” nutrition into the overall national and subnational policy and stewardship agenda. Potential indicators at this level include:

- Increased allocation and expenditure on programs / activities contributing to nutrition (nutrition-specific and nutrition-sensitive)
- Preparation, approval, and adoption of a comprehensive nutrition strategy, and a fully costed national action plan, reflected clearly in the budget. Indicators could also track major milestones in the implementation of the strategy
- Establishment and functioning of a high-level multisectoral coordination structure
- Establishment of integrated management information systems that include appropriate data on nutrition indicators
- Nutrition-sensitive agricultural policies
- Legislation mandating appropriate food fortification with micronutrients
- Legislation on food safety
- Legislation on nutritional content of certain foods, e.g., banning sugary drinks
- Existence and functioning of enforcement mechanisms for regulation of food fortification, food safety, nutritional contents of food, etc.
- Social safety net programs that are nutrition-sensitive, that go beyond income generation, and promote better household behaviors aimed at improved nutrition status
- Education policy and programs that are sensitive to nutrition, such as an educational curriculum that includes substantive nutrition content and a program of extracurricular activities on behavior change for nutrition
- Labor laws are changed to mandate crèches and breastfeeding rooms for female employees
- Country-specific reform measures, e.g., improved targeting measures to focus on the first 1,000 days

⇒ *Program for Results (PforR / DLI) and Performance Based Budgeting (PBB)*

PforR / DLI and PBB can use a combination of policy reform indicators (see above), as well as service delivery indicators. The specific service delivery indicators would depend on which services need to be incentivized the most—keeping in mind factors such as strength of evidence, cost-effectiveness, affordability, low coverage, relative newness of the intervention, etc. While incentivizing service delivery through these mechanisms, measures should be taken to assess quality—even if it complicates the process—as well as quantity.

The targets for some of these indicators could evolve over the life of a project, starting at more modest levels and progressively reaching higher levels, including behavior change. One way of conceptualizing the process would be to define “results streams” and to set progressively more difficult disbursement linked indicators along the results chain for each stream. An example of such a results stream could be as follows.

- **Year 1:** Districts sign a performance agreement to implement a set of high-impact nutrition interventions

- **Year 1.5:** Community workers' knowledge of appropriate infant and young child feeding (IYCF) practices
- **Year 2:** Availability (coverage) of community counseling services for IYCF
- **Year 2.5:** Caretakers' knowledge of young children for IYCF practices
- **Year 3:** Appropriate IYCF practices, with increases in targets over subsequent periods

Service delivery indicators for PforR / DLI and PBB could include:

- Districts included in a national social registry for targeting the poorest and most vulnerable households
- Districts implementing a nutrition sensitive social protection program
- Districts, or other locally relevant subnational administrative units, with at least 80 percent of community health workers / midwives trained to deliver a package of core nutrition services. A more ambitious indicator would incentivize the knowledge of workers, but that will be more difficult to assess.
- Districts implementing a nutrition sensitive agriculture program
- Districts, or other subnational administrative units, where at least 80 percent of primary health centers offer community based nutrition counselling services
- Health facilities with all the inputs—human resources, equipment, supplies, as per checklist—required to provide comprehensive nutrition services to pregnant and lactating women and under-five children
- Districts, or other subnational administrative unit as appropriate, where more than 90 percent of the population has access to safe water and sanitary facilities
- Women 15–49 years of age, and under-two children who have received a basic package of reproductive health and nutrition services
- Caretakers and influencers who demonstrate a minimum level of infant and young child feeding knowledge
- Children 0–6 months who are exclusively breastfed
- Children at age six months receiving complementary food

Health Facility Level

⇒ *Performance Based Financing and Performance Based Contracting*

In performance based financing, payment is made on the basis of the quantity and quality of pre-identified individual services provided. Rates paid for the achievement of each service are pre-established, so that the incentives are clear to providers, and can be adjusted over time. Quality checklists are used periodically as complementary tools and the performance on the quality review is a factor in the total payment. Payments are also often adjusted to account for the additional cost of operating in certain areas, e.g., remote areas of a country.

When developing indicators to use in a PBF scheme, attention must be paid to ensuring that (i) the services selected have a clear operational definition that is easy to understand, e.g., what is the minimum content of the service; (ii) services are easily measurable; (iii) verifiers are able to extract the data on the service from registers or files; (iv) the name of an individual who received the services is identifiable so that the services can be verified and counter-verified; (v) services are provided on a regular basis so that health facilities can obtain payments regularly, i.e., at least quarterly; and (vi) not too many services are incentivized, i.e., a maximum of 25, due to the intensity of the verification and counter-verification.

Most of the experiences with PBF to date have been with services that fall under the responsibility of a health facility, i.e., services provided directly by facility workers or by community outreach workers that are accountable to a health facility. However, the PBF approach is increasingly being used to incentivize other levels of the system to ensure the alignment of incentives for effective service delivery.

Iron supplementation during pregnancy is one example of a nutrition service that could be incentivized with PBF. The *quantity* indicator could be the antenatal visits (first to fourth), which is a fairly standard indicator in PBF schemes, and which is when iron tablets and the related antenatal counseling should be provided. It may therefore be unnecessary to add a new quantity-related indicator. Alternatively, the indicator “pregnant women receiving a course of iron / folic acid tablets during ANC visits” may be used. In the quality checklist, the availability of iron tablets in the facility and the quality of counseling, tested by the knowledge of the health worker, could be incentivized. At higher levels in the system, other critical elements could be incentivized—such as up-to-date policy and implementation guidance for iron supplementation, timely availability of supplies in the supply chain, and inclusion of information on iron supplementation in the community mobilization policy—either through a PBF approach or a PforR within the same project. Similar approaches could be developed for most of the core nutrition-specific nutrition interventions outlined in Table 1. Some of the interventions, e.g., promotion of exclusive breastfeeding, lend themselves better to incentivizing the delivery of messages (payment of information sessions) and beneficiary knowledge than the breastfeeding behavior because that behavior is difficult to verify.

Examples of **quantitative** nutrition indicators for a PBF approach include:

- Children 0–24 months who receive a predefined package of essential nutrition services, meeting agreed quality standards / national protocol through a facility nutrition visit
- Pregnant and lactating women who receive a predefined package of essential nutrition services meeting agreed quality standards / national protocol through a facility visit; it could be the antenatal or child vaccination visit
- Pregnant and lactating women who receive iron / folic acid supplements
- Children 0–59 months with diarrhea receiving appropriate treatment with zinc and oral rehydration solution
- Children 6–59 months receiving vitamin A supplementation every six months
- Children 6–24 months receiving micronutrient powders to improve the quality of the diet
- Children receiving deworming treatment every six months
- Children 11–59 months old successfully treated for severe acute malnutrition
- Children 0–59 months receiving household visits for nutrition promotion, including nutrition counseling for the caregiver
- Households with pregnant women and / or under-five children visited by a health worker and provided outreach services including nutrition

Elements to consider in the PBF **quality checklist** for nutrition services include:

- Workers’ knowledge of key child feeding and caring behaviors
- Quality of counseling on child feeding and caring behaviors
- Availability of nutrition supplies, e.g., vitamin A, zinc, oral rehydration solution, iron / folic acid supplements, micronutrient powders, etc.

- Availability and quality of nutrition counseling behavior change materials, e.g., posters, guides, videos, etc.
- Data on women and children in need of nutrition services in the target area
- Data on women and children currently being left out from nutrition services
- Micro plans for community outreach activities

When PBC is used, a wider list of nutrition indicators can be adopted because the verification usually focuses on coverage of services and not on the payment of individual services, such as in PBF. Examples of nutrition indicators for a PBC approach include:

- Children 0–24 months who receive a predefined package of essential nutrition services, meeting agreed quality standards / national protocol would include counseling to caretakers on breastfeeding, complementary feeding, handwashing, etc.
- Pregnant and lactating women who receive a predefined package of essential nutrition services meeting agreed quality standards / national protocol
- Children 0–59 months with diarrhea receiving appropriate treatment with zinc and oral rehydration solution
- Children 6–59 months receiving vitamin A supplementation every six months
- Children receiving deworming treatment every six months
- Children 11–59 months old successfully treated for severe acute malnutrition
- Children 0–59 months receiving household visits for nutrition promotion, including nutrition counseling for the caregiver
- Households with pregnant women and / or under-five children visited by a health worker and provided outreach services including nutrition
- Children fully immunized

Community Level

⇒ *Community-Based PBF and Community-Based Development (CDD) Programs*

In community-based PBF and CDD programs, a main objective is to incentivize results that specifically require either community mobilization or collective action to create an environment that enables positive nutrition change to occur. There is a difference, however, between community-based PBF and CDD programs. Community-based PBF involves contracting with a community platform to achieve nutrition results, and payments are linked to the achievement of these pre-identified results. CDD programs aim to achieve similar results, but payments are not typically linked to these results. Because CDD payments are not linked to results, verification is less of a constraint and thus a somewhat wider range of nutrition indicators may be used. However, CDD programs tend to be more “bottom-up” than community-based PBF, which enhances ownership but poses an additional challenge that malnutrition is not always recognized as a priority by the community. Some of the determinants of malnutrition, e.g., access to water and sanitation, access to health and education services, improved agricultural practices, tend to emerge as community priorities, but not with specific nutrition objectives which the evidence demonstrates are critical to achieving nutritional impact.

Both community-based approaches could involve improvements in the physical environment, such as removal of physical barriers to accessing services, e.g., by building a small

bridge to cross a river. It could also involve changing community norms that create barriers to certain behaviors, such as norms surrounding the role that men should or should not play in infant and young child feeding.

Collective action could also be incentivized, such as community mapping of malnutrition and positive deviance approaches, whereby lessons learned from households with lower or no malnutrition are applied to support households with high levels of malnutrition in the same community.

Some nutrition products and services that are typically provided in facilities, e.g., zinc and oral rehydration solution for treatment of diarrhea, and services to treat cases of severe acute malnutrition without complications, can be provided in community settings. Such community-based services may be particularly useful in communities that are either isolated geographically or excluded socially, and consequently have less access to health facilities.

As noted above, one challenge with community-based approaches is that communities do not always identify malnutrition as a problem, and therefore, they may not know which specific actions to take to address it. In this case, the choice of indicators is all the more important because well-chosen indicators will focus the attention of community members on improvements. The choice of priority indicators will vary by community and should be based on an analysis of the determinants of malnutrition in the community—or at least at the next highest administrative level, for example at the district level, where data is more likely to be available. Some Bank operations have developed tools to facilitate the analysis of determinants of malnutrition at the community level, such as in Nepal. Operations may also need to build in a network of technical advisors in CDD operations to “coach” communities in making their projects more nutrition-sensitive.

Indicators that could be used in community-based PBF and CDD programs include:

- Community growth charts, accompanied by information on determinants of malnutrition, displayed at a prominent place in the community and updated regularly
- Positive deviance mapping and related action plans produced
- Children under-five suffering from severe acute malnutrition who are referred by the community to an appropriate health facility for management
- Children under-five identified as suffering from severe acute malnutrition who are successfully treated through community-based approaches
- Households which have sanitary toilet facilities and safe water supply
- Community members who do not practice open defecation
- Community plan to address food insecurity
- Households using adequately iodized salt for routine consumption
- Pregnant women / mothers of under-five children with the correct knowledge of pre-identified minimum, nutrition-related behaviors. Same indicator for men and for grandmothers
- Sufficient quantities of zinc and oral rehydration solution available to treat all cases of diarrhea in children under-five
- Pregnant and lactating women consuming iron supplements
- Quality checklists (similar to facility level)—applied to community-based events, including testing the quality of the messages

Household / Individual Level

⇒ *Cash Transfer Programs / Public Works Programs*

Cash transfer programs and public works programs each have their respective “core indicators” to measure the performance of their basic objectives, which is to protect poor households from shock and to ensure a minimum income. The income itself can have a positive impact on the consumption of nutritious foods, e.g., micronutrient-rich foods, or on the utilization of health and education services. These outcomes should be tracked.

Nutrition objectives can be further incentivized through cash transfer and public works programs, for example, by linking the cash transfers—through conditions or information packages—to the utilization of proven nutrition services (see list in Table 1). Since cash transfer programs are increasingly using softer conditions, i.e., less use of hard conditions that are difficult and costly to verify, the verifiability of indicators is less of a challenge than for performance based financing. It is therefore possible to incentivize results further up the chain of worker knowledge → caretaker / beneficiary knowledge → caretaker / beneficiary behavior → nutritional impact. This is an important feature because few of the incentive mechanisms reviewed in this study have the ability to reach as far up the results chain.

Public work programs provide additional income and increasing, skills training and other related services, e.g., savings. The more innovative programs also ensure that women can do work that is less strenuous; thereby decreasing the risk of further reducing their already low body mass index (BMI). Training programs for the beneficiaries should focus on some nutrition-sensitive areas, such as small-scale food processing and fortification. The choice works to be constructed through public works programs can also be nutrition-sensitive. Indicators that could incentivize nutrition results include:

- Pregnant women who attend antenatal clinics regularly—at least four times during pregnancy
- Consumption of iron supplements by women during pregnancy
- BMI of women during pregnancy
- Children fully immunized
- Women and children sleeping under insecticide-treated bednets to prevent malaria
- Household food consumption profile, by gender and age
- Rate of school completion for adolescent girls
- Mothers who report early and exclusive breastfeeding
- Mothers who report appropriate complementary feeding behaviors
- Mothers who participate regularly in nutrition promotion sessions
- Children who receive appropriate oral rehydration therapy and zinc for treatment of diarrhea
- Children under-five who consume adequate quantities of multiple micronutrient powders along with their regular diet
- Availability of crèches as part of public work programs
- Nutrition-sensitive community infrastructure constructed



Landscape of Nutrition Partners Working on Nutrition

Given the magnitude and complexity of the nutrition challenge, working in a cohesive and complementary manner with development partners is critical. When developing a nutrition-sensitive World Bank operation, an important step will be to undertake a mapping of partners and their priorities, and their areas of support. If the country has joined the Scaling Up Nutrition (SUN) movement, such a mapping may already exist, and the partners should already be organized into the following networks: donors, UN agencies, business, and civil society. See www.scalingupnutrition.org. When mapping nutrition partners, the following types of partners should be considered.

- **BILATERAL DONORS:** Some bilateral donors have prioritized nutrition for decades, whereas others have discovered it more recently. Donors are active in policy dialogue at the global level and through their bilateral relationships, e.g., through embassies in countries. They are also a source of financing for nutrition, either through their bilateral agreements with governments, through their contributions to multilateral agencies, or through direct agreements with implementation agencies such as nongovernmental organizations. They have traditionally distinguished between nutrition as part of an emergency response and humanitarian assistance or as part of addressing the long-term aspects of malnutrition—notably stunting and micronutrient deficiencies. Some donors have separate divisions responsible for each part of their programming areas. Increasingly, these two types of assistance are merging into a continuum. Some of the donors have a stronger interest in financing nutrition-specific interventions, whereas others have chosen to build on their preexisting priority areas, such as agriculture, and to make those investments more nutrition-sensitive.

Given the magnitude and complexity of the nutrition challenge, working in a cohesive and complementary manner with development partners is critical.

- **MULTILATERAL INSTITUTIONS:** A range of multilateral institutions are active partners in nutrition. All are active in the policy arena—nationally and globally—while also a source of financing at the country level. Some specialize in certain aspects of nutrition, e.g., maternal and child nutrition, food security, safety net programs, etc., whereas others bring to the table the ability to work in a wide range of sectors.
- **FOUNDATIONS:** In recent years, a number of international and national foundations have made nutrition a priority. Particularly the larger foundations can play a role similar to bilateral donors, i.e., a combination of policy advocacy and direct project financing. Some foundations have been created by companies to support non-commercial work and can be an entry point for collaboration with the private sector.
 - **CIVIL SOCIETY:** A wide range of civil society organizations are active players in nutrition. These include:
 - **International and national nongovernmental organizations (NGOs).** Some NGOs specialize in certain aspects of nutrition, whereas others are generalists. Some of the international NGOs are active in international policy advocacy as well as in direct program implementation. In some cases, international NGOs play a technical advisory role to national NGOs on nutrition issues. National NGOs working in nutrition are numerous and varied. They play an advocacy role and implement programs directly. NGOs are at times the implementers of contracts from governments, e.g., performance based contracting.
 - **Media.** Media personalities are opinion leaders that play an important role in raising the overall profile of nutrition and clarifying some of the specific issues. Some media partners are also involved in behavior change communication, either through groups dedicated to the subject, e.g., media foundations that specialize in behavior change in developing countries, or as contracted implementers of behavior change communication activities. In a country where nutrition is not a high priority or where it is misunderstood, it may be wise to proactively engage with the media to develop their capacity to engage on the issue.
 - **Religious leaders.** In many countries where malnutrition is highly prevalent, religious leaders are opinion leaders, and they can be effective agents either in an advocacy campaign or for individual behavior change. Some religious groups also manage organizations that offer nutrition services to the population. These same organizations are also a potentially important source of financing for nutrition in some countries.
 - **Academia / think tanks.** Some research groups and think tanks have focused specifically on nutrition and are important partners in areas such as advocacy and evidence generation for nutrition. A range of national and international universities are key players, with roles that range from preservice training of nutrition workers to impact evaluation and other types of research. Some academics in countries are important opinion leaders due to their deep technical knowledge on nutrition.
- **PRIVATE SECTOR:** The private sector plays a critical role in nutrition. They produce and process food, provide a high proportion of the health services in developing countries and produce nutrition-related products—such as specialized products for treatment of severe

malnutrition, vitamin and mineral supplements, and nutrition assessment tools. The private sector also tends to have a comparative advantage in deploying logistics systems in areas that are difficult to reach, which is a particular challenge for enabling the poorest and most vulnerable to access nutrition services. Assessing the private sector's level of engagement in a country will be a critical aspect of the partner mapping. A good starting point is usually national federations or associations that represent private sector entities. Equally important will be to assess the government capacity to engage with the private sector, notably in the area of regulation to balance the private sector's incentive to provide value to shareholders with the public interest in reducing malnutrition.



Additional Support to Task Teams and Leaders to Incentivize Nutrition Programming

A number of other resources are available at the World Bank to support task team in scaling up nutrition, including:

- **EXPERIENCED STAFF:** A group of World Bank staff who have technical knowledge and experience in integrating nutrition into national policies and programs. This group operates as a community of practice and is one of the Global Solutions Groups within the Health, Nutrition and Population Global Practice, under the leadership of the Global Solutions Lead, Meera Shekar (mshekar@worldbank.org). They can be integrated into World Bank task teams to support policy dialogue and operations.
- **SWAT TEAM:** The staff in the Global Solutions Group for nutrition and short-term consultants are available for rapid mobilization as part of the World Bank's response to country requests for technical assistance in policy reform, program design, implementation support evaluation, etc.
- **REFERENCE MATERIALS:** A number of technical guidance notes and other reference materials are available to guide teams. See Annex 2.
- **TRUST FUNDS:** A number of trust funds are available to support country teams in scaling up nutrition, including:
 - Japan Trust Fund
 - Power of Nutrition Trust Fund
 - Global Financing Facility (GFF) Trust Fund for Every Woman Every Child
 - Global Agriculture and Food Security Program (GAFSP) Trust Fund
 - Strategic Impact Evaluation Fund (SIEF) Trust Fund
 - Rapid Social Response (SRS) Trust Fund
 - Early Learning Partnership
- **ADDITIONAL SUPPORT:** Several donors and partners are in discussion with the World Bank to see how they can best support the institution to scale up its financing of operations to prevent stunting.

ANNEX 1. The Nutrition System

What are the main elements of a national nutrition system?

Countries successfully managing national nutrition programs share common governance structures, systems, and determinants—even if the political, cultural, and economic contexts for each country’s nutrition problems and solutions differ. Based on a recent systematic literature review of nutrition governance and policy processes, we outline the structures and factors that affect how the World Bank and its clients are solving their distinct undernutrition situations. This review¹³ highlights the critical components, challenges, and enabling factors that characterize countries with successful nutrition programs, which are alleviating undernutrition in their populations.

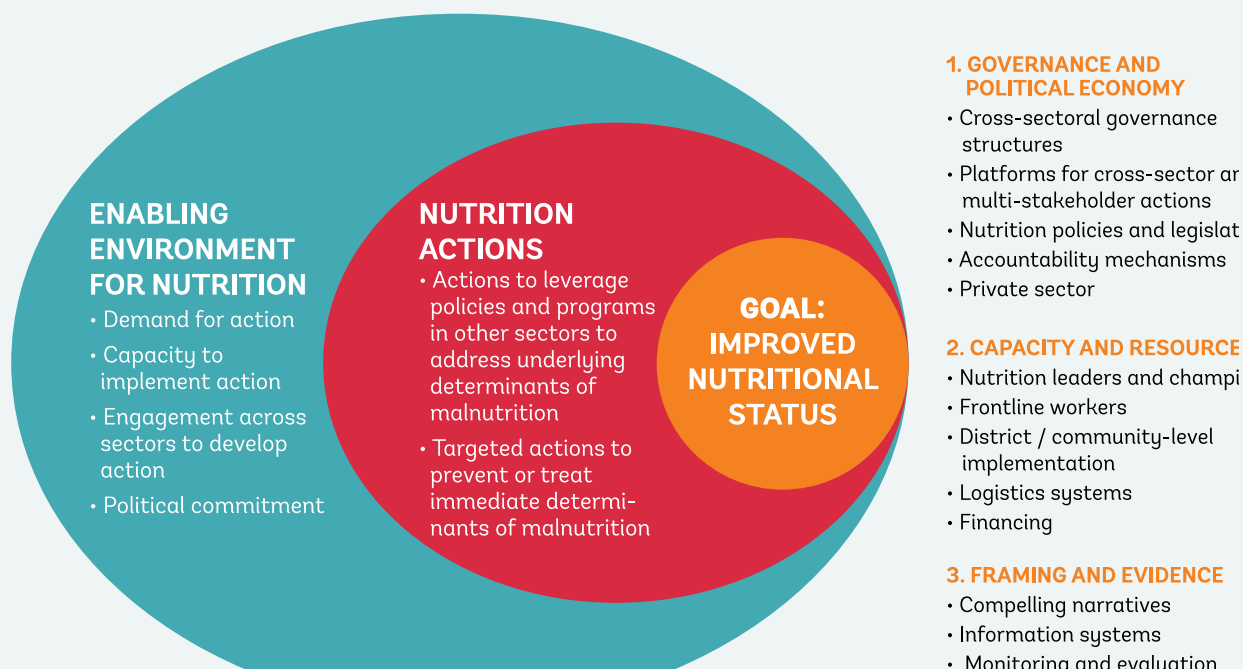
A country’s enabling environment is a critical backdrop to scale up effective national nutrition programs. The 2013 *Lancet* series on maternal and child nutrition defines an enabling environment as “political and policy processes that build and sustain momentum for the effective implementation of actions that reduce undernutrition.”¹⁴ The 2015 Global Nutrition Report¹⁵ identifies a series of actions in three domains that are required to create an enabling environment ultimately leading to actions to improve nutritional status. These are (1) governance and political economy; (2) capacity and resources; and (3) framing and evidence (see Figure 1). Each domain is described below.

¹³ S. Gillespie et al. 2013 *The Lancet* Maternal and Child Nutrition 4. The politics of reducing malnutrition: building commitment and accelerating progress. 82–99.

¹⁴ Ibid.

¹⁵ International Food Policy Research Institute. 2015. *Global Nutrition Report (GNR) 2015 Actions and Accountability to Advance Nutrition and Sustainable Development*. Washington, DC.

Figure 1. Structural Elements to Achieve Nutritional Impact at Scale



Source: Adapted from the Global Nutrition Report 2015.

1. GOVERNANCE AND POLITICAL ECONOMY

Cross-sectoral governance structures

A high-level, cross-sectoral governance structure(s) is needed at the national level to coordinate nutrition programming, e.g., a nutrition focal point located in the Prime Minister's office. This structure is charged with and accountable for coordinating an integrated nutrition policy and a proven set of programs to reduce undernutrition. In addition to a high level nutrition coordinating structure, platforms for cross-sector and multi-stakeholder actions need to be established to support nutrition programming. The Scaling Up Nutrition (SUN) global movement supports countries in establishing multi-stakeholder platforms (MSP) as an important first step in scaling up nutrition at the national level.

Nutrition policies and legislation

A national nutrition strategy and policies are also necessary to guide the process of improving the environment contributing to poor nutrition. A recent review¹⁶ of scaled up nutrition programs found that national nutrition policies frequently lack a number of components critical for success. These are planning for well-designed evidence-based nutrition interventions; clear goals, targets, and timelines for desired nutrition outcomes and impacts; attention to capacity building at all levels; monitoring and evaluation; and a financing plan.

Improved governance through legislation for nutrition-specific and nutrition-sensitive activities and commodities is also central to achieving effective nutrition programs. For example, governments need to institute laws and standards to govern food fortification, legislation to im-

¹⁶ S. Gillespie et al. 2015. *Advances in Nutrition* 6. Scaling Up Impact on Nutrition: What Will it Take? 440–51.

plement the Code of Marketing of Breastmilk Substitutes, food safety standards, maternity leave, and regulations regarding the marketing of foods to children—among other issues that require good governance.

Accountability mechanisms

Government accountability to its citizens is reinforced by international commitment. “Accountability is the glue that connects commitment to action,” according to the 2015 Global Nutrition Report.¹⁷ International accountability mechanisms include the six 2025 World Health Assembly (WHA) nutrition targets and the Sustainable Development Goals (SDGs). The international community has committed to a series of important nutrition targets by 2030. SDG 2.2 calls for an end to all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under-five years of age and addressing the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.¹⁸ Countries need to develop and disseminate specific commitments and targets for nutrition, e.g., reducing child stunting, coverage of children with vitamin A supplements, and the early initiation of breastfeeding.

Tracking and reporting the accomplishments of national nutrition commitments are important next steps. A variety of reporting mechanisms exist at the global level and can be adapted to individual country contexts. In 2015, for example, WHO member states adopted a Global Monitoring Framework on Maternal, Infant and Young Child Nutrition with 14 nutrition related indicators, in addition to the six WHA nutrition targets.¹⁹

Checklists and scorecards to track nutrition commitments can be used at multiple levels within a country, starting at the community and moving to district, regional, and national levels. Social audits and public hearings at the local levels help to raise awareness, create demand on the part of families, and mobilize the commitment of communities to invest resources in the damaging but often invisible problem of undernutrition. Another important accountability mechanism is engaging the media to highlight progress or challenges.

The private sector

The private sector plays a major role in a nation’s food system(s) and directly affects the nutrition status of its citizens. Ranging from food production and processing to food distribution and retail, the private sector is a major player in the business of feeding a population. In addition, through the private sector’s participation in the health sector, the media, and the technology sector—including mobile phones to provide nutrition and health information to consumers as well as data collection for monitoring and evaluation purposes, the private sector is an influential partner in producing better or worse nutrition for vulnerable groups such as children and pregnant women.

The potential for conflict of interest is significant between the private sector’s primary goal of increasing value for investors and shareholders and optimal public health and nutrition outcomes. Aggressive marketing of breastmilk substitutes is a classic example. So is the production and marketing of sugary beverages and high fat and salty snack foods, which contribute to overweight, obesity, and the rise of chronic diseases such as diabetes.

*Accountability
is the glue
that connects
commitment
to action.*

¹⁷ International Food Policy Research Institute. 2015.

¹⁸ United Nations. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

¹⁹ WHO indicators. http://www.who.int/nutrition/events/2015_informal_consultation_monitoringframework_miyen_backgroundpaper_indicators.pdf.

How can the private sector be incentivized to meet the nutritional needs of the lower income quintiles by developing low-cost fortified complementary foods and affordable multiple micro-nutrient supplements for pregnant women, for example, while also holding the private sector accountable for positive nutrition outcomes? Governments, international organizations, and civil society can work together to meet this challenge through a variety of mechanisms, including regulatory, political, and market-based mechanisms.²⁰ Transparency is a critical attribute of public-private sector engagements, including clarifying how policies that affect the nutrition of vulnerable groups are affected by private sector influence.

Accountability mechanisms for engaging with the private sector can include direct imposition of food safety laws and production standards, taxes and subsidies, and public praise or criticism of industry and businesses by politicians or others. Consumer watchdog groups, shareholder actions at annual company meetings, and consumer boycotts are ways that civil society can hold the private sector accountable to positively affecting nutrition.²¹

2. CAPACITY AND RESOURCES

Nutrition leaders and champions

Focused leadership and national and international champions for nutrition are critical for success in nutrition programs and approaches.^{22,23} Strategic, experienced senior leaders, particularly within government, are critical to mobilize others across sectoral boundaries and to build effective teams and partnerships to collaboratively address complex undernutrition issues and to manage competing stakeholders' interests at all levels of the nutrition and food system.²⁴

Common challenges for nutrition leaders include working effectively with ministries, donors, and other stakeholders, scarce data, understanding local level contexts and scenarios of undernutrition, as well as the lack of coherent country policies, goals, and programs. Even when political rhetoric supports nutrition, the ability to hold politicians and bureaucrats accountable to nutrition commitments is frequently difficult.

Possible approaches to build the capacity of leaders in nutrition include (1) coaching and other techniques to increase adult development, which require a substantial investment of time, and (2) training programs to impart technical nutrition knowledge and skills in stakeholder mapping, advocacy, and transforming evidence to policy reform and action, among other trainings that are generally shorter in duration. Proactive planning for and investment in developing nutrition leaders is crucial to improving nutrition outcomes in high burden countries.

Frontline workers at sufficient capacity

The technical capacity and motivation of frontline workers is critical to delivering quality nutrition services. Accurate nutrition knowledge and training in applied skills is necessary, e.g., measurement of children and effective counseling techniques for all cadres and levels of health care staff from physicians and nurses to community health workers and village volunteers. Staffing and coverage of rural and remote health facility settings is often problematic, and the high turnover of paid and volunteer health workers is a challenge to adequate human capacity nutrition staffing for many countries.

Incentives to encourage and retain nutrition workers—particularly frontline workers—can take different forms. Financial rewards are one type of incentive, but others may also be effective,

²⁰ International Food Policy Research Institute. 2015.

²¹ Ibid.

²² Ibid.

²³ N. Nisbett et al. 2015. *Food Policy* 53. What drives and constrains effective leadership in tackling child undernutrition? Findings from Bangladesh, Ethiopia, India and Kenya. 33–45.

²⁴ Ibid.

including peer recognition, the opportunity for additional training or study, performance-linked rewards such as local community-based award ceremonies, competitions between service areas, and job promotions.²⁵

Implementation at district and community level

A functioning decentralized administrative governance structure is key to the effective delivery of nutrition services at the district and community levels. A six-country governance study²⁶ found that the following attributes of sub-national governance are helpful for moving nutrition policy successfully into action. They are (1) capacity to effectively implement nutrition services at the local level; (2) politicians and local leaders at district and community levels who understand and support the importance of addressing nutrition issues, which are also supported by decentralized budgets and an understanding of the potential political salience of malnutrition; and (3) timely and accurate data about the undernutrition situation.

Supply and logistics systems

An effective and efficient supply system is required to source and deliver the commodities that support nutrition programming. Supplies include micronutrient supplements, e.g., vitamin A capsules, micronutrient powders, oral rehydration salts and zinc tablets, therapeutic food for malnourished children, supplementary food, scales and other monitoring and measurement equipment, among other necessary supplies.

Supply chain planning depends on the careful assessment of need, including determining the number of beneficiaries that require which type(s) of commodities; the duration of need; the distance or methods of commodity transport, etc.; and a functioning information system to manage the process from planning through procurement, transportation, storage and delivery to beneficiaries. Determining the shelf life of commodities must be part of the planning, including the risk of food-borne illness, e.g., for supplementary foods. A quality assurance system must also be established for product sampling and testing, for example.

New technologies, such as Rapid SMS, are providing innovative ways to monitor supply chain logistics. By sending mobile text message data, with real-time reports on the distribution of nutrition commodities, staff can report stock-outs at local health clinics to central warehouses so supplies can be transported immediately, instead of weeks or months later.

Financing

Sustainable and effective nutrition programming requires predictable funding from a combination of domestic, international, donor, and public and private sectors. To determine the financing requirements and gaps for national nutrition programs, a costing exercise is a necessary first step in the planning process. Several different costing approaches and tools have been used. More than 20 Scaling Up Nutrition (SUN) countries have prepared costed nutrition plans using several approaches. The program unit cost approach is based on estimates of the cost per child of a program in similar countries, such as a program for the community management of severe acute malnutrition. The ingredients approach breaks down activities into their components and costs them individually. Although the ingredients approach is considered the more precise, it is also the more resource-intensive approach to costing a program.

3. FRAMING AND EVIDENCE

Narratives that create compelling argument for change

Generating political will is necessary to build and sustain the interest and momentum necessary

²⁵ S. Gillespie, et al. 2015. *Advances in Nutrition* 6. Scaling Up Impact on Nutrition: What Will it Take? 440–51.

²⁶ A.M. Acosta and Fanzo, J. 2012. *Fighting maternal and child malnutrition: analyzing the political and institutional determinants of delivering a national multisectoral response in six countries. A synthesis paper*. Brighton, UK: Institute of Development Studies.

for successful national nutrition policies. The experiences of Bangladesh, Brazil, Ethiopia, India, Peru, and Zambia demonstrate the importance of insuring that nutrition is framed as part of the broader national development agenda to raise nutrition to a higher public profile.²⁷ Raising national awareness about the critical 1,000 day window to prevent irreparable damage to a child's cognitive and physical development links nutrition programming directly to a nation's human capital and development goals.

Peru and Brazil have elevated nutrition to the national agenda. In Peru, nutrition became a centerpiece of the government's engagement with its citizens with a presidential promise to reduce stunting by 5 percent for all children under five in five years, known as the "5 by 5 by 5" commitment. Brazil framed its drive to improve nutrition as part of the government's program to alleviate poverty and hunger—raising the issue of nutrition from a narrow health sector concern to one of broad and national importance.

Information systems with data and metrics for monitoring nutrition

For accountability mechanisms to be effective, accurate data must be available to track, analyze, and report the results of interventions and programs designed to reduce undernutrition. Governments need to collect comparable data systematically with consistent frequency, coverage, and quality over time. Persistent gaps exist in data about infants and young children's diets and the heights and weights for women of reproductive age across countries—as well as many other information gaps for individual countries.²⁸

The traditional nationally representative household surveys such as the Demographic and Health Surveys (DHS) or UNICEF's Multiple Indicator Cluster Surveys (MICS) can be complemented by less expensive survey methods. For example, the Helen Keller International post-event coverage surveys (PECS) require smaller samples and can be implemented annually. Mobile phones can also be used for rapid data collection, which may be useful to expand nutrition surveillance and increase the availability and use of quality nutrition data.

The European Union and the Scaling Up Nutrition movement are leading the National Information Platforms for Nutrition initiative (NIPN). It aims to be a country-led and owned approach to support the collection of comparable information about nutrition outcomes and resources and programs supportive of improved nutrition. The NIPN's intended goals are better donor coordination, strengthened nutrition strategies and program planning, and a fuller understanding of the contributions of nutrition-specific and nutrition-sensitive actions delivered through multiple sectors.

What is needed to scale up an effective response?

With a solid evidence base to guide the selection of nutrition-specific interventions, countries must prioritize national scale up of programs that effectively and efficiently deliver quality nutrition services. As nutrition-sensitive approaches to improved nutrition are tested and evaluated for delivery through agriculture, social protection, and education, they will also need to be scaled up. The following key elements critical to scaling up nutrition programs based on the research by Gillespie²⁹ are as follows:

- A clear vision of the type of large-scale nutrition impact that is envisioned, along with metrics and a persuasive story line to explain how and why this impact will be achieved.

²⁷Ibid.

²⁸International Food Policy Research Institute. 2015.

²⁹S. Gillespie et al. 2015. *Advances in Nutrition* 6. Scaling Up Impact on Nutrition: What Will it Take? 440–51.

For accountability mechanisms to be effective, accurate data must be available to track, analyze, and report the results of interventions and programs designed to reduce undernutrition.

- Clarity about the specific interventions / approaches that will be scaled up, e.g., nutrition-specific, nutrition-sensitive, and the context, e.g., household and community settings, stand-alone project or integrated into the national health system, etc., in which the scale up will occur.
- High-level political support, including a nutrition leader / champion; national and local level commitment to resolving nutrition problems and incentives for achieving tangible results.
- Planning for what will be scaled up and how. Scaling up processes may take the form of quantitative scale up (expansion in size, geographical reach or budget); functional scale up (increased types / numbers of activities); political scale up (growing through political support); and organizational scale up marked by increased strength and capacity of the organization.

A comprehensive approach to reducing malnutrition will require actions at all levels of a country's health system, across a number of key sectors, and focused on supply and demand.

- Adequate capacity to go to scale, including strong organizations and systems that will support / empower the workforce needed to achieve the nutrition objectives of the program / strategy. In addition, the strategic capacity of leaders and managers, e.g., skills for building commitment, conflict resolution, and strategic communication among others, and the operational capacity of both management and the workforce are important.
- Within governance, there is a need for horizontal (the systems / structures supporting cross-sectoral engagement on nutrition) and vertical (national to community-level systems and structures) coherence as well as the resolution of trade-offs for such issues as tension between community ownership of small-scale programs and large scale implementation, quantity versus quality in the process of scaling up, and short-term versus longer-term impacts.
- To finance scale up of nutrition programs, funding needs to be adequate, stable, and flexible to support adaptation of the scale up process as needed, including responding to local needs and learning.³⁰
- Monitoring, learning, and adapting midcourse, and evaluation of program impacts are all important components of the process of going to scale.

How to coordinate an effective multisectoral response?

A comprehensive approach to reducing malnutrition will require actions at all levels of a country's health system, across a number of key sectors, and focused on supply and demand. The health sector policy-making and service delivery systems—the traditional “home” of nutrition interventions—will likely continue to be a main platform to address the immediate causes of malnutrition through direct nutrition interventions. Nevertheless, several nutrition-specific interventions can at least be partly delivered through other sectors. Addressing the underlying causes of malnutrition through nutrition-sensitive interventions will also require actions from other key sectors, notably education, social protection, agriculture, gender, and water and sanitation.

³⁰ Estimating the cost of scaling up nutrition programs remains challenging for several reasons. Detailed costing studies for specific contexts are often unavailable, although there are several groups, including the World Bank, that are working with countries to correct this. More is known about the costs for delivering nutrition-specific interventions; whereas much less information is available about the costs of nutrition-sensitive approaches to undernutrition. Similarly, there is little information about the costs of creating an enabling environment for nutrition.

A multisectoral nutrition response is complex and requires a strong coordinating mechanism at the national level, but usually also at other levels of the system. In federated states, coordination mechanisms are also necessary at the provincial and state level, and in all countries, usually also at a district level or its equivalent. Given the complexity of the undertaking, a successful model may follow the following steps:

***Plan multisectorally → implement sectorally →
review progress regularly multisectorally.***

While multisectoral coordination is required at the planning and review stages, the sectors will implement independently. Such a model is probably more realistic than attempting to have all the sectors implementing jointly at all times in a given geography. However, the model is workable only if the relevant ministries are incentivized to meet together to plan the program and to re-meet to review progress and to take corrective actions as necessary.

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Annex 3. World Bank Projects with Nutrition Objectives

REGION	COUNTRY	PROJECT NUMBER	PROJECT TITLE	TASK TEAM LEADER
AFR	Benin	P143652	Food, Health and Nutrition Project	Mulder-Sibanda, Menno
AFR	Burkina Faso	P124015	Social Safety Net project	Monchuk, Louise Victoria
AFR	Cameroon	P104525	Health Sector Support Investment (SWAP)	Robyn, Paul Jacob
AFR	Central African Republic	P149512	Emergency Food crisis & Agriculture relaunch	Ehoue, Bleoue Nicaise
AFR	Chad	P148052	Mother and Child Health Results Strengthening Project	Diack, Aissatou
AFR	Chad	P151215	Emergency Food and Livestock Crisis Response	Hopkins, Jane C.
AFR	Comoros	P150754	Social Safety Net Project	Vermehren, Andrea
AFR	Congo, Democratic Republic	P147555	Health System Strengthening Project	Samaha, Hadia Nazem
AFR	Congo, Republic	P143849	Health Sector Project	Fritsche, Gyorgy Bela
AFR	Cote d'Ivoire	P147740	Health Systems Strengthening & Ebola Preparedness	Haagen, Dominic S.
AFR	Cote d'Ivoire	P119328	Emergency Basic Education Support Project	Kamil, Hamoud Abdel Wedoud
AFR	Djibouti	P131194	Improving Health Sector Performance	Ogaltin, Emre
AFR	Ethiopia	P146883	Productive Safety Nets Project 4	Coll-Black, Sarah
AFR	Ethiopia	P148591	Second Agricultural Growth Project	Goodland, Andrew D.
AFR	Gambia, The	P143650	Maternal & Child Nutrition & Health Results	Hasan, Rifat
AFR	Ghana	P145792	Maternal, Child Health & Nutrition	Akala, Francisca Ayodeji
AFR	Ghana	P105092	Nutrition and Malaria Control for Child Survival	Awittor, Evelyn
AFR	Guinea	P147758	Primary Health Services Improvement	Magagi, Ibrahim
AFR	Guinea	P123900	Productive Social Safety Net Project	Zampaglione, Giuseppe
AFR	Kenya	P148098	Kenya Health Sector Support Project	Ramana, Gandham N.V.
AFR	Lesotho	P114859	Lesotho Maternal & Newborn Health PBF	Yamashita-Allen, Kanako
AFR	Madagascar	P131945	Emergency Support to Critical Education, Health, Nutrition	Qamruddin, Jumana N.
AFR	Madagascar	P149323	Social Safety Net Project	Vermehren, Andrea
AFR	Malawi	P125237	Nutrition & HIV/AIDS Project	Hyder, Ziauddin
AFR	Malawi	P105256	Agricultural Development Program Support Project	Durand, Olivier
AFR	Malawi	P133620	Strengthening Safety Nets System	Drabek, Ivan
AFR	Malawi	P154803	Malawi Floods ERL	Parvez, Ayağ

REGION	COUNTRY	PROJECT NUMBER	PROJECT TITLE	TASK TEAM LEADER
AFR	Mali	P127328	Emergency Safety Nets project	Pereira Guimaraes Leite, Phillippe George
AFR	Mozambique	P151407	Third Agriculture Development Policy Operation	Nijhoff, Jan Joost
AFR	Niger	P147638	Population and Health Support Project	Karamoko, Djibrilla
AFR	Niger	P132405	Support to Quality Education Project	Majgaard, Kirsten
AFR	Niger	P123399	Niger Safety Net Project	Del Ninno, Carlo
AFR	Nigeria	P146583	Saving One Million Lives	Loevinsohn, Benjamin P.
AFR	Nigeria	P120798	Nigeria States Health Investment Project	Odutolu, Ayodeji Oluwole
AFR	Senegal	P129472	Health & Nutrition Financing	Lemiere, Christophe
AFR	Senegal	P070541	Senegal Nutrition Enhancement Program	Mulder-Sibanda, Menno
AFR	Senegal	P115938	Rapid Response Child-Focused Social Cash Transfer and Nutrition Security Project	Mulder-Sibanda, Menno
AFR	Senegal	P133597	Senegal Safety Net	Coudouel, Aline
AFR	South Sudan	P127187	South Sudan Health Rapid Results Project	Chisaka, Noel
AFR	Tanzania	P152736	Strengthening PHC for Results	Nguyen, Son Nam
AFR	Togo	P143843	Maternal and Child Health Support	Ousmane Diadie, Haidara
AFR	Togo	P127200	Community Development and Safety Nets	Van Dyck, John
AFR	Togo	P144484	Pilot Cash Transfer Program	Van Dyck, John
AFR	Uganda	P143324	Enhance Smallholder Family Nutrition	Hyder, Ziauddin
AFR	Uganda	P149286	Multisectoral Food Security Nutrition	Hyder, Ziauddin
AFR	Zambia	P145335	Health Services Improvement Project	Workie, Net-sanet Walelign
AFR	Zambia	P147745	Livelihood & Nutrition Project	Hyder, Ziauddin
EAP	Cambodia	P132751	SP Cash Transfer Pilot Project	Acosta, Pablo Ariel
EAP	Indonesia	P128832	PNPM RURAL 2012-2015	Woo, Sonya
EAP	Indonesia	P132585	TF PNPM GENERASI PROGRAM	Wrobel, Robert
EAP	Lao People's Democratic Republic	P151425	Health Governance and Nutrition Development Project	Chanthala, Phetdara
EAP	Lao People's Democratic Republic	P120495	Lao PDR Community Nutrition	Tandon, Ajay
EAP	Lao People's Democratic Republic	P123891	Mobilizing Ethnic Communities for Imp	Ishihara, Satoshi
EAP	Timor-Leste	P145491	Community Driven Nutrition Improvement	Sullivan, Eileen Brainne
EAP	Vietnam	P152023	Northern Mountain Child Nutrition	Dao, Huong Lan

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EAP	Vietnam	P128072	VN-Central Highlands Poverty Reduction	Bradley, Sean
ECA	Tajikistan	P146109	Tajikistan JSDF Nutrition Grant 2	Lavado, Rouselle F.
LCR	Brazil	P101504	Second Bolsa Família	Steta Gandara, Maria Concepcion
LCR	El Salvador	P117157	Strengthening Public Health Care System	Gordillo-Tobar, Amparo Elena
LCR	Haiti	P123706	HT Improving Maternal and Child Health	Rajkumar, Andrew Sunil
LCR	Guatemala	P077756	Maternal and Infant Health and Nutrition	Lao Pen, Christine
LCR	Nicaragua	P106870	Community and Family Health Care Services	Gordillo-Tobar, Amparo Elena
LCR	Haiti	P126744	Relaunching Agriculture: RESEPAG II	Colleye, Pierre Olivier
LCR	Honduras	P148737	Corredor Seco Food Security Project	Weiss, Eli
LCR	Nicaragua	P148809	Caribbean Coast Food Security Project	Garcia, Augusto
LCR	Peru	P079165	Sierra Rural Development Project	Diaz Rios, Luz Berania
LCR	Haiti	P124134	Education for All Project - Phase II	Baron, Juan
LCR	Guatemala	P145410	Pilot Improve the Dev and Nutrition	Bassett, Lucy Katherine
LCR	Peru	P117310	Results Nutrition for Juntos SWAp	Marini, Alessandra
LCR	Peru	P131029	Social Inclusion TAL	Silva Villalobos, Carmen Veronica Del Rosar
MNA	Djibouti	P130328	Crisis Response-SSN project	Koettl-Brodmann, Stefanie
MNA	Yemen, Republic of	P094755	Health & Population	Abdel-Hamid, Alaa Mahmoud Hamed
MNA	Yemen, Republic of	P131236	Emergency Targeted Nutrition Intervention	Abdel-Hamid, Alaa Mahmoud Hamed
SAR	Afghanistan	P129663	System Enhancement for Health (SEHAT)	Sayed, Ghulam Dastagir
SAR	Afghanistan	P112446	Strengthening Health Activities for the Rural Poor (SHARP)	ul Haq, Inaam
SAR	Bangladesh	P009496	Bangladesh Integrated Nutrition Project	Gragnotati, Michele
SAR	Bangladesh	P118708	Health Sector Development Program	Alam, Bushra Binte
SAR	Bangladesh	P074841	Health Nutrition and Population Sector Program	Binte Alam, Bushra
SAR	Bangladesh	P120583	Modern Grain Storage Facilities	Verissimo, Patrick
SAR	Bangladesh	P123457	Integrated Agricultural Productivity	Cook, Edward C.
SAR	Bangladesh	P149605	Nuton Jibon Livelihood Improvement Project	Manoharan, Seenithamby
SAR	Bangladesh	P146520	Income Support Program for the Poorest	Malik, Muhammad Iftikhar

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SAR	India	P121731	IN: ICDS Syst Strength & Nut Imp Program	Pinto, Sangeeta Carol
SAR	India	P149811	Karnataka Multisectoral Nutrition Pilot	Al-Omair, Abeyah A.
SAR	India	P143608	Telangana Rural Inclusive Growth Pr	Shah, Parmesh
SAR	India	P152210	Andhra Pradesh Rural Inclusive Growth Pr	Shah, Parmesh
SAR	India	P102627	Bihar PRI	Nagarajan, Mohan
SAR	Nepal	P125359	Community Action for Nutrition Project	Bhattarai, Manav
SAR	Nepal	P128905	Agriculture and Food Security Project	Mghenyi, Elliot Wamboka
SAR	Pakistan	P123394	Punjab Health Sector Reform Project	Masud, Tayyeb
SAR	Pakistan	P131850	Enhanced Nutrition for Mothers and Child	Kaufmann, Silvia
SAR	Pakistan	P128307	Sindh Agricultural Growth Project	Syed, Tahira
SAR	Pakistan	P150974	Improving Nutrition at Local Level	Alvi, Mohammad Imtiağ Akhtar
SAR	Sri Lanka	P118806	Second Health Sector Development	Navaratne, Kumari Vinodhani

Annex 4. Glossary of Nutrition Terms

TERM	DEFINITION <i>(adapted from World Bank. 2013. Improving Nutrition Through Multisectoral Approaches. Washington, DC: World Bank.)</i>
<i>First 1,000 days</i>	The period of time, or window of opportunity, from conception to 2 years old, in which nutritional requirements are substantial and damage from malnutrition is largely irreversible.
<i>Anthropometry</i>	The study and techniques of measuring the human body. Anthropometric measurements are often used to compare or classify individuals or population groups.
<i>Community-based management of acute malnutrition</i>	The management of acute malnutrition through (1) inpatient care for children with severe acute malnutrition with medical complications and infants under 6 months old with visible signs of severe acute malnutrition; (2) outpatient care for children with severe acute malnutrition; and (3) community outreach.
<i>Complementary feeding</i>	The introduction of other foods and liquids when breast milk alone is no longer sufficient to meet the nutritional requirements of infants. The transition from exclusive breastfeeding to family foods typically covers the period from 6–24 months old, even though breastfeeding may continue beyond 2 years old. This is a critical period of growth during which nutrient deficiencies and illnesses contribute globally to higher rates of undernutrition among children under 5 years old. Complementary food is any food, whether manufactured or locally prepared, given in addition to breast milk (or a breast milk substitute) to satisfy the nutritional requirements of the child.
<i>Deworming</i>	Periodic drug treatment with an anthelmintic to purge the body of soil-transmitted helminths, such as roundworm, whipworm, and hookworm. Soil-transmitted helminths impair nutrition status through loss of iron and protein, and malabsorption of and competition for nutrients. WHO estimates that over 270 million preschool children and over 600 million school-age children are living in areas where these parasites are intensively transmitted and in need of treatment and preventive interventions.
<i>Dietary diversity</i>	The number of food groups consumed over a given period of time used as an indicator of household food security and diet quality.
<i>Double burden of malnutrition (DBM)</i>	The simultaneous occurrence of undernutrition and overweight or obesity in the same community, household, or individual. The DBM is linked to two simultaneous global transitions: (1) the nutrition transition, which refers to the shifting dietary consumption and energy expenditures that coincide with economic, demographic, and epidemiological changes, such as modernization, urbanization, economic development, and increased wealth; and (2) the epidemiological transition that accounts for the replacement of infectious diseases by chronic diseases over time and refers to the pattern of increased population growth rates, due to improved public health, sanitation and disease therapy and treatment, followed by a releveling of population growth, due to subsequent declines in fertility rates.

TERM**DEFINITION** *(adapted from World Bank. 2013. Improving Nutrition Through Multisectoral Approaches. Washington, DC: World Bank.)*

Food security	When all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life.
Food system	A collaborative network that integrates sustainable food production, processing, distribution, consumption, and waste management in order to enhance the environmental, economic, and social health of a particular place.
Food fortification	The addition of one or more micronutrients (vitamins and minerals) to a food during processing. Ideally, food fortification provides a public health benefit with minimal risks to health in the population.
Growth monitoring	Growth monitoring follows the growth rate of a child in comparison to a standard by periodic, frequent, anthropometric measurements in order to assess growth adequacy and identify faltering early. Growth Monitoring & Promotion (GMP) consists of growth monitoring combined with counseling to increase awareness of child growth, improve caring practices, and increase demand for other nutrition-related services.
Hunger	A feeling of discomfort, illness, weakness, or pain due to a prolonged lack of food.
Infant and Young Child Feeding (IYCF)	Refers to specific recommendations and guiding principles for feeding children between birth and 24 months old for optimal nutrition, health, and development. A set of eight core population-level indicators ³¹ have been developed to assess feeding trends over time; improve targeting of interventions; and monitor progress in achieving goals and evaluating the impact of interventions. The principles include: <ul style="list-style-type: none">• Early initiation of breastfeeding—initiation of breastfeeding within one hour of birth.• Exclusive breastfeeding for infants under 6 months old—the feeding of an infant only with breastmilk from his or her mother or a wet nurse, or expressed breastmilk, and no other liquids or solids except vitamins, mineral supplements, or medicines in drop or syrup form.• Continued breastfeeding at 1 year—children 12–15 months old who received breast milk during the previous day.• Introduction of solid, semisolid or soft foods—infants 6–8 months old who receive solid, semisolid or soft foods.• Minimum acceptable diet—a composite indicator consisting of both minimum dietary diversity (children 6–23 months old receiving foods from four or more food groups) and minimum meal frequency (children 6–23 months old receiving solid, semisolid, or soft foods the minimum number of times per day or more).• Consumption of iron-rich or iron-fortified foods—children 6–23 months old who receive an iron-rich food or iron-fortified food that is specially designed for infants and young children or a food that is fortified in the home.

³¹ WHO (World Health Organization). 2008. Indicators for Assessing Infant and Young Child Feeding Practices. Conclusions of a Consensus Meeting held November 6–8, 2007. Washington, DC: WHO.

TERM**DEFINITION** (adapted from World Bank. 2013. *Improving Nutrition Through Multisectoral Approaches*. Washington, DC: World Bank.)***Intergenerational cycle of malnutrition***

Also referred to as the undernutrition cycle, a concept that describes how growth failure is transmitted across generations through the mother. The theory links undernutrition in the various stages of development: Small adult women are more likely to have low-birth-weight babies; children born with a low birth weight are more likely to suffer from growth failure during childhood; girls born with a low birth weight are more likely to become small adult women; and adolescent girls who become pregnant are even more likely to have low-birth-weight babies.

A child born weighing less than 2,500 grams is categorized as having a low birth weight. At the population level, the proportion of infants with a low birth weight often serves as an indicator of a multifaceted public health problem that includes long-term maternal malnutrition, ill health, hard work, and poor health care in pregnancy.

Lean or hunger season

Refers to the period between planting and harvesting, when food supplies can become scarce. Families may have to sell livestock, farming tools, and other assets to pay for food. During this period, poor farmers are at increased risk for malnutrition.

Malnutrition

Poor nutritional status caused by deficiency (undernutrition) or excess.

Commonly used anthropometric measures of nutrition status include:

- Stunting (chronic malnutrition)—low height for age, defined as more than 2 standard deviations below the mean of the sex-specific reference data. Stunting is the cumulative effect of long-term deficits in food intake, poor caring practices, and illness.
- Wasting (acute malnutrition)—low weight for height, defined as more than 2 standard deviations below the mean of the sex-specific reference data. Wasting is usually the result of a recent shock, such as lack of calories and nutrients or illness, and is strongly linked to mortality.
- Underweight—low weight for age, defined as more than 2 standard deviations below the mean of the sex-specific reference data.

Other anthropometric indicators are commonly used for program purposes, including:

- MAM (moderate wasting)—weight for height between 2 and 3 standard deviations below the mean of sex-specific reference data.
- AM (severe wasting)—weight for height more than 3 standard deviations below the mean of sex-specific reference data.
- Global acute malnutrition (moderate and severe wasting combined)—weight for height more than 2 standard deviations below the mean of sex-specific reference data.
- Moderate malnutrition (moderate underweight)—weight for age between 2 and 3 z-scores below the mean of sex-specific reference data.
- BMI is a measure of body fat, calculated as weight in kilograms (kg) divided by the square of height in meters (m²). Other measures of nutrition status are calculated using BMI. Overweight is defined as a BMI between 25 and 30 kg/m². Obesity is defined as a BMI of 30 or more. Although BMI is a good measure for determining a range of acceptable weights, it does not take into consideration some important factors, such as body build, the relative contributions of fat, muscle, and bone to weight.

TERM**DEFINITION** *(adapted from World Bank. 2013. Improving Nutrition Through Multisectoral Approaches. Washington, DC: World Bank.)****Micronutrient deficiency***

- Also referred to as hidden hunger, the lack of one or more micronutrients, often caused by disease or lack of access to or consumption of micronutrient-rich foods such as fruit, vegetables, animal products, and fortified foods. Micronutrients are vitamins and minerals that are needed by the body in small amounts to produce enzymes, hormones, and other substances essential for proper growth and development. Micronutrient deficiencies increase the severity and risk of dying from infectious diseases such as diarrhea, measles, malaria, and pneumonia. More than two billion people in the world are estimated to be deficient in iodine, vitamin A, iron, or zinc. Common micronutrient deficiencies include:
- Anemia—the condition of having a hemoglobin concentration below a specified cut-off point, which changes according to age, gender, physiological status, smoking habits, and the altitude at which the population being assessed lives. WHO defines anemia in children under 5 years old and pregnant women as a hemoglobin concentration of less than 110g/l at sea level. It is estimated that 50 percent of anemia worldwide is due to iron deficiency. Other causes of anemia include malaria and other parasitic infections; acute and chronic infections that result in inflammation and hemorrhages; deficiencies in other vitamins and minerals, especially folate, vitamin B12, and vitamin A; and genetically inherited traits, such as thalassemia.
- Iron deficiency—the most common nutritional deficiency in the world, resulting from insufficient iron in the body due to inadequate consumption of bioavailable iron, blood loss, or unmet increased iron requirements due to infection, pregnancy, rapid growth, dietary habits, or any combination of these.
- Iron deficiency anemia—the condition in which a deficiency in iron causes an insufficiency of healthy red blood cells. Iron deficiency and iron deficiency anemia are associated with fetal and child-growth failure, compromised cognitive development in young children, lowered physical activity and labor productivity in adults, and increased maternal morbidity and mortality. Women and young children are the most vulnerable to iron deficiency anemia, which increases the risk of hemorrhage and sepsis during childbirth, and is implicated in 20 percent of maternal deaths. Furthermore, children with iron deficiency anemia suffer from infections, weakened immunity, learning disabilities, impaired physical development, and in severe cases, death.
- Iodine deficiency—the condition resulting when iodine intake falls below the recommended level of 100-199g/l, tested through median urinary iodine concentration.
- Iodine deficiency disorders—the consequences of iodine deficiency in a population that can be prevented by ensuring that the population has an adequate intake of iodine. Iodine deficiency disorders can affect children at any stage of rapid growth, with the greatest negative effect on cognitive development occurring during pregnancy. Symptoms range from mild impairment of brain development and subtle degrees of brain damage, goiter, hypothyroidism, reproductive disorders (spontaneous abortion, stillbirth,

TERM**DEFINITION** (adapted from World Bank. 2013. *Improving Nutrition Through Multisectoral Approaches*. Washington, DC: World Bank.)***Micronutrient deficiency, (continued)***

hypothyroidism, reproductive disorders (spontaneous abortion, stillbirth, congenital abnormalities, and perinatal mortality) to its most severe form, cretinism. Iodine deficiency is the primary cause of preventable mental retardation and brain damage in the world

- Vitamin A deficiency—the condition resulting when vitamin A intake falls below recommended levels. Vitamin A deficiency may be exacerbated by high rates of infection and greatly increases the risk that a child may die from diseases such as measles, diarrhea, and acute respiratory infections. It is the leading cause of childhood blindness. Vitamin A deficiency compromises the immune systems of approximately 40 percent of the developing world’s children under 5 years old and leads to the deaths of as many as one million young children each year.
- Zinc deficiency—the condition resulting when zinc intake falls below recommended levels. Zinc deficiency is associated with growth retardation, malabsorption syndromes, fetal loss, neonatal death, and congenital abnormalities. Zinc supplementation reduces the duration and intensity of diarrheal illnesses and reduces clinical disease caused by acute respiratory infections and malaria.

Nutrition education

Encompasses a wide range of efforts to improve nutrition outcomes by changing nutrition practices, including one-to-one counseling and BCC, and leverages available communications channels including IEC, social media, and community-level education and mobilization.

Nutrition security

The ongoing access to a balanced diet, adequate care and feeding practices, a safe and clean environment, clean water, and adequate health care (both preventive and curative) for all people, and the knowledge needed to care for and ensure a healthy and active life for all household members.

Nutrition-sensitive

Interventions that address the underlying and basic determinants of maternal, fetal, and child nutrition and development, including 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 programs can serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage, and effectiveness. Examples include programs for agriculture and food security; SSNs; early childhood development; maternal mental health; women’s empowerment; child protection; schooling; WASH; and health and family planning services.³²

³²Ruel, M.T., Alderman, H., and the Maternal and Child Nutrition Study Group. 2013. The *Lancet* series on Maternal and Child Nutrition. Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? Vol. 382: 536-551.

TERM**DEFINITION** (*adapted from World Bank. 2013. Improving Nutrition Through Multisectoral Approaches. Washington, DC: World Bank.*)**Nutrition-specific**

Interventions that have an immediate and direct impact on maternal, fetal, and child nutrition and development, including adequate food and nutrient intake, feeding, caregiving and parenting practices, and low burden of infectious diseases. Examples include adolescent, preconception, and maternal health and nutrition; maternal dietary or micronutrient supplementation; promotion of optimum breastfeeding; complementary feeding and responsive feeding practices and stimulation; dietary supplementation; diversification and micronutrient supplementation or fortification for children; treatment of SAM; disease prevention and management; and nutrition in emergencies.³³

Oral rehydration therapy

A type of fluid replacement used to prevent or treat dehydration, especially that due to diarrhea, which is defined as the passage of three or more loose or liquid stools per day or more frequently than is normal for the individual. Diarrhea is usually a symptom of gastrointestinal infection, which can be caused by a variety of viral and parasitic organisms. Severe diarrhea leads to fluid loss and plays a particularly important role in nutrition and growth faltering, because it can lead to malabsorption of nutrients and appetite suppression. The adjusted odds of stunting at 24 months old increases by 5 percent with each episode of diarrhea in the first 24 months of life.

An oral rehydration solution is a liquid electrolyte solution that is used for the management of diarrhea among children. It is typically distributed in ready-to-use sachets that are added to one liter of clean water.

Psychosocial stimulation

The maternal-infant bond formed at the beginning of life is essential for cognitive, emotional, and social development later in life. Feeding and other care practices provide opportunities for psychosocial stimulation and help to establish a positive attachment between caregiver and child.

School garden

A small plot or plots within school grounds or nearby—typically managed by the schoolchildren with the help of parents, teachers and other community stakeholders—where a variety of crops are grown for the purpose of learning, recreation, and improving diets. Crops commonly include vegetables, fruits, legumes, tubers, and nonfood plants including medicinal herbs, spices, and fuel material that are grown throughout the year. Sometimes small livestock and fish are raised.

Smallholder farmer

Marginal and submarginal farm households that own or cultivate typically less than two hectares of land. Smallholder farmer households constitute a large proportion of the population in the developing world and of households living in poverty and hunger.

³³ Ruel, M.T., Alderman, H., and the Maternal and Child Nutrition Study Group. 2013. The *Lancet* series on Maternal and Child Nutrition. Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? Vol. 382: 536-551.

TERM**DEFINITION** *(adapted from World Bank. 2013. Improving Nutrition Through Multisectoral Approaches. Washington, DC: World Bank.)****Specialized nutritious foods***

A wide range of foods aimed at improving nutritional intake, including:

- Fortified blended foods, such as corn soya blend and wheat soya blend.
- Point-of-use or ready-to-eat foods, commonly lipid-based nutrient supplements, such as ready-to-use therapeutic food, which is a high-energy and protein-rich food with added electrolytes, vitamins and minerals, specifically designed to treat SAM in the rehabilitation phase, and ready-to-use supplementary food, which is a high-energy nutrition supplement particularly suited as a nutritional support in emergency situations or in the context of nutritional programs for the prevention or treatment of moderate malnutrition and deficiency-related illnesses. Typically oil- or peanut-based, ready-to-use foods do not have to be mixed with water and are microbiologically safe to enable outpatient use.
- Micronutrient powders (such as multiple micronutrient powder, multiple micronutrients, and micronutrient sprinkles) which are tasteless powders that come in individual sachets containing the recommended daily intake of 16 vitamins and minerals for one person. The powders can be sprinkled into home-prepared food after cooking or just before eating.
- High-energy biscuits are wheat-based biscuits that are easy to distribute and can improve the level of nutrition in the first days of an emergency when cooking facilities are scarce.

Supplementary feeding

A direct transfer of food to target households or individuals, most commonly PLW and children. The food may be prepared and eaten onsite or given as a dry ration to take home. Supplementary feeding is often provided as an incentive for participation in public services such as primary health care and education.

Undernourishment

When a person's usual daily food consumption, expressed in terms of dietary energy (kcal), is below the energy requirement norm. An undernourished person is not able to acquire enough food to meet the daily minimum dietary energy requirements.

