







PANDA

Background and Objectives

OPTIMA Nutrition, an allocative efficiency modelling tool for nutrition, has been developed through a collaboration between the Bill & Melinda Gates Foundation (BMGF), the Burnet Institute, and the World Bank. A primary objective of the tool is to provide practical advice to governments to assist with the most efficient allocation of current or projected budgets across nutrition programs for optimal outcomes in reducing undernutrition.

The model has a flexible set of interventions that includes – infant and young child feeding education, micronutrient supplementation, treatment of severe acute malnutrition, treatment and prevention of diarrhoea, fortification of foods, family planning and malaria prevention interventions. **OPTIMA** Nutrition can be used to determine expected trends in undernutrition under different funding scenarios and to project how likely a country is to meet their nutrition targets. It promotes improving allocations to evidence-based interventions, particularly those that impact the early years of a child's life. The tool requires context-specific data and can be customised based on various parameters such as budget, priority interventions and constraints in any given scenario. OPTIMA Nutrition uses an optimisation algorithm to determine the most efficient allocation of resources to achieve user-specified objectives such as reducing child stunting and wasting, and reducing child mortality (Figure 1).

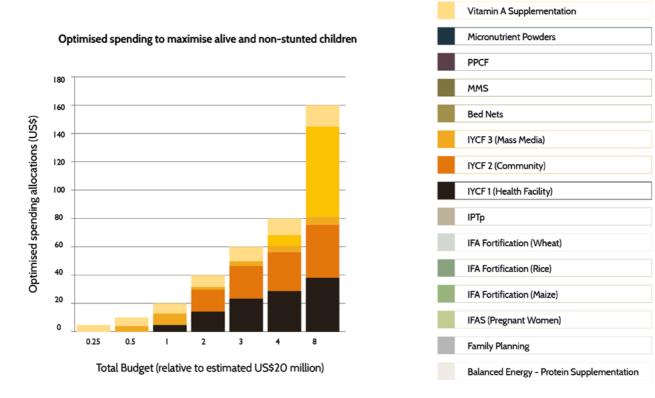


Figure 1: Sample of an optimisation algorithm



Session Highlights

The event included comprehensive discussions and deliberations on the use of the OPTIMA Nutrition tool in the context of India, encompassing a wide array of perspectives and experiences from both central and state levels. This report highlights the key discussion points from the interactions during the event and the outcomes achieved from the deliberations.

The event opened with panel presentations providing an overview of nutrition financing in India to set the context for the workshop. The first presentation delivered by Meera Shekar, Global Lead, Nutrition, World Bank, provided a global overview of what we know works to improve nutrition outcomes and estimated financing needs and health and economic benefits of investing in nutrition. The presentation highlighted that the key to successful reduction in stunting is a primary focus on scaling up investments in evidencebased nutrition-specific and nutrition-sensitive interventions during the critical 1000-days window from conception through the first two years of a child's life.

Other key points from the presentation included that:

(i) Peru and Senegal were successful in achieving significant reductions in stunting due to a focus and commitment at all levels of government to high quality nutrition service delivery and financing for scale-up;

(ii) As demonstrated in Madagascar and Tanzania, innovative schemes such as performance-based and results-based financing can be used to incentivise improvements in the quality and coverage of nutrition interventions; and

(iii) There is a need to be cognizant on the emerging challenges of increasing prevalence of overweight and obesity in low- middleincome countries.



The global overview was followed by a presentation on the assessment of public financing for Nutrition in South Asia Region (SAR), which included analysis undertaken in India, Nepal, Bhutan and Sri Lanka. Ajay Tandon, Lead Economist at the World Bank, presented the results of the analyses. Key challenges for assessing public financing for nutrition include: (i) the spread of nutrition programming across multiple ministries and implementation agencies; (ii) bundling of nutrition interventions with other interventions; and (iii) non-standard classification of nutrition-specific and nutrition-sensitive interventions across countries.

The assessment for India included the two flagship programs, Integrated Child Development Services (ICDS) implemented by Ministry of Women, and Child Development (MWCD) and National Health Mission (NHM) implemented by Ministry of Health Family Welfare (MoHFW). The analysis covered these programs in the states of Madhya Pradesh (MP), Jharkhand (JH) and Tamil Nadu (TN) over a 3 year period [2013-2016]. The assessment resulted in insightful revelations on the way budgeting for nutrition is carried out. Some of the key points from the India analysis are:

- a) Budgets and line items' classification are not conducive to disaggregation by interventions or target groups
- b) ICDS and NHM allocations and utilisation rates vary across states
- c) Allocations are linked to utilisation rates
- d) Inadequate allocations for targeted, softer interventions such as community mobilisation and Behaviour Change Communication (BCC) limit innovation and restrict impact, and
- e) Assessing the recently launched POSHAN Abhiyaan on similar parameters reveal that the program has a more defined budget planning framework, although some planning line items are missing (e.g. supervision) and expenditure line items are yet to be developed (e.g. Jan Andolan and program monitoring).

Michelle Ashwin Mehta, Nutrition Specialist at the World Bank, provided an overview of the OPTIMA Nutrition tool and the lessons learned from using the tool in countries like Tanzania and Bangladesh to link investments with impacts. Some of the key points made were that:

- While many tools exist for impact and economic analysis for nutrition, none address the question of allocative efficiency nor all nutrition Sustainable Development Goals (SGDs), and OPTIMA Nutrition fills this gap
- (ii) It combines information on cost, coverage and impact, and identifies the best/highest impact allocation of resources across cost-effective interventions and/or geographies
- (iii) It is tailored to each country, using country specific data and focus on SDG targets
- (iv) OPTIMA Nutrition is primarily intended to be used for program/policy development, especially for budget planning and prioritisation of investment, and
- (v) Experiences from Tanzania and Bangladesh show that prioritising sub-national divisions for allocation of additional resources could yield greatest impact.

Dr. Rajesh Kumar, Joint Secretary at the Ministry of Women and Child Development, acknowledged the gap in the current systems of budget allocation for nutrition programming in the country. He shared that the purpose of this workshop was to equip the participants with an understanding of the importance of prioritising interventions to maximise impact for nutrition outcomes, and to improve decision-making related to optimum allocation and use of available resources. He reiterated that while the government has taken important measures with POSHAN Abhiyaan to streamline the budgeting and continue with results-based financing, there is still scope





for further improvement. A tool like OPTIMA Nutrition can be a step in helping the government look at steps for addressing undernutrition differently.

Once the participants developed a basic understanding of the OPTIMA Nutrition tool through the introductory sessions, Nick Scott, Econometrician at the Burnet Institute, together with his team oriented the participants on various aspects of the **OPTIMA** Nutrition tool, including practical exercises using OPTIMA Nutrition Graphic User Interface. The presentations highlighted the rationale for conducting allocative efficiency analysis, the underlying impact model of the OPTIMA Nutrition tool, the different interventions that can be modelled, and how each outcome (e.g. stunting, wasting, anaemia, etc.) is modelled using the tool. The list of 25 interventions included in the model were based on the set of effective interventions for maternal and child malnutrition identified in the Lancet's Maternal and Child Undernutrition series published in 2008 and 2013.

Other selected interventions were based on evidence form large-scale global trials. The presentation discussed the need for setting-specific information for running the model, including data on stunting, wasting, anaemia, diarrhoea, exclusive breastfeeding and demographics (population sizes, poverty). These data are generally available from Demographic and Health Surveys (including National Family Health Survey -NFHS for India) or other sources. The presentation also discussed the need for estimates of existing coverage and cost of programs and interventions to be modelled.



Key Discussion Points

The model is influenced by the effect size estimates of each program/intervention, which are obtained from literature on global impact estimates and not necessarily setting-specific. The data-book stores setting specific data, therefore needs to be adapted to the Indian context.

Global interventions included in the tool represent the universe of evidence with effect sizes that can be modelled; some of these may not be applicable to India but can be modified if robust evidence from trials in the Indian context become available.

In the list of 25 interventions included in the OPTIMA, the impact of Water, Sanitation & Hygiene (WASH) interventions are effectively null due to recent evidence. However, if there is evidence of the effect of these interventions on malnutrition in India, these effect estimates can be modified.

Recommendations

1

There is a need for policy dialogue at the national level, involving all relevant stakeholders, before implementing OPTIMA Nutrition in its present form, issues like contextualising, and incorporation of multiple sectors in the modelling, need to be intensively discussed before using the tool.

2

The OPTIMA Nutrition tool can be utilised as an instrument for NITI Aayog, which can work as the nodal agency, and bring together a think tank or working group for OPTIMA, including the Indian scientists who have undertaken studies in Indian context on various nutrition issues. A nodal agency like NITI Aayog can also work out convergent financial planning while contextualising.

3

It is critical to involve the Ministry of Finance in making use of the OPTIMA tool at the central level. The 15th Finance Commission should be actively involved by orienting them on the tool and its use to prioritise and optimise the allocation of resources for improved operational efficiency.

4

OPTIMA, with its multiple features and numerous steps to be followed, is complicated, and may just be used at the national level by the central ministry to carry out planning for both - national and regional levels, and not by respective states.









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