

Tracking Hunger and Nutrition SDG Targets: Gaps, Challenges and Possibilities

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ABSTRACT The cornerstone of any Monitoring and Evaluation (M&E) programme, especially for global targets such as the Millennium Development Goals (MDGs) and its successor, the Sustainable Development Goals (SDGs), is quality, comprehensive and real-time data. Without such data, M&E processes and operations are neither reliable nor relevant. This rule applies, for example, to targets related to nutrition and hunger—without effective nutrition monitoring capable of capturing trends in under-nutrition at an early stage, policy decisions to combat nutritional issues become ineffective. This paper maps the current monitoring systems in place in India and the constraints of the current information available (data gaps, periodicity gaps or inadequate coverage). It also examines whether data-related pitfalls of the MDGs remain applicable, and explores measures by which these gaps can be addressed in a way that will help achieve the hunger and nutrition targets of the SDGs by 2030.

INTRODUCTION

Unlike its predecessor, the Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs) recognise the eradication of hunger as a stand-alone goal and not only a component of the larger objective of eliminating poverty. As the second goal in the list of 17 SDGs, hunger and nutrition will be at the forefront of any developmental agenda and will be given the priority it deserves. The uniqueness of the goal though is that it expands the purview of hunger and nutrition to include food security and sustainable agriculture, both of which play an equal part in understanding and effectively combating hunger and malnutrition.

While MDGs have been successful in reducing poverty across many parts of the world, the gains in hunger and nutrition were not as

promising. This is true for India, which was able to achieve only a 15-percent reduction in malnourishment over the 15 years covered by the MDGs.¹ The prevalence of undernourishment or food-insecurity in India's population is a grim reminder of the necessity of continued action. Indeed, India today is home to one-fourth of all the world's undernourished, one-third of all malnourished children, and one-third of the world's food-insecure population.²

In the MDGs, hunger and nutrition were partially addressed in Goal 1. No longer are both these indicators a smaller part of the larger hunger goal. The key expansion in the SDGs, however, has been to incorporate the root of the issues rather than simply aiming to eradicate the problem, with the inclusion of sustainable agriculture and

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enhancing food supply as part of the goal to combat hunger and nutrition.

While it is commendable that issues such as agricultural productivity, supply chains, access to food and nourishment, and genetic modification, have been included, for the purpose of this paper, the first two targets in the overall hunger goal will be considered. These are:

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

The goal to eradicate hunger and end the various diseases caused by lack of nutrition in daily diet has been a concern for successive Indian central and state governments but have met with little success. Despite agricultural advances and successful food production programmes instituted throughout India's history, poverty, hunger and malnutrition remain prevalent. India ranks 55th out of 76 on the Global Hunger Index and is home to nearly 194.6 million undernourished people.⁴ The country's woes comprise a long list: Approximately 15 percent of India is undernourished; nearly 73 percent of households do not have access to sufficient food or health;⁴ and nearly one in every six children between 38-57 months is wasted.⁵ It is predominantly the Indian rural population that suffers most from hunger and malnutrition, and even with significant economic progress across the country, undernourishment continues to impede overall socio-economic growth.

By way of international comparisons, there are two primary means of measuring India's position in terms of hunger and nutrition. First, the Prevalence of Undernourishment (PoU), which measures overall hunger in the country; the second is the Prevalence of Underweight Children under five years of age, which is monitored by

UNICEF. Both these feed into what is known as the Global Hunger Index, in which 12 of the 29 Indian states fall in the 'alarming' category. India has its own initiatives, too, such as the Integrated Child Development Service (ICDS), the National Nutrition Monitoring Bureau (NNMB) as well as ministries dedicated to ascertain the ground realities of these issues and in turn design policies that can solve discrepancies. Through these institutions and programmes, hunger and nutrition are measured through various surveys and studies, including data acquired from nationally representative surveys such as the National Family Health Surveys (NFHS) and National Sample Surveys (NSS).

Tracking hunger and nutrition indicators is crucial as it is able to depict the prevailing situation in the country and assess the trends, historical patterns and other such necessary information that assist in corrective policy measures. The lack of current data and information limits the quality and efficacy of any policy initiative. As India fine-tunes its social sector schemes and policy in alignment with the SDGs, the question of availability and quality of data becomes highly important.

This paper aims to set the stage on the role of M&E in the overall scheme of assisting nutrition programmes in the country, examine what gaps were prevalent during India's efforts in addressing hunger and nutrition in the MDGs, those that persist in data collection for the SDGs, what have been addressed so far, and policy questions that need attention to improve the system and ensure meeting the goals set out in the post-2015 development agenda.

M & E IN HUNGER AND NUTRITION: INDIA'S CHALLENGES

THE NEED FOR MONITORING AND EVALUATION

Monitoring and Evaluation (M&E) systems are designed to assess the progress of any public policy project or programme and determine how such would meet their targets. Through periodic data collection and continuous timely evaluation

of such data, M&E can be a decisive tool in modification of old policies or creation of new ones.⁶ Nutrition M&E identifies outcomes of nutritional diagnosis and interventions and is taken over a specific period of time. Practitioners often select nutritional indicators that will show a change as a result of nutritional care and allows them to modify or tweak certain procedures, care and diagnosis to become more effective in reaching their prescribed targets.⁷

The need for quality M&E in nutrition in India has become more urgent in the face of the persistent failure of various programmes supposedly designed for the eradication of hunger and malnutrition in the country. As per the MDG report card published by the Ministry of Statistics and Programme Implementation (MoSPI), lack of data has proved to be a constraint in tracking hunger and nutrition in the country.⁸ Various indicators have required modification, such as the target on undernourishment for children below the age of 5, to the age of 3—as the lack of data made it nearly impossible to find suitable information for evaluation.

India employs several methods to collect data on nutritional and hunger related indicators. While nutrition and hunger appear as separate indicators within larger national surveys such as the NSS, nutrition and hunger are also measured through a number of dedicated surveys relating to only these two issues. The following are some of the key national surveys by which nutrition and hunger data are gathered:⁹

- Surveys of the National Sample Survey Organisation (data on food consumption)
- Surveys on Micronutrients conducted by the National Nutrition Monitoring Bureau (NNMB)
- District Level Household and Facility Surveys (DLHS)
- Annual Health Surveys (AHS)
- National Family Health Survey (NFHS)
- Indian Human Development Survey (IHDS)
- HUNGaMA (Hunger and Malnutrition) Survey
- Rapid Survey on Children (RSOC)

While many of these surveys are through centrally

planned schemes and ministries, India also has a plethora of information-gathering tools at the state level, in most cases, through their departments of health. Further, each programme or initiative set up by either the centre or the state will have its own monitoring and evaluation framework. The MOSPI admits that despite the vast numbers of tools and methods in gathering data for M&E purposes, information can still be lacking. There are some persistent problems with data gathering and analysis which have also created a negative impact on MDG monitoring, and they persist into the SDGs as well. For example, according to POSHAN (Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India) of the International Food Policy Research Institute (IFPRI) none of the national health and nutrition surveys of India include internationally accepted indicators on access to food and food security.¹⁰ While some gaps have been addressed, other new challenges in data capture have arisen given that hunger and nutrition are now a goal by themselves.

Moreover, the challenge ahead for the Indian government in capturing a more holistic perspective of the hunger and nutrition problem in the country is to incorporate a larger base of topics and indicators. For example, while nutrition is an indicator that is widely studied through various surveys, hunger and food intake indicators are rare. In fact, the question of hunger and food intake is studied only by one question in the NSS and ignored in many of the other nutritional surveys in India. Gaps such as these in the design of surveys and the range of indicators and topics they cover, represent the paramount challenge in M&E for the SDGs.

DATA GAPS and CHALLENGES in CURRENT M & E PRACTICES

The gaps and challenges in monitoring and evaluation of nutrition and hunger-related programmes and initiatives aimed towards addressing the SDGs can be divided into two

categories. First, *persistent gaps* in M&E which were relevant in the MDGs have continued forward into the post-2015 development agenda and will affect SDG monitoring if not addressed immediately. Second, *new challenges* have emerged in addressing hunger and nutrition as a separate goal altogether. While emerging challenges may be easier to fix with innovative thinking, the continuing challenges may require larger structural reforms in the way statistical data are gathered in the country.

PERSISTENT GAPS¹¹

- **Data Gaps:** The main persistent gap which has continued since the MDGs is the lack of data at the sub-state level. While national surveys and even state surveys try to gather as much information, smaller sample sizes or hunger and nutrition being only a small aspect of the larger survey like NSS, limits the size of the data that can be gathered. Increasing sample sizes also remains relatively expensive and thus is not considered an alternative.¹²
- **Periodicity Gaps:** A consistent problem with data, not only for nutrition and hunger in India, has been the irregular intervals at which data are collected. This makes it highly difficult to use such data for mid-course correction of policy. Similarly, owing to various obstacles, the agencies concerned have been unable to conduct their nutrition and hunger surveys at more desirable, regular intervals. Often, the gap between the same surveys can be as long as nine years, like in the case of NFHS. Other surveys and studies such as DLHS or IHDS have experienced similar lags, ranging from four to seven years between each round.¹³ Availability and accessibility of raw data has often been a matter of concern. IFPRI's research shows that for the latest rounds of completed surveys on nutrition, data reports and data sets are either readily available in the public domain or unavailable with no

information on when a report might be forthcoming, if at all. Also, the study found that availability of each survey's documentation (manuals, questionnaires, sampling information) also varied substantially.¹⁴

- **Incomplete Coverage:** In many surveys and tools, there are multiple cases where data remain incomplete, i.e., the relevant questions required for the robustness of the survey are often omitted. These are especially frequent in administrative records, for example of hospitals and nursing centres in smaller towns, districts and villages.
- **Quality gaps:¹⁵** Quality assurance is not a standard operating measurement in data gathering in many of these national and state-level programs. The lack of an independent quality control body limits the quality of available data especially given the many layers the data must go through to reach the stage of evaluation and analysis.

NEW CHALLENGES

- **Identification Challenge:¹⁶** The separation of hunger and nutrition goals from the larger goal of poverty reduction as done in the MDGs, will require new methods by which target populations will need to be identified. The lack of authentic, digitised data on various sections of society, especially at the sub-state level, will make it difficult to identify those who should be counted. Without proper identification of people, based on various indicators surrounding health and nutrition such as income, daily diet, calorie intake, height, and weight, policy design and intervention will prove more difficult. Identification is key to assess how many people in the country suffer from issues of hunger and malnutrition and this puts policymakers in a better position to reduce these numbers.
- **Specificity Challenge:** The measurement of food insecurity remains weak. The tool of the

National Sample Survey Organisation (NSSO) includes a question on access to food, but is shown to be inadequate to capture the frequency and intensity of food insecurity and is not a globally recommended measure. The National Family Health Survey (NFHS), for its part, while it includes indicators on diet diversity, neglects food security.¹⁷

- **Data Literacy¹⁸ Challenge:** The increased specificity of the SDGs especially that in hunger and nutrition will require a higher level of data literacy, wherein those collecting data and those evaluating such data will have to be knowledgeable of technical aspects of the indicators being used. This will have unintended future consequences as it may not be indicative of the actual situation of the target population.

Moreover, the reshaping of state and district boundaries—from 24 to 29 states and from 504 to 640 districts—presents a significant geographic challenge for drawing comparisons.¹⁹

Some of the issues are being partially addressed by NFHS-4, with an enhanced sample size that will enable the realisation of district-level indicators for nutrition. Also, from this round onwards, NFHS will be conducted once in every three years. One of the main objectives of the DLHS and AHS was to give policymakers district-level indicators, and since NFHS now addresses this aspect, they have been discontinued.

As outlined earlier, India has to address a number of persistent gaps and new challenges in tackling the SDGs. It might be easier to address the new challenges as they predominantly require expansion of the coverage of surveys and increased technical training as to be knowledgeable on the indicators for which data will be gathered. On the other hand, the stubborn gaps will require a more concerted effort, and the most effective way to hurdle these obstacles is to institute major reforms in methods by which data in the country are collected. While record digitisation, the right to information law, and other related government initiatives are aiding in

data collection, targeted reforms to address issues of quality, periodicity, coverage and levels will need to be made in order for monitoring and evaluation of SDGs to not only be transparent but accountable and accurate as well.

India has long been averse to external monitoring and evaluation, often relying instead on internal centralised agencies to collect, evaluate and disseminate data. Multiple non-governmental organisations, international consultants, and multilateral organisations like the United Nations have programmes that help monitor and evaluate government-run initiatives in various countries. Given the sheer size of the country, the population and the numerous targets set forth in the SDGs, the central government may find it difficult to gather the necessary information as to design appropriate policy responses or assess the progress of programmes and schemes already in place. At the same time, the variance in data sources, i.e. centre, ministries, state and sub-state, creates multiple data points that can be more difficult to evaluate. Varying data with little to no uniformity tends to skew analysis and yield inaccurate outcomes. Lastly, the aversion to international and external audit of data and programmes also diminishes both accountability and authenticity of the data. If external audit were to be allowed, India data can be verified from additional sources, making the task simpler for governmental agencies. Suggestions that international auditing can lead to both transparency and accountability have been made in the past.²⁰


POSSIBLE POLICY DIRECTIONS

1. Data gaps still persisting in India vis-à-vis the global SDGs. An Indicator framework for hunger and nutrition will have to be identified and addressed through the nationalisation of indicators, as well as through modifications in India's statistical infrastructure. Formalising and streamlining MoSPI's role in SDG monitoring could be useful in ensuring

efficiency, accountability and transparency. An important step forward is the creation of a platform where state and central ministries and departments can interact on questions regarding nutrition and hunger monitoring, which will also connect various ministries conducting nutrition research. Another option would be to provide the responsibilities of each SDG to a dedicated wing in MOSPI, which could be directly in charge of all central, state and sub-state level data collection, schemes and programmes. Triangulation of data from the administrative sources with that from surveys can improve the quality of data.

2. Surveys also can be designed in a manner to specifically target a section of the population. For example, the Longitudinal Ageing Survey of India (LASI) studies every aspect of the elderly population in the country, whether it be health, social status, education, and livelihood.²¹ National hunger and nutrition surveys, if designed to understand pockets of the populations rather than adhering to the 'one size fits all' model of surveys, can gather more specific information and subsequently study the exact problems and issues per such population groups. By doing so, smaller groups can also find some attention.
3. The central authority can also help in bringing uniformity in questions and surveys that are being conducted, so that the data collected is aligned with the nationalised SDG indicator framework. For example, the NSS and NFHS must be designed in conjunction with each other, where questions missed by one can be asked by the other. As shown in a POSHAN study mentioned earlier, while the NSS has questions relating to indicators on access to food and food security, other national surveys do not; this mismatch must be corrected and redundancy in data must be systematically managed.²² Introduction of hunger/nutrition related questions in regular NSSO rounds can be explored, as well as pooling of central and state level samples in order to achieve district level estimates.
4. Regular intervals must be maintained in data collection. Variations will help neither M & E nor future policy design. The vast gaps between time periods of the same survey--like in the case of NFHS of nine years between the last two rounds or the five years between DHLS surveys--only skew data and do not provide a realistic illustration of change. If for example the NFHS is to be conducted every three years, while the government should endeavour to maintain the periodicity of this survey, it also must carry out its other national, state and local survey such that they can complement data collection in the year where NFHS is not being carried out.
5. As per the current scenario as described above, hunger and nutrition are still a part of the larger surveys on health and family. For the practical purposes of the SDGs, especially given the specificity of the goals outlined within it, a dedicated survey just for the core goals could be an ideal statistical tool. The survey could be instrumental in eliciting specific responses and can provide trends and pattern is carried out annually.
6. By simply improving monitoring of existing programmes linked to National Food Security Act (NFSA), an up-to-date record of distribution and delivery of food can be maintained. This will help not only improve efficiency of the programme itself but can be used to identify areas of improvement and those that may require additional interventions. A system such as this is available for MNREGA and one covering NFSA will be useful for the policy community.
7. Where possible, the government may be able to lessen the responsibility of ensuring data quality by allowing external review and audits of these programmes. International institutions can be employed to conduct

M&E programmes, so as to help reduce the burden on public resources. Moreover, the autonomy of these consultants may help India achieve the global standard it aims for in M&E activities. International university tie-ups to specific programs are currently designed to monitor the effectiveness and

efficiency of the program. This recommendation suggests instead that such link-ups need to be created to monitor data collections and evaluation specifically as to uphold acceptable standards and increase transparency. 

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ENDNOTES AND REFERENCES

1. Javed, S and Mishra, V. "New Road to the Old Destination: Analysing the Hunger Goal". Global Actions, National Accounts. Global Policy Series. Observer Research Foundation. Chapter 4. 2015.
2. "Millennium Development Goals," UNDP India, <http://www.in.undp.org/content/india/en/home/mdgovoverview/#goal1>
3. Mathur, V. and Passi, R. "Global Goals, National Actions: Making the Post-2015 Development Agenda Relevant to India," ORF India, Global Policy Series
4. Garrett, J., S. Kadiyala, and N. Kohli. 2014. Working Multisectorally to Improve Nutrition: Global Lessons and Current Status in India. POSHAN Policy Note #1. New Delhi, India: International Food Policy Research Institute
5. Vir, S., K. C. Sreenath, V. Bose, K. Chauhan, S. Mathur, and S. Menon. 2014. National Policies and Strategic Plans to Tackle Undernutrition in India: A Review. POSHAN Report No. 2. New Delhi: International Food Policy Research Institute
6. Medicins Sans Frontiers (1995). Registration and Monitoring/Evaluation of Feeding Programmes, In: Nutrition Guidelines (Nutritional programmes in Emergency Situations). 1st Ed. Paris
7. NCP Step 4: Nutrition Monitoring and Evaluation. http://www.andeal.org/files/Docs/IDNT_Snapshot_NMEe4_S4.pdf
8. "Millennium Development Goals, India Country Report", Ministry of Statistics and Program Implementations. Government of India. http://mospi.nic.in/Mospi_New/upload/mdg_26feb15.pdf
9. <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/129722>
10. C. Maitra. Sethi, V. et al. "Internal Validity and reliability of experienced based household food-security scales: Evidence from India". POSHAN. Feb 8. 2016
11. "Millennium Development Goals, India Country Report", Ministry of Statistics and Program Implementations. Government of India. http://mospi.nic.in/Mospi_New/upload/mdg_26feb15.pdf
12. "Challenges in Monitoring and Evaluation: An Opportunity to Institutionalize M&E systems." World Bank. 2010. Session 5. http://siteresources.worldbank.org/INTLACREGTOPPOVANA/Resources/840442-1255045653465/Challenges_in_M&E_Book.pdf

13. Garrett, J., S. Kadiyala, and N. Kohli. 2014. *Working Multisectorally to Improve Nutrition: Global Lessons and Current Status in India*. POSHAN Policy Note #1. New Delhi, India: International Food Policy Research Institute
14. <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/129722>
15. Saxena, N.C. "Hunger, Nutrition and Food Security in India". Working Paper 44. Chronic Poverty Research Centre. Department of International Development (DFID).
16. Saxena, N.C. "Hunger, Nutrition and Food Security in India". Working Paper 44. Chronic Poverty Research Centre. Department of International Development (DFID).
17. <http://poshan.ifpri.info/2016/02/08/internal-validity-and-reliability-of-experience-based-household-food-security-scales-evidence-from-india/>
18. United Nations Data Revolution Group. <http://www.undatarevolution.org/>
19. <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/129722>
20. "Supplemental Guidance: The Role of Auditing in Public Sector Governance". Global Series. The Institute of Internal Auditors. January 2012. https://na.theiia.org/standardsguidance/Public%20Documents/Public_Sector_Governance1_1_.pdf
21. The Longitudinal Ageing Survey in India (LASI). International Institute of Population Sciences. http://iipsindia.org/research_lasi.htm
22. C. Maitra, Sethi, V. et al. "Internal Validity and reliability of experienced based household food-security scales: Evidence from India". POSHAN. Feb 8. 2016



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