An evolving evaluation ecosystem: Lessons from the Indian Experience

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Abstract

The increasing emphasis on the effectiveness of public expenditure and the demand for accountability from government institutions has resulted in focus on rigorous evaluations of the development schemes implemented by the Government of India. Historically, despite efforts to ensure results-based Monitoring and Evaluation (M&E) activities tied to planning, budget, and accountability, India's progress on key human development indices has been sluggish.

This Practice Note attempts to enlist the supply-side challenges in enhancing the resilience and informativeness of Indian M&E systems for policymakers. The note summarises the practical and institutional challenges encountered in conceptualising and implementing evaluation studies for government programmes, as discussed by the Development Monitoring Evaluation Office (DMEO) with Indian states and union territories. This includes a review of technical aspects including the gamut of evaluation methodologies applied for evaluations. It also highlights the significant bottlenecks relevant to human resources and capacity building for undertaking large-scale evaluations. The note explores the importance of selecting an appropriate evaluation method that aligns with the study's objective and scope, debunking the notion of a 'one-size-fits-all' approach. The importance of partnerships with key stakeholders, including the private sector, think tanks, and civil society, is also addressed.

The note's findings will benefit government officials, M&E professionals, decision-makers, and researchers in comprehending the technical nuances and challenges of undertaking M&E studies of Indian government programmes. Drawing lessons from the Indian experience can aid in effectively managing evaluation challenges.

Key Words: Large-scale evaluation, Partnerships, Capacity Building, Quality of Evaluation

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I. Introduction

India's monitoring and evaluation (M&E) ecosystem encompasses government and non-government stakeholders. Government stakeholders include a central ministry and state departments that prioritise M&E, while the non-government stakeholders include research institutions, think tanks, universities, and consulting firms, among others. The growing demand for evidence-based policymaking evaluations has highlighted supply-side challenges. These challenges relate to the capacities of institutions and the competencies of staff engaged in evaluations.

This Practice Note is structured into three sections: supply-side challenges in building robust M&E systems, potential solutions, and the future direction for evaluation systems in the country.

II. Supply-side challenges in building robust evaluation systems in India

The Development Monitoring Evaluation Office (DMEO) serves as the central office for evaluating government schemes and programmes, while also playing a key role in establishing an M&E ecosystem in India. This section summarises India's supply-side challenges, based on discussions with 29 states and union territories, as well as DMEO's experience of planning and conducting evaluations at the central level. The evaluation ecosystem in India is tackling challenges at three levels: institutional, individual, and procedural. Institutional challenges stem from varying state capacities in institutionalising evaluations. Individual-level M&E-related challenges include insufficient skilled human resources. Procedural challenges encompass all obstacles encountered from evaluation conception to implementation.

a. *Institutional level*

Evaluation capacities of central and state institutions are growing, albeit in a fragmented manner. Few government institutions have emerged with sufficient funding and autonomy. Leveraging innovative channels to address demand-supply gaps is crucial for ensuring quality evaluations. At the centre, DMEO, an attached office under NITI Aayog (often referred to as the Ministry of Planning), is responsible for evaluating government schemes and programmes in India. At the state level, the maturity of evaluation institutions varies significantly. The entities involved in evaluations can be categorised into three groups: (i) units/cells within state planning departments with limited budgetary and staff allocations, (ii) divisions within state planning departments that may or may not have separate budgets for evaluations, and (iii) independent authorities with dedicated budgets and staff for conducting evaluations. Departments often utilize a small proportion (generally 5 percent) of the scheme's budget for evaluation purposes when they lack specific budgetary allocations for evaluation. Insufficient funding and personnel have led to the closure or dysfunction of some state-level units. This presents a major challenge to achieve the objective of conducting quality evaluations.

b. Individual level

Skilled and well-trained personnel in M&E are frequently limited in developing countries like India. This scarcity can present huge supply-side constraints for robust M&E implementation (Mehrotra, 2013). A Kenyan study demonstrated that

the M&E human resource capacity exerted a significant influence on the performance of certain projects. It is crucial to have competent M&E staff and consistently enhance their skills at all levels (Murei, 2017). Exposure to M&E is necessary for students at the university level, incumbent staff at the training academy level, and existing staff at the department level.

One of the emerging challenges in India is the limited availability of graduate and post-graduate courses specifically focused on evaluations, which hinders the influx of well-trained personnel and development of robust capacities for evaluations. Additionally, while evaluation officials at both central and state levels are typically required to fulfill specific educational qualifications, the lack of subsequent capacity building opportunities for the staff remains a challenge. Including courses on M&E in both the probationary/induction training of staff and during their service is of utmost importance. Exclusion of the M&E component in the curricula of training academies and departments hinders the staff's ability to acquire the necessary skills at an optimal rate.

c. *Procedural level*

The rollout of any evaluation plan often necessitates a substantial effort due to procedural challenges being faced during the design phase of any programme. The key stumbling blocks identified in our discussions with Indian states and UTs include objective-setting, M&E planning, determining the scale of the evaluation, sampling, questionnaire design, and data quality management (DQM). Examples from experience have been cited to bolster the understanding of key concerns and mitigation measures.

- **Objective-setting** is one of the most important aspects of the planning phase of an evaluation study, particularly when evaluating government policies. According to Okali et al. (1994), "A meaningful plan for monitoring and evaluation can only exist in relation to clearly defined objectives and strategies". While a policy might have multiple objectives, it is important to conduct an evaluation exercise to identify and prioritise one core objective that needs evaluation, along with 1-2 peripheral objectives that can also be investigated (Simister, 2015). It is important to build upon existing knowledge rather than starting from scratch. Considering the existing evidence could contribute to enhancing the evaluation design. For example, various studies conducted by DMEO define the objectives of the evaluation study, which primarily focus on the core objectives of the scheme. The evaluation plan is drawn accordingly. Scheme assessment is based on the output and outcome indicators to evaluate the proposed goals of the scheme and what it has achieved. DMEO has sought to learn from international experiences and guidelines since its inception. Most notable among these effort in this regard was the incorporation of the OECD's DAC criteria in planning and conducting evaluation of 126 centrally sponsored schemes in 2019-20. DMEO also adheres to most UNEG norms and standards in its evaluation studies,

ensuring independence, credibility, and utility of evaluations.

- **M&E Plan** can be chalked out based on the needs of the programme/organisation, and/or policy. For the evaluation of government schemes, programmes, and initiatives, it is imperative to prepare an M&E plan with at least a medium-term perspective. A plan of this nature should incorporate the prioritisation of schemes. For example, DMEO as the central evaluator prioritises schemes with relatively large budget allocations and large beneficiary pools (discussed in more detail in subsequent sections). The M&E plans could also include additional details such as indicators, clearly defined roles and responsibilities, tools to be used, data management, and quality assurance plans. For smaller programs, Basic M&E frameworks would suffice but for more complex programmes/policies, the evaluator would need to focus on the key aspects of the programme and accordingly work out the plan. A data collection table/matrix is a critical tool for the planning and management of data collection, analysis, and use. This table is a broader M&E plan. A well-designed M&E plan should also incorporate learning as a key component of its design. This involves incorporating feedback loops and communication dissemination strategies to ensure that the key stakeholders adopt the recommendations. It is also a good practice to identify and prioritize the interventions for monitoring and evaluation and plan for M&E of these interventions. Additionally, when the users and uses of the evaluation are specified at the outset, it enhances the acceptability and utilisation of the evaluation.

- **Deciding the scale of evaluation**

  India has approximately 740 Central Sector (CS) and 65 Centrally Sponsored Schemes (CSS). While not all of them may be amenable to evaluation, still evaluation of such a large number of schemes is a gigantic task.[6] The evaluation design is crucial for the timely completion of the evaluation of important schemes. Choosing the type of evaluation is essential. This depends on the objective of the scheme and whether it is suitable for a specific type of evaluation. Additionally, the operational scale of the scheme could be an important factor in determining the scale of evaluation. An ideal approach to evaluate a nationwide programme with a substantive budget allocation is to conduct a large-scale household-level study (**Box 1** provides specific challenges posed by the rollout of large-scale evaluations). Whereas schemes with limited beneficiaries and those that do not focus on individual beneficiaries could be evaluated using a small sample. The study could also be conducted in a limited number of states to generate evidence about the functioning and impact of the scheme.

[6] Government of India, Ministry of Finance, Expenditure Profile, 2022-23, https://www.indiabudget.gov.in/doc/eb/vol1.pdf

- **Evaluations using large-scale surveys**

  Large-scale surveys are used to accurately estimate indicators of interest among the beneficiary pool during evaluations. However, there are significant execution challenges in operationalisation of large-scale surveys, as it requires meticulous planning and substantial allocation of financial and human resources. Further, if the survey is not monitored properly, it will fail to provide unbiased and precise estimates of the indicator for the population, primarily due to non-sampling errors.

  The primary barrier that any evaluation using large-scale survey faces is sampling. The sampling must be based on one of the core indicators that the survey is trying to estimate. It is also important to ascertain the desired level of disaggregation at which the estimates are required. As the level of disaggregation increases, a larger sample size is required. If estimates are required only at the national level, the sample size will be smaller than if estimates are required at both the national level and a more detailed level, such as the state or district level. For example, the National Family Health Survey (NFHS) is a comprehensive survey in India that offers detailed estimates at the district, state, and national levels. The sample size for this exercise is approximately 6 lakh households. In contrast, the National Sample Survey Office's (NSSO's) sample survey offers state-level estimates alongside national estimates, necessitating a smaller sample size as compared to the NFHS. The Law of Large Numbers[7] ensures the precision of the estimates.

  Additional challenges in planning large-scale evaluations, whose mitigation needs to be well-thought of, include:

- **Preparing a questionnaire** of reasonable length, capturing essential data for a thorough study while not being overly extensive is crucial. Pilot testing of the questionnaire is a pre-requisite for ensuring high-quality data collection.

- **Data quality management** is crucial to administering large-scale evaluations such that findings from the survey are of sufficient quality to help incorporate meaningful insights into the functioning of a program. Adequate sample size, sample design, and data quality are all equally important. For example, in the outsourced evaluation model where a consultant is hired by the agency to conduct an evaluation, ensuring quality is a humungous task. The hiring agency must establish sufficient checks and balances to ensure the quality of data reporting and its use in the evaluation report. An evaluation is as good as its data. Entire analysis and evidence-based policymaking hinge on the quality of data collected. To ensure data quality, regular monitoring of the data collection processes, proper training of the enumerators, and verification of submissions for

[7] The law of large numbers, in probability and statistics, states that as a sample size grows, its mean gets closer to the average of the entire population.

authenticity are necessary. Conducting spot checks, back checks, and surprise visits during data collection is necessary to ensure collection of quality data, which is *sine qua non* for quality evaluation.

BOX 1

Usability of evaluation outcomes

Firstly, the rationale for conducting the evaluation needs to be clear. Mostly, there is a need for an "impact" assessment without explicitly designing for capturing impact. Therefore, a clarity on the type of evaluation needed is of utmost importance, which would then help make decisions about type of tools to be deploy for the evaluation easier. The mixed-methods approach, combining qualitative and quantitative assessment with purposive sampling at a smaller scale, is commonly employed due to time constraints, limited data availability, and/or insufficient data collected during the programme's initial phase of implementation. The M&E design should be embedded within the programme design, allowing for regular assessment of outcome parameters. Additionally, process evaluation helps in understanding the reach of the program and assessing whether the intended beneficiaries have been reached or not. Most of the evaluation studies in India are diagnostic evaluations using a mixed-method approach. One such example is the evaluation studies of 126 Centrally Sponsored Schemes (CSS) conducted by DMEO by hiring consultancy services were found to be useful by the user of these evaluation reports i.e. the Ministry of Finance and the administrative ministry that implements the scheme. Based on the recommendations of these evaluation reports, scheme rationalisation, in terms of modification or closure of schemes, were carried out.

Secondly, a universal evaluation design does not exist. The selection of the evaluation method depends on the scheme's objective, outreach, indicators to track to assess the progress of the scheme, and the available data type (i.e. cross-sectional, time-series, or panel data).

Finally, the usability of the evaluation outcomes depends on various factors, including the type of evaluation, consultation with the administrative ministry responsible for implementing the scheme, ensuring coherence with other schemes, and the need for pragmatic recommendations that may not always require additional budgetary support. Further, the political economy uses the outcomes of the evaluation to optimise the scheme's efficiency, considering both the implementing Ministry's perspective and that of the Ministry of Finance, which provides funding for all government schemes and programmes in India.

Localisation of global indicators needs to be considered when planning data analysis and report writing for M&E exercises that involve the application of global frameworks and indicators. For instance, in a recent WFP evaluation study of the Government of India's

scheme for the distribution of subsidised pulses, one of the indicators used for assessing the nutritional impact was the consumption of Hem-iron rich foods. The indicator, designed for a global audience, considers eggs as a component of the standard vegetarian diet. This leads to different results compared to the Indian context, where eggs are primarily not considered part of the vegetarian diet. Consequently, if the indicator is not adjusted to match the context, it may distort the data.

III. Potential solutions

Potential solutions to the aforementioned challenges include engaging in fruitful partnerships, procuring technical services, and capacity building of human resources at various levels.

a. Partnerships with expert organisations in M&E

Collaborating with different stakeholders can expedite the resolution of supply-side challenges, thereby providing support for the establishment of robust M&E systems. Research institutions, think tanks, and multilateral organisations often possess expertise that is continuously enhanced through up-skilling. These organisations align with best practices in the national and international arena to maintain market relevance. Based on DMEO's experience, partner organisations have offered diverse perspectives by [8] DMEO has successfully utilised external partnerships to strengthen the quality and quantum of evaluation studies conducted by the organisation. For instance, the partnership between DMEO and the UN World Food Programme (UN WFP) has progressed from focusing on building evaluation capacity at the national and state levels to also encompassing a collaboration to conduct a comprehensive evaluation of one of the world's largest social safety nets in India. UN WFP has functioned as a resource and technical partner for activities under the Statement of Intent (SoI), while the DMEO has served as the primary organisation to fulfill its national mandate.

conducting extensive stakeholder consultations. Additionally, partnerships have played a crucial role in directing the domain expertise required for the conceptualisation of evaluation studies. DMEO's partnerships have been established either through a financial route, involving the procurement of technical services, or through a non-financial route, which entails the exchange of technical expertise, capacity building, knowledge sharing, and advocacy through a Statement of Intent (SoI) between two parties.

In addition to presenting a linear or evolutionary model for partnerships, a closer examination of the different categories can serve as a valuable discussion tool for partners to assess the position of their relationship on the spectrum.

b. Capacity building

[8] https://ecdpm.org/great-insights/civil-society-business-same-direction/partnerships-sustainable-development-monitoring-evaluation-challenge/

The capacity building needs of evaluation personnel, both potential and existing, should be addressed at the university, training academy, and department levels. DMEO has implemented various initiatives to strengthen the competencies of stakeholders at government and non-government levels. These include:

i. Regular **Training Need Assessments** to understand the current expertise of the staff and the required focus areas.

ii. Under Mission Karmayogi, DMEO developed a comprehensive **M&E Competency Framework and Training Curriculum** to address capacity building requirements at behavioural, functional, and domain levels.

iii. **Innovation in pedagogy**: The adoption of WTDET (Watch Think Do Explore Test) Model has improved the effectiveness of training programmes.

iv. Continuous **feedback** and its incorporation in subsequent trainings.

These innovations have led to improved interest in M&E training by several state planning departments.

Some mechanisms that may be utilised to bridge the existing gaps in learning include the following:

i. Tapping the Administrative Training Institutes (ATIs) and Central Training Institutes (CTIs)[9] network, as well as universities in the country. Currently, the majority of institutes and universities lack a curriculum component dedicated to M&E. Ongoing efforts to integrate M&E into the curriculum aim to provide continuous induction and in-service training to civil servants and students, and enhance the supply of quality evaluators.

ii. Training government departments on technical service procurement is essential for ensuring quality outputs from the procured agencies.

IV. Conclusion

Given the increasing demand for evidence-based decision-making in government policy, it is prudent to ensure robust evaluation systems at both national and state levels. In a dynamically evolving M&E ecosystem, like India's, it is crucial to develop and execute innovative solutions to address supply-side constraints. Nurturing a collaborative environment, strengthening capacities, and streamlining M&E processes are crucial for ensuring the effectiveness and sustainability of such systems.

[9] India has a large network of ATIs and CTIs – 24 state Administrative Training Institutes and 27 Central Training Institutes spread across the country. These cater to the induction and in-service training needs of officers in the central and state civil services.

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