Impact Evaluation Framework for Government-Based Projects

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Abstract

There is now a growing interest in evaluating the impacts of government projects mainly because of the principle of transparency that the leadership in government advocates. The need to closely monitor government projects, especially those funded from outside sources such as grants or loans, necessitate research and understanding of the conceptual and practical issues relating to a holistic impact evaluation. The spending process and requirement to demonstrate a return on the use of public funds, as well as identifying the long term effect of certain programs/projects that provide development intervention should be studied, evaluated and monitored. For the National Economic and Development Authority, or NEDA, the Philippines' independent economic development and planning agency, analysis on impact evaluation will serve as basis in making recommendations as to the advisability of continuing budgetary allocation for certain programs and projects. However, there is no clear or ready protocols and standards on how to go about implementing impact evaluation. This paper attempts to propose a capacity building framework in conducting impact evaluation for government-based projects, from conceptualization to sampling of baseline data to tools used in the analysis. Major players for the implementation are the NEDA regional offices and the state universities and colleges.

Key words and phrases: capacity-building framework, protocols, NEDA regional offices, state universities and colleges

1. Introduction

The National Economic and Development Authority (NEDA) is the agency primarily responsible for the formulation of continuing, coordinated and fully integrated social and economic policies, plans and programs. Such tasks are anchored on the societal goal of inclusive growth and poverty reduction. Major socioeconomic policies, plans, programs and projects of different government agencies are coordinated by the NEDA at both the national and regional levels. This ensures consistency with established national priorities and aligned with other policies, plans, programs and projects of the Philippine government.

In order to structure and support the development of future policies, NEDA needs to conduct impact evaluation (IE) of various sectoral programs, activities and projects (PAPs). IE identifies program options to achieve a desired outcome, and analyzes likely impacts of programs in the economy, environment and society. It then serves as basis in making recommendations like the advisability of continuing budgetary allocations for such programs and projects.

To initiate the plan, NEDA Director-General and Secretary of Socio-Economic Planning instructed its Regional Development Offices (RDOs) to undertake impact evaluation of selected major government projects. The Statistical Research and Training Center (SRTC), being the research and training arm of the Philippine Statistical System, was identified to assist in the implementation of the undertaking, specifically on methodologies, tools and techniques in conducting evaluations by NEDA RDO staff and state universities and colleges (SUCs).

2. Objectives, Components and Coverage

The move aimed to investigate the impacts of government projects implemented in the regions. Specifically it intends to (i) determine the appropriate tools and methodologies for impact evaluation on various types of government projects; (ii) establish the corresponding data requirements and proper application of tools and methods; (iii) recommend a system for establishing databases and the institutionalization within the concerned agencies of said system to facilitate conduct of subsequent activities on impact evaluation; and (iv) enable the conduct of impact evaluation, the results of which can be used for recommending budgetary actions on major government programs and projects.

There are three components in the undertaking. The first component is on the Statistical Capacity Building, which is two-fold, namely: inventory of impact evaluation best practices and conduct of training. The inventory of best practises involved: (i) review of current impact evaluation tools and methodologies, (ii) review of project design and logical framework of pre-identified major projects; and (iii) impact evaluation framework formulation. The conduct of training will have the following milestones: (i) training program design, (ii) personnel profiling vis-à-vis training needs assessment and post-evaluation of participants; and (iii) conduct of training/workshop itself.

The second component is the research-based impact evaluation implementation that maybe conducted to cover the following activities: (i) identification and data gathering of development indicators for baseline and end line information, (ii) statistical analyses, iii) setting up impact evaluation database management system, (iv) formulation of policy recommendations using impact evaluation results; and (v) preparation of institutionalization plan for implementation and scaling up of capacity building program.

The third component will cover concluding activities such as preparation of technical final report and presentation of output to NEDA technical staff groupings concerned with impact evaluation.

Initially, the impact evaluation activities cover only three (3) regions in the Philippines. These are Bicol Region or Region 5, Eastern Visayas or Region 8 and Zamboanga Peninsula or Region 9. These were selected due to the relatively large number of government programs/project currently implemented and are among those that needs improvement/intervention in terms of: (i) poverty incidence, (ii) average family income, (iii) infant mortality rate, (iv) maternal mortality rate, (v) under 5 mortality rate, (vi) prevalence of underweight children below 5 years old, (vii) net enrolment ratio in primary education; and (viii) cohort survival rate and primary education completion rate.

3. Strategies of Implementation and Output

3.1 Roles of cooperating entities

This undertaking is a collaboration of the National Economic Development Authority's Central and Regional Offices, State Universities and Colleges and Statistical Research and Training Center. Following are the distinct roles of each entity:

- NEDA-Regional Development Offices (NEDA- RDOs) - shall provide the overall direction and approve the training design and work and financial plan of the project;
- NEDA Regional Development Coordinating Staff (RDCS) - shall provide project design and log-frame of the identified projects in the pilot regions; and efforts to facilitate the provisioning of impact evaluation tools that will be use.
- NEDA Regional Offices 5, 8, and 9 - shall (i) submit inventory of impact evaluation practices/studies in their respective regions; (ii) select the participating SUCs, (iii) in consultation with SUCs, prepare the draft Memorandum of

Agreement with them; (iv) maintain continuous coordination with SUCs; and (v) confer with them in firming up impact evaluation pilot activities.

- State Colleges and Universities (SUCs) - shall be a partner and independent entity. They are tasked to: (i) Assign a focal person for the project, preferably from its research unit/group; (ii) Ensure participation to trainings; and (iii) Support NEDA on data collection, putting up the database, and proper analysis of the results of baseline data gathering.
- The Statistical Research and Training Center (SRTC) - shall conduct the following activities: (i) Make inventory and assessment of impact evaluation tools and best practices inside and outside NEDA; (ii) Consolidate log-frame of projects; (iii) Formulate impact evaluation capacity building framework viz standards and protocol taking into consideration the data/information limitation; (iv) Develop and implement pilot trainings on impact evaluation, including submission of training design, assessment of capacities of SUCs on impact evaluation, conduct of pilot trainings and evaluation of training results; (v) Submit training completion report; and (x) Recommend the implementation plan for the second component of the impact evaluation undertaking.

4. Assessment of impact evaluation tools and practices

An assessment of impact evaluation methodologies of selected government projects/programs based on information available was made. Among the projects evaluated were as follows:

- National Rice Program of the Department of Agriculture (DA)
- Agrarian Reform Communities Project (ARCP III) of the Department of Agrarian Reform (DAR)
- Integrated Coastal Resources Management Project of the Department of Environment and Natural Resources (DENR)
- Program Beneficiaries Development of DAR
- Agrarian Reform Infrastructure Support Project III (ARISP III) of DAR
- Conditional Cash Transfer (CCT) of the Department of Social Welfare and Development (DSWD) also known as the Pantawid Pamilyang Pilipino Program (4Ps)
- Kapit-Bisig Laban sa Kahirapan – Comprehensive and Integrated Delivery of Social Services (KALAHI-CIDSS) of DSWD.

4.1 Other evaluation methodologies for projects typically smaller in scale was also reviewed and described for additional insights.

4.2 The primary purpose of the "quick" assessment is to provide clearer perception on the development of a capacity building program on impact evaluation that will involve participation of selected State Universities and Colleges (SUCs) in the regions. The SUCs will be able to generate collaboration in the regions to strengthen area studies where the SUCs belong. At the same time, the SUCs can play a key role in building and expanding network of impact evaluation practitioners.

4.3 Many of the projects (particularly those that are donor-funded and cover a wide area) have developed log-frames to guide monitoring and evaluation efforts of activities. While there were identified and verified indicators, there appears to be a lack of some form of operational definition for the indicators. For instance the indicator "Share of poor households (HHs) registered in the database receiving benefits of social programs" did not specify the actual targeted proportion of HHs in the database that received benefits nor did it mention the objective of determining a percent increase among such HHs .

4.4 Based on the impact evaluation methodologies by the identified projects, there appears no standard guide applied in evaluating project impacts. Some of these projects engage or contract outside/third parties to conduct impact evaluation

where the methodology applied primarily depends on the expertise and capability of the contractor's. This was observed in projects funded by foreign donors such as: Pantawid Pamilyang Pilipino Program (4Ps) and Agrarian Reform Infrastructure Support Project (ARISP III). It was also observed that there were no specific set of standards/principles as to how impact evaluation methodology should be carried out which more likely explains the variation in the methodologies.

4.5 At the heart of any impact evaluation methodology is the comparison of the changes in outcome indicators between project/program beneficiaries and the "counterfactual" defined as the change in the outcome indicators among beneficiaries had they not received project/program intervention. Among the projects reviewed, only the impact evaluation report for the 4Ps indicated efforts as to how the counterfactual can be measured. Specifically, the project employed some form of randomized evaluation design where eligible households were grouped into recipients (forming the treatment group) and those eligible but were not recipients of the program (also known as control group). It was noted that those belonging to the control group may eventually become recipients at a later time due perhaps to budgetary constraints whereby all eligible households in the identified area can be outright recipients at the start of the project. The instrumental variable regression approach was employed to take account of the different times households were exposed to the project.

4.6 In the case of the ARISP III, evaluation was primarily based on the comparison between baseline and end-line surveys. Both surveys were contracted out to third parties and it was not clear if the same contractor will be conducting both surveys to ensure comparability in terms of the manner in which the surveys were conducted. There was no mention as to how the "counterfactual" was to be measured. In the project report (proposal), no standards/principles were specified as to how such surveys were to be conducted.

4.7 One major observation for many of the projects evaluated particularly those done at the regions, is the absence of a systematic manner in which baseline surveys was conducted. In fact, some projects reported the absence of baseline surveys and perhaps in lieu of baseline information, published official statistics were employed which generally are not designed to generate statistically reliable estimates for smaller areas.

4.8 Data collection methodologies applied were quite suspect as it does not conform to standard requisites of providing reliable statistics at the project area level. In fact one of the weaknesses of the impact evaluation study reported for the 4Ps project is the use of purposive sampling in the generation of estimates used to evaluate impact.

4.9 Another important consideration is the standardization of survey instruments in the collection of data. Whenever possible, it is recommended that survey instruments be developed so that they are comparable with instruments employed in the generation of official statistics so that estimates generated from impact evaluation surveys can be comparable to the official statistics (popular example is the poverty and income statistics).

5. Framework of the Impact Evaluation Capacity Building

5.1 While the generation of the final impact evaluation framework can be regarded as a work in progress, a proposed framework is presented towards with an end in view of (a) establishing a network of competent impact evaluation practitioners based on collaborative work and sustainability; and (b) specification of standard principles of impact evaluation methodologies that will be streamlined in government projects with the primary purpose of providing reliable evidences that can be of assistance to decision makers.

5.2 This would entail the conduct of the project in phases beginning with the pilot stage that includes building capacities through the conduct of trainings on impact evaluation methodologies and case studies through mini impact evaluation studies on selected regions. These activities should lead to the identification of problems that may arise during actual impact evaluation work and come up with proposed solutions. This should lead to a codification of standards, principles and methods for impact evaluation that will be presented to the NEDA for possible institutionalization.

5.3 In the pilot phase, collaborative networking will involve the SRTC as lead agency and expected to institutionalize impact evaluation in its research and training agenda. Institutionalization of IE ensures sustainability and improvement of impact evaluation methodologies. NEDA will provide advice on proper policy directions coherent with the national development plans and priorities. It will also coordinate partnership and collaboration with Government Departments and the SUCs and assist in the funding requirements. The SUCs on the other hand, should form the backbone of impact evaluation network that will be established. To sustain these initiatives, impact evaluation shall be part of the research and extension agenda of such institutions and scholarly work will be produced in such efforts.

5.4 After the pilot phase, impact evaluation protocols will be developed and codified for presentation to NEDA for approval.

5.5 After the acceptance of impact evaluation protocols, the project will now enter into the scaling-up and institutionalization stage. This means expansion of the network to include other regions and present a full project concept/proposal to the NEDA board for allocating budget for such purpose.

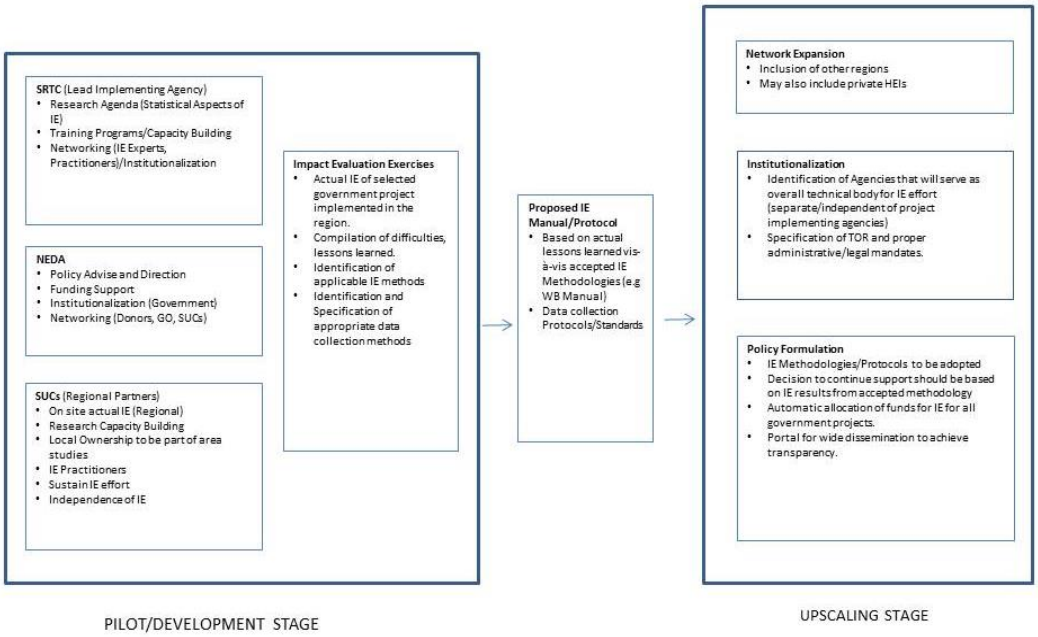

Figure 1. Proposed IE Capacity Building Framework

5.6 Figure 1 presents a schematic diagram of framework discussed.

6. Future Directions

The Component 2 of this undertaking, particularly for the research-based implementation of impact evaluation, will be conducted at the second quarter of the year. Following activities are proposed to be implemented:

Statistical Training Program and Action-Based Research

This will be a more focused follow-up of the training program previously conducted. Training programs will be conducted in the regions. Other resource persons will be tapped for this purpose. In each region, identified government projects will be used as case studies. The training courses to be included are:

1. Administration of Survey for baseline and end line information
2. Data Management using Excel
3. Statistical Analysis using STATA
4. Identification and data gathering of development indicators
5. Statistical analyses

Side by side with the training courses are series of workshops to develop survey questionnaire for impact evaluation and the manual of instructions for survey and analysis. After the training program, a working calendar will be prepared to serve as basis for the allocation of funds for the entire exercise.

Actual Data Gathering and Analysis of Results

This activity includes actual survey, data encoding and cleaning, training on data management and stat analysis using STATA and report writing.

Follow Up and Monitoring Visits

Follow-up and monitoring visits will be conducted by the SRTC team during the actual impact evaluation work.

Presentation of impact evaluation results

At the end of Component 2, an impact evaluation conference will be organized by the SRTC where training participants will prepare and present papers. It is recommended that papers presented be disseminated in published proceedings.

Preparation of impact evaluation Protocols and institutionalization efforts

At the end of the impact evaluation conference, impact evaluation protocols will be formalized. Also, institutionalization plan will be prepared based on lessons learned from component 2.

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