



Helpdesk Research Report

Methods for monitoring and evaluating local government performance

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Question

What data collection methods can be used to understand tangible and intangible domains of change in a small number (n=6) of local government areas in Papua New Guinea that are likely to indicate progress or not towards change in service delivery and economic development?

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1. Overview

A range of methods can be used to monitor and evaluate whether a programme/workstream has contributed to change in local governance, service delivery and economic development, and to generate understanding and knowledge that can be shared with others to support better governance, service delivery and economic development in a decentralised government system.

This report looks at the following methods, providing an overview of their strengths and weaknesses as highlighted in the literature on monitoring and evaluation methods:

- Political Economy Analysis
- Social Network Analysis
- Positive Deviance
- Qualitative Comparative Analysis
- Outcome Mapping
- Contribution Analysis

The methods covered in this report share several commonalities:

- They tend to require highly skilled individuals to implement the methodology
- They are often time consuming
- They often involve high financial costs

There is a relatively large body of literature on these methods, consisting both of peer-reviewed journal articles and grey literature. However, the body of literature analysing these methods in the context of evaluation is smaller, particularly in the context of local governance.

Particular emphasis was placed on gender and inclusiveness during the literature search; however most of the literature on the methods included in this report is gender blind.

2. Methods

Political Economy Analysis

Using Political Economy Analysis (PEA) in monitoring, evaluation, indicator development, impact analysis, and collaborative learning can help identify and maintain a focus on context-specific challenges and constraints (USAID, 2016a). According to USAID, undertaking applied PEA across different sectors can facilitate the identification of key actors and their incentives, relationships, and capacity for action. This, they argue, can help prevent 'errors of omission' in programme design (USAID, 2016a). Applied PEA research enables the integration of different stakeholders opinions at different levels (USAID, 2016a, p. 16). According to USAID 'PEA requires researchers to understand the broader systems and relationships between powerful actors and development outcomes and to expose how and why these actors and systems specifically hinder development goals in order to identify what change processes could be supported by targeted programming to support changes in behaviour' (2016a, p. 16).

A briefing paper published by the Overseas Development Institute (ODI) advocates problem-driven PEA. It argues that focusing on a specific problem can help ensure that the analysis does not just highlight

salient features of the political context in which development interventions take place, but also has operational relevance. It notes that this can be time consuming but that time spent identifying and formulating the problem is well spent (Harris, 2013, p. 3).

Steps:

USAID's Field Guide to Applied PEA (2016), suggests the following steps:

1. Hold initial discussions to brainstorm Applied PEA questions.
2. Recruit the team members based on Applied PEA focus.
3. Conduct a desk study.
4. Agree on a preliminary agenda.
5. Hold an Applied PEA workshop in country.
6. Finalise the agenda/site visit plan.
7. Conduct the fieldwork – USAID recommends two weeks for this (2016a, p. 7)
8. Meet nightly to review interview results.
9. Conduct additional interviews to triangulate and confirm findings
10. Brief sector and Mission leadership on preliminary findings.
11. Draft a baseline Applied PEA report.
12. Finalise based on feedback from Mission staff and other stakeholders
13. Repeat fieldwork as necessary to refine and update results, and learn as you go (2016, p. 6).

On the final step, they suggest that it is good practice to update a PEA repeatedly if:

- the context is changing
- if there is a need to ask a similar set of questions in a number of localities
- if project/activity goals are not being met and the reasons why are unclear (2016, p. 6)

USAID's guide suggests that engaging national staff as well as PEA specialists when undertaking a PEA will make it easier for subsequent PEAs to be undertaken locally, and potentially without further specialist assistance. This reduces costs (USAID, 2016, p. 4). The guide also states that redoing PEAs also helps to regularly monitor key actors and changes in leadership, as well as any changes in the formal rules and informal norms governing behaviour. It also helps monitor political, social and economic events that are driving and limiting reforms (USAID, 2016, p. 4). This knowledge enables new projects and changes to existing projects to be planned. It also enables the monitoring and evaluation of on-going projects (USAID, 2016, p. 4).

Limitations:

- PEA research requires flexibility and adaptability during the interview process. Teams should therefore ideally coordinate and communicate before, during and after interviews (USAID, 2016a, p. 9).

- In terms of inclusivity, gender is not systematically included in PEA (Browne, 2014, p. 1).

Social Network Analysis

Social Network Analysis (SNA) is appropriate for several types of evaluation, such as the evaluation of collaboration and communities of practice, and participatory evaluation. It is unique as it focuses on the social context and behaviour of relationships among actors, rather than on the rational decisions individual actors make (Fredericks & Durland, 2005, p. 9). SNA is a theoretical framework, which is conceptually simple, and analyses data in a matrix format. It sheds light on how a relationship is structured and what it means (Fredericks & Durland, 2005, p. 11). A number of sources state that SNA is often used in conjunction with other evaluation methods.

According to Fredericks and Durland (2005), SNA can help evaluators to:

- Understand the overall network within a programme or initiative.
- Identify subgroups within the network.
- Identify key characteristics about the individuals or actors in the network.
- Measure the level of importance and similarity of individuals or actors within the network.

SNA typically asks the following questions:

- Who is talking to whom
- Who works with whom
- Who gives and seeks advice or mentors others
- Who gives resources to whom
- Who is related to whom
- Who has access to whom (Fredericks & Carmen, 2013)

Steps:

1. Identify the network of individuals, teams, and units to be analysed.
2. Collect background information to understand specific needs and issues, for example by interviewing senior managers.
3. Define the objective and scope of the analysis.
4. Formulate hypotheses and questions.
5. Develop the survey methodology.
6. Design the questionnaire.
7. Survey the individuals and teams in the network to identify the relationships and knowledge flows between them.
8. Visually map out the network using a social network analysis tool.
9. Review the map and the problems and opportunities it highlights using interviews and/or workshops.
10. Design and implement actions to bring about desired changes.
11. Map the network again after a suitable period of time (Serrat, 2009, p. 3).

Limitations:

- SNA requires extremely high response rates and complete data to be accurate.
- SNA requires specific software.
- Due to the nature of data collection requirements, managing the size and scope of the evaluation can be challenging.
- Consultants/ contractors with a unique skill set and training are required (Fredericks and Carman, 2013).

Positive deviance

Positive Deviance is based on the premise that certain individuals facing similar challenges and constraints to their peers will use uncommon but successful strategies to find better ways of overcoming these challenges. Innovative solutions to these challenges can be identified and refined, by studying these individuals (positive deviants). Positive deviance is considered unique as it focuses 'on the successful exceptions, rather than the failing norm' (Herington & Van de Fliert, 2017, p. 3). Moreover, it places emphasis on "who" and "how", rather than on "why" a programme or approach succeeds (Herington & Van de Fliert, 2017, p. 3)

A systematic review of the literature on positive deviance finds that there is a significant difference between how positive deviance is applied in theory and in practice. In literature dealing with positive deviance in practice, common concepts covered are health, care, and women. However, the theoretical literature focuses more on concepts such as social, behaviour, process, and change. (Herington & Van de Fliert, 2017, p. 4).

Steps:

1. Define the problem.
2. Identify desirable outcomes.
3. Identify individuals or groups who have achieved these outcomes and the behaviours or strategies that enabled them to do so.
4. Design an intervention that promotes these practices and monitor progress (Herington & Van de Fliert, 2017, p. 3).

Limitations:

- It is time and labour intensive, and requires a skilled facilitator.
- The process occurs in a 'non-traditional, iterative fashion,' and requires donors, planners, and implementers to accept a degree of uncertainty.
- This approach often emphasises process over efficiency.¹

Qualitative Comparative Analysis (QCA)

QCA is a hybrid method, designed to bridge the gap between qualitative and quantitative research. It is intended to serve as 'a practical approach for understanding complex, real-world situations' (Cragun et al,

¹ https://www.betterevaluation.org/en/plan/approach/contribution_analysis

2015, p. 1). There are numerous techniques that fall under the umbrella of QCA. These include csQCA (crisp set QCA), fsQCA (fuzzy set QCA), and mvQCA (multi-valued QCA). Papers vary on the size of dataset QCA is intended to be used for. These range from medium-N situations (Braumoeller, 2015) to the whole range of small, medium and large datasets (Cragun et al, 2015, p. 19).

QCA requires in-depth qualitative knowledge of each case. This is obtained using a diverse range of qualitative research methods such as ethnography, semi-structured interviews, observation, or literature reviews. Achievement of outcomes and causal factors are then translated into a numerical format to carry out a systematic analysis of patterns across the data (CDI, 2016, p. 1). The evaluator looks for links between influencing factors (or 'conditions') and outcomes. The potentially influencing conditions are usually derived from existing social science theory or a programme theory of change. A systematic comparison of a number of cases that seek to achieve the same outcome is undertaken to test for the relative influence of each condition (CDI, 2016, p. 1). QCA helps to determine which factors are more important and which are less likely to have an impact among the cases that are investigated in relation to the same outcome. An important element in this analysis is the identification of 'sufficient' and 'necessary' conditions that occur in conjunction with an outcome (CDI, 2016, p. 1). At the end of the process, the evaluator usually finds a number of different configurations of conditions, or multiple causal patterns that lead to outcomes being achieved (CDI, 2016, p. 1). QCA assumes that multiple conditions can result in the same outcome and that a single condition does not usually have an effect alone (CDI, 2016, p. 2).

Steps:

1. Select cases that share the same outcome goals.
2. Look at contextual and programme related conditions that are likely to influence the outcome, based on a theory of change.
3. Go back and forth between sampling, data collection, and analysing data against these conditions, refining, adding, or taking away conditions or cases as new insights emerge during the analysis. Cases are scored on their outcome achievement, and conditions are scored on their presence or absence for each case as part of the analysis. This turns the data set into a numerical summary that can be compared using Boolean algebra.
4. To compare data, QCA specific software is needed. The analysis shows sufficient and necessary conditions and combinations of conditions in the data set, revealing important patterns in the data. Based on that, the number of conditions are reduced to the most important patterns that lead to the achievement of outcomes. These patterns can be illustrated using a Venn diagram
5. The interpretation of QCA results is the key last step. Turning QCA findings into meaningful interpretations can be difficult. It is therefore important that the evaluator has an excellent understanding of the analysis (CDI, 2016, p. 2).

Advantages:

- Provides a tool for identifying causal complexity.
- Enables the generation of solutions (using a computer programme).
- Calculates measures to evaluate the merit of those solutions (Cragun et al, 2015, p. 19).
- Makes evaluators use tight definitions to ensure rigorous analysis. This also ensures an increased level of objectivity and replicability of the analysis (CDI, 2016).

Limitations:

- A condition can only be included in the analysis if enough data is available for all cases. If there are no data for one case, the condition or the case has to be left out of the analysis (CDI, 2016, p. 3)
- Potential for measurement error and case misclassification (Cragun et al, 2015, p. 19)
- In csQCA conditions and outcomes have to be dichotomised. However, in fsQCA outcomes and/or conditions can be coded on a calibrated scale from 0-1. This means that as opposed to csQCA, fsQCA is able to maintain variation and more accurately represent nuance. Bias and measurement error are still a problem but are less likely to occur with fsQCA (Cragun et al, 2015, p. 19)
- Requires a lot of time
- Findings are very technical and abstract and have to be made accessible users
- Evaluators need to have a thorough understanding of this methodology and require guidance from a QCA practitioner
- It is most relevant if the evaluation object consists of a number of comparable cases, and if the causality observed fits with the QCA logic of multiple causal pathways. Moreover, QCA is most applicable if a complete data set is available (CDI, 2016, p. 7).
- Little accessible guidance is available to those unfamiliar with the methodology (Scholz et al, 2016).

The Centre for Development Impact finds that combining QCA with other methods is essential in determining what works in what contexts (2016, p. 6).

Outcome mapping

As an evaluation approach, Outcome Mapping provides insight into a programme's theory of change, provides a framework to collect data on immediate, basic changes that lead to longer, more transformative change, and enables a realistic assessment of the initiative's contribution to results.²

Outcome Mapping can be used alone or together with other planning, monitoring and evaluation methods to:

- identify individuals, groups or organisations with whom you will work directly to influence behavioural change;
- plan and monitor behavioural change and the strategies to support those changes;
- monitor internal practices of the project or programme to remain effective;
- create an evaluation framework to examine more precisely a particular issue.³

² https://www.betterevaluation.org/en/plan/approach/contribution_analysis

³ https://www.betterevaluation.org/en/plan/approach/contribution_analysis

MacDonald & Simister (2016) and the Better Evaluation website set out the steps required for Outcome Mapping. These are detailed below.

Steps:

1. Develop a vision that reflects development-related changes that the programme hopes to encourage or achieve.
2. Develop a mission statement that explains how the programme hopes to support the vision.
3. Individuals, groups, or organisations are identified with which the programme will interact directly and where there will be opportunities for influence. These are referred to as boundary partners.
4. Develop an outcome challenge statement for each boundary partner, which describes the desired changes in the behaviour, relationships, activities, and actions of the boundary partner. The aim is for each type of boundary partner to contribute to vision of the programme.
5. Identify progress markers for each boundary partner. These are visible, behavioural changes ranging from the minimum one would expect to see the boundary partners doing as an early response to the programme, to what it would like to see, and finally to what it would love to see them doing if the programme were having a significant influence. They are an essential component of the monitoring process. They are intended to show progress as a body of markers rather than as individual indicators. Progress markers can be adjusted during the implementation process, can include unintended results, do not describe a change in state and do not contain percentages or deadlines.
6. Develop strategy maps to identify strategies to be used by the programme to contribute to achievement of each outcome challenge.
7. Identify organisational practices that the programme will use to be effective. These should explain how the implementing team is going to operate and organise itself to fulfil its mission.
8. Identify monitoring and evaluation priorities and divide them into organisational practices, progress toward the outcomes being achieved by boundary partners, and the strategies that the programme is using to encourage change in its boundary partners.
9. Develop outcome journals for each boundary partner, which includes the progress markers identified in Step 5, a description of the level of change as low, medium, or high; and a place to record which of the boundary partners exhibited the change.
10. Develop a strategy journal, which records data on the strategies being used, and is filled out during the programme's regular monitoring meetings.
11. Develop a performance journal for the programme which records data on how the organisation is operating to fulfil its mission. This should be filled out during regular monitoring meetings.
12. Develop a descriptive plan of a proposed evaluation. This outlines the evaluation issue, the way findings will be used, the questions, sources and methods to be used, the nature of the

evaluation team, the proposed dates and the approximate cost (MacDonald & Simister, 2016).⁴

Advantages:

- Introduces monitoring and evaluation in the early stages of a programme, and ensures that it is incorporated in the programme design (MacDonald & Sinster, 2016).
- It is a robust methodology that can be adapted to a wide range of contexts.
- It improves team and programme understanding of change processes
- Improves the efficiency of achieving results and promotes realistic and accountable reporting. ⁵

Limitations:

- Requires skilled facilitation as well as dedicated budget and time.
- More appropriate for small programmes, but the investment required may not be proportional to benefits of using this methodology (MacDonald & Simister, 2016).
- If users require an impact assessment, additional tools and methodologies need to be used as Outcome Mapping does not focus on impact (MacDonald & Simister, 2016).

Contribution Analysis

Contribution Analysis offers a step-by-step approach designed to help identify what contribution a programme has made to particular outcomes.⁶ The benefit of Contribution Analysis is that it offers an approach designed to increase certainty about the contribution an intervention is making to observed change or results.⁷ This is done by enabling an increased understanding of why the observed results have or have not occurred, and of the roles played by the intervention and other internal and external factors.⁸

Contribution Analysis is particularly useful in situations where the programme is not experimental, but rather is based on a fairly clearly articulated theory of change. Contribution Analysis helps to confirm or revise a theory of change; it is not supposed to be used to ‘uncover and display a hitherto implicit or inexplicit theory of change.’ The report from a Contribution Analysis provides evidence from which it is possible to draw the conclusion that, within some level of confidence, the programme in question has made an important contribution to achieving the documented results.⁹

⁴ https://www.betterevaluation.org/en/plan/approach/contribution_analysis

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⁹ https://www.betterevaluation.org/en/plan/approach/contribution_analysis

Steps:

1. Determine which cause-effect issue is to be addressed.
2. Determine plausibility of theory of change and identify alternative explanations for change
3. Gather existing evidence on the theory of change
4. Assess contribution claim and challenges to it
5. Find additional evidence
6. Revise and strengthen contribution story (Noltze et al, 2014)

Advantages:

- The flexibility of this method means that different data collection tools and types of analysis can be incorporated to test causal links systematically (Noltze et al, 2014)

Limitations:

- Each additional causal link under investigation increases the resources required for the evaluation (Noltze et al, 2014)
- Methods for implementing the six steps of Contribution Analysis to maximise its utility are not well-developed (Riley et al, 2017)

A number of authors have highlighted the need for methodological elaborations of Contribution Analysis. These cover issues such as how theories of change can be strengthened to incorporate concepts of reach, how pathways of impact are influenced over time and how competing explanations and influencing factors can be accounted for (Riley et al, 2017).

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Key websites

- www.betterevaluation.org
- www.positivedeviance.org

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