

Evaluating projects ex-post & emerging sustainability and resilience

Fieldwork Methods Options



Training material METHODS

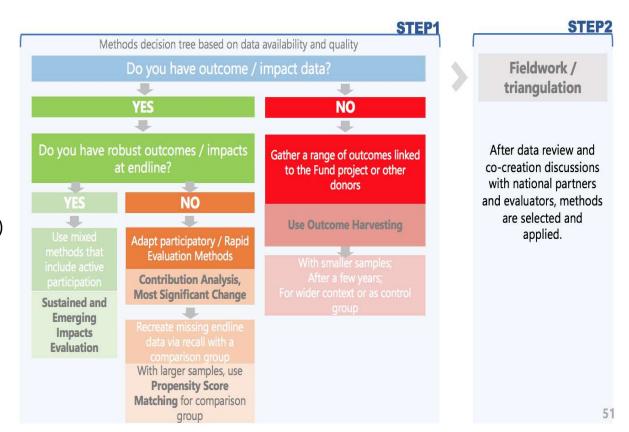
Recap

Ex-post sustainability methods selection

Ex-post sustainability methods options:

- A. Sustained and Emerging Impacts Evaluations (Mixed methods)
- **B.** Contribution Analysis (Qualitative)
- **C.** Most Significant Change (Qualitative)
- **D.** Outcome Harvesting (Qualitative)
- E. QCA and Story Surveys (Mixed methods based on algorithms)
- F. Propensity Score Matching or SEIE Surveys (Quantitative)





Recap

Ex-post sustainability methods selection

Methods:

A. Where project final evaluations document robust outcomes data, where possible, mixed-methods that included active participation can effectively evaluate a mix of human and natural systems will be suggested. One set of qualitative/ quantitative tools is a population-based evaluative method, Sustained and Emerging Impacts Evaluation, which examines the degree to which measurable outcomes and impacts have continued, as well as processes/ideas and what emerged from local efforts.

B. Where there is an unclear Theory of Change and weak outcomes or only outputs, <u>Contribution Analysis</u> or <u>Most Significant Change</u> can help identify locally-prioritized outcomes and trace the duration of outcomes to the AF-Funded project.

Comparison group methods:

- C. When a population-based comparison group is not large enough, we suggest you innovate by using Outcome Harvesting among comparable former participants from elsewhere than the selected ex-post evaluation sites. Note. Prompt for AF activities at end of harvest
- D. Contribution Analysis is preferable to <u>Outcome Harvesting</u> for the main ex-post evaluation, where direct contribution *could be* but also *could not be* traced to the AF.
- E. Outcome Harvesting, however, is an excellent way to isolate what donor projects' helped resilience most
- F. Where a comparison group is possible, given a statistically significant large-enough sample, and data needs to be re-created with these methods and randomized with Propensity Score Matching.

Quick overview of methods

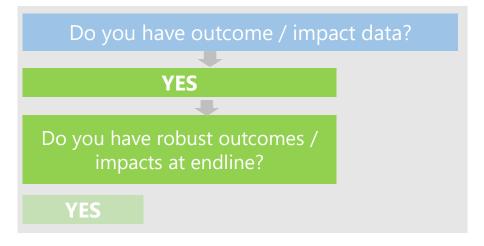
Fieldwork methods: SEIE

Sustained and Emerging Impacts Evaluation



refers to an evaluation that focuses on outcomes and impacts for some time after the end of an intervention (which might be a project, policy, or group of projects or programmes) or after the end of participants' involvement in an intervention. It traces what emerged from local efforts to sustain results.

It uses mixed methods to examine the extent to which intended impacts have been sustained, as well as any emerging impacts that have emerged over time (positive and negative).



Key words:

Mixed methods

Intended impacts

Emerging impacts

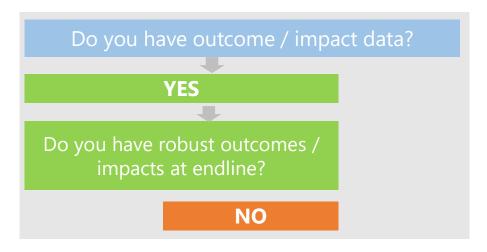
Quick overview of methods

Fieldwork method: Contribution Analysis

Contribution analysis



assesses causal questions and infers causality in real-life programme evaluations. It offers a step-by-step approach to help managers, researchers, and policymakers arrive at conclusions about the contribution their programme has made (or is making) to outcomes. It reduces uncertainty about the contribution of the intervention to observed results thrgh increased understanding of why the observed results have occurred (or not) and the roles of the intervention, and other internal & external factors.



Key words:

Causality

Step-by-step approach

Internal & external factors

Quick overview of methods

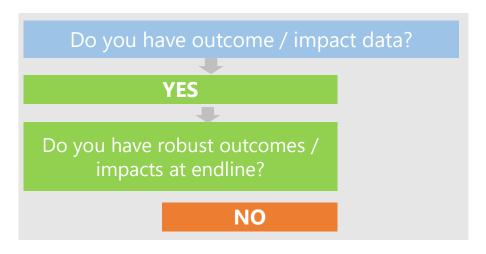
Fieldwork methods: Most Significant Change

Most Significant Change



involves generating and analyzing personal accounts of change and deciding which of these accounts is the most significant – and why. It follows three basic steps:

- deciding the types of stories that should be collected (e.g. stories about practice change or health outcomes or empowerment)
- collecting the stories and determining which stories are the most significant
- sharing the stories and discussion of values with stakeholders and contributors so that learning happens about what is valued.



Key words:

Personal stories

Most significant

Discussion of values

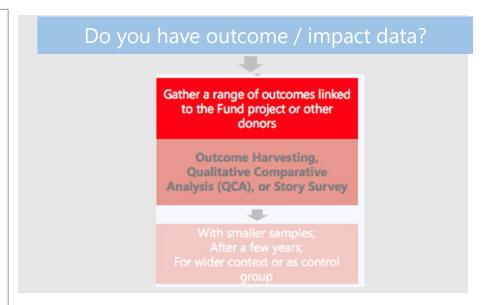
Choice and discussion of field methods

Fieldwork methods: Outcome Harvesting

Outcome Harvesting



collects ("harvests") evidence of what has changed ("outcomes"). Unlike some evaluation approaches, it does not measure progress towards predetermined objectives or outcomes. Rather, it collects evidence of what has changed and then, working backwards, determines whether and how an intervention contributed to these changes. The outcome(s) can be positive or negative, intended or unintended, direct or indirect, but the connection between the intervention and the outcomes should be plausible.



Key words:

Evidence of change

Working backwards

Contribution

Data collection process and methods

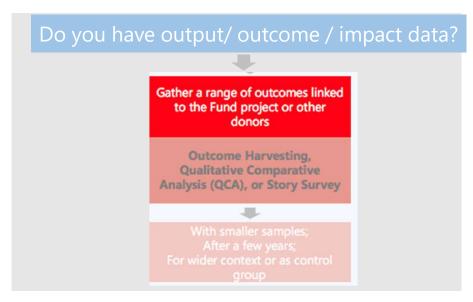
Fieldwork methods: Qualitative Comparative Analysis (QCA)

Qualitative Comparative Analysis



Qualitative Comparative Analysis (QCA) is a means of analyzing the causal contribution of different conditions (e.g. aspects of an intervention and the wider context) to an outcome of interest and how different factors contribute to a given outcome.

QCA starts with the documentation of the different configurations of conditions associated with each case of an observed outcome. These are then subject to a minimization procedure that identifies the simplest set of conditions that can account for all the observed outcomes, as well as their absence.



Key words:

Presence of outcome: binary (yes/no) or degree of presence (0.0 to 1.0)

Cases with similar outcome

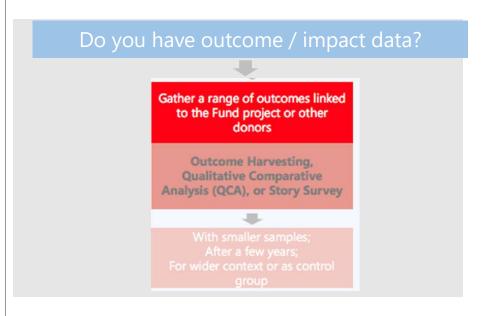
Typical # of cases: 5-22

Choice and discussion of field methods

Fieldwork methods: Story Survey (Contribution Analysis)

Story Survey

StorySurvey.app is a quantative, causal survey tool prompt them stakeholders to make connections and give reasons, e.g.. Qualitative uses open-endedd questions and Natural Language Processing (NLP) to synthesize the words and ideas respondents themselves use. It asks respondents why things happen, and presents results in the form of intuitive and interesting causal maps. The app can even display how trends and ideas change and develop over time. It can pick up unexpected, emerging or even maladaptive information as they are entered, so it can be used for regular monitoring and ex-post evaluation.



Key words:

Evidence of change

Working backwards

Contribution

Choice and discussion of field methods

Fieldwork methods: Propensity Score Matching

Propensity Score Matching



Recall methods and Propensity Score Matching creates sets of participants for treatment and control groups.

A matched set consists of at least one participant in the treatment group and one in the control group with similar propensity scores.

The goal is to approximate a random experiment, eliminating many of the problems that come with observational data analysis.

Comparison group methods:



with large samples

Key words:

Similar characteristics

Treatment/ control group

Random experiment

Reminder: what is SEIE?

Sustained and Emerging Impacts Evaluation



refers to an evaluation that focuses on the longterm sustainability of outcomes and impacts at least 2 years after the end of an intervention (which might be a project, policy, or group of projects or programmes) or after the end of participants' involvement in an intervention. It also traces what emerged from local efforts to sustain results. SEIE uses **mixed methods** to examine the extent to which intended impacts have been sustained, as well as any emerging impacts that have emerged over time (positive and negative). Fieldwork involves qualitative evaluation with a range of stakeholders that is followed by quantitative evaluation with communities

Returning post-project to evaluate impact answers *how* sustainable our development is, why, and how to boost locally-owned development solutions.

Transparent, accountable aid puts participants and partners the center of development.



How does SEIE work?





Random selection

- project participants and partners sorted by characteristics or project involvement for Qualitative FGD and KII (slide 16)
- households randomly selected from a list for Quantitative Survey

Qualitative methods first

Participatory Rural
Appraisal



Quantitative survey after

- qualitative methods answer a range of what was functioning due to 'ownership' by whom, what resources, capacities, partnerships enabled project results
- draw on <u>Appreciative Inquiry</u> and <u>Empowerment Evaluation</u> principles of looking for what has worked best and valuing and empowering local stakeholder voice along with <u>Participatory Impact Assessment or Rapid Rural Appraisal</u> processes which contextualizes 'project' and 'non-project' impacts, influences and changes."
- identify shocks to the continuation of outcomes/ outputs, probing for activities communities and partners mentioned were still functioning (especially tracking differences groups. Look at the role of seasonality.
- survey shapes learning about how widespread outcomes and impacts are (often using Likert scales and open-ended answers), probes for the full range of expected activities and explores unexpected findings that the qualitative phase unearthed.
- when time and finances allow, a statistically robust quantitative survey exploring the extent to which these outcomes and impacts were sustained across genders and ages in communities.

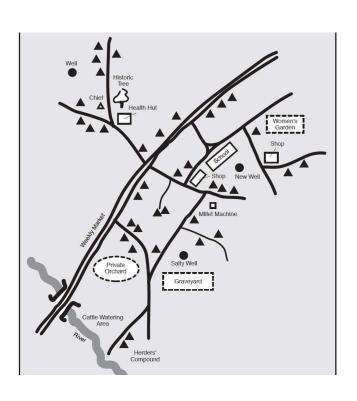
Respondent selection: considerations for sampling

Respondent Sampling

- The site and datasets should replicate the final evaluation.
- Identify who is still there and could know of the project then and now through participant lists, community leaders and INGOs (international non-profits) and NGOs (local non-profits)
- Four types of informants:
 - National and international project stakeholders
 - Participants in Communities and Key community members
 - Partners i.e. non-profit, academia and/or private sector who co-implemented
 - **Government national representatives or subsequent donors** who co-implemented or were to sustain results post-exit of the donor funded project
- Additional sampling considerations will be made based on client input regarding rigor demanded, funding and data collectors available.
- After receiving input from IE (implementing entity) /EE (executing entity) and INGO/ Country1 and project's data, the evaluator shall develop a sampling frame to select a representative sample of households within the at least two sites

Qualitative phase of SEIE: Rapid Rural Appraisal

The qualitative enquiry uses a community-wide **Rapid Rural Appraisal** to first gather all outcomes and sustained and emergent impacts and look for who enabled them, proving for those expected by INGO compared to others we find.



Toolbox: INGO PRA/ RRA Manual

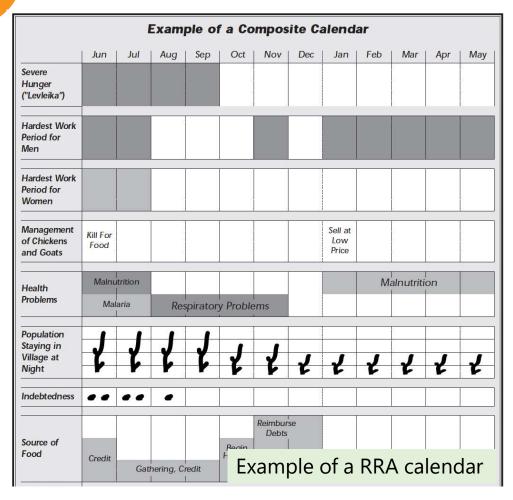
- understand why the situation stands as it is in terms of sustainability (or not), what role the project had to play, or should have played
- look for other contextual factors that could affect project sustainability including the presence of other partners that intervened since closeout, new government regulations,
- assess the strength of the government to carry activities on given the current conditions and the role of youth in sustaining activities for decades to come.

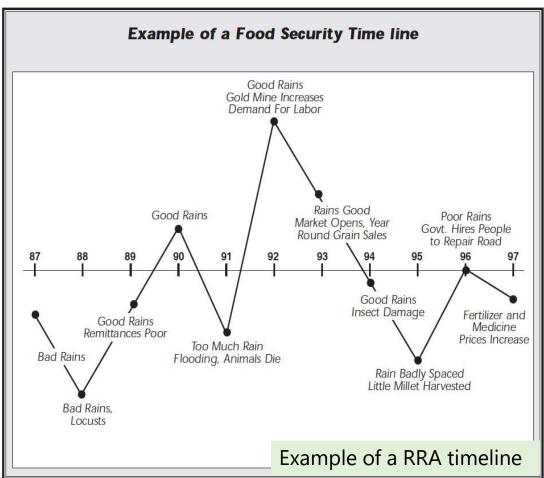
Qualitative phase of SEIE: Rapid Rural Appraisal tools

Community Participatory Tools for RRA:

- **Seasonal Calendar** to isolate continuing activities in the last three years since closeout final year and last year and why continued or ceased
- Timelines of major events and what projects were intervening in the areas doing what when
- **Venn diagram with map** to identify partners, including government partners, currently supporting the communities in key areas as well as identify (non-) functioning assets
- Activities mapping typical day to assess gender-specific use of program activities, barriers and things to consider in future gender-differentiated programming
- **Rankings and Matrices** to determine perceptions about most/least sustained activities and (un)expected impacts and discussion of why
- **Transect walks** and **focus group discussions** about what emerged in the years since tracing back to the project
- **Focus Group Discussion** by gender, income, age, shock-affected, etc..

Qualitative phase of SEIE: Rapid Rural Appraisal tools





Qualitative phase of SEIE: Rapid Rural Appraisal tools information gathering



Example of a RRA mapping conducted on the field in Niger

Qualitative phase of SEIE: Rapid Rural Appraisal tools

Example of a Historical Matrix Used to Look at Food Security Issues									
	Appx. 50 Years Ago	When the School Was Built (1973)	When the Dam Was Completed (1985)	Present					
Population of the Village									
Number of Months the Average Family's Harvest Lasted in an Average year									
Consumption Of Meat									
Consumption of Oil									
Amount of Harvest Devoted to Ceremonial Purposes									
Number of Food Insecure Households in the Village									
- In things		Example of a RRA matrix							

Example of a Transect Focused on Food Security and Nutrition Issues								
	AM AM AM	At Mask						
Zone	Central Village	Inner Fields	Outer Fields	Forest				
Food production / gathering	Household vegetable gardens, chickens, papaya, mango, and orange trees; Goats fenced in during rainy season	Groundnuts, corn, some hibiscus in women's garden, Some tree products, Small ruminant grazing during dry season	Millet, sorghum, some rice; Watering holes for animals; Karite trees; Cattle grazing during dry season	Fruit from baobab, wild date, fig and other wild trees, honey. Cattle grazing during rainy season				
Food processing and storage	Dried vegetables and fruits; Groundnuts in women's fields	Family granaries in or near fields	Oil processed from karite nuts					

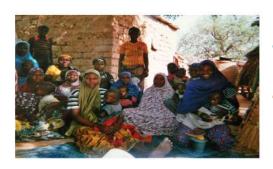




Examples of transect walks

Figures: confirmation of use (local zai 18 with composting) and functioning mill

Qualitative phase of SEIE: interviews (FGD/ KII)



- Procus Group
 Discussions (FGD)
- Key Informant Interviews (KIIs)

- Starts with national stakeholders, drilling down to regional, then local
- Typically using RRA participatory tools with communities and smaller subsets by characteristic or participation in project
- Relies on partner for site selection, self-selection by participants
- Triangulates findings with local partner interviews



- Confirm Theory of Sustainability (ToS) and sustainability of final output /outcome & impact measures
- Shape fieldwork



- Can be used to confirm findings
- Debriefs to triangulate and share learning (community, regional, national level)



 Can be used for Outcome Harvesting (OH) in control sites

Qualitative phase of SEIE: unintended and emerging outcomes/ impacts

Differentiating unintended from emerging outcomes/ impacts

Unintended outcomes relate directly to a project's theory of change and may reveal the extent and reasons why assumptions or objectives deviated from what was anticipated in the design, including what endured, what didn't, and why.

Emerging outcomes consider how project participants used their own means to carry project initiatives forward and may inform future approaches to incentivizing sustainability. Emerging outcomes might also include how project participants adapted skills or assets they acquired in the course of a program to a completely different use, with new outcomes and impacts emerging.





Qualitative phase of SEIE: RRA matrix example from AF Samoa's ex-post

Triangulation via evaluation tools: Move from large communal groups to smaller focus group discussions to individual interviews with range of stakeholders in the field

	Communal gro	munal groups		Small groups. FGD/ and / individual KIIs			ENGIEERING
AIMS for use/ Tools	Мар	Historical ecological and economic Calendar	Historical Timeline including Shocks	Transect walk	Rankings	Probing	
(Human systems) Community organization & structures in community related to the AF infrastructure	х			Х			
History of range of shocks		X	X	X			Well-designed & Withstood shocks?
Other projects & partners there (did what, when, how overlapped)			х	Х		X	
Benefits of wall(s) – economic/ livelihood, social					X	Х	
Gender and income- specific views on benefits/ cost of wall(s) eg planting					Х	Х	
Design of wall(s) implementation, maintenance			Х			х	
Natural systems & effect/ affected by wall(s)			X	Х			
CIM Plan involvement re: Walls							

Qualitative phase of SEIE: considerations for implementation

Triangulating at the respondent level

Whether in RRA or PRA, attention must be paid to triangulation at the respondent level. Since different people and groups within the community have different perceptions and points of view, it is important that the full range of perspectives be considered as information is being gathered.

Thus, it is important to gather information from:

- men and women
- people who are older and younger
- those who are poorer as well as those who are richer
- those who have suffered from a disaster/ climate crisis, or not
- people from different ethnic groups, castes, or professions

In some cases, **interviewing non-project participants** can add valuable insights about outcomes and impacts as well as diffusion and uptake as well as unintended impacts and emerging impacts.

Quantitative phase of SEIE: survey

Qualitative findings shapes the quantitative questionnaires, which confirms the extent to which assumed sustainability is true.

TIMING:

• Drafted at inception or after qualitative fieldwork has narrowed findings about likelihood of sustainability

QUESTIONNAIRE:

- Questionnaire to explore representativeness of qualitative findings
- Questionnaire to consider quantifiability of outcomes/ impact(s)
- Questionnaire to include triangulation questions
- Develop an evaluation design matrix and questionnaire (decisions on computer software/ hardware)

SAMPLING:

Sampling plan and sampling frame to be based on HH clusters

DATA COLLECTION:

- Involves training of enumerators and daily data cleaning
- Data collection in at least 2 sites (2-3 days per site), but depends on sample and desired confidence interval (80-95%)

DATA ANALYSIS:

- Qualitative analysis: word frequency of open-ended questions
- Statistical analysis: regression analysis (Epi-Info; SPSS) for final to ex-post changes

Quantitative phase of SEIE: considerations for sampling and design

- Given the large number of participants per activity, random sampling for fieldwork may be needed, e.g. in one AF project, 2639 families incorporated homestead gardens or 4,526 ha of land was repowered to benefit 3650 families. This may involve much smaller numbers at each site – to discuss
- The participating households in communities are **random-sampled for the quantitative survey.** Respondents are only project participants, self-select their participation for the qualitative phase, then randomly sample them for the survey)
- The sample size will be influenced by factors such as the need for statistical rigor (representativeness, confidence interval, etc.), and the time/ budget available.
- 10% additional households are added to any sample to account for those who moved since project close, or others who are not unavailable.





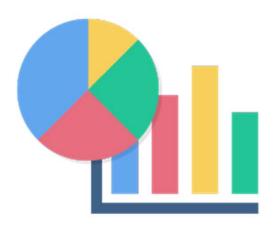
Quantitative phase of SEIE: considerations for implementation

- Enumerators need to be trained and ideally tablets are used. If data is collected through paper, then additional 'data cleaning' time in the field is needed at the end of every day when surveys are reviewed
- A pretest of the questionnaire is done either with local staff or a handful of similar respondents not related to the project
- Each interviewer should make an effort to speak to alternate respondents between men and women (1 per household)





Quantitative phase of SEIE: consideration for analysis



- The firm running the SPSS or other statistics analysis should know they may need to **do additional analyses** once the findings are sent to the team, as questions may arise.
- Charts should be generated for all findings by household type (e.g female-headed, youth, etc.).



SEIE: triangulation of findings

Triangulation of findings to manage bias

Manage bias



triangulation

- Gender Bias: More emphasis is put on the point of view of either men or women; the other perspective is underrepresented
- **Spatial Bias:** One area is favored in collecting information and the views of people who live in or frequent that area may be given more weight. This may take place if some places are more accessible (areas near good roads, near the center of the village versus the periphery) or more pleasant;
- **Wealth Bias:** Often the views of people who are wealthier or who hold positions of authority are given greater weight over the course of a study. The poor are frequently underrepresented unless specific actions are taken to include them;
- **Education Bias:** The views of those with more formal education are often solicited and considered more carefully than those with less education. This often coincides with a language bias since educated people may be better able to communicate with the research team;
- **Expectation Bias:** The village's expectations of what the outside organization may bring them often causes villagers to favor certain types of information in their discussions. Similarly, the researchers' expectations of what they will find in the community acts as a filter for the information that is received by the team.

SEIE: triangulation of findings

Multiple points of confirmation

- Qualitative
- Observational
- Quantitative
- All triangulate one another







Multiple respondents

- Donors, national government
- Project implementers/ partner staff
- Project participants,
- Local government, private sector etc



Multiple Methods or resources

- Qualitative methods can use Participatory methods (RRA)
- MSC or CA, confirmed by OH in non-evaluated area
- Quantitative methods to confirm qualitative
- KII and observation to confirm sustainability of assets and capacities
- Other measures such as road investment costs or water quality to confirm/ refute mixed method fieldwork findings

SEIE: triangulation of findings (RRA example)

Tools and techniques for triangulation

Since each tool introduces a particular bias, it is important that the study diversify the tools that are used. A sampling of potential tools is presented in Part III of this manual. RRA and PRA tools include:

- Modes of interviewing modes Semi-Structured Interviews, Focus Group Discussions, Key Informant Interviews
- **Diagraming** Participatory Mapping including territory, or region, Venn Diagram, Wealth Ranking, Matrices, Historical Events & Seasonal Calendars
- Participant observations and evaluator quantitative confirmation, Transect Walks



Mixed-methods in ex-post evaluation further triangulates qualitative findings (what, why, how) with quantitative surveys which are shaped by qualitative questions (how much/ how many)

Use of RRA Tools to Collect Types of Information Needed in Baseline SSI Consumption Historical Matrix Venn Diagram FS Calendar (For illustrative Purposes Only) Social Map OXX History X X Geographic Context X X X X X Social Context X X X X X Economic Context X X X X X X Food Acquisition Strategies X X X X Food Consumption Pattern X X Price Variation of Foods X X X X Food Sharing X Food Availibility Constraints 0 X X X Household/indiv strategies O O X

SEIE: Confirming results through comparison

Ongoing analysis of findings:

- Ongoing and everyday analysis of findings in the field allows to confirm and reframe hypotheses at subsequent sites.
- In subsequent sites, it may be possible to **confirm findings based on 1st site learning, and test different hypotheses**: are differences due to new location, exposure to different shocks or to different conditions (natural resources, different partners)? This offers opportunities to explore different kinds of resilience and learn about sustainability.

Comparison sites:

- Use Outcome Harvesting to confirm/ deny results by visiting former AF project site(s) along with other projects were implemented.
- 'What aid has made you less vulnerable to climate change?'
 - -the framing should be in such a way to be open to all kinds of aid community self-help aid, government aid, foreign aid or other assistance, beyond the project.
 - -verify whether the AF project is mentioned, and if so, how. [See Outcome Harvesting]

Comparison groups:

- Desirable in studies to measure impact or change but should consider the following:
 - shared characteristics with the study treatment sites
 - potential contact with the project (intended or unintended spill over effect)-
 - impact of other development interventions

Samoa: photographic documentation and sharing results with stakeholders

A key aspect to ex-post sustainability and resilience evaluations is the process of stakeholder learning from the results. Samoa's ex-post has been published: https://www.adaptation-fund.org/document/ex-post-evaluation-summary-samoa/ Illustrative findings are presented below in pictures taken in two sites. Photographic evidence is mandatory for ex-posts.

FIGURE 1: Examples of sustained and unsustained structures

Infrastructure site 3: Vaiala seawall - no visible defects (landside view, left; seaside view, right)





Infrastructure site 4: Salimu/ Musumusu rockwall – rocks are crumbling into wetlands and water is collecting on the road



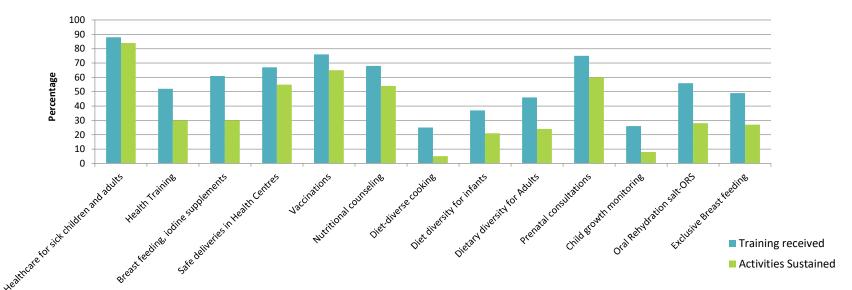


SEIE: triangulation of findings

Triangulation allows to **confirm surprising findings**, **question inconsistent findings**, and **confirm how the project contributed to sustainability** of results (and if not, why?). Ask project leadership whom you find about inconsistencies or emerging outcomes from analysis, and ask why.

As sustainability of outputs/outcomes and impacts is shown, resilience of these to climate change is ascertained.

A comparison of health-related training received, and activities sustained



Source: CRS Participation by All ex-post (2015)

Importance of team meetings and debriefs

Team lessons meetings should be scheduled at the end of every day and generally take at least two hours. Why?

- 1. Reviewing information gathered that day
- 2. Planning the next day's activities
- 3. Preparing checklists

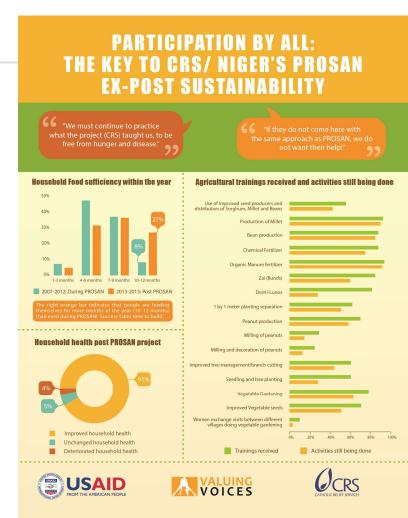
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4. Methodological review including narrowing of questions in subsequent sites

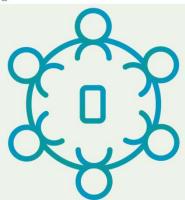
Findings from each site are shared, hence publicly triangulated/ confirmed at community and regional center, and again at the national level. These meetings are as much information sharing and information gathering, and all relevant organizations are invited for comment and learning.

Accountability: Local actors including communities

| Technical Evaluation | receive final infographics |



Other qualitative methods





Qualitative methods: ALTERNATIVE TO SEIE: Contribution Analysis

Reminder: what is Contribution Analysis?

Contribution analysis



assesses causal questions and infers causality in real-life programme evaluations. It offers a step-by-step approach to help managers, researchers, and policymakers arrive at conclusions about the contribution their programme has made (or is making) to outcomes. It reduces uncertainty about the contribution of the intervention to observed results thrgh increased understanding of why the observed results have occurred (or not) and the roles of the intervention, and other internal & external factors.

Contribution analysis provides an alternative approach to addressing the attribution challenge through its exploration of how a policy or program contributes to the observed results

Qualitative methods: Contribution Analysis

What is Contribution Analysis?

"Mayne's (2001) broader approach to contribution analysis seeks to achieve what Hendricks calls a 'plausible association' whereby a 'reasonable person, knowing what has occurred in the program and that the intended outcomes actually occurred, agrees that the program contributed to those outcomes'"

"The focus was instead on clarifying the results chains (i.e. program logic) and assessing alternative explanations for outcomes, to establish a picture of the program's contribution to outcomes."

Kotvojs, Fiona and Bradley Shrimpton, 2007. "Contribution Analysis". Evaluation Journal of Australasia, Vol 7, No. 1.

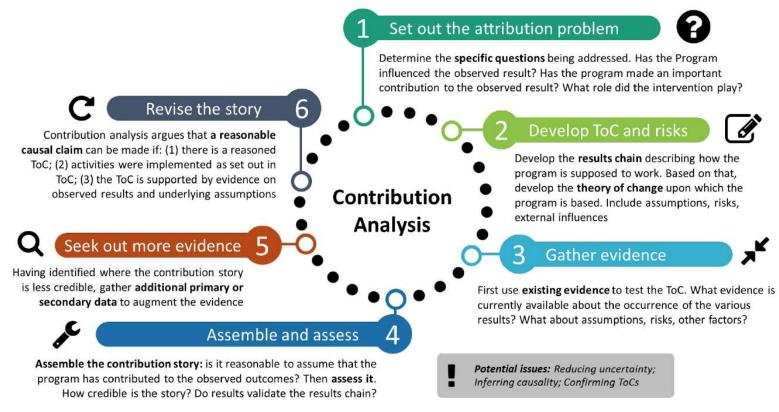
This article looks at the method of contribution analysis, its implementation in the Fiji Education Sector Program





Qualitative methods: Contribution Analysis

Steps of Contribution Analysis



Source: Authors' elaboration from Mayne (2008) and Betterevaluation.org

Qualitative methods: Contribution Analysis

Steps of Contribution Analysis (process)

Develop a gross list of hypotheses to be tested through the subsequent collection of new evidence based on the work done in the preceding phases.

Address

- (a) risks to the main assumptions,
- (b) other influencing factors, and
- (c) alternative explanations.
- **Prioritize** a list of hypotheses to be tested for the contribution analysis.
- **Develop** questions framed as specific research questions, and strategies for collecting new evidence...
 - e.g. which assumptions, risks, performance measures are strong (good evidence available, strong logic, or wide acceptance), including other identified influencing factors and the contribution they may be making?

Seek out additional evidence:

- (a) determine what kind of additional evidence is needed to enhance the credibility of the contribution story,
- (b) refine the theory of change, and
- (c) gather new evidence.

Assemble your contribution story.

- **After** the available evidence has been collected, collated, and analyzed:
 - (a) construct a more credible contribution story,
 - (b) reassess its strengths and weaknesses, and
 - (c) revisit hypotheses and credibility of evidence

Qualitative methods: ALTERNATIVE TO SEIE: Most Significant Change

Reminder: what is Most Significant Change?

Most Significant Change



involves generating and analyzing personal accounts of change and deciding which of these accounts is the most significant – and why. It follows three basic steps:

- deciding the types of stories that should be collected (e.g. stories about practice change or health outcomes or empowerment)
- collecting the stories and determining which stories are the most significant
- sharing the stories and discussion of values with stakeholders and contributors so that learning happens about what is valued.

The Most Significant Change (MSC) approach involves generating and analyzing personal accounts of change and deciding which of these accounts is the most significant – and why.

MSC is not just about collecting and reporting stories but about having processes to learn from these stories – in particular, to learn about the similarities and differences in what different groups and individuals value.

Qualitative methods: Most Significant Change

Steps for Most Significant Change

- STEP 1- Introduce a range of stakeholders to MSC and foster interest in and commitment to participating
- STEP 2- Identify the **domains of change** to be monitored
- **STEP 3-** Decide how **frequently to monitor changes** taking place in these domains
- STEP 4- Collect stories from those most directly involved, such as participants and field staff.
- **STEP 5- Analyze the stories** and filter them up through the levels of authority typically found within an organization or programme. Every time stories are selected, the criteria used to select them are recorded and fed back to all interested stakeholders, so that each subsequent round of story collection and selection is informed by feedback from previous round.
- **STEP 6- Produce a document** including all stories selected at the uppermost organizational level in each domain of change over the given period
- STEP 7- Verify the selected stories by visiting the sites where the described events took place
- **STEP 8- Quantify** the account of change
- **STEP 9- Monitor the monitoring system** itself, which can include looking at who participated and how they affected the contents, and analyze how often different types of changes are reported
- **STEP 10- Revise the design of the MSC** process to take into account what has been learned as a direct result of using it and from analyzing its use

Qualitative methods: Most Significant Change

Most Significant Change in Focus Group Discussions

- Focus groups discussions with project participants can be used to collect qualitative information, using the Most Significant Change (MSC) methodology.
 - can be held with groups of men, women and mixed youth from two villages
- The MSC focus groups ask questions that seek **data on sustainability and impact**, including the most significant change the participants had experienced since project exit.
 - 'emerging' and unexpected positive sustainability outcomes can come up
- During the focus group discussions, participants **rank the changes** and are prompted to discuss why these changes were important to them.
 - the groups are led in sharing their opinions about the sustainability of outputs and outcomes.
- This fieldwork could add questions on climate changes and how resilient the project has/ has not enabled them to be.



Qualitative methods: ADDITION to any Qualitative: Outcome Harvesting

Reminder: what is Outcome Harvesting?

Outcome Harvesting



collects ("harvests") evidence of what has changed ("outcomes"). Unlike some evaluation approaches, it does not measure progress towards predetermined objectives or outcomes. Rather, it collects evidence of what has changed and then, working backwards, determines whether and how an intervention contributed to these changes. The outcome(s) can be positive or negative, intended or unintended, direct or indirect, but the connection between the intervention and the outcomes should be plausible.

Outcome Harvesting is an interesting alternative for open-ended questions about the most efficacious programming to address expected impacts (or outcomes) – and see if/how well the project's activities and partnerships 'ranks'.

"Outcome Harvesting is particularly useful when outcomes, and even, inputs, activities and outputs, are not sufficiently specific or measurable at the time of planning an intervention."

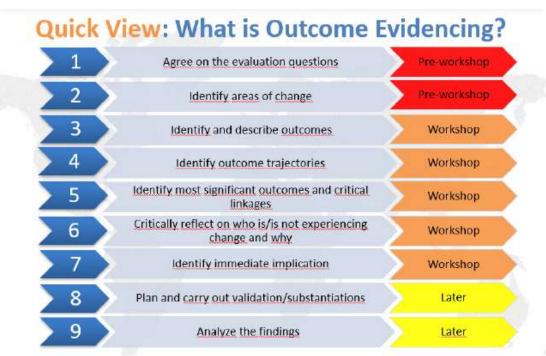
"Outcome Harvesting will be used as a confirmation of results by asking in non-evaluated communities what caused the presence or lack of resilience, which could (not) trace back to the AF/IE/EE project

Qualitative methods: Outcome Harvesting

Steps of Outcome Harvesting

- 1 Design the Outcome Harvest
- Review documentation and draft outcome description
- Engage with informants in formulating outcome descriptions
- 4 Substantiate
- 5 Analyze and interpret
- 6 Support use of findings

Key process steps to applying outcome evidencing (Source: FAO)



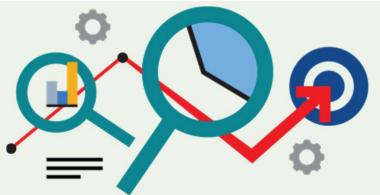
Modified key process steps to applying outcome evidencing based on Paz-Ybarnegaray, R., & Douthwaite, B., 2017 (Source: FAO)

Qualitative methods: Outcome Harvesting

How do we do Outcome Harvesting?

- Outcome Harvesting would be done outside of the evaluated communities
 - However, comparable communities should be selected in terms of the array of programming done
 - Possibly, select a wider array of donor projects done simultaneously or subsequently to test case of the relevance of programming
- FGD would be held with **similar groups**, e.g. men/women, elderly/ young, disaster-affected/ not...
- Questions for Outcome Harvesting would be
 - "What has decreased your vulnerability to climate change" (see if the project activities are cited) >> ranking which projects or other interventions led to the changes
 - Probing follows "working backwards, determines whether and how the AF's project has contributed to these changes."
- There is an independent confirmation of the cause (or not) being the project itself.

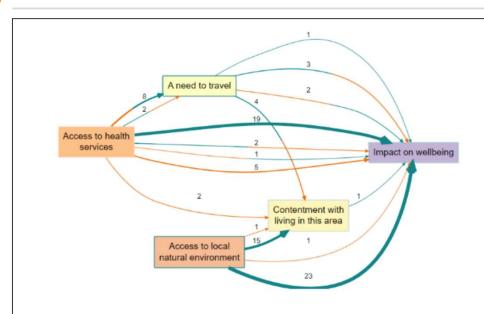
Other quantitative or analytic methods





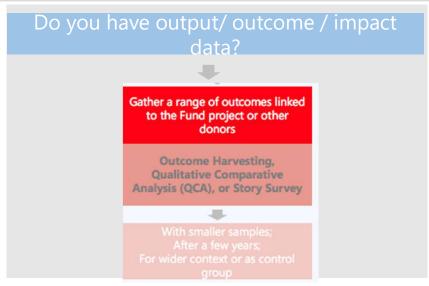
Data collection process and methods

Causal Mapping via Story Surveys



A causal story comes from a qualitative, causal field survey of individuals' mental models of "how things work". Answers prompt prompt them to make connections and give reasons.

Respondents' individual responses are retained (through open-ended answers) and can be analyzed real-time. Can be combined with online surveys (remote).



Key words:

Personal stories

Most significant trends

Minimum # of informants: 30

Data collection process and methods

Using Story Surveys for Causal Mapping

Identify and visualize causal connections in speech and writing

Causal Map is a new online research tool, a way to code, analyze and visualize fragments of information about what causes what. Use it to make sense of what interviewees tell you in social science research. Use it to visualize stakeholders' experiences of how a program or intervention is working and create collective empirical 'theories of change'.



Highlight connections

Identify the links made between causal factors, according to your source text



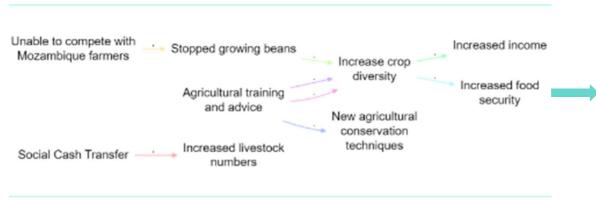
View causal maps

See causal maps build up live as you code causal connections between factors

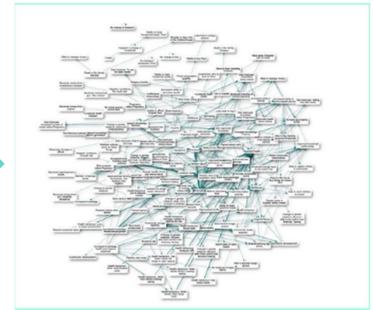


Filter and analyse

View and compare maps and connections by any theme or characteristic to help your analysis



Source: https://www.causalmap.app/



Data collection process and methods

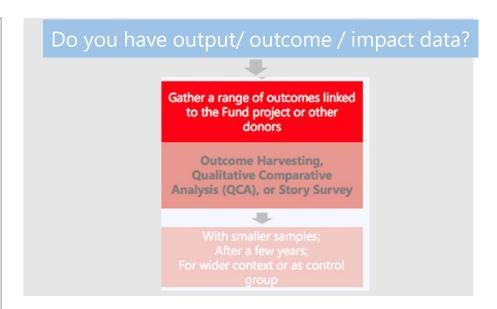
Qualitative Comparative Analysis (QCA)

Qualitative Comparative Analysis



Qualitative Comparative Analysis (QCA) is a means of analyzing the causal contribution of different conditions (e.g. aspects of an intervention and the wider context) to an outcome of interest and how programs contribute to outcomes.

QCA starts with the documentation of the different configurations of conditions associated with each case of an observed outcome. These are then subject to a minimization procedure that identifies the simplest set of conditions that can account for all the observed outcomes, as well as their absence.



Key words:

Evidence of change

Working backwards

Contribution

Quantitative Alternatives to SEIE's Surveys

While the focus of this evaluation is post-project sustained and emerging impact and resilience, we recognize the **extraordinary power that comparison to the final evaluation has for telling the story of change** and results.

Time and funding feasibility will determine whether a comparison site and groups with **statistically significant analysis of a large enough group** will be used and what methods could work, but this is dependent on the preferences of the national evaluator and their team.



Propensity Score Matching



Choice and discussion of field methods

Reminder: what is Propensity Score Matching

Propensity Score Matching



Recall methods and Propensity Score Matching creates sets of participants for treatment and control groups.

A matched set consists of at least one participant in the treatment group and one in the control group with similar propensity scores.

The goal is to approximate a random experiment, eliminating many of the problems that come with observational data analysis.

PSM attempts to reduce the effect of the bias due to characteristics on the difference of outcomes between a group receiving a treatment and a group not receiving it.

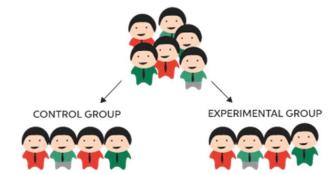
PSM attempts to control for these differences to make the groups receiving treatment and not-treatment more comparable.

In doing so, PSM attempts to estimate the effect of a treatment, without the bias of other confounding characteristics

Propensity Score Matching: how does it work?

Steps for PSM simplified:

- 1 First you need a database about your population
 - Should have data about treated and untreated population
 - Should have enough details about both groups' characteristics



- Choose the criteria for matching (these will be the characteristics that will make both groups alike = covariates)
 - When choosing the confounds, choose characteristics that could have an effect on your results e.g. age, residence, etc.
- Pair up as many people as possible based on the covariates
 - The main difference should now be the allocation of treatment or not
- 4 Test your hypotheses (statistical analysis)

Propensity Score Matching: how does it work?

Propensity score matching is a statistical process that tries to pair treatment subjects to control subjects based on key observed covariates. It creates sets of participants for treatment and control groups. A matched set consists of at least one participant in the treatment group and one in the control group with **similar propensity scores**.

How do you do matching (statistically speaking)?

- **Estimate the propensity scores.** The true scores are unknown but can be estimated by many methods including: discriminant analysis, <u>logistic regression</u>, and random forests. The "best" method is up for debate, but one of the more popular methods is logistic regression.
- **Match the participants** using the estimated scores.
- **Evaluate the covariates** for an even spread across groups. The scores are good estimates for true propensity scores if the matching process successfully distributes covariates over the treated/untreated groups (Ho et. al, 2007).



Propensity Score Matching: considerations and limitations

- First you need a database about your population
 - Should have data about treated and untreated population
 - Should have enough details about both groups' characteristics
- Choose the criteria for matching
- Pair up as many people as possible based on the matching criteria



PSM can only accommodate <u>large datasets*</u> in order to be able to find matching characteristics in both the treatment and the control group, but also an effect when analyzing the differences between both groups (statistically significant difference)



This means that it is often a costly method and if no survey has been done, implications in terms of logistics and budget should be considered



Propensity Score Matching: considerations and limitations

Pair up as many people as possible based on the matching criteria



The more covariates (characteristics) you try to match for, the harder it will be to find people who match on all of your criteria



Some covariates (characteristics) cannot be matched for, yet can have an effect on your result

issues with internal validity



Propensity Score Matching: considerations and limitations





Ideally, you would want data at both endline (final evaluation) for both your treatment and control group. You would then compare to data collected at ex-post. This is however rarely the case.

What if you don't have measurement of characteristics at endline/ final evaluation?



The construction of a comparison group by PSM can accommodate the absence of an endline, but specifically for impact measurement with a retrospective cohort study, we would need to factor in some endline information. This can only be done by recreating a endline if no endline information is available i.e. through a recall survey for instance, to compare with at ex-post. This would however introduce some bias in the analysis.





An ex post facto design can be used (i.e. the treatment and control groups are selected after the treatment has occurred and there are no pretest measures). Only a posttest is collected, but this causes issues in terms of validity and contribution