



Triangulation applied to the identification of evaluation findings

Experiences with systematic triangulation in the GEF

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Overview

- Rationale for using triangulation in evaluation
- GEF Country Portfolio Evaluations (CPE): addressing CPE common challenges
- GEF systematic triangulation procedure
- Results from the application of systematic triangulation in 9 evaluations
- Example from an evaluation conducted in the Pacific region

Rationale for using triangulation in evaluation (I)

- *Triangulation refers to the use of multiple sources of qualitative and quantitative information and/or data collection and analysis methods*
- *Generally, in research it is used either for:*
 - *validating results in a study; or for*
 - *deepening and widening one's understanding/insight into study results*
- *Several articles describe how data, theories or methods are triangulated in the field of health, social sciences, IT-modeling, economics and management.*

Rationale for using triangulation in evaluation (II)

- *In evaluation, methodological triangulation is most commonly used, especially in situation of unreliability and/or scarcity of data.*
- *In GEF CPEs we use it in conjunction with observers triangulation, to identify key findings. It helps in:*
 - *Reducing the risk in which evaluators incur of not looking beyond being anecdotal evidence in the identification of evaluation findings;*
 - *Triangulation also reduces the risk of giving excessive importance to the results of one method as opposed to those of the other methods used to analyze the data collected.*

GEF CPEs: common challenges

- *Absence of GEF country program objectives and indicators;*
- *Scarcity or unreliability of national statistics on environmental indicators and data series, especially in least developed countries (LDCs);*
- *Weak or unreliable M&E systems;*
- *Challenges in evaluating the impacts of GEF projects and establish attribution; and*
- *Intrinsic difficulties in defining the GEF portfolio of projects prior to the undertaking of the evaluation.*

Addressing GEF CPEs' challenges

- *Adopting an iterative and inclusive approach with stakeholders during the evaluation process to help identify and address information and data gaps;*
- *Conducting original evaluative research, including through theory-based approaches to assess progress to impact;*
- *Using qualitative methods and mixing the emerging evidence with available quantitative data through systematic triangulation with the ultimate goal of identifying evaluation findings.*

GEF Systematic Triangulation (I)

- *The Office's CPEs are conducted in a standardized way for comparability purposes*
- *Initial Terms of Reference are made country-specific through stakeholder consultation during a scoping mission to the country*
- *Standard set of data gathering methods and tools, including:*
 - *Standard methods (desk and literature review, portfolio analysis, interviews), and*
 - *GEF-specific methods (country environmental legal framework analysis, review of outcomes to impact)*

GEF Systematic Triangulation (II)

Key evaluation questions	Indicators	Sources of information	Methodology components
Relevance			
KQ1	I1, I2, ...	Sol1, Sol2, Sol3, ...	M1, M2, M3, ...
KQ2	...	...	...
KQ3	...	...	...
...
Efficiency			
KQ1	I1, I2, ...	Sol1, Sol2, Sol3, ...	M1, M2, M3, ...
KQ2	...	...	...
KQ3	...	...	...
...
Effectiveness of results			
KQ1	I1, I2, ...	Sol1, Sol2, Sol3, ...	M1, M2, M3, ...
KQ2	...	...	...
KQ3	...	...	...
...

From the evaluation matrix to the triangulation matrix ----->

Key evaluation questions	PERCEPTIONS		VALIDATION		DOCUMENTATION		Key Preliminary Findings
	Method 1	Method 2	Method 3	Method 4	Method 5	...	
Relevance							
KQ1							
KQ2							
KQ3							
...							
Efficiency							
KQ1							
KQ2							
KQ3							
...							
Effectiveness of results							
KQ1							
KQ2							
KQ3							
...							

GEF Systematic Triangulation (III)

The evaluative evidence is categorized in the three major research areas of *Perceptions*, *Validation* and *Documentation*



GEF Systematic Triangulation (VI)

Key evaluation questions	PERCEPTIONS		VALIDATION		DOCUMENTATION		Key Preliminary Findings
	Method 1	Method 2	Method 3	Method 4	Method 5	...	
Relevance							
KQ1	F1	F4	F2			F3	KPF1
KQ2							need further analysis
KQ3	F5			F6	F7		KPF2
...		F8			F9	F10	
Efficiency							
KQ1		F11		F12			KPF3
KQ2			F13				
KQ3	x		x		x		
...	x			x		x	
Effectiveness of results							
KQ1						x	
KQ2		Fx			Fx		
KQ3	x	x			x		
...			x		x	x	

The evaluation team brainstorms by discussing one question at a time; the relevant finding emerged from each method is inserted in the appropriate cell in the triangulation matrix.

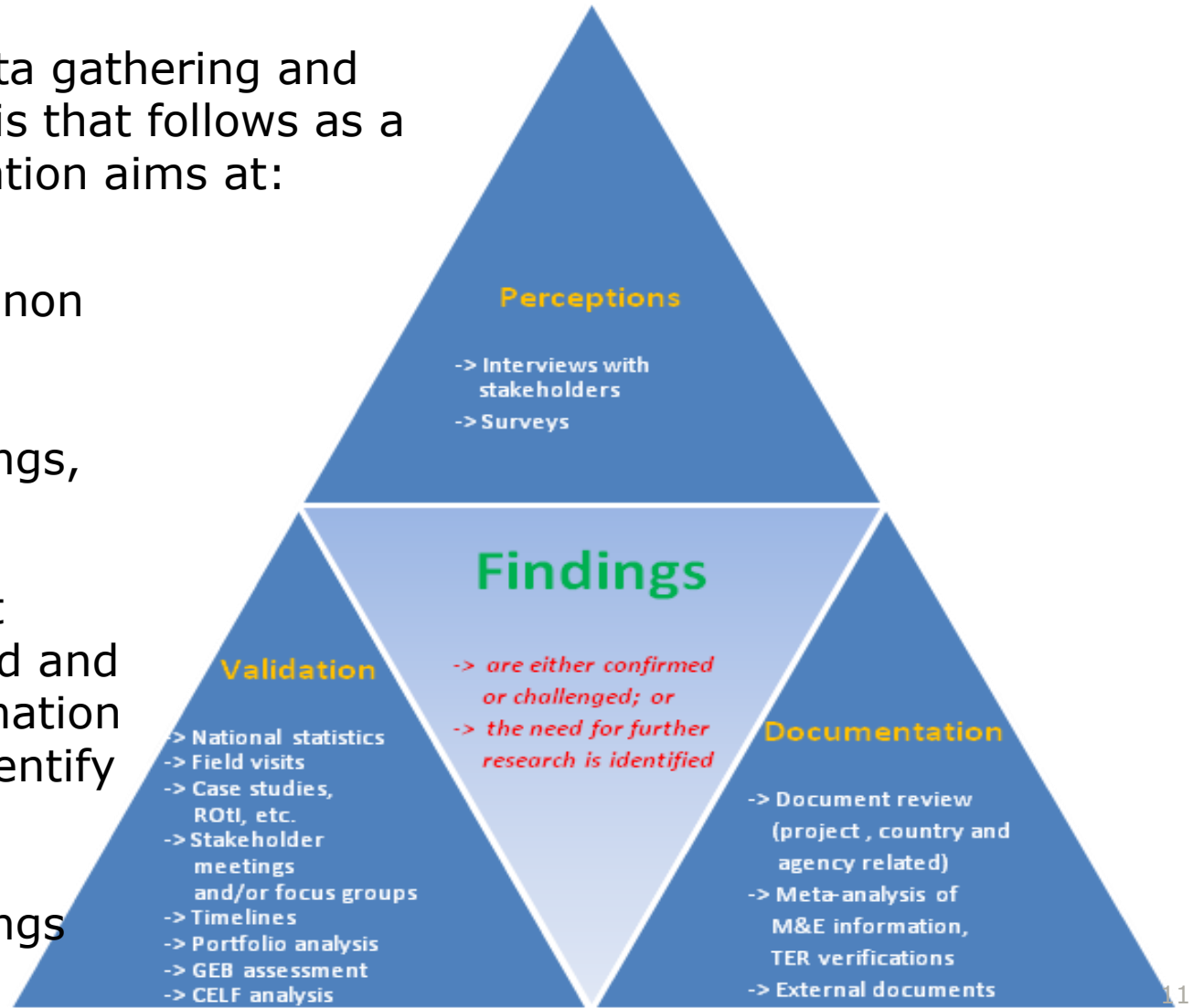
The final step consists in identifying whether (and which) other methods can be used to conduct further analysis, and specify any eventually available related source of information that can be used.

Key evaluation questions	PERCEPTIONS		VALIDATION		DOCUMENTATION		Key Preliminary Findings
	Method 1	Method 2	Method 3	Method 4	Method 5	...	
Relevance							
KQ1	F1		F2			F3	KPF1
KQ2		F4		Sol1		Sol2	need further analysis
KQ3	F5			F6	F7		KPF2
...		F8			F9	F10	
Efficiency							
KQ1		F11		F12			KPF3
KQ2			F13				
KQ3	x		x		x		
...	x			x		x	
Effectiveness of results							
KQ1						x	
KQ2		Fx	Sol3		Fx	Sol4	need further analysis
KQ3	x	x			x		
...			x		x	x	

GEF Systematic Triangulation (V)

The additional data gathering and evaluative analysis that follows as a result of triangulation aims at:

- a) Confirming or challenging the non viable key preliminary evaluation findings, and
- b) identifying what research method and source of information is needed to identify the missing key preliminary evaluation findings



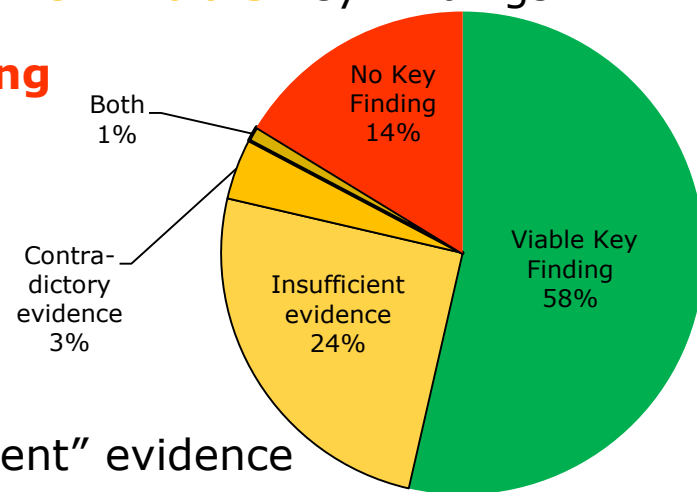
1. Evaluation Phase



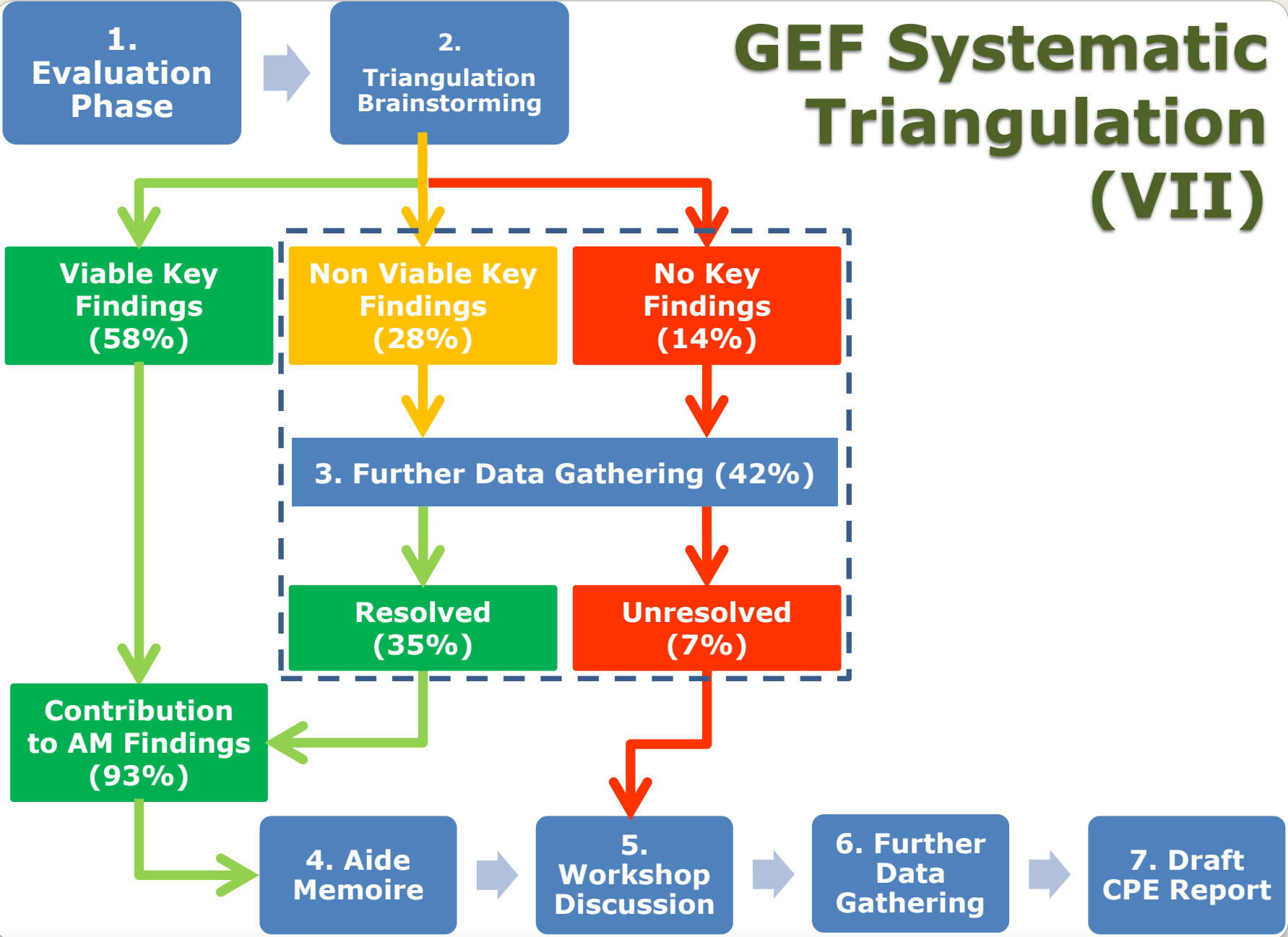
2. Triangulation Brainstorming

GEF Systematic Triangulation (VI)

- **9** CPE triangulations so far: **8** countries and **1** SGP evaluation
- **19** = Average number of Key Questions per evaluation
 - Effectiveness \approx **7**; Relevance \approx **5**; Efficiency \approx **7**
- After the 2 day triangulation brainstorming sessions:
 - Key findings were generated for **86%** of key questions
 - **58%** were **Viable** Key Findings vs. **28%** **Non-viable** Key Findings
 - **14%** of key questions had **No Key Finding**
- Why were the **28% Non-viable**?
 - **24%** had “insufficient” evidence
 - **3%** had “contradictory” evidence
 - **1%** had both “contradictory” and “insufficient” evidence



GEF Systematic Triangulation (VII)



◦ **N.B.:** These results are preliminary and should be considered **WORK IN PROGRESS**

GEF Systematic Triangulation (VIII)

- The Vanuatu SPREP evaluation triangulation matrix led to 14 key preliminary findings against 15 Key evaluation questions. The 14 key findings were consolidated in 11 final key findings through vertical triangulation.
- 4 out of 5 key findings on **effectiveness/results** were consistently confirmed by more than three methods, and at least one method for each method category (**Perceptions**, **Validation** and **Documentation**).
- 1 out of 3 key findings on **relevance** – *weak country ownership* (emerged during interviews) – needed more analysis. Deeper document review later confirmed weak ownership, especially in Vanuatu, except for enabling activities.
- 1 out of 2 key findings on **efficiency** – *coordination/synergies* – showed contradictory evidence. Subsequent research did not yield enough evidence to produce a finding. The finding was discussed at the final workshop.



The GEF Triangulation Analysis Method can be
downloaded from:

[www.thegef.org/gef/CPE Triangulation Analysis Method](http://www.thegef.org/gef/CPE%20Triangulation%20Analysis%20Method)

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