



# Introduction to Contribution Analysis and Process Tracing

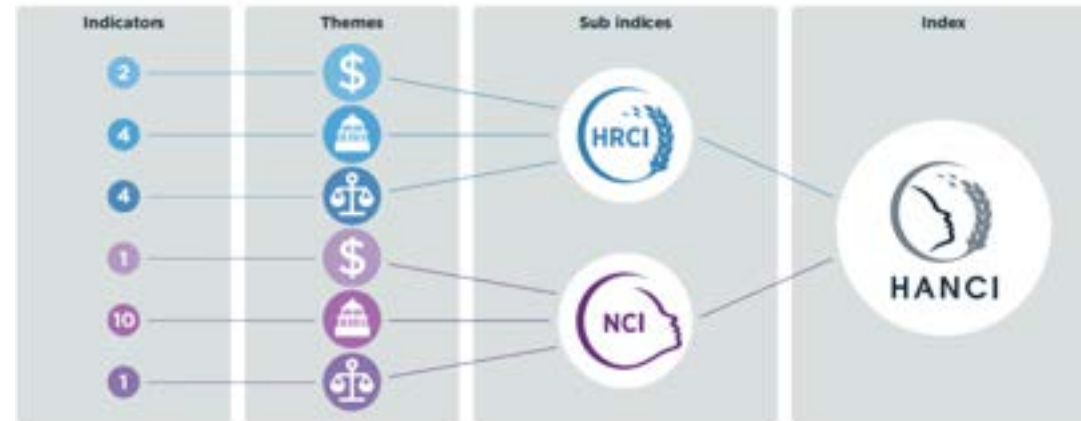
Kat Pittore for DeSIRALIFT, MEL Masterclasses,  
23 November 2023

# Why Contribution Analysis and Process Tracing?

- How do you evaluate policy change oriented activities?
- Is there any way to quantify the impact of your activities in a more objective way?
- How can you increase certainty that your actions (and not something or someone else) led to the changes you see?

# Introduction to the Case Study

- Understanding the impact of indicators, specifically using the Hunger and Nutrition Commitment Index (HANCI)
- Index includes 22 indicators (grouped in terms of laws/policies and spending) measuring policy commitment to addressing both hunger and nutrition
- The idea is to change the framing of hunger and nutrition from being issues to be solved by technical solutions to understanding the issues as political phenomena
- 45 countries are ranked relative to each other
- Index looks at commitment, not outcomes. A higher score = higher commitment



Full paper which this part of the presentation draws on can be found at:

Te Lintelo, D.J.H., Munslow, T., Pittore, K. *et al.* Process Tracing the Policy Impact of 'Indicators'. *Eur J Dev Res* **32**, 1312–1337 (2020). <https://doi.org/10.1057/s41287-019-00244-0>

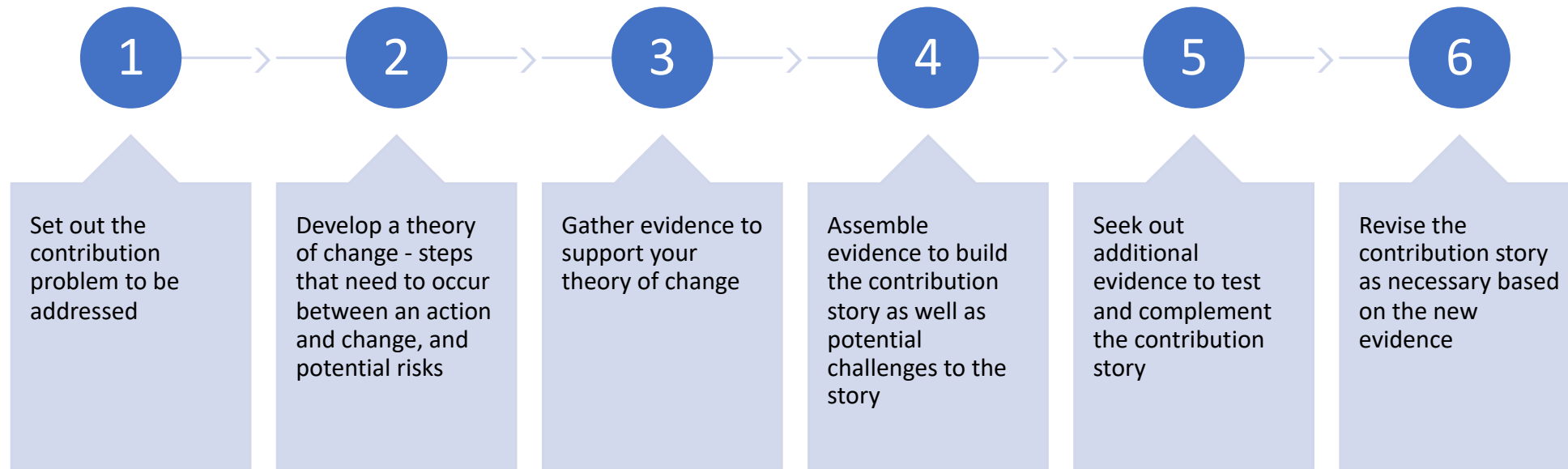
# Introduction to the Case Study continued

- What we did:
  - Developed the index
  - Developed communication materials
  - Co-developed country engagement plans
  - Media engagement
- Also engaged partners in 5 focus countries:
  - Tanzania
  - Zambia
  - Malawi
  - Bangladesh
  - Nepal

→ Engagement levels varied depending on partner priorities, this meant some countries received more funding than others



# Contribution analysis (CA) – 6 steps

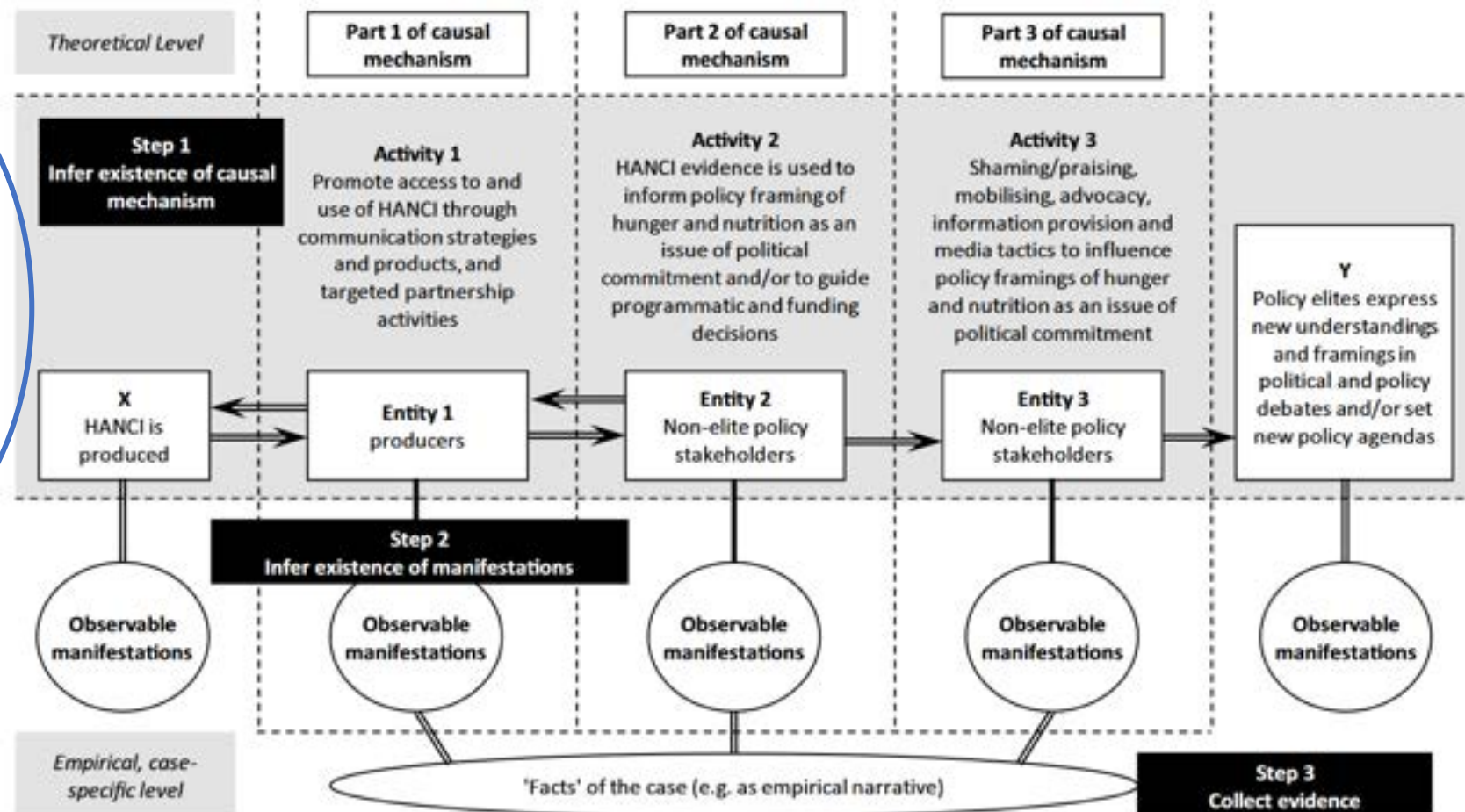
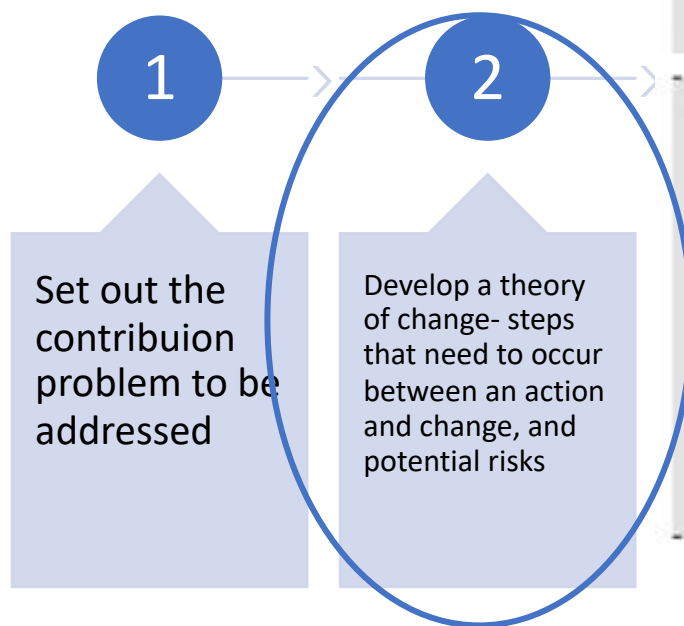


Source: <https://www.betterevaluation.org/methods-approaches/approaches/contribution-analysis>

# Contribution analysis (CA) – 6 steps



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Theory based evaluation:  
using your theory of change as an  
evaluation tool

# Contribution analysis (CA) – 6 steps

1

Did you do what you planned?  
What evidence do you have to show what you did?

3

4

Set out the attribution problem to be addressed

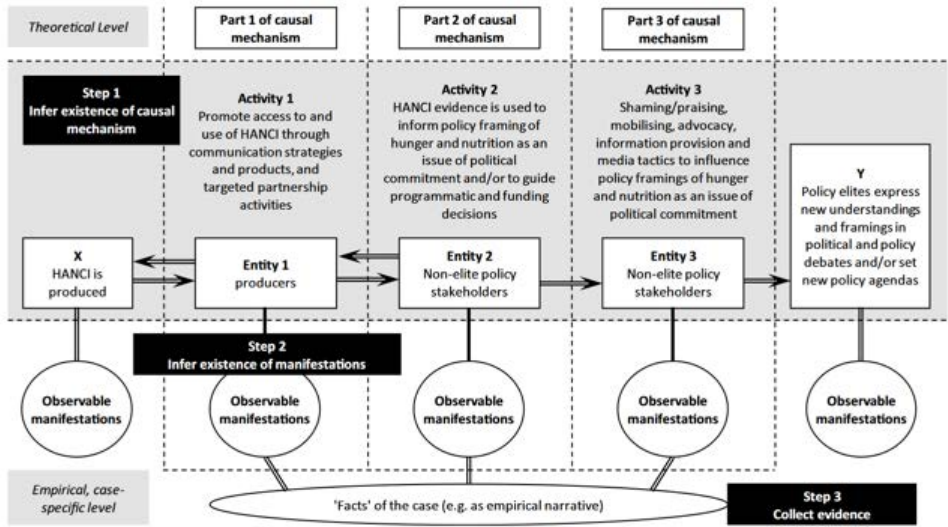
Gather evidence to support your theory of change

Assemble contributions as...

See add

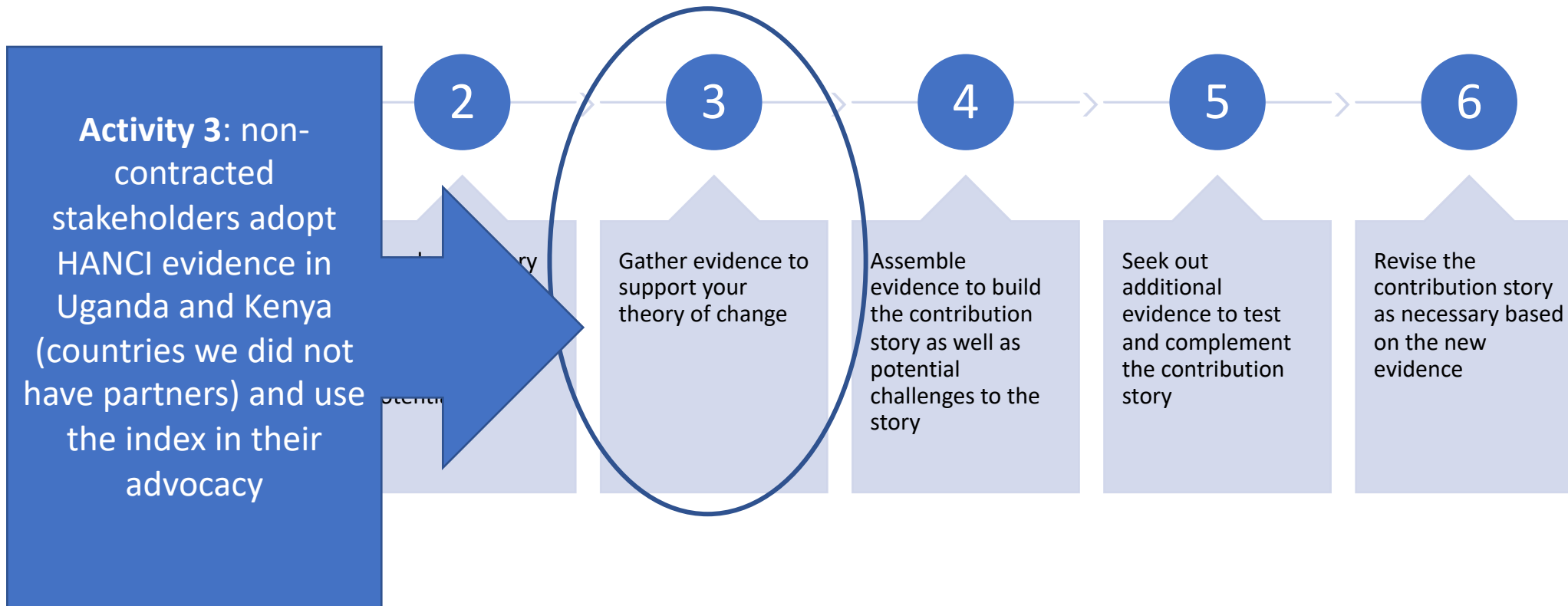
Gathered evidence related to implementation including:

- **Activity 1:** Communication strategies developed; Simple, free user-friendly communication materials available; contracted partnership activities are implemented
- **Activity 2:** HANCI evidence is used to inform policy framings by international INGOs and donors; Print and other reports on the HANCI index (media mentions); Contracted stakeholders develop advocacy messages using HANCI evidence





# Contribution analysis (CA) – 6 steps



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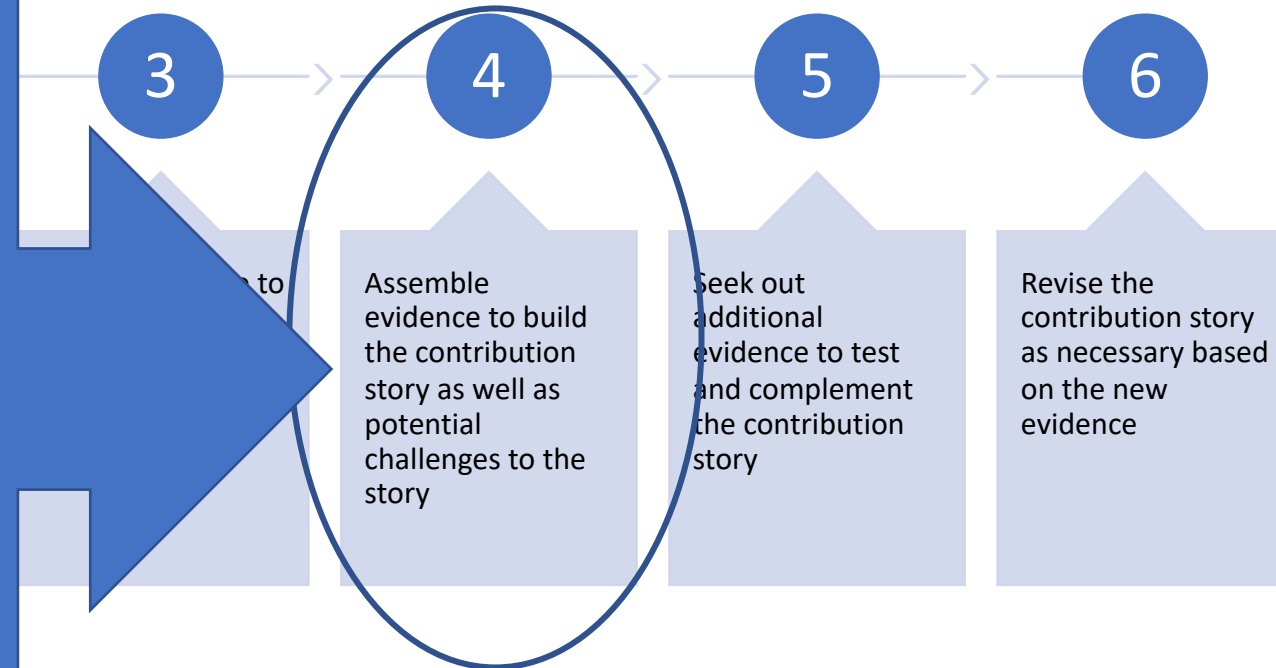
## What are potential challenges to our story?

Indicators can be used by policy makers to justify a decision which has already been made/ already high score

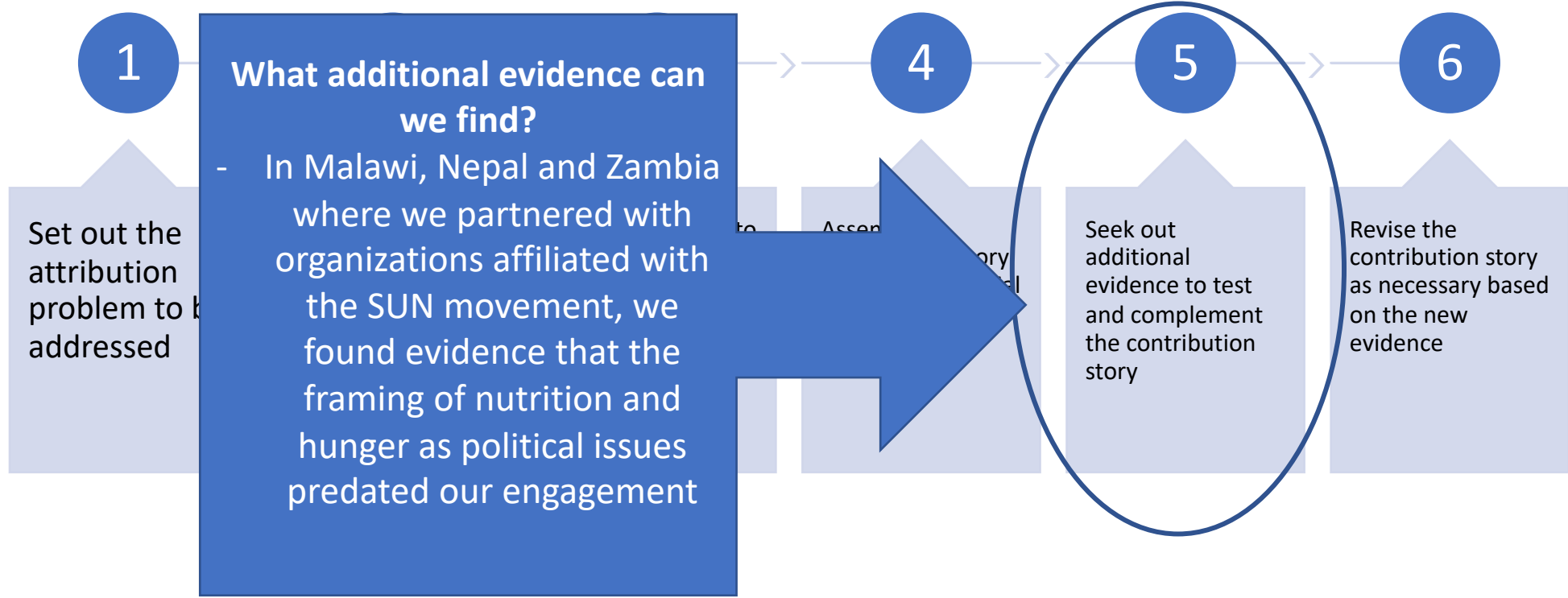
- Accountability of the organization making the indicators (or the indicators themselves) question by policy makers.

Bangladesh “I am not aligning our indicators to HANCI indicators, no I am using my own indicators”

- In Zambia, data used in the index was questioned and dismissed, felt the ranking was not an accurate representation of country efforts



# Contribution analysis (CA) – 6 steps



Source: <https://www.betterevaluation.org/methods-approaches/approaches/contribution-analysis>

# Contribution analysis (CA) – 6 steps

1

Set out the attribution problem to be addressed

## New contribution Story

- HANCI index was able to influence issue framings in Malawi, Nepal and Zambia but not Bangladesh
- Use of the index by the Vice president of Guatemala suggest that the goal of reaching policy elites was reached.
- No specific policy changes were observed, but are possible in the future.
- HANCI used by international INGOs, donors (IrishAid in Malawi). Suggested as an indicator of political commitment to address hunger and undernutrition by the World Health Organization
- Approached by the New Partnership for African Development, NEPAD for further collaboration.

5

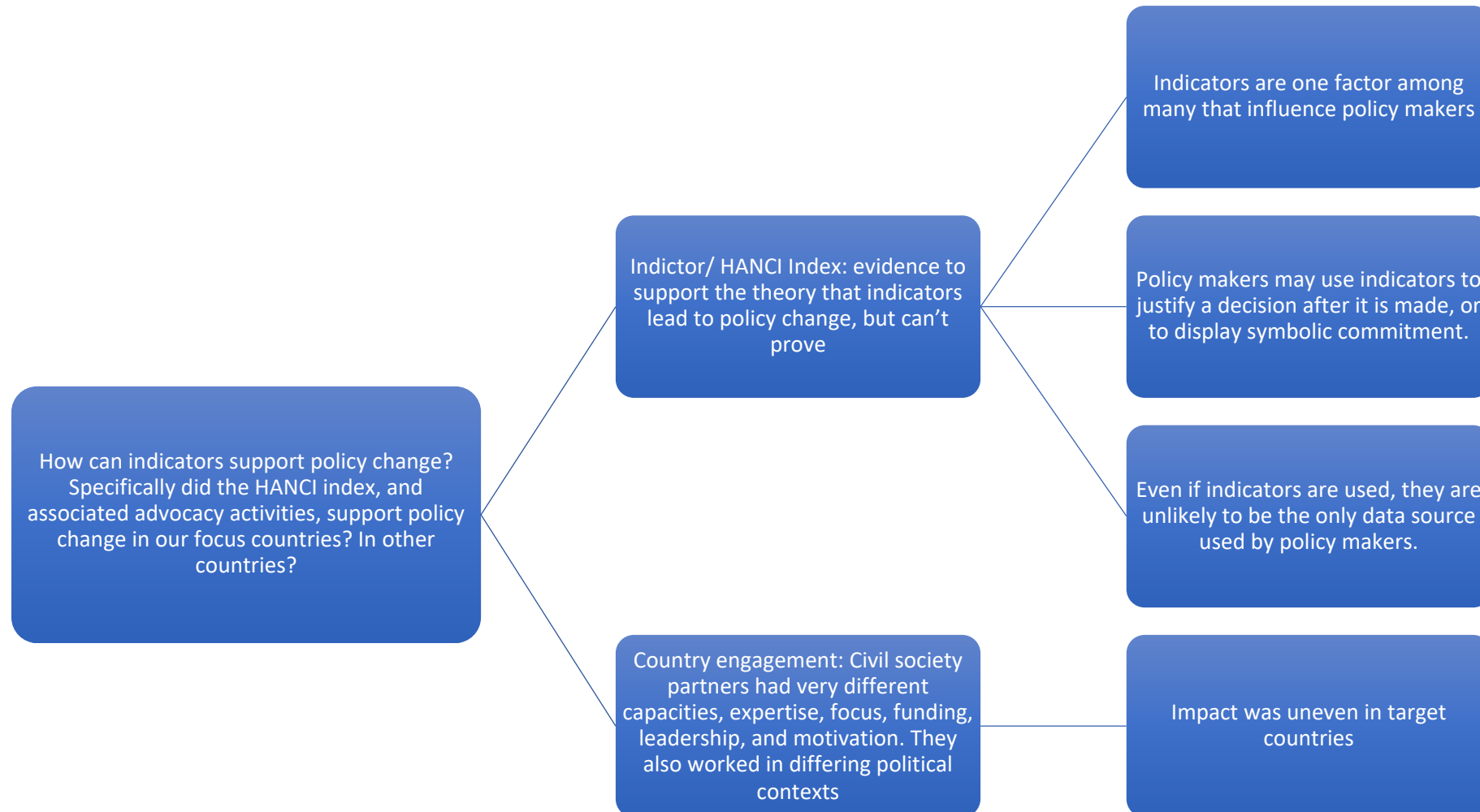
6

Revise the contribution story as necessary based on the new evidence



Guatemalan Vice-President takes ownership of HANCI findings

# Can we answer our original question?



# Advantages and Disadvantages of using CA

- Advantages

- Allows for a systematic way to investigate and triangulate multiple forms of evidence
- Analytically easy to understand
- Using a theory of change provides guidance to an evaluation

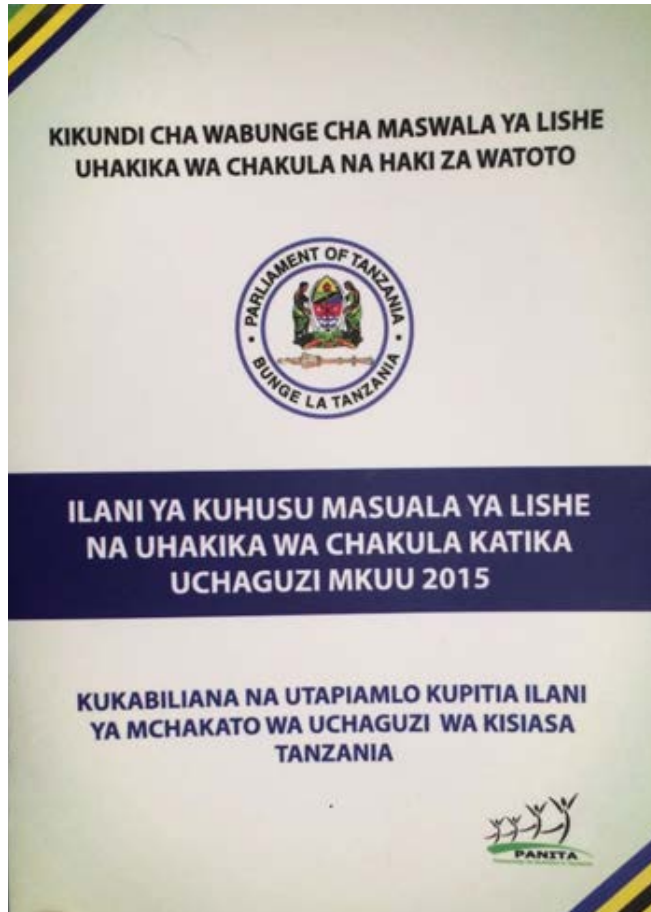
- Disadvantages

- Requires a robust theory of change for the project
- Requires quite a substantial amount of data, some of which can be challenging
- Cannot determine how much of an outcome can be attributed to a specific set of activities



Contribution analysis  
and process tracing

# Introduction to the Case Study

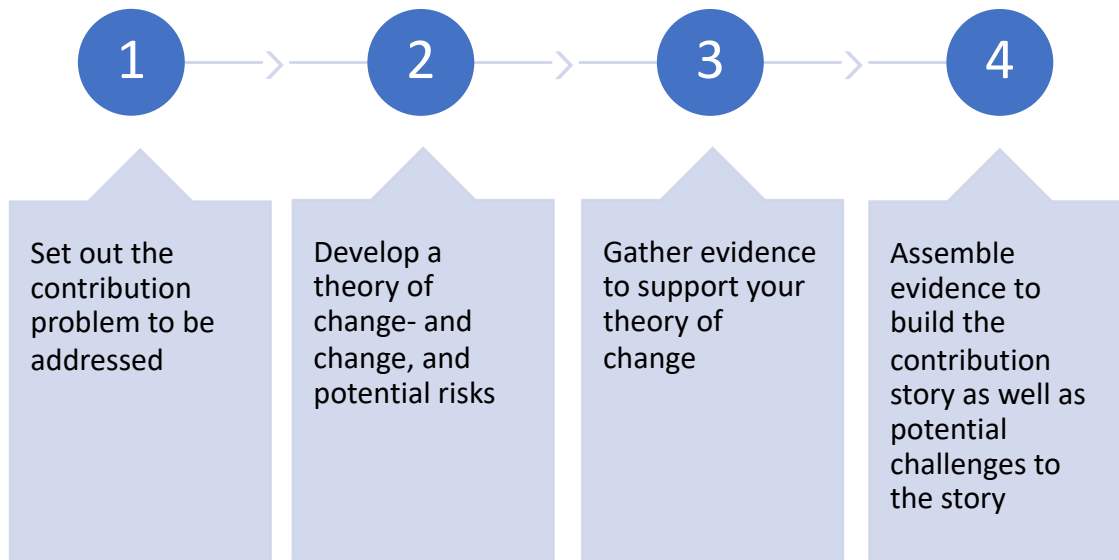


- Also using the HANCI Index
- **Tanzania:** partner organization, PANITA, worked with a group of parliamentarians interested in child nutrition
- The parliamentarians wanted support to get nutrition included in the parliamentary manifestos for the 2015 election
- Were we able to influence the content of the manifestos? How certain can we be of our influence?

Full paper which part of the presentation draws on can be found at: te Lintelo, D.J.H., Pittore, K. Evaluating Parliamentary Advocacy for Nutrition in Tanzania. *Eur J Dev Res* **33**, 735–759 (2021). <https://rdcu.be/drElq>



# Process Tracing in contribution analysis



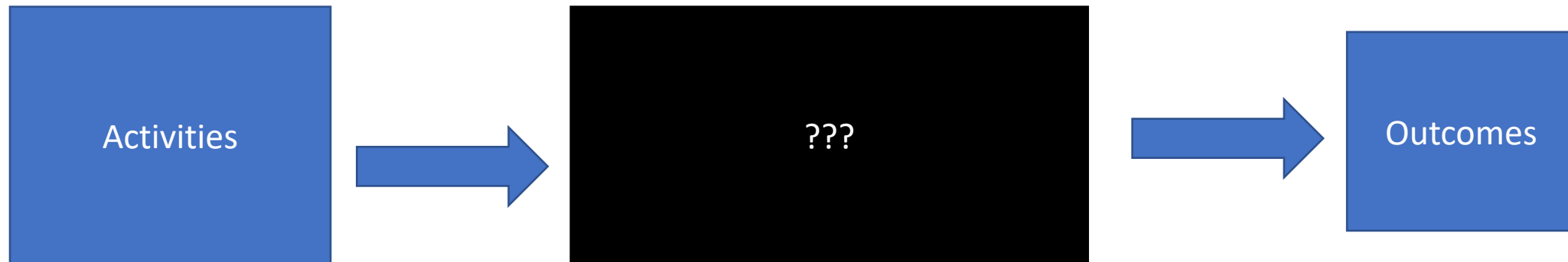
5. Testing the intervention

6. Testing other potentially contributing factors

7. Testing the ToC as a whole

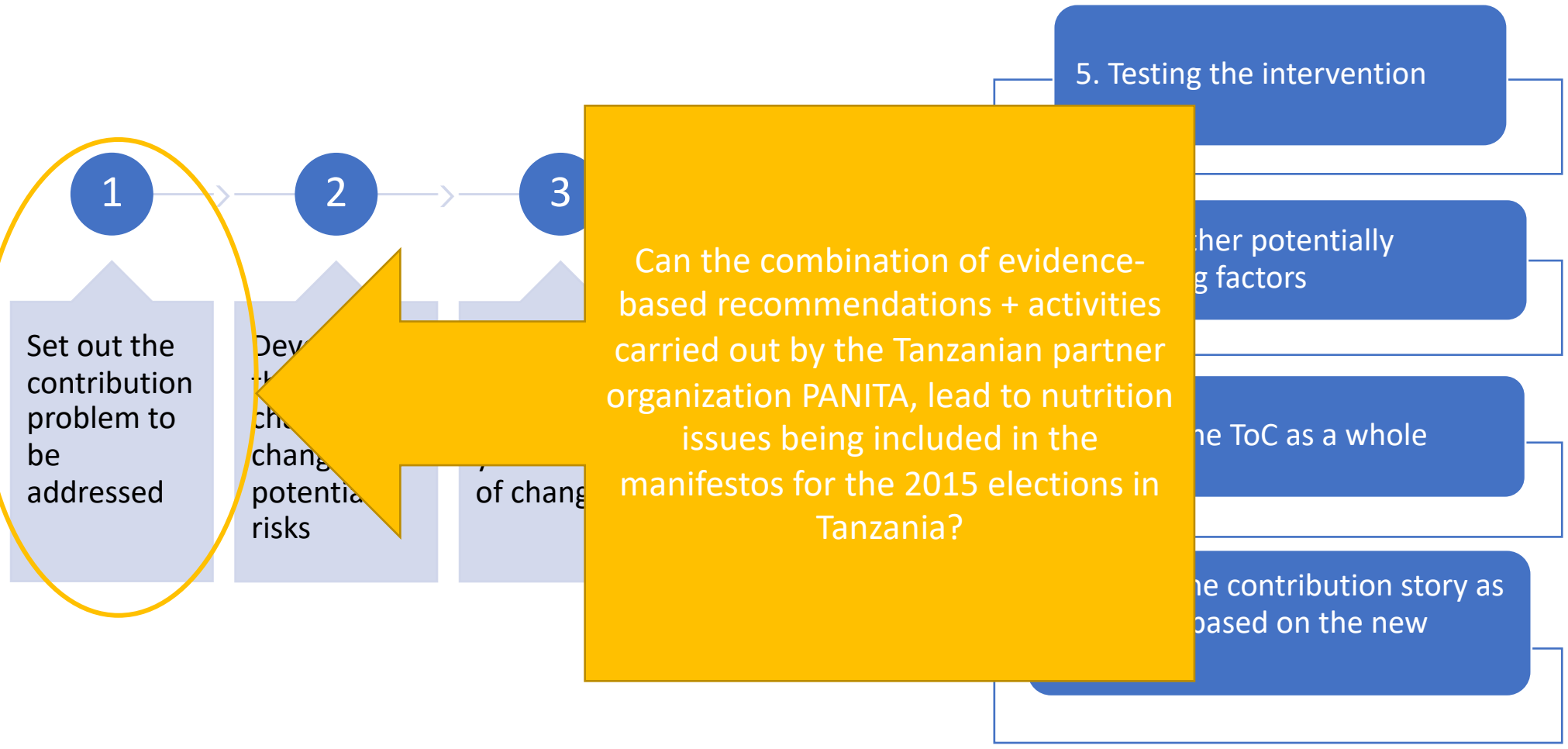
8. Revise the contribution story as necessary based on the new evidence

# Process Tracing

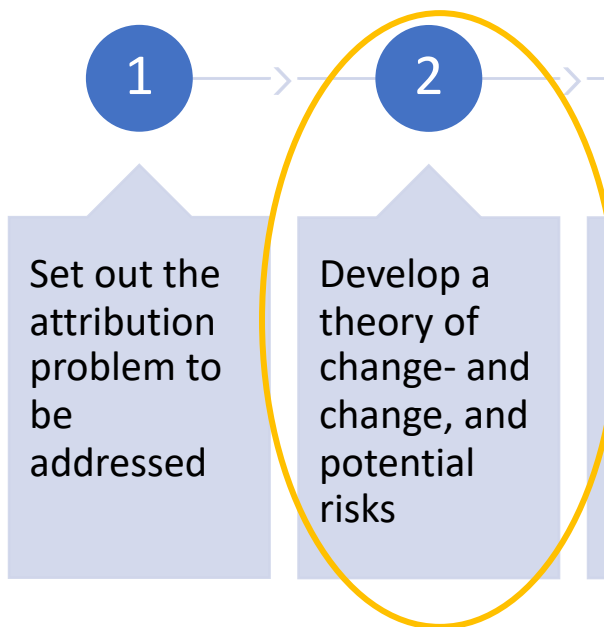


Process tracing aims to understand what happens in the black box between the activities that you do and the outcomes that you see.

# Contribution analysis and Process Tracing



# Contribution analysis and Process Tracing

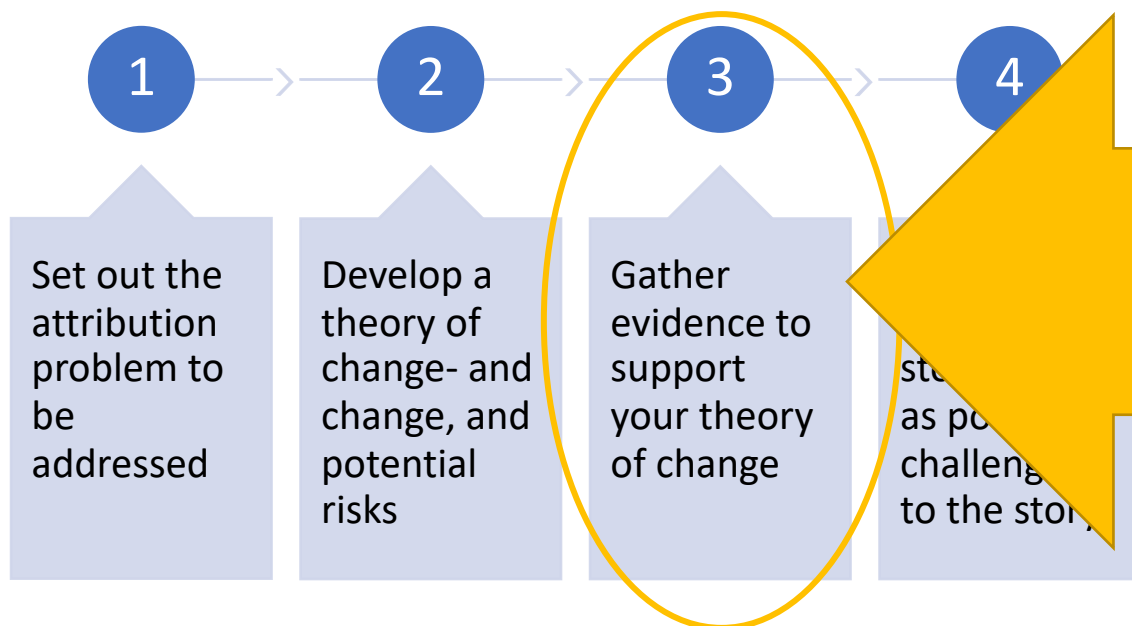


Activity types	Outputs	Immediate outcome	Intermediate outcomes	Longer term outcomes	Ultimate impact
1. Evidence based advocacy messages presented to PG	Report from meeting	MPs suggest that nutrition should be in party manifestos	Nutrition features substantively in party manifestos	Increased attention to nutrition in manifestos translates into concrete changes in laws, policy and spending when the party is in power	Improvements in Tanzanians' nutritional status
2. Develop Nutrition recommendations to support PG in their advocacy	Booklet (Swahili and English) with recommendations	Nutrition recommendations available in suitable format to political elites			
3. Advocacy activities promote the NRs among MPs and party elites (launch events, bilateral meetings, etc)	Reports on launch events of the NRs, meetings, etc.				
4. Train journalists to present nutrition as an issue of political commitment in media	Training notes, articles written and radio programmes produced				

Assumption: NR is effectively communicated to PG members	Assumptions: Targeting Circulation Timing	Assumption: Party manifestos effectively guide public policy for election winner when in government	Assumption: Public policy is effectively implemented
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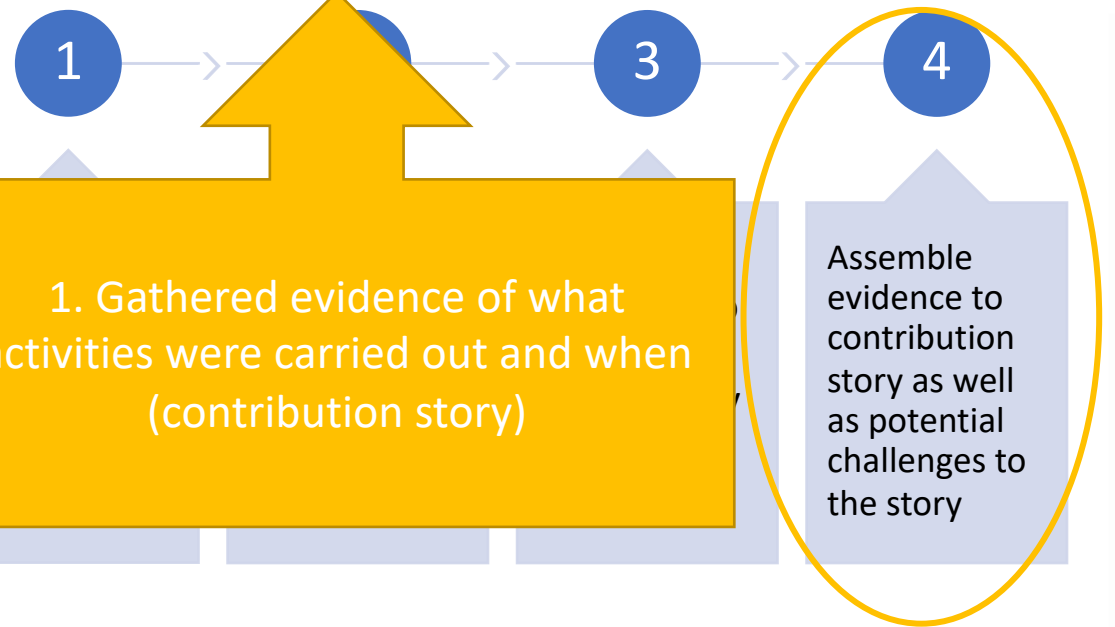
# Contribution analysis and Process Tracing



## What evidence can support our ToC?

- Survey of experts indicates that no political party has a strong commitment to hunger and undernutrition in their party manifestos
- PANITA developed evidence- based nutrition messages
- Various advocacy activities directed at MPs carried out between April- June 2013
- Booklet of key nutrition messages was developed and distributed
- Training for journalists on HANCI organized – articles and radio mentions

Timeline	Description of activity
01 July 2013	PANITA and IDS discuss HANCI 2012 research findings
01 November 2013	PANITA and IDS devise and present four advocacy messages to PG, to identify party manifestos as advocacy opportunity
01 March 2014	PANITA hires consultants to develop nutrition recommendations (NR)
April-June 2014	PG members present four PANITA advocacy messages to fellow MPs in budget session of Parliament
22 June 2014	Consultative meeting with 42 MPs in Dodoma about NR
01 September 2014	Training 10 journalists on nutrition
16 October 2014	Follow up interviews with four PG members
October-December 2014	PG consults and sanctions NR. Booklet devised
01 February 2015	Launch NR in Parliament, Dodoma, by Chairperson PG. Event with 43 MPs, keynote speech by Pindi Chana (MP Deputy Minister for Children Development and Gender. Journalists report
04 March 2015	Engaging zonal coordinators PANITA on manifesto influencing process
29 May 2015	PG chairperson presents booklet at regional launch of the Global Nutrition Report 2015, Dar es Salaam. Journalists report (Print Articles by A. Hussein 19 March 2015, and in The Citizen "NGOs Call Upon Politicians to Prioritize Nutrition" 16 June 2015)
01 June 2015	PANITA and PG conduct follow up meetings with range of parties and MPs, Dodoma
22 July 2015	Regional consultation, Iringa
August/September 2015	Party manifestos published (Intermediate outcome)
25 October 2015	General elections



**Only two assumptions were within our control**

Assumption: NR are effectively communicated to PG member → HANCI staff and partners organized a launch event attended by 14 MPs

Assumption: targeting/ circulation/ timing → we relied on data coming from the MPs themselves, and interviews indicated that the document was circulated widely, although we are unsure of the exact extent

Who writes the manifestos, and when exactly remained unclear

Activity types	Outputs	Intermediate outcomes	Longer term outcomes	Ultimate impact
1. Evidence based advocacy messages presented to PG	Report from meeting	Nutrition features substantially in party manifestos	Increased attention to nutrition in manifestos translates into concrete changes in laws, policy and spending when the party is in power	Improvements in Tanzanians' nutritional status
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Assumption: NR is effectively communicated to PG members	Assumptions: Targeting Circulation Timing	Assumption: Party manifestos effectively guide public policy for election winner when in government	Assumption: Public policy is effectively implemented
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# What are some potential alternative hypothesis?

- Of course, there can be many! However, in process tracing not all data is considered
- Tests can be applied to increase our certainty that a certain piece of data is likely due to our intervention, versus something else
- Tests are based on probabilities, using the idea of necessary and sufficient.

You are standing outside a bank. You think you witnessed a robbery. What would be examples of the types of evidence?

		Sufficient for affirming causal inference	
		No	Yes
Necessary for affirming causal inference	No	<b>1. Straw-in-the-Wind</b> You pass bank and you see a man running out of the bank wearing a mask and carrying a bag	<b>3. Smoking-Gun</b> You enter the bank and see people lying on the ground, and a smoking gun on the floor on the floor.
	Yes	<b>2. Hoop</b> The police see the man and stop him, they ask to see what is in the bag. Passing: the bag contains money. Failing: the bag does not contain money	<b>4. Double Decisive</b> You find a CCTV camera footage showing the robbery and you can see the face of the man who ran out with the bag firing the gun.



## Sufficient for affirming causal inference

		No	Yes
Necessary for affirming causal inference	No	<b>1. Straw-in-the-Wind</b> <b>a. Passing:</b> Affirm relevance of hypothesis, but does not confirm it. <b>b. Failing:</b> Hypothesis is not eliminated, but is slightly weakened.	<b>3. Smoking-Gun</b> <b>a. Passing:</b> Confirm hypothesis. <b>b. Failing:</b> Hypothesis is not eliminated, but is somewhat weakened.
	Yes	<b>2. Hoop</b> <b>a. Passing:</b> Affirm relevance of hypothesis, but does not confirm it. <b>b. Failing:</b> Eliminates hypothesis.	<b>4. Double Decisive</b> <b>a. Passing:</b> Confirm hypothesis and eliminates others. <b>b. Failing:</b> Eliminates hypothesis.

## Sufficient for affirming causal inference

No

Yes

### 1. Straw-in-the-Wind

- a. Passing:** Affirm relevance of hypothesis, but does not confirm it.
- b. Failing:** Hypothesis is not eliminated, but is slightly weakened.

### 3. Smoking-Gun

We find key phrases from our booklet in the manifestos, but the combination is not unique enough to say for sure that it came from the nutrition recommendations. Key members of the manifesto drafting committee mention the booklet

### 2. Hoop

We find an increased number of mentions of key terms (nutrition, malnutrition, hunger) in the 2015 manifestos compared to the 2010

### 4. Double Decisive

We find whole passages which are copied from the nutrition recommendation booklet in the manifestos of various parties.

Necessary for affirming causal inference

No

Yes

# Contribution analysis and Process Tracing

**Table 2** Intermediate outcome: Nutrition keyword search results for political party manifestos 2010–2015

	CCM		CHADEMA	UKAWA
	2010	2015	2010	2015
Nutrition ( <i>Lishe</i> )	1	12	5	2
Malnutrition ( <i>Utapiamlo</i> )	0	1	1	0
Severe acute malnutrition ( <i>Utapiamlo mkali</i> )	0	1	0	0
Hunger ( <i>njaa</i> )	2	1	3	0

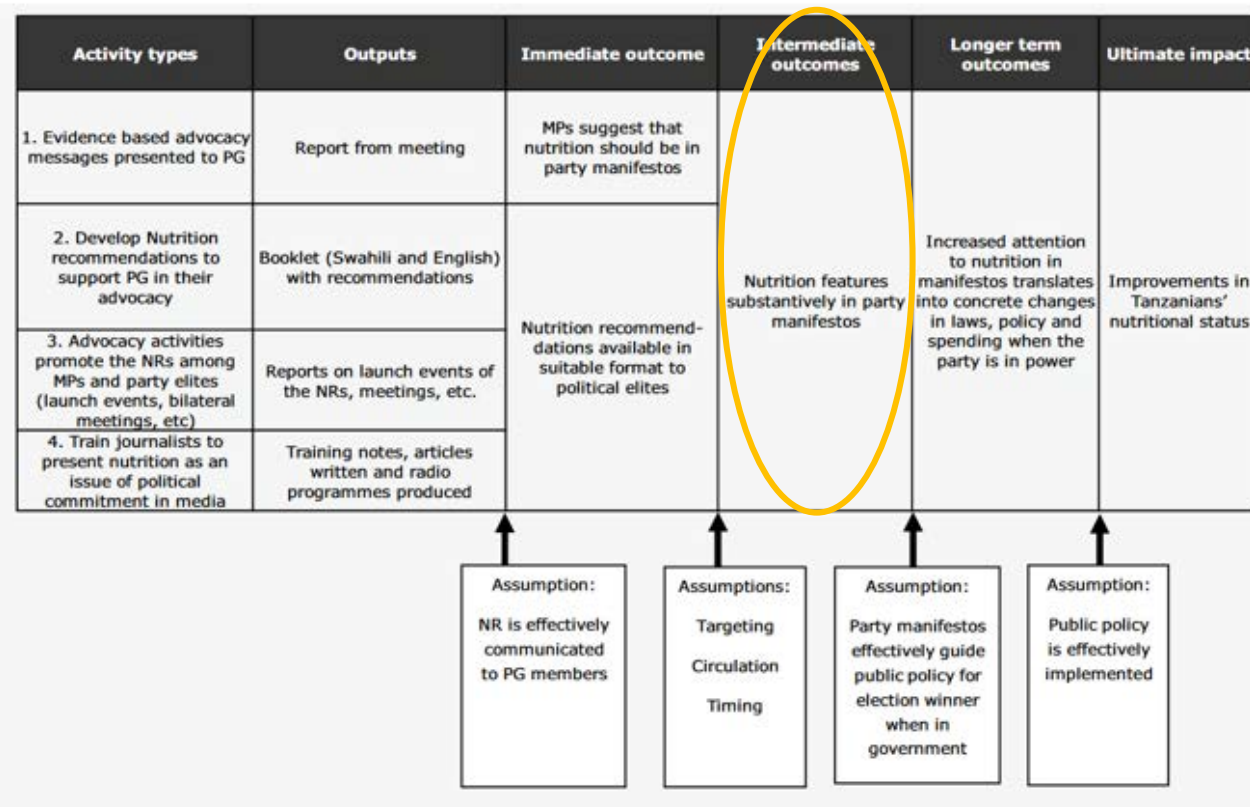
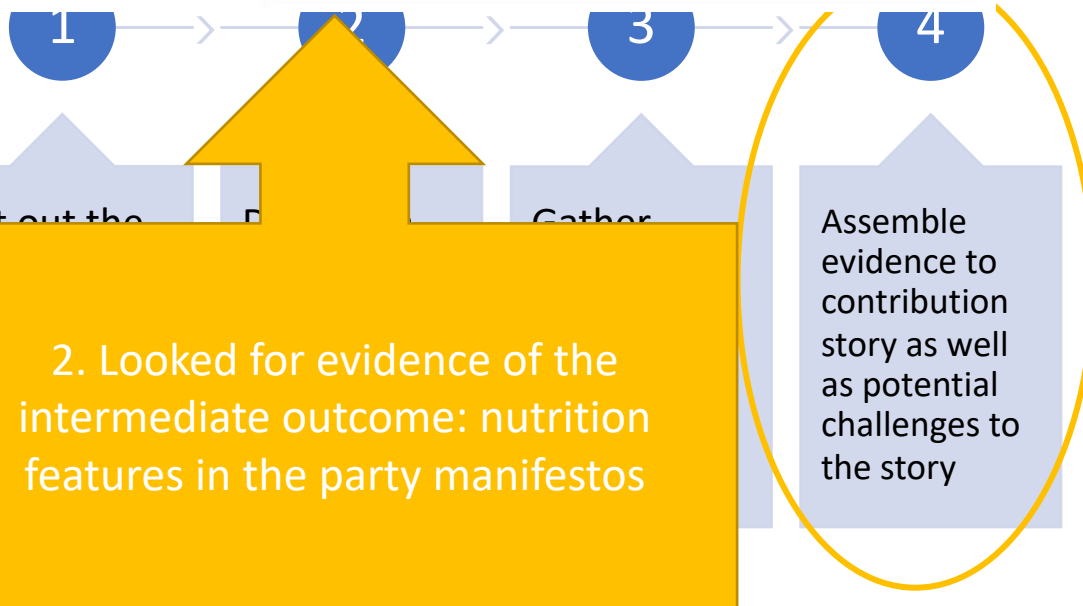


Fig. 1 Theory of change

# Contribution analysis and Process Tracing

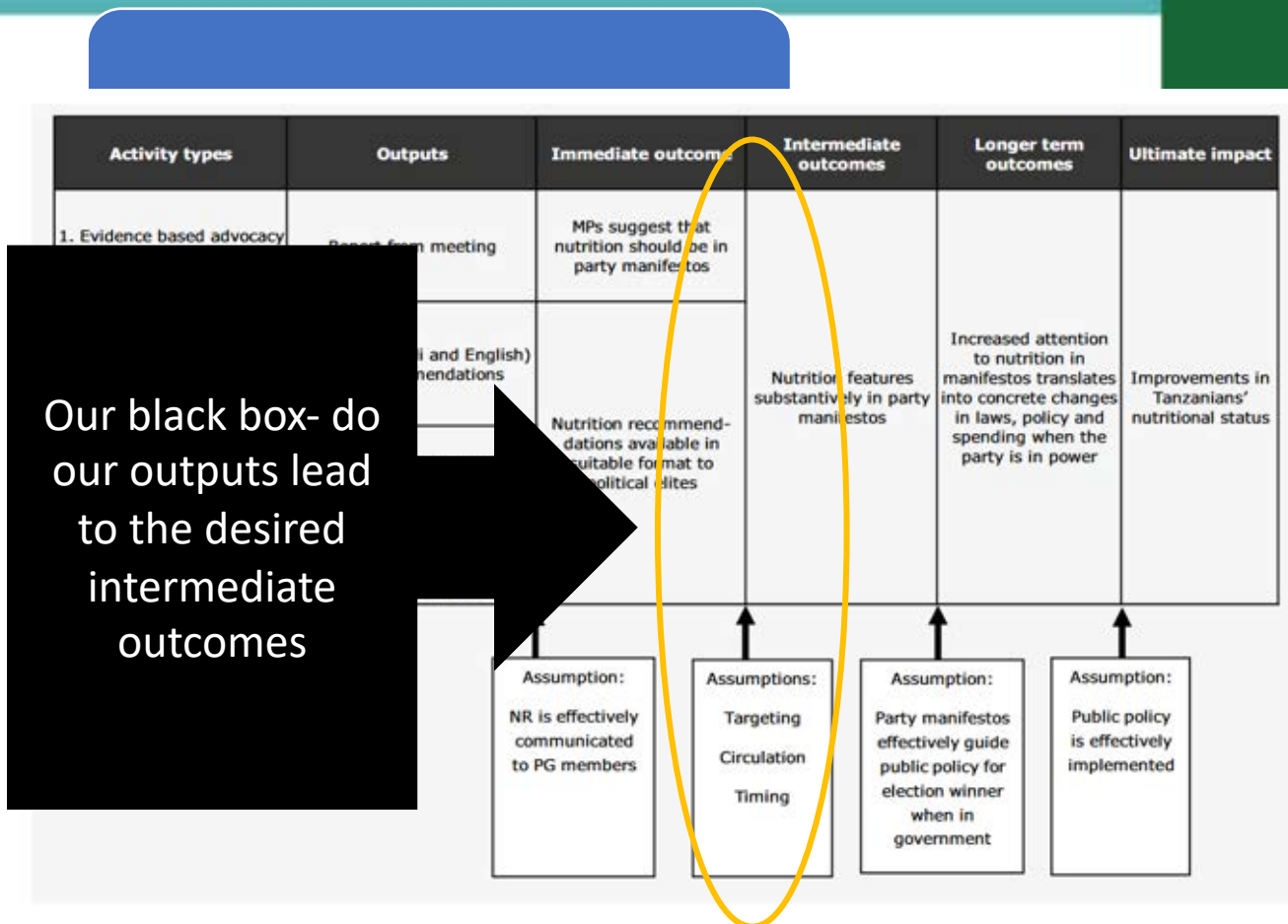
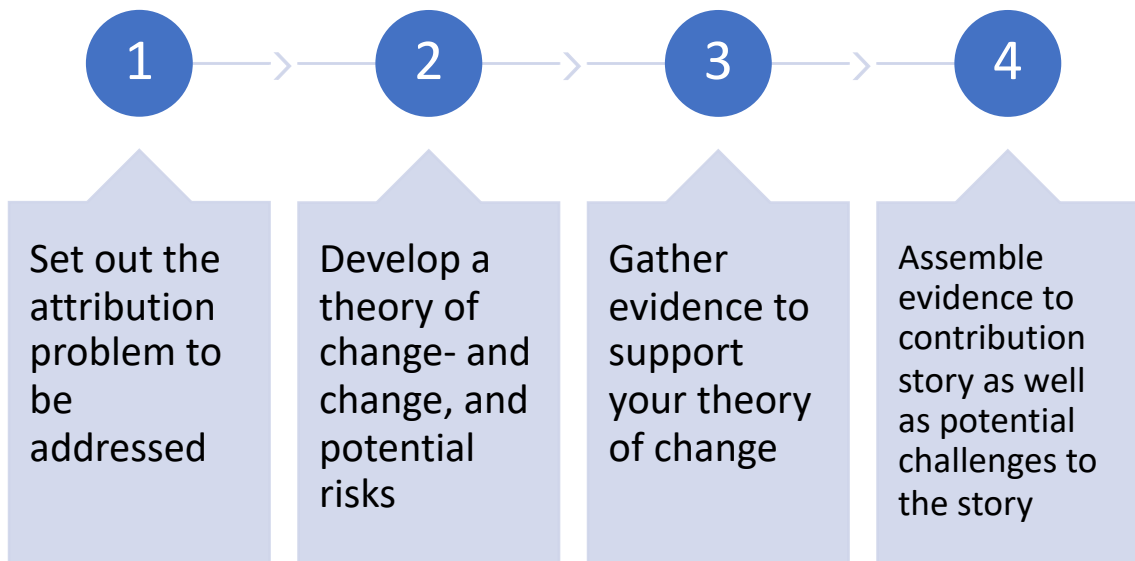


Fig. 1 Theory of change

## Potential rival hypothesis 1: Nutrition was already in the manifestos of the major political parties

CCM- pass mentions of nutrition increase from 1 → 12

UKAWA- fail Decreases from 5 → 2

## Potential rival hypothesis 2: Nutrition increasingly appearing in the manifestos was a result of advocacy activities by other actors.

-stakeholder mapping shows many actors active in the nutrition space in Tanzania.

Many including USAID, DFID and the World Bank promoted nutrition. →

However, we could identify no other groups were carrying out advocacy with parliamentarians or around the getting nutrition included in the manifestos.

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o the story

In conclusion: for CCM (only) we can reject rival hypothesis 1 and 2

# Analysis and Process Tracing

5. Testing the intervention

6 Testing other potentially contributing factors

7. Testing the ToC as a whole

8. Revise the contribution story as necessary based on the new evidence

# s and Process Tracing

## Other assumptions which emerged:

- Challenge of accessing data on the outcomes of parliamentary advocacy, for example access to parliamentary debates or access to data about the parliamentary drafting committee → had to mainly rely on secondary data
- Power differences could impact trust between parliamentarians and advocates, especially between the leader of the parliamentary group who controlled access to other parliamentarians
- MPs, we learned, are not the only or most powerful actors shaping the manifesto drafting. Structure of the drafting committee was very hard to navigate, even for MPs- circulation assumption holds
- Limited political space, which was shrinking at this time especially regarding media criticism. Had to tread carefully.
- Resources and high costs associated with parliamentary advocacy

5. Testing the intervention

6 Testing other potentially contributing factors

7. Testing the ToC as a whole

8. Revise the contribution story as necessary based on the new evidence

1

Set out the attribution problem to be addressed

# Contribution analysis

# acing

5. Testing the intervention

6 Testing other potentially contributing factors

7. Testing the ToC as a whole

8. Revise the contribution story as necessary based on the new evidence

4

Assertion to

Confident of a clear causal relationship between PANITA led advocacy activities, output (the nutrition recommendations), and nutrition featuring in the CCM manifesto.

- We found no disconfirming evidence for CCM, we hypothesize that this is due to the high power of the lead of the parliamentary group who is a member of CCM.
- No evidence of impact for UKAWA

# Contribution analysis + Process Tracing

1. Set out the contribution problem to be addressed
2. Develop a theory of change, and potential risks
3. Gather evidence to support your theory of change
4. Assemble evidence to contribution story as well as potential challenges to the story

## Process Tracing steps

1. Testing the intervention
2. Testing other potentially contributing factors
3. Testing the ToC as a whole
4. Revise the contribution story as necessary based on the new evidence

Source: Befani and Mayne Process Tracing and Contribution Analysis Cause Inference for Impact Evaluation



# Advantages and Disadvantages of PT+CA

- Advantages

- Tries to answer questions about the types of evidence that are necessary and/or sufficient to confirm or disconfirm a causal explanation
- Provides a specific method to evaluate the strength of specific evidence

- Disadvantages

- Can be very hard to apply in practice
- Developing appropriate tests is quite time consuming – lots of thinking and discussing
- High need for data which might be challenging (or impossible!) to find especially for more confirmatory types of evidence

# Applying this to your own work

- Do you think you could use process tracing in your own work?
- What types of tests could you apply?

		Sufficient for affirming causal inference	
		No	Yes
Necessary for affirming causal inference	No	<b>1. Straw-in-the-Wind</b> <b>a. Passing:</b> Affirm relevance of hypothesis, but does not confirm it. <b>b. Failing:</b> Hypothesis is not eliminated, but is slightly weakened.	<b>3. Smoking-Gun</b> <b>a. Passing:</b> Confirm hypothesis. <b>b. Failing:</b> Hypothesis is not eliminated, but is somewhat weakened.
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Thanks for  
listening!

For further reading:

te Linteló, D.J.H., Munslow, T., Pittore, K. *et al.* Process Tracing the Policy Impact of 'Indicators'. *Eur J Dev Res* **32**, 1312–1337 (2020).

<https://doi.org/10.1057/s41287-019-00244-0>

te Linteló, D.J.H., Pittore, K. Evaluating Parliamentary Advocacy for Nutrition in Tanzania. *Eur J Dev Res* **33**, 735–759 (2021). <https://rdcu.be/drElq>

Barbara B. and Mayne, J. Process Tracing and Contribution Analysis: A Combined Approach to Generative Causal Inference for Impact Evaluation. 2014. Institute of Development Studies DOI: 10.1111/1759-5436.12110

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