

**Evaluating Impact through
a Contribution Analysis**



October 2010

CENTRE EUROPÉEN D'EXPERTISE EN ÉVALUATION

Opening 2

What is contribution analysis?

A new **item** in the evaluator's toolkit

- ... making **impact analysis** feasible
- ... and **rigorous**

The tool refers to

- ... **theory based** evaluation
- ... **realistic** evaluation

Mayne 1999, 2010

Practicalities 3

Contribution analysis: one day, one tool

- Introducing the tool (*lecture, Q/A*)
- Applying the tool (*training case study*)
- Lunch
- Applying the tool (*training case study continued*)
- Discussing the tool (*lecture, Q/A*)

Practicalities 4

A tour on the web

Presentations by J.Mayne
http://www.inteval-group.org/IMG/pdf/ILAC_Contribution_Analysis-2.pdf
http://www.evaluationcanada.ca/distribution/20080514_mayne_john.pdf
<http://dsp-psd.pwgsc.gc.ca/Collection/FA3-31-1999E.pdf>

Examples of use
<http://www.aes.asn.au/conferences/2006/papers/022%20Fiona%20Kotvojs.pdf>
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2856526/pdf/1478-4491-8-7.pdf>
<http://www.scotland.gov.uk/Resource/Doc/175356/0091400.pdf>

Discussing the tool in a forum
<http://www.inteval-group.org/-Forum-.html>

The tool 5

Introducing the tool

<p>Cause-and-effect issue</p> <p>Theory of change</p> <p>Gathering evidence</p> <p>Draft contribution story</p> <p>Additional evidence</p> <p>Final contribution story</p>	}	<p>Defining key terms</p> <p>Implementing the tool</p> <p>Examples</p>
--	---	--

The tool (1) 6

Evaluation and causality

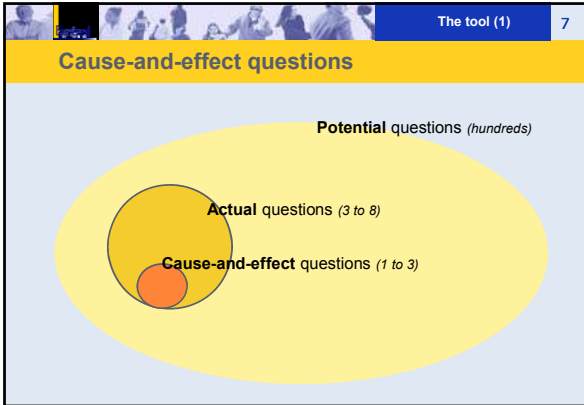
Effects, outcomes, results, impacts

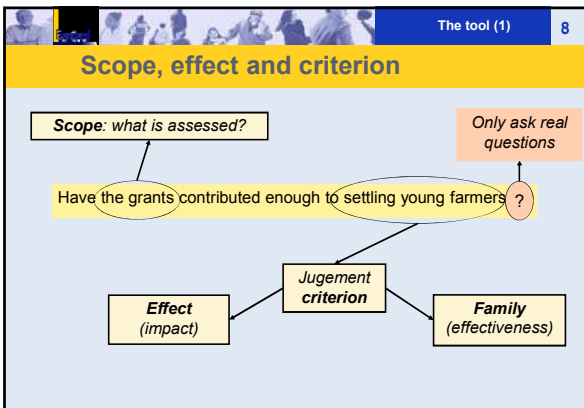
- Under control or not?
- Visible or not?
- Intended or not?

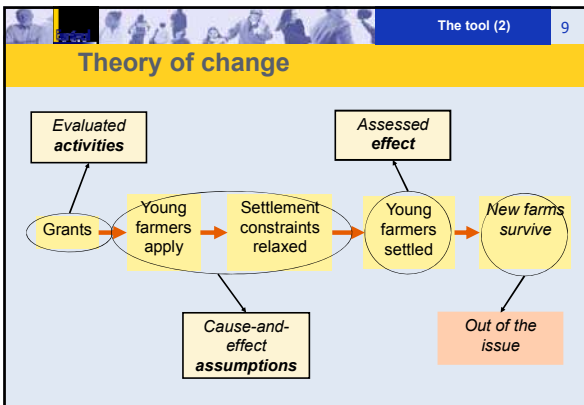
Effectiveness, efficiency, utility

Evaluation

- Impact evaluation vs impact assessment
- Impact evaluation or just evaluation?







The tool (2) 10

Developing the theory of change

Faithful, reconstructed

Logic model

- Linear chain
- External factors => explanatory model
- Causal loops => macro-level model

What does mean 'logic'?

- Internally consistent and clear
- In line with expert knowledge

The tool (3) 11

Developing the data collection work plan

Grants → Young farmers apply → Settlement constraints relaxed → Young farmers settled

Monitoring database: ● ● ● ●

Interviews managers: ● ●

Case studies farmers: ● ● ● ●

The tool (3) 12

Structuring data collection tools

Grants (1) → Young farmers apply (2) → Settlement constraints relaxed (3) → Young farmers settled (4)

Change 1 Change 2 Change 3 Change 4

Assumption 1-2 Assumption 2-3 Assumption 3-4

The tool (3) 13

Quality of gathered information

Coverage of all

- ... boxes (change)
- ... arrows (assumptions)

Balance of information

- ... confirming theory
- ... refuting theory

Triangulation, i.e. several distinct sources

- ... per box
- ... per arrow

The tool (4) 14

Evidence analysis database

Analysed item	Case of a farmer facing major non-financial constraints
Source	Case study n°3, p6
Assumption	Settlement constraints relaxed
Box / Arrow	Arrow 2-3
Causal mechanism	External factor
Causal argument	Refuting
Strength of evidence	Strong

The tool (4) 15

Causal mechanism

```

    graph LR
      Grants --> YFA[Young farmers apply]
      YFA --> SCR[Settlement constraints relaxed]
      SCR --> YFS[Young farmers settled]
  
```

Assumption: A → B

Alternative explanation: A → B

Condition: A ⊕ B

The tool (4) 16

Causal argument

Confirming

- Cause, change and mechanism occurred

Refuting

- Cause occurred but ...
- ... change did not occur and/or
- ... alternative explanation or condition

Don't know

- Cause did not occur

The tool (4) 17

Strength of evidence

	Trace	Testimony
Direct	Fact	Opinion of those concerned
Indirect	Signature	Others' opinion

Evidence of change or mechanism, quantitative or qualitative

The tool (4) 18

Evidence analysis table

Relaxing settlement constraints (assumption 2-3)

	Mechanism	Argument	Strength
Cases of farmers facing major non-financial constraints	Alternative explanation	Refuting	Strong
Managers' opinion: grants relax constraints	Assumption	Confirming	Very weak
Cases of constraints relaxed without grants	Alternative explanation	Refuting	Strong

The tool (4) 19

Writing the draft contribution story

Grants supplied (change 1)
...

Relaxing settlement constraints (assumption 2-3)
Grants make just a marginal contribution to relaxing settlement constraints because the main constraints are not of a financial nature
...

Young farmers settled (change 4)
...

One statement per box / arrow

The tool (4) 20

Assessing the contribution story

Criticizing the draft contribution story

- Internal quality control
- Evaluation reference group
- Panel of experts
- Stakeholder focus group

Criteria for internal quality assessment

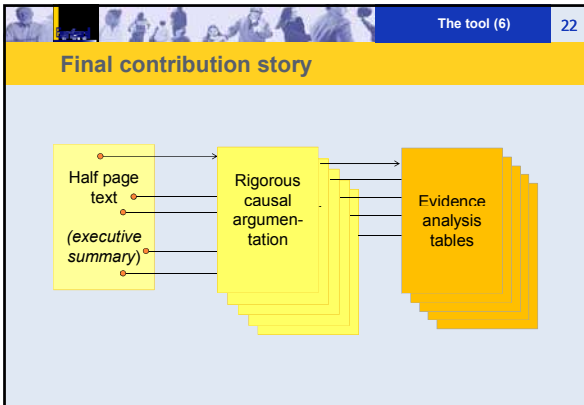
- All statements supported by many information items
- Triangulation for all statements
- Facts in sufficient proportion (1/3 at least)
- Refuting information in sufficient proportion (1/3 at least)

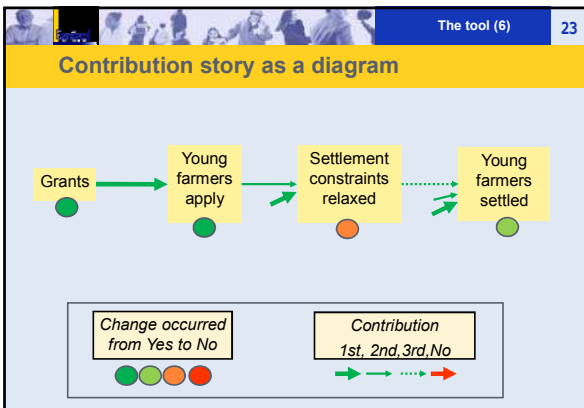
The tool (5) 21

Seeking additional evidence

Collecting additional information

- ... from distinct sources
- ... rapidly
- ... enabling the analyst to cross-check





The case 24

Evaluation of EC support to Jordan

Euréal (Europe) – To-Excel (Jordan) – 2007
 Report on www.ec.europa.eu/europeaid/

Complex and complicated intervention

Nine questions, of which ...

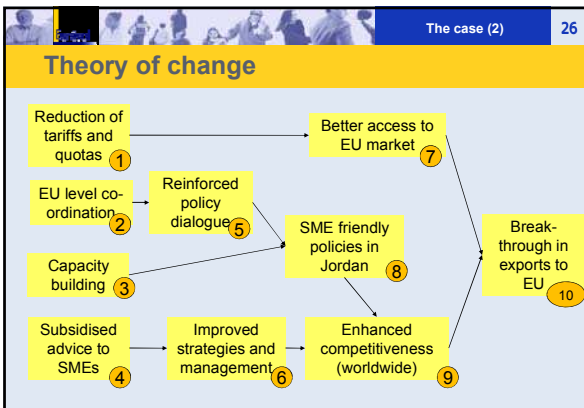
- **Five cause-and-effect questions**, of which impact of ...
 - ... trade liberalisation
 - ... support to SMEs

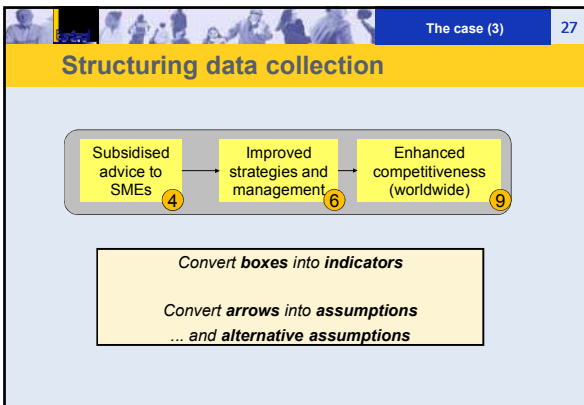
The case (1) 25

Cause and effect issue

<p>Impact of ...</p> <ol style="list-style-type: none"> 1. Advisory services to SMEs 2. Sector level assistance 3. Support to policy reforms 4. Trade liberalisation 5. Regional integration 	<p>Impact on ...</p> <ol style="list-style-type: none"> a. Industrial development b. Overall competitiveness c. Exports to the EU market
--	--

Propose another option. Justify





The case (3) 28

Developing a data collection work plan

<p>Available documents</p> <ol style="list-style-type: none"> 1. Activity reports 2. Previous evaluations 3. Economic studies 4. Questionnaire to 100 subsidised SMEs 5. Trade statistics 	<p>Data collection tools</p> <ol style="list-style-type: none"> a. Interviews of insiders b. Visit and interviews in 8 subsidised SMEs
---	---

Propose other tools. Justify

The case (4) 29

Drafting the contribution story

Evidence analysis form

- Go to Arrow 6-9 (p14)
- Select an information item
- Fill in Table 4

Evidence analysis table

- Continue with other items
- Fill in Table 5
- Write the corresponding part of the draft contribution story

The case (4) 30

Assessing the draft story

A story in 14 statements

Supported by about ...

- 70 information items
- originating from 15 distinct sources
- Direct facts: 5%
- Confirming / falsifying: 70-30
- Triangulation: 25%

What are the weakest points in the contribution story?

Discussing 31

Discussing the tool

Counterfactual? ... with / without

Generalisation

Evaluability in the case of **complicated** programme

... and **complex** effects

Discussing (1) 32

Approaches to evaluating impacts

```

graph TD
    Q((?)) --> O[Observations]
    Q --> D[Declarations]
    O --> I[Interpreted]
    O --> A[Analysed]
    D --> A
    A --> AT[Attribution]
    A --> C[Contribution]
  
```

Discussing (1) 33

Change, counterfactual, impact

Impact (estimate)

Counterfactual (estimate)

Change (indicator)

Discussing (1) 34

Towards a new excellence standard

<p>Attribution analysis</p> <ul style="list-style-type: none"> ■ <i>Conterfactual</i> ■ <i>Representativeness</i> ■ <i>Impact estimates</i> 	<p>Contribution analysis</p> <ul style="list-style-type: none"> ■ <i>Falsifying theory</i> ■ <i>Full diversity</i> ■ <i>Ranked contributions</i>
---	--

Discussing (2) 35

Learning transferable lessons

```

graph TD
    AA[Attribution analysis] --> GP[Generalisation to population]
    GP --> MA[Meta-analysis]
    MA --> UD[Understanding differences]
    CA[Contribution analysis] --> GT[Generalisation to theory]
    UD --> GT
  
```

Discussing (3) 36

Deductive approach mainly

Testing assumptions and suspected alternatives (*deductive*)

A → B → C

Discovering unknown alternatives (*abductive*)

Discussing (4) 37

Complicated interventions

Adding simple causal chains

```

    graph LR
      A1[Activity] --> C1[Change]
      C1 --> C2[Change]
      C2 --> C3[Change]
      A2[Activity] --> C4[Change]
      C4 --> C5[Change]
      C5 --> C6[Change]
      A3[Activity] --> C7[Change]
      C7 --> C8[Change]
      C8 --> C9[Change]
      A4[Activity] --> C10[Change]
      C10 --> C11[Change]
      C11 --> C12[Change]
      C1 --> C12
      C2 --> C12
      C5 --> C12
      C8 --> C12
      C11 --> C12
  
```

Discussing (4) 38

Asking a few well-thought questions

Many activities
Many targeted groups
Many expected effects
7 evaluation criteria

Less than 10 questions

Learning 1 or 2 lessons

Discussing (3) 39

Evaluability and complication

```

    graph LR
      A1[Activity] --> C1[Change]
      C1 --> C2[Change]
      C2 --> C3[Change]
      A2[Activity] --> C4[Change]
      C4 --> C5[Change]
      C5 --> C6[Change]
      A3[Activity] --> C7[Change]
      C7 --> C8[Change]
      C8 --> C9[Change]
      A4[Activity] --> C10[Change]
      C10 --> C11[Change]
      C11 --> C12[Change]
      C1 --> C12
      C2 --> C12
      C5 --> C12
      C8 --> C12
      C11 --> C12
  
```

Question 1 (circled in red) points to the first 'Change' box of the second chain.

Question 2 (circled in green) points to the first 'Change' box of the second chain.

Shared tool and cross-checking

Discussing (5) 40

Complexity

Changing systems

Activity → Change → Change → Change

System 1 System 2 System 3

Discussing (5) 41

Evaluable systems

Identity
Self-organisation
Stability
Explanatory models
Available expertise
Accumulated knowledge

Evaluable
Knowledge based
policies

Discussing (5) 42

Inevaluable systems

Unclear borderline
Loose connection
Instability
No expertise
Knowledge gaps

Inevaluable
Theory based
policies



Thanks for your attention

© Eureval, 2010

*This training material can be used
by participants in Eureval training events
except for commercial purpose*

Eureval should be quoted

Attribution-NonCommercial-NoDerivs 3.0 Unported

You are free:

- Ⓒ to Share - to copy, distribute and transmit the work

Under the following conditions:

- Ⓘ Attribution. You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).
- Ⓓ Noncommercial. You may not use this work for commercial purposes.
- Ⓔ No Derivative Works. You may not alter, transform, or build upon this work.
- For any reuse or distribution, you must make clear to others the license terms of this work. The best way to do this is with a link to this web page.
- Any of the above conditions can be waived if you get permission from the copyright holder.
- Nothing in this license impairs or restricts the author's moral rights.