Policy Analysis for Multi-Actor Systems

Synthesis and storyline

What & Why : Going from analyses to issue paper

Leon Hermans, Faculty of Technology, Policy and Management



Challenge the future

Storyline for a scientific paper on Delfland policy monitoring study

1. Introduction

- a. Need and calls for new tools for evaluation and learning as part of adaptive management (called for in various papers, needed for adaptive policies/governance - among those, Swanson et al 'Seven tools for creating adaptive policies' in Techn Forecasting &SocChange 77, 2010)
- Next step: translating these tools and principles into workable approaches, and applying them to support development of monitoring and evaluation frameworks supportive of adaptive management.
- c. Paper: What would such an approach look like, and what happens if we apply it?

2. Theory: challenges to current evaluation approaches

- a. Literature: some of the main challenges to current evaluation approaches, underlying the call and need for new tools and approaches.
- b What if we don't know the system, if we know we don't know our 'theory of change'? Then we need, and want, to learn.
- c. What if we will be held accountable, at least to a certain extent, for policy implementation and success. This introduces a tension: learning vs accountability.
- What if all of this takes place in a multi-actor environment? Adding coordination and communication layers to the challenge?
- What if our means and resources are constrained?
- Last two items further exacerbate the tension between learning and accountability in f evaluations.
- So, the 'stakes' are high: tool for learning, accountability and communication (joint factfinding but also joint sense-making). As academics, we can try to isolate each of these, and to treat each of these individually. And we can even advice practitioners to do the same (as Patton does). And all this makes sense for building understanding. But in the mean time, increasingly, policy practitioners face these demands and challenges all at once. Let's use tools already available, and see if by combining them, we get somewhere.

3. Method: what's in the toolkit?

- a. Rational tools for multi-actor and uncertain settings: tools for policy theory construction and analysis (based on critical assumptions/adaptive PA), in a multi-actor setting: consult different people, and use DANA to aid analysis and consolidation
- b. Knowledge of political and human dimensions, and critical role of trust. Awareness of the 'actor' dimension in all of this, and the tensions this creates. Tools: participatory discussions about potential risks and way to deal with those in workshop. Based on 'trust' as critical mechanism to reconcile the two (in workshop). Also stakeholder analysis tools and mutual gains approach for evaluation process planning.

4. Results from the Delfland case:

- a. What we did (and did not) do: documents, interviews, workshops (3, including 'process plan') b. Main outcomes:
- - i. cognitive maps to represent (partial) policy theories
 - ii. linked to tables with signposts and triggers although triggers could not be filled
 - iii process insights and some ways to deal with them: risks and practical ways to build trust, and outcomes of stakeholder analysis related to who to involve in

what role. Idea to separate two types of evaluation somewhat (political accountability and bureaucratic learning)

- c. All of this brought some new insights and learning, for instance related to critical assumptions surfacing: nitrogen and water circulation time/flushing, process with municipalities (was a simple black box instrument, but turned quite complicated and time consuming itself as well), but also related to monitoring and evaluation itself: takes more time and efforts than expected, and not all figures that were assumed to be there, were there. Also, felt confident that there was a good basis to continue, with other actors. Nevertheless, the process was not carried through in the end.
- In sum: Tools worked, patient died. All our analytic tools and tricks seemed to 'work', or at d. least, so we were told, yet no follow-up process started.

5. Discussion and making sense of what happened:

- a. What happened? What was the apparent starting point and context, where did we end up, and why?
- Ъ. We were part of larger game, linked to other arenas. But also, we were asking too much, and Delfland was hesitant to go into new waters.
- c. The lead client, the water board, realized the need to involve the others, yet was hesitant to actually do so
- d The resulting causal 'theory' model was 'incomplete' and 'simplified', yet already too demanding in terms of finding the data. And prospect of monitoring this was also daunting. Would require much more time than they would actually be willing to commit to monitoring and evaluation
- e. This was related to the apparent absence of an implementation plan. This would be left to other departments within the water board. For an important part, these were the 'account managers' who worked with the municipalities, helping them to make 'implementation' plans. So, even within the organization, planners were separated from implementors, creating hurdles for implementation and subsequent monitoring (and evaluation).
- f. The process and procedural risks identified in the workshop were all too true; identifying them did not help in avoiding them
- g. So: we know what to do, but it is too much to ask in practice. We as evaluators did not understand what the water board could and could not do, and what data it did and did not have available. (But note that even the water board did not know this, but learned from this process that certain data were not there!). The water board had to formulate its own answer for dealing with tensions in a multi-actor setting, but had not vet done so. They had started something, but were unsure on how to proceed. Combined with political turmoil and budget cuts, this was enough to 'kill' (freeze) the initiative.
- h. This is more down to earth than tensions between learning and accountability, although what can be observed in this case, is that either of the two alone provides a better stimulus to 'do' something. Learning is a non-threatening academic exercise, 'positive' outcomes (look how innovative and knowledge-oriented we are!). Accountability is a negative stimulus. Ultimately, we do need to link the two - or not?

6. Conclusions

- a. We outlined and illustrated an approach to confront challenges
- b. Feasible, but still, meaningfully applying these tools in practice is hard, and probably will continue to be hard. (What to do about this? Implications?)
- c. Showed that monitoring data requirements are more demanding than expected. Showed that trust and process dominate the content



Evaluation and Program Planning 35 (2012) 427-438



Evaluation and Program Planning

Contents lists available at SciVerse ScienceDirect

journal homepage: www.elsevier.com/locate/evalprogplan

An approach to design long-term monitoring and evaluation frameworks in multi-actor systems—A case in water management

Leon M. Hermans*, Arienne C. Naber, Bert Enserink

Delft University of Technology, Faculty of Technology, Policy and Management, P.O. Box 5015, 2600 GA, Delft, The Netherlands

ARTICLE INFO

Article history: Received 20 May 2011 Received in revised form 28 October 2011 Accepted 21 January 2012 Available online 6 February 2012

Keywords:

Long-term planning Monitoring Theory-based evaluation Multi-actor systems Water management Dynamic Actor Network Analysis Assumption-based planning

ABSTRACT

Learning-by-doing and adaptive management require careful monitoring and evaluation of the outcomes of environmental policies and programs under implementation. Selecting relevant indicators is difficult, especially when monitoring over a longer period of time. Further challenges arise when policies are developed as a collaborative effort among multiple actors.

LUAT

This paper discusses an approach to design frameworks for long-term monitoring and evaluation in multi-actor systems. It uses Dynamic Actor Network Analysis (DANA) as an actor-sensitive method to reconstruct program theories. This is combined with elements of assumption-based planning to identify critical assumptions and associated indicators to incorporate the dynamic aspects related to long-term monitoring.

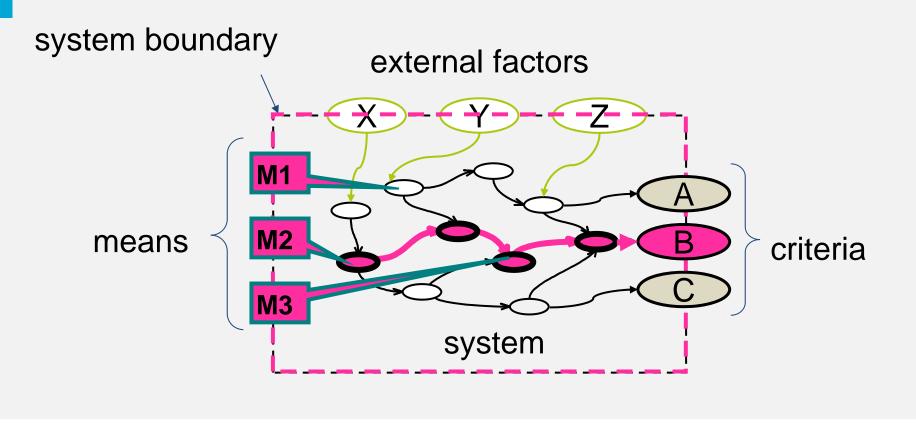
An application of this approach is described for a case of water management in the Netherlands. Here, mapping multiple perspectives and identifying critical assumptions helped to broaden the scope of monitoring in important ways. Identifying associated indicators and expectations on their development in response to policy implementation proved more difficult.

From this case, it can be concluded that the approach is feasible, useful, but also demanding. However, when continuing treads of networkey governance and adaptive management, additional efforts to reflect the strength in meniodic and adaptive there are precised at the strength in meniodic and adaptive the strength in meniodic and adaptive the strength in meniodic action and adaptive the strength in the strengt

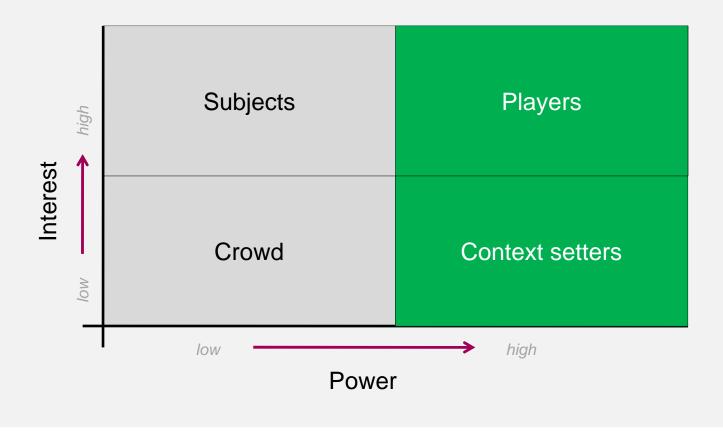
Synthesis and storyline for an issue paper

What is a storyline? Why use one for your issue paper?

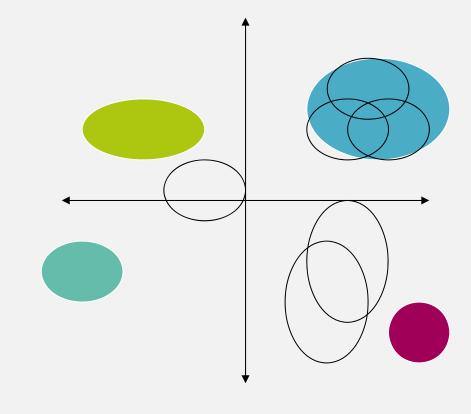
Systems analysis

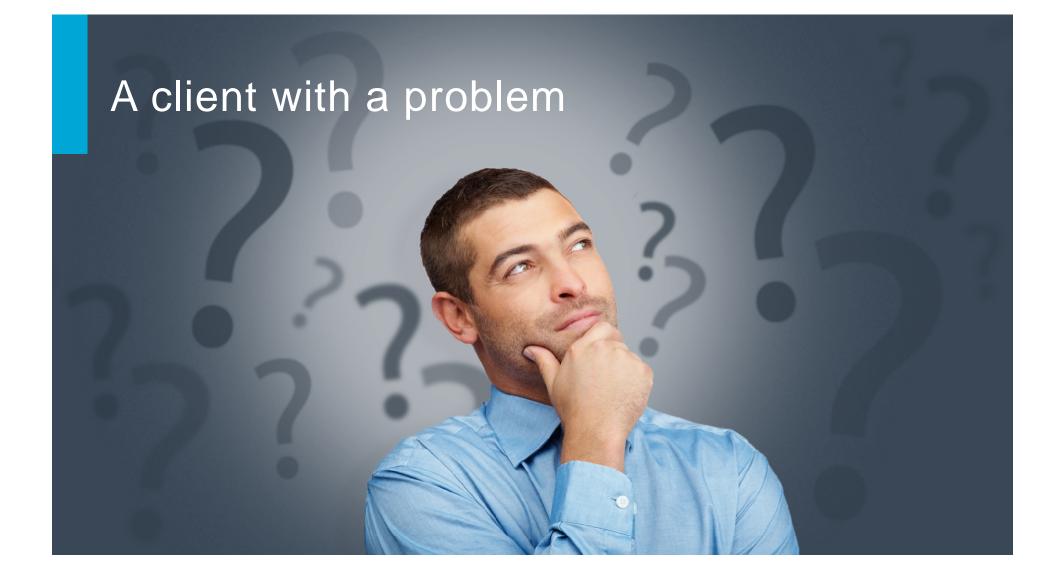


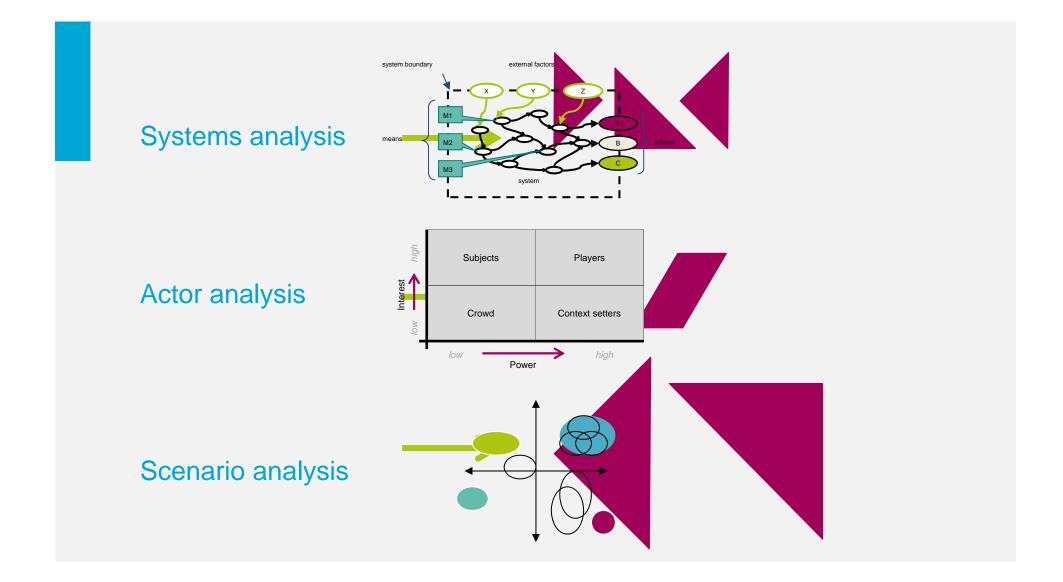
Actor analysis

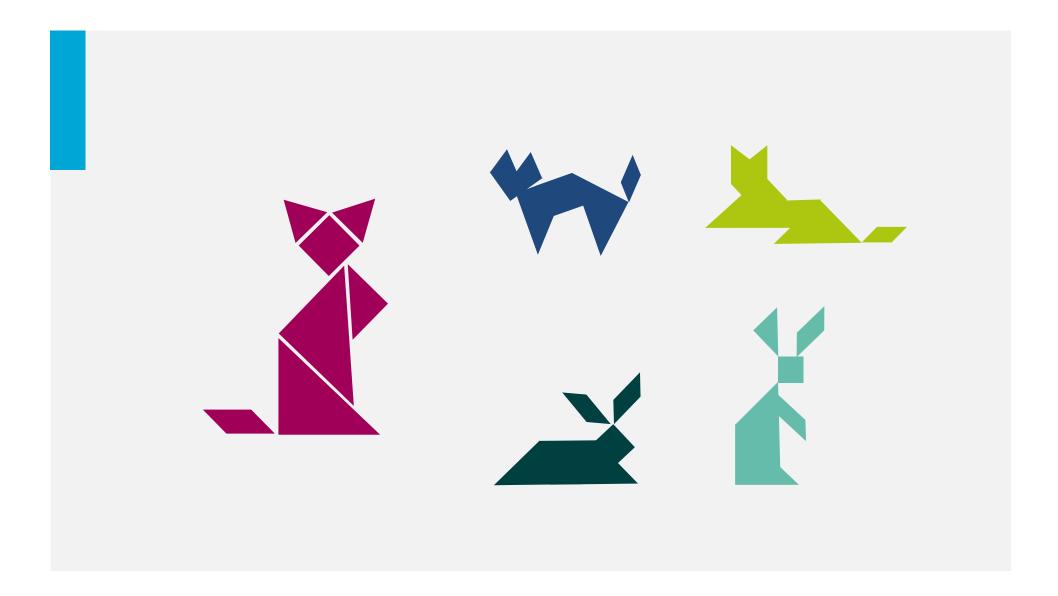


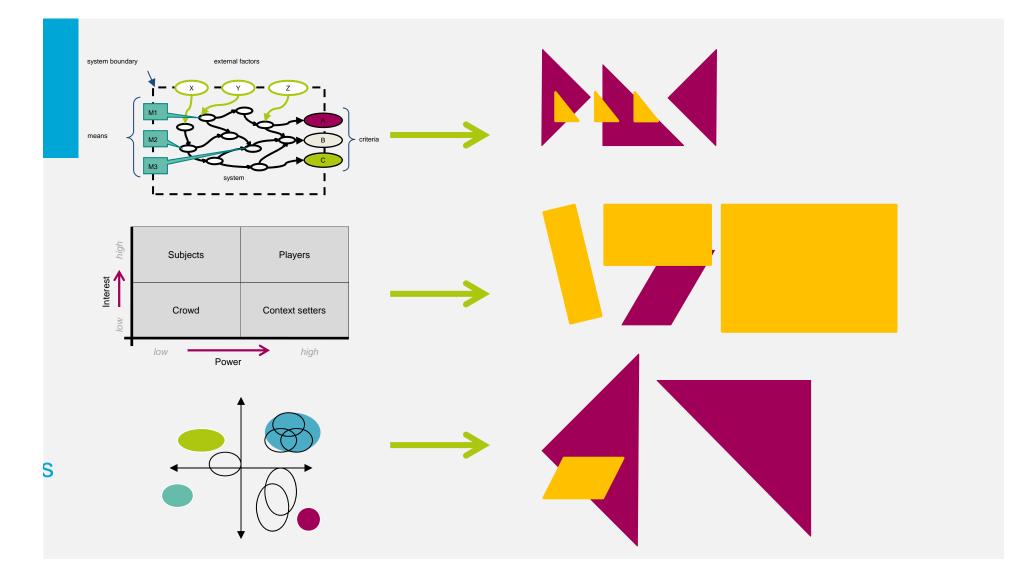












Synthesis and storyline for an issue paper

What is a storyline? Why use one for your issue paper?

Introduction

1)Issue: waste management

2)Problem owner and problem: Ministry and national policy objectives recycling

a)Official policy objective: 83% of waste recycled by 2015 (I&M, 2010)

3)Means: Current policy measures (Milieu, 2011; Wiel, 2011; Hoogers, 2012):

a)stimulating innovation and knowledge bundling, 'grondstofrotonde', involving municipalities, waste companies and producers

b)reduce red-tape (administrative burdens) for international waste transportation,

c)stimulating separated waste collection (e.g. public awareness campaigns).

d)But: already high amount of waste recycling in Netherlands, more not easy.

Problem Analysis

- 4) Over-capacity in waste incineration plants is barrier for recycling objectives
- 5) Longer term approach needed (>2015)
 - a) Looking into waste incineration plant closure
 - b) Using imports of waste as long-term strategy
 - c) There are certain conditions that need to be met to reduce opposition from other parties against closure: plants older than 20 years (average time to recover investments, AgentschapNL2, 2011); no running contracts with munipalities; no link local heating networks.
- 6) On short term (2015) temporary measures should be taken
- 7) Finally: consider reflection on current policy objectives

Conclusions and Knowledge gaps

- 8) Recycling targets difficult to realize. Requires measures to address overcapacity waste incineration plants, only feasible on longer term.
- 9) Decision on these longer-term strategies requires that several knowledge gaps are being addressed. Among others:
 - Alternative 'green' energy sources in coming 20 50 years?
 - Dependency of municipalities on waste incineration plants due to coupled city heating infrastructure?
 - Time needed to recover past investments?
 - Incineration capacity needed to dispose of waste that cannot be recycled?

•Research proposal

10) Research question: What are the critical factors in facilitating a transition towards (nearly) complete recycling in the Netherlands?11)Method: Elaborate System Dynamics model around observed loops, to get a better understanding of system behavior, and factors that are influential in facilitating a change towards positive developments

Introduction

1)Issue: waste management

2)Problem owner and problem: Ministry and national policy objectives recycling

a)Official policy objective: 83% of waste recycled by 2015 (I&M, 2010)

3)Means: Current policy measures (Milieu, 2011; Wiel, 2011; Hoogers, 2012):

a)stimulating innovation and knowledge bundling, 'grondstofrotonde', involving municipalities, waste companies and producers

b)reduce red-tape (administrative burdens) for international waste transportation,

c)stimulating separated waste collection (e.g. public awareness campaigns).

d)But: already high amount of waste recycling in Netherlands, more not easy.

Problem Analysis

- 4) Over-capacity in waste incineration plants is barrier for recycling objectives
- 5) Longer term approach needed (>2015)
 - a) Looking into waste incineration plant closure
 - b) Using imports of waste as long-term strategy
 - c) There are certain conditions that need to be met to reduce opposition from other parties against closure: plants older than 20 years (average time to recover investments, AgentschapNL2, 2011); no running contracts with munipalities; no link local heating networks.
- 6) On short term (2015) temporary measures should be taken
- 7) Finally: consider reflection on current policy objectives

Conclusions and Knowledge gaps

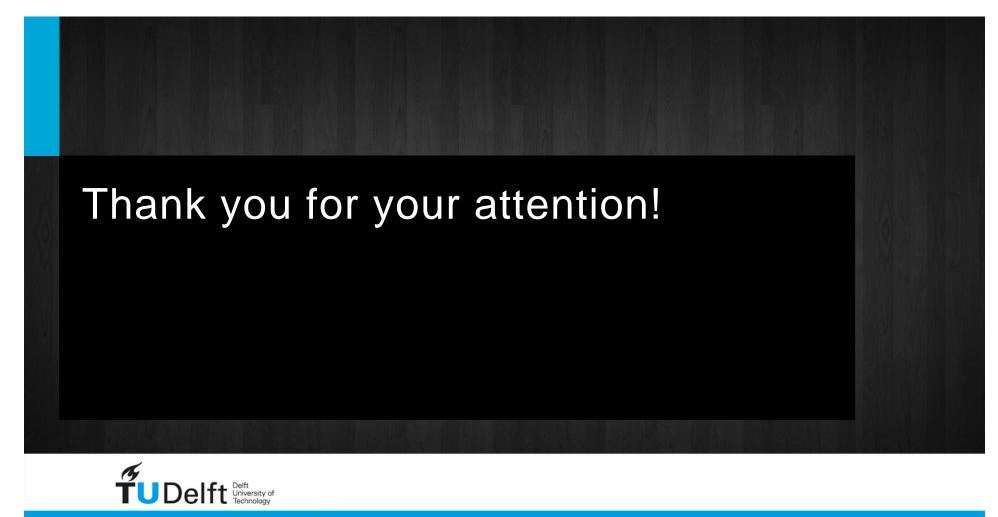
- 8) Recycling targets difficult to realize. Requires measures to address overcapacity waste incineration plants, only feasible on longer term.
- 9) Decision on these longer-term strategies requires that several knowledge gaps are being addressed. Among others:
 - Alternative 'green' energy sources in coming 20 50 years?
 - Dependency of municipalities on waste incineration plants due to coupled city heating infrastructure?
 - Time needed to recover past investments?
 - Incineration capacity needed to dispose of waste that cannot be recycled?

•Research proposal

10) Research question: What are the critical factors in facilitating a transition towards (nearly) complete recycling in the Netherlands?11)Method: Elaborate System Dynamics model around observed loops, to get a better understanding of system behavior, and factors that are influential in facilitating a change towards positive developments

Clips in this tutorial

- 1. What & why?
- 2. How? Main steps
- 3. Example
- 4. Checking your work
- Additional sources



Challenge the future