Re-framing the use and influence of indicators in the POINT project

Gudmundsson, Henrik

Publication date:
2010

Document Version
Early version, also known as pre-print

Link back to DTU Orbit

Citation (APA):
Re-framing the use and influence of indicators in the POINT project

Henrik Gudmundsson
Technical University of Denmark
hgu@transport.dtu.dk

ISA World Congress of Sociology, Gothenburg, 11-17 July, 2010
- Research Committee on Social Indicators RC55
Purpose of POINT project

Background:
- Indicators and systems are re-emerging, ubiquitous
- Little is known on their actual policy use and effectiveness
- Challenge to uncover ‘influence of indicators’

Purpose to help understand:
- how indicators are actually used,
- how they become influential - or not
- why they become influential - or not
...in different manifestations of policy making
Approach of POINT

Key policy areas of study:
• Sustainable development and environmental integration
• Sectors (energy, agriculture, transport)
• Instruments (SDI strategies, Integrated assessment)
• Composite indicators
...but aiming broader towards policies generally

Research methods:
• Analytical framework construction
• Document and text analysis
• Semi-structured interviews
• Interactive stakeholder workshops
Overview

1. The purpose and approach of the POINT project
2. Constructing a framework
3. Definition of key concepts
   - 'Indicators'
   - 'Use', 'Influence', 'Pathways' etc
4. Independent/explanatory factor set-up
5. Propositions/questions for research
6. Preliminary findings
7. A re-discussion of the analytical framework
Construction of framework

**Framework** (not theory or model) (Ostrom)
- ‘organize diagnostic and prescriptive inquiry’
- ‘meta-theoretical language’,
- ‘general lists of variables’
+ Interdisciplinary approach

**Process:**
- Broad literature search
- Consultations with advisory panel and peers
- Refinement of framework in light of findings

**Main elements:**
- Definitions of key concepts and categories
- Explanatory set-up (what can determine influence…?)
- Hypothesis/propositions
'Knowledge utilization'
(Weiss, Caplan, Rich & Oh…)

Evaluation research
(Mark & Henry, Shulha et al…)

Env./Sust. Assessment
(Cash et al; Deelstra et al…)

Performance Management
(Pollit, De Bruijn, Behn …)

Policy theory
(Sabatier et al, Kingdon…)

Critical indicator research
(Innes, Rydin et al, Turnhout et al )
• “A substantial literature on knowledge utilization documents how little, on the whole, formal analysis and information influence decisions”

• “…when information is most influential, it is also most invisible. That is, it influences most when it is part of policy participants’ assumptions and their problem definitions, which they rarely examine”
  (J.E. Innes 1998)

• “…Indicators do not drive policy. People are not suddenly converted because they are confronted with data, no matter how expertly or how collaboratively designed. Compendia of indicators are not used by policy makers as aids to decision”
  (Innes & Booher 2000)
The many ways to ‘use’ information:

- **Instrumental use:** information used as a tool to help fulfil objectives
- **Legitimising use:** Political use of results to justify certain moves already decided or planned
- **Ritual use:** Use of information process to appear rational and make sense of what is going on
- **Tactical use:** Use of information processing to deflect attention from other problems/issues
- **Enlightenment use:** Information influence general understandings, concepts, attitudes
- **Process use:** the mere processing of information causes change

*(Vedung 1997, after Weiss and others)*
“…discussions about indicators in general neglect the importance of the political context that the indicators are used in”

“…indicators can be expected to be influential in well structured policy problems. Under certain conditions they may serve as accommodating overarching shared frameworks in badly structured problems. They are likely to increase political conflict in moderately structured problems. Finally, they may be invoked to increase policy learning in unstructured problems..”

(Turnhout et al 2007)
Indicator definition

• Indicators are *variables*, which are explicitly constructed or selected to represent properties of items or concepts in policy, in order to allow simplified communication about and possibly control over them.

• In operational applications the indicator variables are fed with data or *values*.

• In some cases an *evaluation* is built into the indicator (via reference to a standard, target etc).

• Usually the indicator is built into a *framework*, which is a structured way to define, organize, produce and *sets of indicators* with reference to wider concepts or applications.
Indicators as a knowledge technology

- Statistics
  - Framework
  - Indicator
  - Variable & Value
  - Data
  - Concept

- Information
- Knowledge
- Communication
’Policy’

- Must encompass both ’structured’ areas (sectors) and broader arenas (e.g. Sust. Dev. debates)
- Must not assume only rational/positivist policy model, but allow tactical, enlightening, process related effects of indicators
- -> A broad and open understanding, involving processes, goals, measures, results, frameworks, etc
- Some focus on effects in different ’policy stages’ (e.g. agenda setting, ex ante assessment, decisions, ex post evaluation)
Use, Influence, Role, Pathway

- Terminology is messy
- Notion of 'use' has become inflated
- Use is not the main concern, influence is
- Notions of 'pathways' are often too rigid
Indicator 'use'

**Indicator use** in policy involves the adoption or operation of an indicator (variable, value, or framework) by a body involved in a policy situation or process, such as,

- acknowledgement (explicit recognition)
- internal application (calculation, internal communication)
- external application (ext. communication, reporting)
- action support (e.g. decision, allocation)
Indicator influence is a process where some aspect of policy (agenda, goal, measure, procedures) is affected (confirmed, changed, deleted) by an indicator, at the e.g.,

- individual level,
- interpersonal level, or
- collective levels (actual policy)
The Role of an indicator refers to the researchers’ interpretation of the general function indicators have with regard to distinctions such as,

- Instrumental role (problem solving, decision tool),
- Political role (symbolic, tactical…)
- Conceptual role (‘enlightenment’), or
- Process role (not results but process effects)
- Distortive role (tunnel vision, gaming etc)
- No role (ignored, suppressed etc)
Explanatory categories

• Indicator factors, e.g.
  – accuracy, reliability, data availability, timeliness, etc
• User factors, e.g.
  – skills, position/function of user, etc
• Policy factors
  – maturity, complexity, stability, operationality, etc
Overall framework

Flow: Production - Uses - Influences - Impacts

Indicator Factors
- Validity
- Reliability
- Timeliness
- Operationality
- etc

Dynamics
- Individual
- Interpersonal
- Collective
- etc

User factors
- Position/role
- Beliefs
- Values
- Interests
- etc

Policy factors
- Policy type
- Task type
- Admin.
- Cultural
- Institutional
- Regime
- etc

Socio-economic, political, cultural, contexts and trends
Preliminary observations (1)

- Indicator use can be identified in policy documents and interviews; Indicators are used in many ways
- In some cases indicators match policy developments, in others not
- Indicator influence is hard to detect, and it is hard to isolate indicator influence from,
  - Other information formats and knowledge technologies
  - Other factors influencing policy
- There are major difference in uses and influences across policy domains
- More use and influence from sector indicators than SDIs
Preliminary observations (2)

- Indicator factors like quality and political salience compete for influence
- Combination of indicators and other tools (like models) may reinforce use and influence
- Vague and complex frameworks associated with sustainability deter from use and influence of SDIs
- Close collaboration users/producers may enhance use and influence
- Target based policy regimes favour use but not necessarily influence
Preliminary observations (3)

• We are a far cry from being able to ‘explain’ indicator influence, hard enough to identify.
• It is difficult to identify conceptual roles.
• Issues that need further consideration include:
  – The confusion over the indicator notion itself.
  – The indicator production process.
  – The ‘knowledge use culture’ in certain sectors, countries etc.
  – The notion of structuredness of policy may be a clue.
  – Additional methodologies (e.g. participant observations).
Distinguishing indicators from other Knowledge Tech’s
Key references

POINT SITE: [http://bayswaterinst.squarespace.com/](http://bayswaterinst.squarespace.com/)


Gudmundsson, H; Lehtonen, M; Bauler, T; Sebastien, L.; Morse, S. 2009. Process and results of analytical framework and typology development for POINT. POINT Deliverable number: D5. Submission date: June 29 2009


Innes, J.E: 1998. Information in communicative planning. Journal of the American Planning Association, Chicago; Winter 1998; Vol. 64, Iss. 1; pg. 52, 12 pp


Turnhout, E; Hisschemöller, M; Eijsackers, H. 2007. Ecological indicators: Between the two fires of science and policy Ecological Indicators 7, pp215–228
