

Evaluations for Evidence based  
Environmental Programs and Policies  
-  
*from a European (and Finnish) perspective*

**Per Mickwitz**

**Finnish Environment Institute (SYKE)**  
**Environmental Evaluator's Networking Forum**  
**15.6.2007**

# Evidence based policy – Background

- **The intent to base policy making on knowledge about what types of efforts work and with which means** (U.K. Cabinet office 1999)
- **Better use of evidence and research in policy making and better focus on policies that will deliver long term goals** (U.K. Cabinet office 1999)
- **Evidence based policy & effectiveness**
- **However, evidence take different forms and is valued differently in:**
  - The legal system
  - Natural science
  - Medicine
  - Humanities

# Evidence-based policy in Europe

<b>Sectors</b>				
<b>Health</b>				
<b>Social service</b>				
<b>Education</b>				
<b>Criminology</b>				
<b>Environment</b>				

*Based on Hansen & Rieper 2006*

# Evidence-based policy in Europe

<b>Sectors</b>				
<b>Health</b>	<b>Cochrane Collaboration</b>			
<b>Social service</b>	<b>Campbell Collaboration</b>			
<b>Education</b>				
<b>Criminology</b>				
<b>Environment</b>	<b>? ? ? Biodiversity: ConservationEvidence.com</b>			

*Based on Hansen & Rieper 2006*

# Evidence-based policy in Europe

<b>Countries</b>	<b>The U.K.</b>	<b>Denmark</b>	<b>Sweden</b>	<b>Finland</b>
<b>Sectors</b>	<b>Labour</b>			
<b>Health</b>	<b>Cochrane Collaboration</b>			
<b>Social service</b>	<b>Campbell Collaboration</b>			
<b>Education</b>				
<b>Criminology</b>				
<b>Environment</b>	<b>? ? ?</b>			

*Based on Hansen & Rieper 2006*

# Policies based on systematic review & a “hierarchy of knowledge”

- Randomized controlled trials
  - Quasi-experiments studies
  - Before and after comparisons
  - Cross-sectional, random sample studies
  - Process evaluation, formative studies and action research
  - Qualitative case studies and ethnographic research
  - Descriptive guides and examples of good practice
  - Professional and expert opinion
  - User opinion
- (Pawson 2006)

# Key phases of systematic review and some comments

- 1. Formulation of review question**
  - 2. Systematic search**
  - 3. Criteria for exclusion – inclusion (hierarchy of knowledge)**
  - 4. Summary of results**
- **Most studies show “no evidence or insufficient evidence” that interventions have effects.**
  - **Few studies of use of systematic review, but indications of barriers to use and actual use of alternative sources of information.**

# Evidence for environmental programs and policies

- **Evaluation came later than to many other fields → there is less to make synthesis from**
- **Yes, there is a need to learn from others**
- **But, context should be taken into account**
  
- *“Recently Pullin et al. (2004) and Sutherland et al. (2004), among others, have demanded that conservation efforts **should be based on more solid evidence than previously**. In the UK, these studies claim, the consequences of conservation efforts are rarely documented, systematic reviews of previous experiences are seldom made and research data are scantily utilised when new management plans are drafted.” (Evaluation of the Finnish National Biodiversity Action Plan 1997–2005)*
  
- **Evidence in law is a better model than evidence in health**



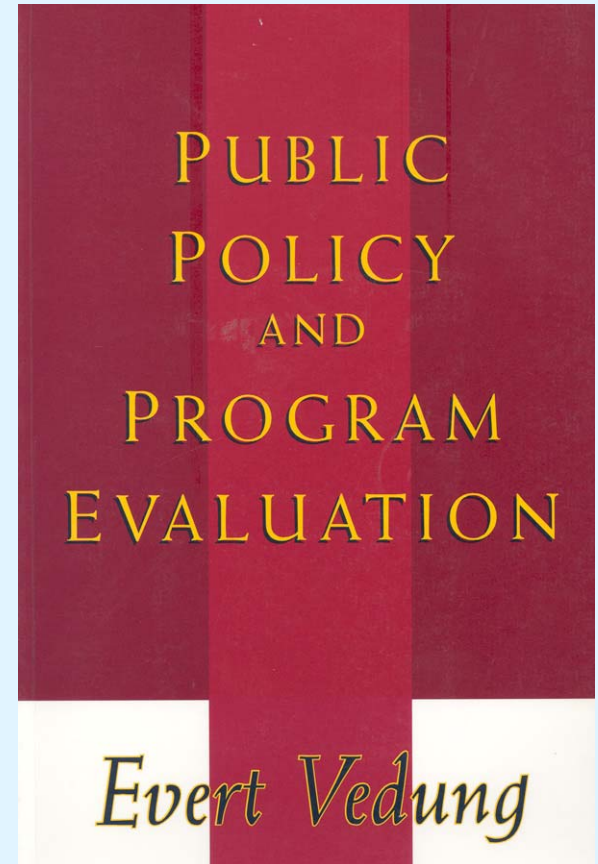
# Evidence in law, according to Wikipedia and some interviews

- *"The law of evidence governs the use of **testimony** (e.g. oral or written statements, such as an affidavit) and **exhibits** (e.g. physical objects) **or other documentary material** which is admissible (i.e., allowed to be considered by the trier of fact, such as jury) in a judicial or administrative proceeding (e.g. a court of law)."*
  - Relevance & Authentication
- The "Hierarchy" of the evidence depends on the case
- Burden of proof depends on type of case (criminal – civil law)
  - *"Beyond reasonable doubt" vs. "preponderance of the evidence"*
- *All the evidence is judged together, i.e. many different sources that would not be enough proof alone may jointly be considered enough – triangulation in evaluation.*
- *Narrative synthesis, very different from Cochrane Collaboration.*

# What do I mean by evaluation?

**Evert Vedung (1997)  
defines evaluation as:**

*"~~careful retrospective~~  
assessment of the merit,  
worth and value of  
administration, output and  
outcome of government  
interventions, which is  
intended to play a role in  
future, practical action  
situations."*

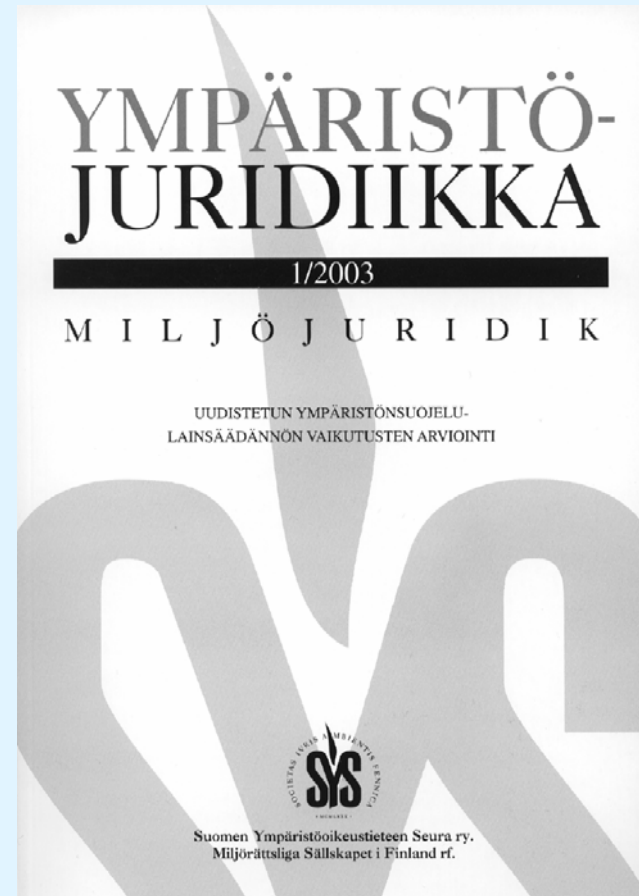


What are the practical situations where the evidence is intended to play a role?

- ***“Intended use by intended users”***. Patton (1997)
  - ⇒ **What can be considered evidence depends on by whom the evaluation is intended to be used and in what context.**
- **What can be considered evidence, or what degree of evidence varies from the federal to the local level.**
- **What evidence evaluations should produce depends on the window of opportunity for change and ongoing policy discussions.**

# Example: the evaluation of the Finnish Environmental Protection Act

- **9 peer-reviewed articles in a Finnish law review**
- **Credibility as evidence among Finnish lawyers**
- **Much interest among those involved in implementation of the act**
- **The EU level has been a problem**
- **Manuscripts + additional report in advance to committee**



# Evaluations of legal acts in Europe *during the era of the Lisbon agenda*

- It was adopted for a ten-year period in 2000 in Lisbon, Portugal by the European Council. It aims to *“make Europe, by 2010, the most competitive and the most dynamic knowledge-based economy in the world”*.
- *“Releasing our creativity from the restraints of red-tape is the best way to push forward our ambitious goals for the economy, for the society and the quality of life of our citizens. **If we can improve the regulatory environment both at EU and national level, we will take a giant step towards unlocking Europe’s hidden potential.**”* (Barosso 2005)
- *“If it can’t be Lisbonized then it should be terminated”* (High EU official)
- Environmental & social side-effects have been subordinated to the economic and especially the side-effect on competitiveness.
- ⇒ Evaluations of acts need to consider also side-effects on competitiveness to be considered serious evidence

# Timing of evidence by evaluation is crucial

	<b><i>Ex ante evaluation</i></b>	<b><i>Ex post evaluation</i></b>
<b>To early</b>	<b>Nothing is decided.</b> The focus is too wide and since “the devil is often in the details” little can be said	<b>No outcomes can be observed</b>
<b>To late</b>	<b>Everything is decided.</b> The evaluation can have no other role than a justifying function	<b>So much vested interests that no change is possible</b>

# Evidence by evaluation depends on many case specific aspects

## **Evert Vedung (1997) defines evaluation as:**

*"careful retrospective assessment of the merit, worth and value of administration, output and outcome of government interventions, which is intended to play a role in future, practical action situations."*

- **What kind of careful assessment can produce evidence that policies can be based on?**
- **What are the relevant criteria of merit worth and value for evidence-based policy?**
- **What should evaluations focus on (projects, programs, strategies / institutions, policy instruments, principles ...) if they are to produce evidence for policies?**
- **What are the practical situations where the evidence is intended to play a role?**

## Take home message

- **A fixed “hierarchy of knowledge” approach to evidence is too narrow.**
- **The relevance of different types of evidence depends on the practical situations where it is intended to be used.**



# Some European sources about evidence based policy

- Hansen H. and O. Rieper 2006. *The Institutionalization of Synthesized Evaluative Knowledge: Adoption, Methods and Use*. paper presented at the European Evaluation Society (EES) conference in London 4-6 October 2006.  
[www.europeanevaluation.org/download/?id=1408334&download=1](http://www.europeanevaluation.org/download/?id=1408334&download=1)
- Pawson R. 2006. *Evidence-based Policy: A Realist Perspective*. London: SAGE
- Davies H., S. Nutley and P Smith (eds.) 2000. *What Works? Evidence-based policy and practice in public service*. Bristol: The Policy Press.