



# Center for International Forestry Research

A CGIAR Consortium Research Center

## EVIDENCE-BASED FORESTRY INITIATIVE

### GUIDANCE ON SYSTEMATIC MAPS

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Systematic maps are a transparent, robust and repeatable method to identify and collect relevant literature to a research question in policy or management. Thus, systematic maps are an excellent method to show the quantity and quality of evidence available. However, unlike systematic reviews, systematic maps do not attempt to synthesize the evidence collected. More information on systematic maps can be found in section 2.4.3 of the Collaboration for Environmental Evidence (CEE) Guidelines (reproduced below), or through the CEE website:

[http://www.environmentalevidence.org/Mgroups\\_maps.html](http://www.environmentalevidence.org/Mgroups_maps.html).

Additional resources are available through the following institutions:

- Social Care Institute for Excellence (SCIE)  
<http://www.scie.org.uk/research/maps.asp>
- Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre):  
Selected systematic maps  
<http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2462>  
<http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=780>
- University of Strathclyde  
<http://www.strath.ac.uk/aer/materials/8systematicreview/unit8/systematic/>
- Environmental Evidence Journal: Instructions for Authors  
[http://www.environmentalevidence.org/Instructionsforauthors\\_maps.html](http://www.environmentalevidence.org/Instructionsforauthors_maps.html)



Collaboration for Environmental Evidence. 2013. *Guidelines for Systematic Review and Evidence Synthesis in Environmental Management*. Version 4.2. Environmental Evidence: <http://www.environmentalevidence.org/Authors.htm/Guidelines 4.2.pdf>: 24

### 2.4.3 Using a systematic mapping approach

Sometimes the evidence needs are articulated as open-framed questions and it is not feasible to derive or select a more specific question before a broader review of evidence is conducted. Initial searching for and sorting of evidence in relation to broader questions is termed systematic mapping. Thus it may be useful to undertake a two-stage review, with a systematic map of the research, followed up by SRs on subsets of research identified in the map. This permits the reviewers and users to understand the scope of current research activity in a given broad subject area before focusing on specific areas of interest.

In systematic mapping, the searching and inclusion processes are conducted with the same comprehensive method as for a full review, but the process does not extend to critical appraisal or data synthesis. Data are however extracted from included studies in order to describe important aspects of the studies using a standard template and defined keywords and coding. This approach is designed to capture information on generic variables, such as the country in which a study took place, the population focus, study design and the intervention being assessed. This standard and well-defined set of keywords and codes is essential whenever classifying and characterising studies in order for reviewers to pull out key aspects of each study in a systematic way. For an example of a systematic map see <http://www.environmentalevidence.org/SR35.html>. In this example, Randall et al. (2012) examined the effectiveness of integrated farm management, organic farming and agri-environment schemes for conserving biodiversity in temperate Europe. Their systematic map searched for relevant information in accordance with typical systematic review methodology. Screening was then undertaken to abstract level and a searchable database created using key wording to describe, categorise and code studies according to their focus and methodology. This searchable database is hosted on the CEE website and is freely available. Once the research has been mapped in this way it is then possible to identify pools of research which may be used to identify more narrowly defined review questions. For an example of this approach see Bowler et al. 2009. For examples within the health and social science fields see the EPPI Centre (<http://eppi.ioe.ac.uk>). **Systematic maps are registered and conducted according to the same procedures as CEE SRs** (See Section 1 of CEE Guidelines).