Environmental Science & Policy 64 (2016) 38–47

Contents lists available at ScienceDirect

Environmental Science & Policy

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

A framework for evaluating flood risk governance

Meghan Alexander[a,*], Sally Priest[a], Hannelore Mees[b]

[a] Flood Hazard Research Centre, Middlesex University, The Burroughs, Hendon, London, NW4 4BT, UK
[b] Faculty of Social Sciences, University of Antwerp, Sint-Jacobstraat 2, 2000 Antwerp, Belgium

ARTICLE INFO

Article history:
Received 11 March 2016
Received in revised form 8 June 2016
Accepted 8 June 2016
Available online 22 June 2016

Keywords:
Governance
Evaluation
Flood risk management
Resilience
Efficiency
Legitimacy

ABSTRACT

Calls to strengthen flood risk governance are echoed across Europe amidst a growing consensus that floods will increase in the future. Accompanying the pursuit of societal resilience, other normative agendas relating legitimacy (e.g. accountability and public participation), and resource efficiency, have become attached to discussions concerning flood risk governance. Whilst these represent goals against which 'success' is socially and politically judged, lacking from the literature is a coherent framework to operationalise these concepts and evaluate the degree to which these are achieved. Drawing from cross-disciplinary and cross-country research conducted within the EU project STAR-FLOOD, this paper presents a framework for evaluating the extent to which flood risk governance arrangements support *societal resilience*, and demonstrate *efficiency* and *legitimacy*. Through empirical research in England, this paper critically reflects on the value of this approach in terms of identifying entry points to strengthen governance in the pursuit of these goals.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Amidst a growing consensus that floods will increase in the future (Feyen et al., 2012), flood risk governance, through which Flood Risk Management (FRM) is delivered, has emerged as a focal point of policy and research attention. In the pursuit of societal resilience, critical questions arise about how current governance arrangements support or alternatively constrain this goal. Different schools of thought have posited that resilience can be measured in terms of the capacity to resist, absorb, recover and/or adapt to stresses and so-called 'shock' events (e.g. Folke, 2006; Djalante et al., 2011). These different standpoints naturally have implications for how resilience is measured and for identifying necessary characteristics of flood risk governance.

Accompanying the pursuit of societal resilience, *efficiency* discourses have arguably grown in momentum following the global financial crisis in 2008 and an increased need to demonstrate the best value for public monies (OECD, 2015). However, the redundancy and diversity of FRM measures requested for resilience (Hegger et al., 2014), are at odds with this endeavour. In addition to resource efficiency, other recurring standards of flood risk governance (and 'good' governance more broadly), include transparency, inclusive and participatory decision-making, accountability, procedural justice, social equity and societal acceptance (Termeer et al., 2011; OECD, 2015; Thaler and Hartmann, 2016). These criteria can be assimilated into the umbrella notion of *legitimacy*.

Drawing from public administration and legal research performed within the EU project "STAR-FLOOD", this paper critically reviews the concepts of societal resilience, efficiency and legitimacy, and seeming conflicts between these. Addressing a neglected gap in the literature, this paper presents a framework for evaluating flood risk governance in terms of these desired goals. Using English flood risk governance as an empirical example, this paper highlights the value of this approach as a tool for identifying entry points to strengthen governance in the pursuit of these goals.

2. Conceptualising flood risk governance

Although governance is a disputed concept, there is a consensus that it captures the dynamics of governing in the pursuit of a collective goal (Lange et al., 2013). Theoretical debates are formed around the different modes of governance, connected to the configuration of actors (public authorities, private and civil society), distribution of power and institutional structures (Driessen et al., 2012). For some, governance marks a transition from traditional State-led, 'top-down' decision-making, towards increasingly complex actor networks and non-hierarchical processes (Pahl-Wostl et al., 2013; Walker et al., 2014); signifying a

* Corresponding author.
E-mail addresses: m.c.alexander@mdx.ac.uk (M. Alexander), s.priest@mdx.ac.uk (S. Priest), hannelore.mees@uantwerpen.be (H. Mees).

http://dx.doi.org/10.1016/j.envsci.2016.06.004
1462-9011/© 2016 Elsevier Ltd. All rights reserved.

shift from '*government to governance* (Swyngedouw, 2005). However, the impression that governance has emerged in a unidirectional fashion is opposed by the argument that hybrid forms of governance seem to exist (Shiroyama et al., 2012). Indeed, Bell and Hindmoor (2009) argue that whilst the state may have diversified governance strategies, they continue to be a pivotal actor. Thus it is possible to discern centralised modes of governance, typifying traditional forms of government-led decision-making, alongside other forms of governance (e.g. decentralised, public-private, interactive and self-governance; see Driessen et al., 2012).

A key point of contention within governance literature concerns the scales and levels through which governance processes occur, and corresponding impact upon the type and scale of solutions to environmental problems. For instance, monocentric forms of governance are concerned with structural reforms and clarifying responsibilities at different administrative levels (Termeer et al., 2010). However, there is mounting evidence to suggest that this approach is insufficient to anticipate and respond to uncertainty and complexity of contemporary environmental challenges (Renn et al., 2011). This has led to the emergence of multi-level governance (Newig and Fritsch, 2008), polycentricity (Ostrom et al., 1961) and adaptive governance (Rijke et al., 2012; Chaffin et al., 2014). Connecting these different theoretical positions is the recognition of scale conflicts between administrative levels and the scale of environmental problems (OECD, 2015). Building upon these theoretical standpoints, this paper acknowledges the importance of multi-level governance and the necessity of coordination mechanisms to deliver effective governance. However, features of adaptive governance, such as the capacity to transform, are also seen as desirable.

The term *flood risk governance* denotes a specific form of risk governance, defined by Renn et al. (2011; p8) as 'the translation of the substance and core principles of governance to the context of risk and risk-related decision-making'. Whilst risk management is delivered through risk governance, the concept extends beyond this and requires consideration of 'the complex web of actors, rules, conventions, processes and mechanisms concerned with how relevant risk information is collected, analysed and communicated, and decisions are taken' (Renn et al., 2001; p8). Adopting this line of argumentation, 'flood' is attached to this concept to make explicit the type of risk under study and to delineate this from other forms of contemporary risks. A Flood Risk Governance Arrangement (FRGA) can therefore be defined as the actor networks, rules, resources, discourses and multi-level coordination mechanisms through which FRM is pursued (Alexander et al., 2016). Within this overarching arrangement, sub-governance arrangements (sub-FRGAs) are discernible according to distinct goals within FRM (e.g. spatial planning aims to minimise exposure, whereas defence reduces the likelihood of hazard occurrence).

3. A framework for evaluating flood risk governance

Evaluation can be approached as a series of 'building blocks' through which insights obtained from smaller units of analysis inform an understanding of increasingly more complex objects (i.e. the overarching FRGA). Thus the proposed framework is designed to be flexible and can be tailored accordingly.

Arguably, the biggest challenge is the selection of appropriate evaluation criteria. Although, a number of recurring themes are evident within the literature, relating to legitimacy, transparency, accountability, fairness, effectiveness, efficiency and sustainability (e.g. Rogers and Hall, 2002: Lockwood et al., 2010; OECD, 2015; Termeer et al., 2011); noticeably absent is a coherent framework for evaluating flood risk governance. Ultimately, the selection of criteria needs to be informed by the subject matter; therefore the first objective of this research was to consult flood risk management policy in the selected countries (Priest et al., 2013). Although flood risk governance has evolved and functions within different cultural, socio-economic, political and cultural settings, a set of shared normative goals exist between selected countries (i.e. Netherlands, England, France, Poland, Belgium and Sweden). These relate to efforts to enhance *societal resilience* to flooding, improve *efficiency* and strengthen the *legitimacy* of flood risk governance; therefore, these form the foundation of the proposed framework. It was decided to exclude 'effectiveness' as a criterion in its own right (e.g. Rogers and Hall, 2002), as this can actually be conceived as a precondition for each evaluation criterion and therefore inherently embedded within the evaluation process. For example, a flood defence cannot enhance the capacity to resist flooding, unless it is able to effectively withstand its design storm. In this sense, the condition of effectiveness can be operationalised according to Young's (1994) definition of 'goal attainment'.

To obtain an understanding of 'the whole' it is necessary to shift the *locus of evaluation* (Box 1) and reflect on the *process*, *outcome* and *impact* of governance arrangements (Rogers and Hall, 2002). Although resilience, efficiency and legitimacy may superficially appear to function on different levels, as the reader will observe, the proposed criteria and corresponding benchmarks can relate to

Box 1. Defining different loci of evaluation.

Loci of evaluation	
Process:	The *inputs, throughput* and *outputs* of the decision-making process. Inputs may include certain resources or stakeholder participation; whereas outputs refer to the result of the decision-making process, such as agreement on a specific course of action. 'Throughput' captures the internal processes and practices connecting inputs to outputs. Rather than isolating these terms (e.g. Schmidt, 2013), these are integrated within the term '*process*' to simplify the framework and improve usability. For example, one might examine the extent to which citizens participate in the process, the nature of public participation (e.g. consultation) and extent to which citizen views influence the resulting output.
Outcome:	The implementation of the outputs from the decision-making process, such as the decision to erect flood defences or the production of a legal instrument outlining responsibilities for flood risk assessment and mapping practices.
Impact:	The resulting effect of the decision-making process and outcome. For example, the extent to which the use of flood zones in spatial planning minimises development on the floodplain.

Download English Version:

https://daneshyari.com/en/article/1053417

Download Persian Version:

https://daneshyari.com/article/1053417

Daneshyari.com