



ELSEVIER

Contents lists available at ScienceDirect

## Environmental Development

journal homepage: [www.elsevier.com/locate/envdev](http://www.elsevier.com/locate/envdev)



CrossMark

# Governance in support of integrated flood risk management? The case of Romania

Joanne Vinke-de Kruijf<sup>a,\*</sup>, Stefan M.M. Kuks<sup>b</sup>,  
Denie C.M. Augustijn<sup>c</sup>

<sup>a</sup> Institute of Environmental Systems Research, University of Osnabrück, Barbarastr. 12,  
49076 Osnabrück, Germany

<sup>b</sup> Department of Governance and Technology for Sustainability (CSTM), University of Twente, Enschede,  
The Netherlands

<sup>c</sup> Department of Water Engineering and Management, University of Twente, Enschede, The Netherlands

### ARTICLE INFO

#### Article history:

Received 23 December 2014

Received in revised form

24 March 2015

Accepted 20 April 2015

#### Keywords:

Water governance

Flood risk management

Romania

Governance assessment

### ABSTRACT

Building on an existing model of governance, this paper aims to assess the supportiveness of Romania's structural flood risk governance context towards integrated flood risk management. We assert that a governance structure supports the development and implementation of integrated flood risk management policies when it takes into account all relevant levels, actors, perceptions, strategies and resources (high extent) and has connections between these various dimensions (high coherence). The assessment shows that, in Romania, both the extent and coherence of flood risk governance has increased in recent years. However, the actual inclusion of actors, strategies and perceptions is lagging behind and actors do not actively look for integration or synergy. Thus, the governance structure is at times restrictive rather than supportive of integrated flood risk management as promoted in international guidelines and the European Floods Directive. We conclude that to effectively reduce flood risk problems, additional efforts and time are needed to further align policies and to change practices. Governance assessment can support responsible actors in this process by identifying the factors that support and restrict integrated, and thus sustainable, flood risk management.

© 2015 Elsevier B.V. All rights reserved.

\* Corresponding author. Tel.: +49 54 196 92429.

E-mail address: [jovinkedekru@uos.de](mailto:jovinkedekru@uos.de) (J. Vinke-de Kruijf).

## 1. Introduction

Flooding poses serious threats to countries around the world and is expected to increase due to climatic and non-climatic factors such as alterations in land use and rivers (Kundzewicz et al., 2013). While the capacity of countries to deal with flood risks continues to increase, so does the number of people and economic assets being exposed to flood risks. In particular, populations in countries with low incomes and weak governance face a high risk of being killed by floods (UNISDR, 2011). In Europe, flooding currently is the most common natural disaster. Between 1998 and 2009, 213 flood events were recorded causing 1127 deaths and affecting more than three million people (about 0.5% of the total population) (EEA, 2010). Against this background, flood risk management has been given special attention by international organizations and at international fora (Samuels et al., 2006; WMO, 2009). At the European level, guidelines for sustainable flood prevention and a flood action plan were developed, which led to the adoption of the European directive on flood risk management (EC, 2007). At the heart of this directive and other guidelines is the notion of integrated flood risk management, which points towards the need for an integrated – rather than fragmented – approach towards the analysis, assessment and reduction of flood risks. Within this context, flood risk is defined as a combination of the probability of a flood event and its potential adverse consequences (cf. Schanze, 2006; WMO, 2009; EC, 2007).

Central in this paper is the *governance* context in which integrated flood risk management policies are being developed and implemented. Governance is becoming an increasingly popular concept in a water management context. At the Second World Water Forum, the Global Water Partnership (GWP) observed that water problems are essentially governance problems (GWP, 2000). Since then, numerous reports of international organizations reiterated that the ‘water crisis’ – the occurrence of floods and droughts and problems of water allocation, quality and use – is a governance crisis (cf. OECD, 2011; UN-Water, 2006). This means that water problems are often caused by a lack of collaboration and capacity, weak institutional and regulatory frameworks and poor financial management. Hence, international organizations argue that improving water governance is the key to more effective water management (GWP, 2000; OECD, 2011). The focus of this paper is on the governance of flood risk management in Romania, which is among the three European countries that is most affected by floods (EEA, 2010).

The central question of this paper is: To what degree is Romania’s governance structure supportive of integrated flood risk management? Governance refers here to the structural context in which various actors with a role in the development and implementation of flood risk management policies act and interact. To answer the research question, an existing model of governance is elaborated and applied to the case of inland flooding in Romania. The relevance of this paper is two-fold. Firstly, as studies about flood risk management in Romania are primarily focused on technical aspects, we aim to provide the reader with a basic understanding of flood risk governance in this country. Within this context, the actual assessment (Section 5) is preceded by a rather rich description of the Romanian setting and the governance structure in place. Secondly, governance assessment frameworks that specifically focus on flood risk management are almost non-existing (a notable exception is the study by Ward et al. (2012)). We introduce such a framework by making (parts of) an existing governance assessment framework operational for flood risk management.

The outline of the paper is as follows. The next section provides a governance assessment framework, which is elaborated for the flood risk management domain. Section 3 introduces the Romanian context and the methods used. The fourth section describes flood risk governance in Romania in terms of five dimensions. Section 5 discusses the supportiveness of Romania’s flood risk governance structure and the adopted framework. The last section presents our main conclusions.

## 2. Assessment framework

In the past years, various methods were developed for assessing water governance in various sectors and at various levels (for an overview, see Jacobson et al., 2013). Without diminishing the importance of other aspects, such as the principles of good governance (e.g. transparency and

Download English Version:

<https://daneshyari.com/en/article/4391416>

Download Persian Version:

<https://daneshyari.com/article/4391416>

[Daneshyari.com](https://daneshyari.com)