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# Supporting Governance Institutions for Adaptive Capacity to Environmental Change

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**ABSTRACT:** The capacity of societies to adapt to environmental change can be constrained by conservative and reactive governance institutions. Many pressing environmental change problems such as climate change, biodiversity loss, and coastal development are also governance problems. The complex nature of environmental change requires governance institutions that facilitate adaptive capacity, enabling societies to respond and adapt to environmental change and its impacts. This article reports the rationale for understanding adaptive capacity to environmental change through an institutional lens. The project seeks to (1) investigate the potential of existing governance institutions to facilitate adaptation to environmental change in the context of coastal Cambodia, Viet Nam and Australia, and (2) support the design, reform and implementation of institutional arrangements to respond to current and future impacts of such change.

**KEYWORDS:** *governance institutions, adaptive capacity, environmental change, coastal environments, Cambodia, Viet Nam, Australia*

## Introduction

Governance institutions are defined as “...formal and informal rules, rule-making systems, and actor networks at all levels of human society (from local to global) that are set up to steer societies towards preventing, mitigating, and adapting to global and local environmental change” (Biermann et al., 2009). The capacity of societies to adapt to environmental change can be constrained by conservative and reactive governance institutions. Many

pressing environmental change problems such as climate change, biodiversity loss, and coastal development are also governance problems. In this regard, governance institutions are critical determinants of both ecological, social and economic problems and their solution (Young, 2003). Understanding how governance institutions may better support adaptation to environmental change has direct and important implications for solving these problems.

The role of institutions in determining a system’s

ability to adapt to environmental change has been investigated by Adger et al. (2011), Agrawal (2008), Eaking and Lemos (2006), Engle (2011), Engle and Lemos (2010), Gupta et al. (2010), Lebel et al. (2006), and Ostrom (2010), among others. The complex nature of environmental change calls for responsive and flexible institutions that facilitate adaptive capacity, enabling social and political actors (e.g., individuals, groups, community, resource users, government and non-government organisations) to adapt to environmental change. This includes enabling actors to design new institutions and change existing ones in response to environmental change and its impacts (Gupta et al., 2010).

While it has been recognised that governance institutions play a critical role in determining a system's ability to adapt (Agrawal, 2008; Eaking & Lemos, 2006; Engle, 2011; Engle & Lemos, 2010; Gupta et al., 2010; Lebel et al., 2006), there is still relatively limited efforts to assess the characteristics of institutions to stimulate society to adapt to environmental change (e.g., Engle, 2011; Engle & Lemos, 2010; Gupta et al., 2010).

This project seeks to: (1) investigate the potential of existing institutions, at different governance levels (from local to national) and facilitate adaptation

to environmental change in the context of coastal Cambodia, Viet Nam and Australia; and (2) support the design and implementation of institutional arrangements to respond to current and future impacts of such change. Ultimately, it aims to foster ongoing cooperation, exchange of expertise, and capacity development in Cambodia, Viet Nam and Australia, and improve the capacity of social and political actors (stakeholders) in these countries to respond and adapt to environmental change.

The project draws on research to assess the adaptive capacity fostered by governance institutions (e.g., Engle, 2011; Engle & Lemos, 2010; Gupta et al., 2010). It uses a case study approach (Yin, 2003) and multiple sources of data including documents, focus groups, interviews and surveys. The project focuses on Thua Thien-Hue Province (Viet Nam), Koh Kong, Sihanoukville, Kep and Kampong Provinces (Cambodia) and the state of Queensland (Australia). These focus areas were selected based on current and past projects undertaken by the proponent organisation (University of the Sunshine Coast – USC) and collaborative links between USC and partner organisations in the region. Furthermore, the selected areas are subjected to environment change of similar nature, including climate change, threats to biodiversity, and pressure over ecosystems and natural resources, which has prompted responses from different actors (Armitage, Marschke, & Truong Van, 2011; Fidelman, Leitch, & Nelson, 2013; Marschke & Kim, 2003; Truong Van, Armitage, & Marschke, 2010). Lastly, comparing environmental governance institutions in Southeast Asia countries with those in Australia broadens the analysis across different social and political contexts, and allows contrasting the extent to which developing and developed countries differ in terms of governance institutions.

The project started in January 2014 with an inception meeting followed by desktop review of governance institutions and the first phase of data collection.

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## HIGHLIGHTS

- » Governance institutions play key role in determining a system's ability to adapt.
- » Environmental change calls for governance institutions that facilitate adaptive capacity.
- » This project investigates how existing institutions in Cambodia, Viet Nam and Australia facilitate adaptive capacity.



**Figure 1.** Coastal fisheries in Viet Nam (photo courtesy of Prof. Bill Carter).

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### PROJECT TITLE

**Supporting Governance Institutions for Adaptive Capacity to Environmental Change**

### COUNTRIES INVOLVED

Australia, Cambodia, Thailand, Viet Nam

### PROJECT DURATION

One-year project

### APN FUNDING

US\$ 46,000

### PROJECT LEADER

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