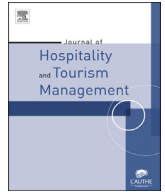




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Adaptive co-management: A novel approach to tourism destination governance?

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ABSTRACT

Although tourism destination governance has been a subject of academic enquiry for some time now, in practice, governance is still a challenge for many tourism destinations around the world. Adaptive co-management (ACM) is a dynamic approach to governance whereby institutional arrangements and ecological knowledge are continually revised through a process of 'learning-by-doing'. Founded on the active participation and collaboration of diverse stakeholder groups, ACM has been used extensively in the governance of natural resource contexts and so may offer valuable synergies for tourism governance; particularly the governance of tourism in protected areas. This review paper presents a critical review and synthesis of the ACM literature, identifying synergies and opportunities for enhancing tourism governance practices in protected area contexts through an ACM approach. A conceptual framework is developed from the review that identifies principles, stages, variables and expected outcomes of the ACM approach. Future research directions for ACM in tourism are proposed that incorporate governance, social learning and multi-stakeholder engagement.

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1. Introduction

Tourism destinations are recognised as complex governance contexts because of the multiple, and often competing, stakeholder groups involved in producing and delivering the tourism products and services (Baggio, Scott, & Cooper, 2010; Jamal & Stronza, 2009; Kuenzi & McNeely, 2008; Larson & Poudyal, 2012). Further factors such as skewed power relationships (often) between government, wealthy elites, and local residents serve to further complicate the governance of tourism destinations, as well as the fact that tourism is a fragmented sector and so leadership is often lacking (Scott & Marzano, 2015). Certainly in tourism there have been calls for several decades to more actively engage a wider range of stakeholders, particularly local residents, in planning and decision-making for tourism (see for examples of Turkey Tosun, 2000; Tosun, 2006).

Increasingly governance has been seen as a means of overcoming conflict and power between destination stakeholders, and addressing the complexity that arises from the many and varied

internal and external agencies and organizations which impact on the functioning of a tourist destination (Laws, Agrusa, Scott, & Richins, 2011). Governance refers to "the interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken, and how citizens or other stakeholders have their say" (Graham, Amos, & Plumptre, 2003, pp. 2–3). Though difficulties remain (Bramwell, 2011), governance has progressively become an integrated system to generate and implement the management and planning processes required for a sustainable destination by minimising adverse impacts and maximising benefits for local communities (de Bruyn & Alonso, 2012).

The complexities of tourism destination governance are further exacerbated when the tourism destination is also a protected area setting. Protected areas, such as national parks and wilderness areas now cover more than 15.4 per cent of the Earth's surface and are often important locations for tourism activity (Deguignet et al., 2014; Eagles, McCool, & Haynes, 2002). However, the challenge arises as tourism takes place in important reserves of natural and cultural heritage which are dedicated to the conservation of species, ecosystems and landscapes. As such, the range of stakeholders, interests and decisions that must be incorporated in managing tourism in protected areas extends quite considerably beyond those normally engaged in tourism destination governance. The impacts

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of habitat destruction, pollution, population growth, and species loss are further factors that complicate already tenuous governance systems.

In some countries, tourism in protected areas is affected by poor governance systems (Eklund, Arponen, Visconti, & Cabeza, 2011; Zafarullah & Huque, 2001). This 'poor' governance is evident in terms of little cooperation and coordination among stakeholders of diverse policy and sector domains, as well as within tourism itself; divergent types of stakeholders (e.g., government, private and NGOs; local, regional, national and international) with competing interests, beliefs and priorities; lack of collective actions; and conflict over the competing use of resources (Bramwell & Lane, 2000; Bramwell, 2011). As such, in natural resource management contexts more generally, much attention has been given to the transition away from traditional top-down or 'command and control' approaches to more inclusive and dynamic approaches to governance. Previous approaches are generally recognised as failing to adequately incorporate the interests of the wide range of stakeholders who can affect, or are affected by, management decisions (Armitage et al., 2009; Ostrom, 2009; Pahl-Wostl, 2009; Plummer & Fitzgibbon, 2004). In response, various approaches and models have been proposed to address the challenges of natural resource governance including co-management (see Abrams, Borrini-Feyerabend, & Gardner, 2003; Beaumont & Dredge, 2010; Borrini-Feyerabend, Johnston, & Pansky, 2006; Eagles, 2008, 2009; Graham et al., 2003).

'Adaptive co-management' (ACM) extends and advances the co-management approach while also drawing on the related concept of 'adaptive management' with the broad objectives of enhancing and sustaining natural resources and improving the social-ecological resilience of environmental systems (Armitage, Berkes, & Doubleday, 2007a; Plummer & Fennell, 2009). The ACM approach is also predicated on the participation of diverse stakeholder groups (including local community residents) in decision-making and management, as well as adaptive learning (i.e., learning-by-doing) to enhance the governance approach (Armitage et al., 2007a; Ostrom, 2009; Stankey & Allan, 2009).

The ACM concept has been used in cases of natural resource management, particularly forestry (including wildlife), protected areas, fisheries (including marine and different wetland ecosystems) over the last three decades as an alternative to traditional natural resource management approaches (Armitage, Berkes, Dale, Kocho-Schellenberg, & Patton, 2011; Berkes, 2009; Borrini-Feyerabend, Farvar, Nguingui, & Ndangang, 2000; Butler et al., 2015; Chen, Ku, & Chen, 2016; Erickson, 2015; Fennell, Plummer, & Marschke, 2008; Galappaththi & Berkes, 2015; Plummer & Fennell, 2007; Trimble & Berkes, 2015), and most recently in the context of climate change adaptation (Baird, Plummer, & Bodin, 2016). These studies have focused on testing various ACM concepts such as linking co-management and adaptive management, the role of ACM in resolving natural resource conflicts, and ACM as a means of enhancing governance systems.

This review paper presents the findings of a comprehensive critical analysis and synthesis of the ACM literature. Given the complexities of tourism destination governance, it has also been suggested that ACM may have synergies for tourism contexts (Chen et al., 2016; Fennell et al., 2008; Lai, Hsu, & Wearing, 2016; Mbaiwa, 2011; Pennington-Gray, Schroeder, & Gale, 2014; Plummer & Fennell, 2009; Romeiroa & Costab, 2010). From a review of 80 published articles on related to ACM (including adaptive management and co-management), it was found that ACM is based on four interconnected principles including; communication and collaboration; social learning; shared rights, responsibility and decision-making; and, building adaptive capacity and resilience. These principles are explored and form the basis of a conceptual framework for

utilising ACM in tourism and protected area governance. The conceptual framework provides guidance for areas of future research which are outlined and discussed.

2. Adaptive co-management

The interdisciplinary term 'adaptive co-management' has been defined and conceptualised differently by several authors. For instance, Armitage, Berkes, and Doubleday (2007b, p. 328) define ACM as a "process whereby institutional arrangements and ecological knowledge are tested and revised in an ongoing, self-organized and dynamic process of learning-by-doing". Olsson, Folke, and Berkes (2004) add that dynamic learning occurs via collaboration or what they describe as a 'community-based system' (p. 75). ACM has also been described as a paradigm of governance that while underpinned by iterative learning, also aims to establish linkages, and share rights and responsibilities between stakeholders (Nancy, 2008). Although these definitions each have subtle differences, the common theme is that learning and collaboration are fundamental aspects of the ACM approach.

ACM is generally seen to be appropriate in contexts characterised by uncertainty or complexity, or where existing governance processes are unable to establish the necessary social connections amongst stakeholders to develop agency and collaborative actions (Baird et al., 2016). It may also be appropriate in situations where local communities are disempowered such as in developing countries where poor governance systems and other constraints to stakeholder collaboration are evident (Tosun, 2000). Here, the ACM approach has been credited with creating a 'level playing field' for disempowered groups by seeking to embed a wider range of stakeholder groups in decision-making processes (Colfer, 2005) as well as creating a fora for collaborative learning (Armitage et al., 2009; Berkes, 2007).

Through an ACM approach, collaborative learning takes place through both formal (i.e., training) and informal (i.e., communication and interaction) measures, as well as 'learning-by-doing' (i.e., experimentation). The ACM approach seeks to transition from *transmissive* expert-based teaching (i.e., objective or content knowledge) to *transformative* community-based learning (i.e., contextual knowledge). It has been suggested that such transformative community-based learning can lead to stakeholder empowerment, improved adaptive capacity and social capital (Capra, 2007). It has also been found to create a learning culture where diverse stakeholders construct consensus and a shared understanding of their communities and the actions required (Prabhu, McDougall, & Fisher, 2007). This can extend to the defining of issues, developing management plans and monitoring processes (Berkes, 2009; Ruitenbeek & Cartier, 2001).

3. Adaptive co-management principles

An extensive review of more than 80 ACM academic articles was undertaken. Papers were identified through Scopus, Science Direct and Google Scholar and given the origins of the concept the vast majority were focused on ACM in natural resource management contexts (i.e., water and flood plains, landscapes, forestry and fisheries). Several studies were included from fields such as climate change, tourism and wildlife. The studies were a mix of conceptual and empirical with the concept explored in a range of contexts including developed and developing countries such as United States, Canada, Australia, Indonesia and India (Baird et al., 2016; Behera, 2009; Butler et al., 2016; Colfer, 2005; Hoggarth et al., 1999; Olsson et al., 2004; Smith, 2007). A variety of methods were employed in the analysed studies including quantitative (i.e., questionnaires with natural resource users), qualitative (i.e., in-

depth interviews with affected stakeholder groups) and mixed methods (i.e., cross case studies) (Armitage et al., 2009; Beaumont & Dredge, 2010; Butler et al., 2015; Carlsson & Berkes, 2005; Cundill & Fabricius, 2009).

In analysing the papers it was found that there were four key principles or features that were consistently identified as underpinning the ACM approach: communication and collaboration; social learning; shared rights, responsibility and decision-making; and, building adaptive capacity and resilience (Table 1). Each of these principles is discussed further below. The key outcomes identified in these studies are discussed under each of the four principles.

3.1. Communication and collaboration

Effective communication and collaboration amongst diverse stakeholder groups was identified as the key principle of an ACM approach. It was consistently recognised in the literature that the ACM approach can provide a platform for the active involvement of different stakeholder groups in decision-making (Prabhu et al., 2007) and governance. For instance, studies have found that the ACM approach has contributed towards enhanced facilitation, co-ordination and collaboration amongst stakeholder groups (for examples see Armitage et al., 2007b; Armitage et al., 2008; Berkes, 2007; Chen et al., 2016; Cundill & Fabricius, 2009; Leon et al., 2013; Towner, 2016). The enhanced communication has also been found to increase stakeholders' understanding of natural resource management, thus building local capacity (Armitage et al., 2008, 2009; Berkes, 2009; Bown et al., 2013).

The collaboration that occurs through an ACM approach has also been credited with facilitating the building of trust, managing conflict and enhancing negotiation, as well as sharing power and rights (Armitage et al., 2009; Berkes, 2009; Mbaiwa, 2011; Park et al., 2012). A caveat has been added however that, to be successful, there is a need for active and effective horizontal and vertical communication (for existing and new relationships respectively) amongst stakeholders if joint decision-making is to be

successful (e.g., Berkes, 2009; Bown et al., 2013; Richardson, 2015; Trousdale, 1999).

An ACM approach will often dictate the need for creating new institutions such as co-management committees and other bodies that can facilitate cooperative relationships (Schusler et al., 2003). Such new institutions have been found to better enable local stakeholders to participate and contribute to different phases of the decision-making process (Eagles et al., 2002; Niedziałkowski, Paavola, & Jędrzejewska, 2012). However, others have questioned the benefits of creating new institutional structures to support the ACM process. For instance, it has been suggested that the conflict that can emerge through this process (for example setting up new committee structures, membership on decision-making boards, etc.) can in fact add further new conflicts to the setting (Ruitenbeek & Cartier, 2001). As such, it has been suggested that instead of creating new institutions through the ACM process, existing institutions could be modified to incorporate a broader range of functions and stakeholders (Folke et al., 2005).

While collaboration and increased communication is a key objective of the ACM approach, there are a number of barriers to achieving this in practice. Certainly, the uneven power between stakeholder groups, power struggles and stakeholders with vested interests can all undermine the success of the process. For instance, there have been a number of documented examples where influential (often political) stakeholder groups have exerted their power over the decision-making process and outcomes (Lai, Hsu, & Nepal, 2013; Ruhanen, 2013; Tosun, 2006); thus undermining the process. Like collaborative management processes more generally, tokenistic participation can be a factor, as well as the ability of all stakeholder groups to sufficiently understand the issues and actions required to affect needed changes. In this case, the learning that occurs through an ACM approach becomes even more important.

3.2. Social learning

Learning is an important feature of the ACM approach, in

Table 1
ACM principles and features.

Principles	Features	Key studies
Communication and collaboration	Interactions, participation and pluralism, cooperation and partnerships	Prabhu et al. (2007); Armitage et al. (2007b); Armitage, Marschke, and Plummer (2008); Berkes (2007); Chen et al. (2016); Cundill and Fabricius (2009); Leon, Scott, and Jill (2013); Towner (2016); Armitage et al. (2009); Berkes (2009); Bown, Gray, and Stead (2013); Mbaiwa (2011); Park, Lee, Choi, and Yoon (2012); Richardson (2015); Trousdale (1999); Schusler, Decker, and Pfeffer (2003); Ruitenbeek and Cartier (2001); Folke, Hahn, Olsson, and Norberg (2005)
Social learning	Working and learning together, social dynamics, shared understanding and intentional learning, social capital, trust building, transfer of knowledge and skills	Berkes (2009); Bos, Brown, and Farrelly (2013); Doubleday (2008); Diduck (2010); Armitage et al. (2011); Khadka and Vacik (2008); Ridder, Mostert, and Wolters (2005); McCool and Guthrie (2001); Paquet (1999); Pahl-Wostl (2009); Pahl-Wostl (2006); Eklund et al. (2011)
Shared rights, responsibility and decision-making	Decentralization and devolution, governance, institution building, power sharing, empowerment, negotiation and conflict management	Paquet (1999); Carlsson and Berkes (2005); Armitage et al. (2007a); Berkes (2007); Butler, Middlemas, Graham, and Harris (2011); Cundill and Fabricius (2009); Solstrand (2015); Doubleday (2008); Fabricius and Currie (2015); Karanth and Nepal (2012); Behera (2009); Bhattacharya, Pradhan, and Yadav (2010); Buchy and Hoverman (2000); Tosun (2000); Tosun and Jenkins (1996); Kalikoski and Allison (2010); Maskey, Gebremedhin, and Dalton (2006); Nagendra, Karmacharya, and Karna (2005)
Building adaptive capacity and resilience	Complex systems thinking and problem solving, joint planning and visioning, social-ecological system complexity and uncertainty	Plummer and Armitage (2007); Smedstad and Gosnell (2013); Wesche and Armitage (2010); Worboys, Lockwood, and De Lacy (2005); Dearden, Bennett, and Johnston (2005); Armitage et al. (2007a); Prabhu et al. (2007); Eagles et al. (2002); Olsson et al. (2004); Bec, McLennan, and Moyle (2016); Butler et al. (2015); Erickson (2015); Flores (2014); Galappaththi and Berkes (2015); Trimble and Berkes (2015)

particular, social learning. Social learning is defined as “the collective action and reflection that takes place amongst both individuals and groups when they work to improve the management of the interrelationships between social and ecological systems” (Keen, Brown, & Dyball, 2005, p. 4). Others describe social learning as “learning together to manage together” (Ridder et al., 2005, p. 11). Diduck (2010, p. 202) elaborates and describes social learning as ‘action group learning’ and defines it as “the processes by which individual learning outcomes become part of a web of distributed and mutual outcomes in a collection of individuals”. Here, the action group is composed of individuals forming cohesive but comparatively informal associations with often short lifespans to focus on targeted objectives and tasks.

The ACM approach is predicated on a process where new knowledge is generated (scientific and traditional/local) and learning occurs that is both interactive and iterative. Interactive learning generally occurs through the process of collaboration and interaction between the stakeholder groups (Berkes, 2009; Bos et al., 2013). Whereas iterative learning, or ‘learning-by-doing’, links to the adaptive management aspects of ACM (Doubleday, 2008) where stakeholders are engaged in designing and monitoring the effects of management interventions and actions, contemplating the impacts of these, and adjusting further action on the basis of lessons learnt. As such, learning is flexible and customized to specific places and situations, as well as different scales, stakeholders and organizations (Diduck, 2010).

In reviewing studies of ACM in natural resource contexts it was found that social learning had been particularly beneficial for addressing conservation issues (Armitage et al., 2011; Berkes, 2009). For instance, a study of forest management in Nepal showed that social learning had led to a shared and deeper understanding of conservation and poverty reduction between the different stakeholder groups (Khadka & Vacik, 2008). Ridder et al. (2005) suggests that social learning can be most beneficial when: (i) there are stakeholders with different interests and resources; (ii) there is interdependency amongst stakeholders to achieve their objectives; (iii) there is no existing agreement on the concerned problem; and, (iv) there are important issues to which the stakeholders need to devote their resources, such as money and time.

On the other hand, the success of social learning can be constrained by a number of the same barriers noted elsewhere including mistrust, conflict and competition amongst stakeholders, as well as access to information and knowledge (McCool & Guthrie, 2001). Additionally, less powerful participants may lose ‘voice’ in establishing consensus and mutual understanding. As such, it has been suggested that highly contested issues might not be appropriate to explore through social learning processes (Diduck, 2010; Schusler et al., 2003).

3.3. Shared rights, responsibility and decision-making

Shared rights, responsibility and decision-making are a further feature of the ACM process; within the literature these principles generally refer to the legal and participatory empowerment of local communities (Armitage et al., 2007a; Berkes, 2007; Butler et al., 2011; Cundill & Fabricius, 2009; Solstrand, 2015). In particular, the co-management dimension of ACM emphasises the importance of shared or joint rights, responsibilities and decision-making power (Doubleday, 2008). This has been particularly effective in settings where there are shared land and/or resources and so further resonates with tourism in protected area contexts. For instance, Fabricius and Currie (2015) found ACM was useful in decentralizing natural resource or common pool resource management. In the case of forest management in Nepal (Karanth & Nepal, 2012) and joint forest management in India (Behera, 2009; Bhattacharya et al.,

2010; Buchy & Hoverman, 2000), the decentralization of responsibility and the increase in shared rights were found to have an overall improvement on the management of local shared resources.

Carlsson and Berkes (2005) emphasize the importance of defining and negotiating the scope of shared rights and responsibilities. They note that ambiguous rights and responsibilities of different stakeholder groups will be likely to lead to conflict over resource use. Certainly, this aspect of ACM is fraught with contention. For instance, in many countries and contexts, government and other powerful stakeholder groups are unable or unwilling to divest their power or decision-making responsibilities (Kalikoski & Allison, 2010; Maskey et al., 2006; Nagendra et al., 2005). Lack of political commitment, top-down management, conflict, weak coordination, tokenism, and bureaucracy all contribute to undermine this aspect of governance (Batterbury & Fernando, 2006; Fisman & Gatti, 2002; Kalikoski & Allison, 2010; Tacconi, 2007).

In developing countries, governance systems are often characterized by corruption and skewed power relationships amongst stakeholders (Borrini-Feyerabend, 2003; Fabricius & Pereira, 2015; Pahl-Wostl, 2009; Snyder & Sulle, 2011). Coupled with additional inhibitors such as poverty, illiteracy, and access to decision-makers, the participation of local stakeholders in natural resource management and governance is often lacking or inefficient in such countries (Tosun & Jenkins, 1996; Tosun, 2000); a situation that arguably challenges the overall progress of developing countries (Jeffery, 2005; Pahl-Wostl, 2009; Snyder & Sulle, 2011).

Several studies have examined the decentralization of local institutions as well as political decentralization to facilitate economic development, rights and democratic culture and values. The objective is to facilitate overall local empowerment through improving governance systems (Batterbury & Fernando, 2006; Fabricius & Currie, 2015; Fisman & Gatti, 2002). Yet, often decentralization is not the expected panacea as it can create new conflicts and nepotism among stakeholders, lead to further corruption, and the emergence of new political actors who have a platform to enforce their power and control in local resource management (Batterbury & Fernando, 2006; Fabricius & Currie, 2015).

3.4. Building adaptive capacity and resilience

Building adaptive capacity and resilience amongst local stakeholders is an important objective and outcome of an ACM approach and this aspect was consistently identified through the review. Indeed a number of authors have supported the importance of interactive and iterative learning amongst stakeholders in building local adaptive capacity and resilience (Armitage et al., 2007a; Eagles et al., 2002; Flores, 2014, pp. 195–209; Olsson et al., 2004; Prabhu et al., 2007). In natural resource and protected area contexts, adaptive capacity and resilience can include overcoming natural resource crises, addressing sustainability, and facilitating the development of sustainable livelihoods (Plummer & Armitage, 2007).

Previously noted principles such as enhanced collaboration and communication, as well as social networking, social learning, and linkages between different levels and scales of organizations and institutions, have all been found to positively contribute to the building of local adaptive capacity and resilience (Armitage et al., 2007a; Bec et al., 2016; Butler et al., 2015; Eagles et al., 2002; Erickson, 2015; Flores, 2014, pp. 195–209; Galappaththi & Berkes, 2015; Olsson et al., 2004; Prabhu et al., 2007; Smedstad & Gosnell, 2013; Trimble & Berkes, 2015). For instance, Smedstad and Gosnell (2013) conducted a study on natural resource planning and management in seven public riparian areas in the western United States and found that the ACM strategy adopted, particularly the interactive and iterative learning, had led to greater social and ecological resilience amongst the local stakeholders.

In study of a northern Aboriginal community of Canada they found that developing community-level adaptive capacity through collaborative initiatives had improved the environmental resources of the community (Wesche & Armitage, 2010). In this case, technical and financial solutions were prescribed as short-term adaptations, while addressing the underlying structural principles of the social and institutional systems of the area were seen as long-term adaptation strategies. Furthermore, the development of social and cultural capital, enhanced education, knowledge transfer and human resource development all had a positive impact on the adaptive capability of the local community in this case (Wesche & Armitage, 2010). Other authors have supported such findings noting that ACM approaches have enhanced local adaptive capacity and resilience which has in turn led to improved living standards for local people (Dearden et al., 2005; Worboys et al., 2005).

4. ACM conceptual framework

The characteristics of protected areas and the complexity of tourism supply in these contexts suggest that ACM may be a valuable practical approach to governance (Flores, 2014, pp. 195–209; Panyik, 2015). As such, the objective of this paper was to conceptually explore the application of ACM to the governance of protected area contexts which also serve as tourism destinations. Based on the extensive review and synthesis of the ACM literature discussed above, a conceptual framework is proposed that depicts the relationships amongst the four identified principles of ACM (communication and collaboration; social learning; shared rights, responsibility and decision-making; and, building adaptive capacity and resilience), alongside variables, processes and outcomes of an ACM approach (Fig. 1). The framework is designed around the interconnected 'lesson and learning' aspect of the feedback mechanism that underpins the ACM approach. It is not proposed to be unidirectional or linear; instead cyclical and continuous in nature where the principles of ACM are dynamic and underpin all areas of governance.

ACM is an approach to governance but is also a process (British Columbia, 2013; Doubleday, 2008; Ruitenbeek & Cartier, 2001) and so can be conceived in two stages: a pre-implementation stage (consultation/problem assessment, planning and design) and a post-implementation stage (implementation, monitoring, evaluation, and applying remedies and adjustments). Both stages are underpinned by the four ACM principles outlined previously. Certain principles, however, may be more prominent at different stages of the process. For example, if we consider the 'consultation/assess the problem' stage, both 'communication and collaboration' and 'social learning' principles would be relevant. Here, this would involve collaboration amongst stakeholders to identify, consider and discuss relevant issues and challenges for the destination. Each of the principles would also underpin the implementation stage. For instance, 'building adaptive capacity and resilience' will support stakeholders to implement actions arising from the process such as the development of new tourism products or services in the destination.

The conceptual model incorporates a range of variables that can also influence the ACM process. These are adapted from Plummer et al. (2012) who identified 12 distinct variables including learning, knowledge, networks, shared power, organizational interactions, trust, leadership, enabling conditions, conflict, shared responsibility, bridging organizations and incentives. These variables influence the process and its outcomes, but again are inter-related and apply to both the identified ACM principles and ACM process (Fig. 1).

The conceptual framework also includes potential or expected outcomes; short to medium term as well as long-term that can

arise from the ACM process. It was identified through the review of previous ACM studies that in the short to medium term the ACM process had led to improved engagement and participation of more stakeholders in decision-making, improved accountability and transparency of stakeholder groups, and enhanced awareness and social learning (Berbés-Blázquez, 2011; Butler et al., 2016; Chapman et al., 2016; Charles, 2007; Chen et al., 2016; Kusumawati & Huang, 2015; Lai et al., 2016; Levine, 2015; Pinkerton, 2007; Plummer, Kulczycki, & Stacey, 2006). Longer term outcomes have been found to include improved local livelihoods through alternative income generation activities, local community empowerment and more balanced power relationships amongst stakeholders, the establishment of new more collaborative institutions; and improved conflict resolution (Butler et al., 2015; Fabricius & Pereira, 2015; Levine, 2015; Mbaiwa, 2011; Pennington-Gray et al., 2014).

There are of course limitations and barriers of the ACM approach, and these would equally apply in tourism and protected area contexts. The extent to which the principles and variables legitimately underpin the process will be crucial to success and determine the extent to which the outcomes can in fact lead to enhanced governance. For instance, a lack of stakeholder capacity and tokenistic engagement has been found to create barriers to effective collaboration (Ruhanen, 2013). Further, an ACM approach is time consuming to implement as well as to gain acceptance and buy-in from the various stakeholder groups involved (Bown et al., 2013). Moreover, it is resource intensive, particularly in terms of human and financial resources (Bown et al., 2013; Cundill & Fabricius, 2009; Fennell et al., 2008). Others have noted that ACM can still be undermined by the influence of powerful stakeholders (often political) in the process which can create barriers to engaging less powerful stakeholders (Cundill & Fabricius, 2009; Khadka & Vacik, 2008).

However, the extensive literature on ACM suggests that, in other contexts such as natural resource management, the approach has been reasonably successful in addressing these inherent problems that often arise in collaborative settings. For instance, social learning has been found to create enabling conditions for not only learning but also collaboration. Social learning has also been found to support the establishment of shared rights, responsibility and decision making which in turn has been credited with resolving power struggles, mediating political influence and overcoming tendencies to revert to top-down decision making approaches (Lai et al., 2013; Tosun, 2006). In turn, this can reduce barriers to trust and enhanced conflict resolution (Batterbury & Fernando, 2006; Butler et al., 2015; Colfer, 2005; Fisman & Gatti, 2002; Leys & Vanclay, 2011; McCool & Guthrie, 2001).

The ACM framework is conceptual and is proposed as a starting point for further application and empirical testing in tourism and protected area contexts. The various challenges facing the governance of these areas were outlined previously and ACM may offer more practical steps to enhance governance. Maintaining the integrity of the protected area resources is important in continuing to attract visitors that can create revenue streams and improve the livelihood of the local communities. For example, Schultz, Duit, and Folke (2011) proposed the use of the ACM approach for 146 UNESCO Biosphere Reserves as a means of reaching sustainable development goals as well as conventional conservation goals. Further, good governance is predicated on the participation of multi-stakeholders. Consequently, strong leadership through governance is vital to coordinate the diverse concerns and values of the community, balancing distorted power relationships and implementing policies and strategies (Trousdale, 1999).

The development of the ACM conceptual framework and its application to protected area tourism contexts highlights some broad research questions such as: (1) To what extent are the

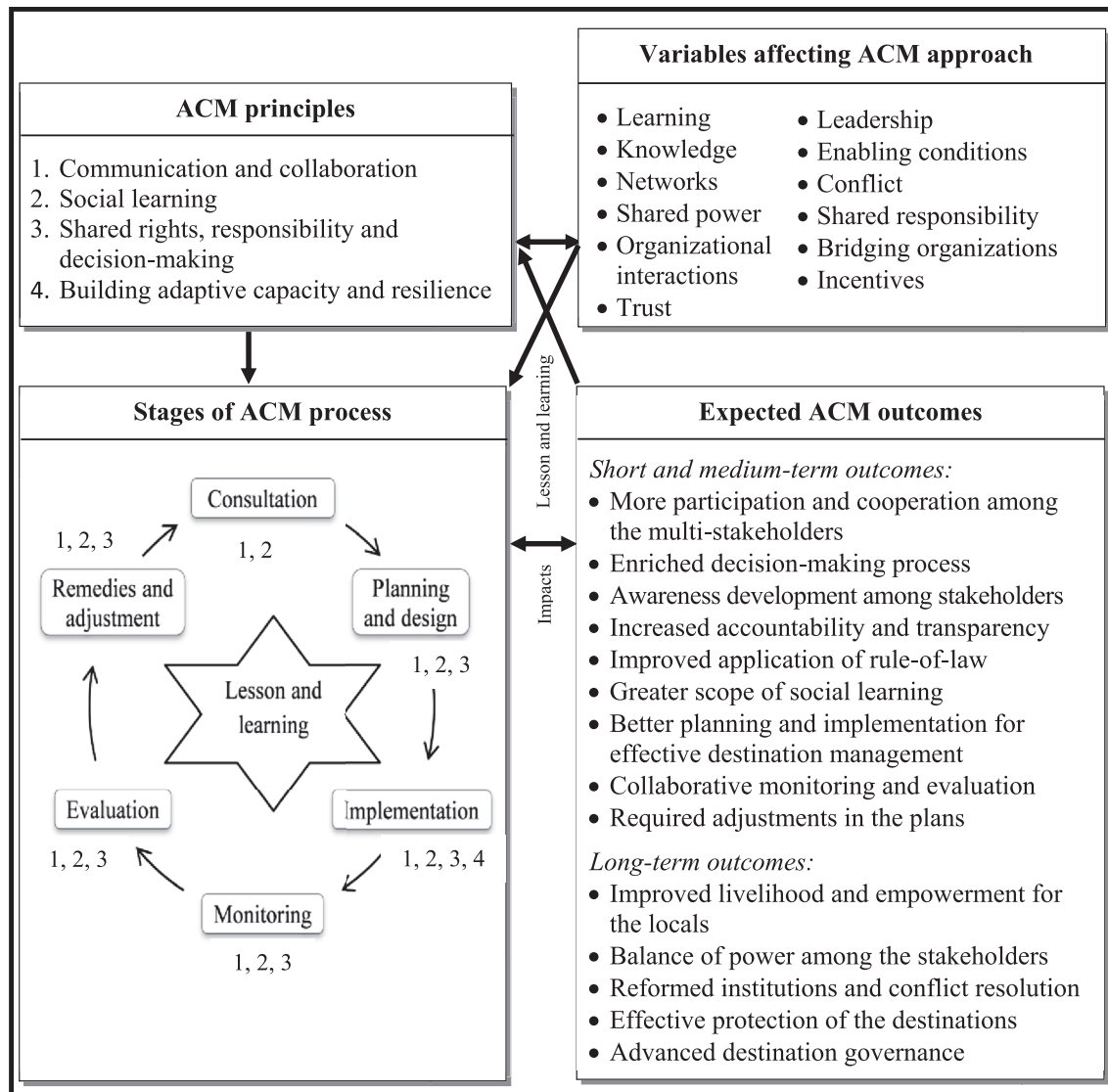


Fig. 1. A conceptual framework of tourism destination governance with particular reference to protected areas through ACM approach. Adapted from Armitage et al., 2007b; Armitage et al., 2008; Armitage et al., 2009; Berbés-Blázquez, 2011; Berkes, 2007; British Columbia, 2013; Butler et al., 2016; Chapman et al., 2016; Charles, 2007; Cundill & Fabricius, 2009; Olsson et al., 2004; Pinkerton, 2007; Plummer et al., 2012; Plummer & Fitzgibbon, 2004.

principles identified through the literature embedded in ACM processes in practice? (2) How do particular variables influence the outcomes from an ACM process? (3) Is ACM appropriate for the governance of protected area tourism destinations? Some examples of emergent research questions under three broad research areas are outlined in Table 2.

While ACM has received much support within the literature as an approach that can address the limitations of governance, empirical research that critiques the model is warranted. In particular, there is much scope to examine the process in the context of tourism in protected areas. There is also much scope to investigate particular aspects of the approach such as social learning which has to date received little attention in studies of tourism generally or tourism destination governance more specifically (Wray, 2012). Research methods used by researchers to address these questions and issues could be qualitative, quantitative or mixed depending on the research questions and issues to be investigated. Comparative case studies, as well as longitudinal approaches, are recommended to help understand the adoption of ACM principles and the variables that might influence ACM

outcomes both in the short and long term. A comparison of different tourism destination contexts (i.e., protected areas, built environments, etc.) is warranted to explore the nuances of differences in the governance approaches.

5. Conclusions

A paradigm shift is taking place in protected areas with a transition from traditional top-down to participatory bottom-up approaches to planning, management and governance. This shift reflects changing expectations of governance towards systems that can legitimately empower and benefit local communities (Eagles, 2009; Eagles et al., 2013). Top-down 'command and control' governance approaches are often criticised as they fail to consider the wide range of stakeholders who can affect or are affected by the outcomes of such decision-making. Importantly, it is recognised that such approaches are ineffective at addressing the underlying social and ecological system complexities and uncertainties faced by protected areas (Armitage et al., 2009; Muganda, Sirima, & Ezra, 2013; Stankey, Clark, & Bormann, 2005; Tosun, 2000, 2001, 2006),

Table 2
Future research questions.

ACM	Research questions and themes
ACM principles and process	<ul style="list-style-type: none"> • How does communication and collaboration among the diverse stakeholders of a protected area tourism destination affect the ACM process? Is communication horizontal or vertical? • How do partnerships influence the governance of tourism in protected areas? • How do different approaches to governance influence adaptive capacity and resilience of protected area tourism destinations? • What strategies and approaches might work best to develop adaptive capacity and resilience for protected areas? • How does social learning affect the governance of tourism in protected areas? • To what extent do shared rights, responsibility and decision making influence governance of protected area tourism destinations?
ACM variables	<ul style="list-style-type: none"> • Does stakeholder conflict affect the governance of tourism in protected areas? Does an ACM approach to governance mediate the conflict amongst stakeholders? • How does social learning contribute to conflict resolution? • Who are the powerful stakeholders in tourism protected area governance systems? What roles and influence do powerful stakeholders have in decision-making? • To what extent does power undermine multi-stakeholder engagement and collaboration? • Is there a role for learning-by-doing in tourism destination governance in protected areas? • Can ACM enhance the building of trust between stakeholders in tourism protected area governance?
ACM outcomes	<ul style="list-style-type: none"> • How can an ACM approach to governance affect expected short and medium-term outcomes? Does the approach improve the achievement of these outcomes? • How can an ACM approach to governance impact on the achievement of long-term outcomes that are expected to accrue through a governance process? • Can ACM improve the governance of tourism in protected areas?

particularly those protected areas that are also tourism destinations and so face additional complexity in their governance systems. ACM has been suggested as one approach that may be appropriate for improving the governance of tourism in protected area contexts.

The key aspects of an ACM approach have been outlined in detail in this paper; identified through an extensive review of more than 80 published papers on ACM, mostly in natural resource management contexts. Importantly, this conceptual paper aimed to synthesise and discuss the key principles, variables and outcomes of an ACM approach and contextualise this within protected area tourism destinations.

ACM is an approach to governance, with action-oriented principles and variables. Certainly, the literature suggests that ACM offers advantages over other approaches to governance, in part due to its comprehensiveness and multiple dimensions. However, an ACM approach will not be the solution for every protected area. If the key ACM principles and variables are absent or unable to be successfully established, the ACM approach will clearly be compromised. Like all collaborative and participatory approaches, ACM is similarly dependent on legitimate as opposed to tokenistic engagement and meaningful participation by all stakeholder groups. Similarly, power, conflict, a lack of trust and lack of transparency can all undermine the approach. Empirical testing in practice is needed to validate whether the approach can be as successful in tourism protected area settings as it has been in natural resource contexts more broadly.

Conflicts of interest

There are no financial or other conflicts of interest associated with this paper.

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