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The re-territorialisation of Biosphere Reserves: The case of Wester Ross, Northwest Scotland

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ABSTRACT

Biosphere reserves, designated under UNESCO's Man and the Biosphere (MAB) Programme, are now regarded as key mechanisms to achieve global imperatives such as the Sustainable Development Goals. The concept of biosphere reserves has evolved significantly from the 1970s to include a larger number of functions and zones, as well as the inclusion of stakeholders in governance, as codified in the 1996 Statutory Framework for the World Network of Biosphere Reserves. Its implementation has led to the re-territorialisation of 66 biosphere reserves, as they have been extended beyond the protected areas that form their 'core areas'. One example is Wester Ross in northwest Scotland. This region has been nationally recognised for its high biodiversity and landscape values since the late 1940s, and a small biosphere reserve was established in 1976. In the current decade, as required by the MAB Programme, this biosphere reserve was extended to over 100 times its original area through a participatory process which is described in detail. Following re-territorialisation, this biosphere reserve, like others, both represents opportunities and faces challenges. These are discussed with regard to four requirements: effective communication, stakeholder engagement, participatory governance, and funding.

1. Introduction

From the last quarter of the twentieth century, a fundamental reappraisal of both the concepts and the practice of conservation has taken place. Until this period, the primary focus of conservation had been on the protection of species, ecosystems and landscapes: 'Nature in, people out' (Adams 2004: 9) – a focus that continues in the many protected areas that may still be described as examples of 'fortress conservation' (Heatherington, 2012) or 'enclaves' (Kroeker-Maus, 2014). In recent decades, there has been increasing recognition of the imperative to consider conservation in the context of sustainable development. A seminal document in this regard was the World Conservation Strategy, published by three global organisations in 1980 (IUCN/UNEP/WWF, 1980). The subsequent evolution of conservation thinking may be evidenced in many ways, for example by considering the themes of the approximately decadal congresses organised by the International Union for the Conservation of Nature (IUCN) (Adams, 2004; Child, 2014). Both scientists and policy-makers now focus increasingly on how protected areas – or, more broadly, conservation areas, which take into consideration not only the conservation of nature but also other societal goals – can be places to jointly conserve biodiversity and reduce poverty, particularly in the context of climate change (Adams and Hutton, 2007; Holland, 2014). This convergence is exemplified by target 15.9 of the Sustainable Development Goals: "By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts" (United Nations, 2015).

Conservation areas are territories situated within wider landscapes inhabited by people, and emerge through a spatiality inscribed through the interactions of science, governance, economics and politics (Zimmerer, 2006). Within the general frame of a neoliberal transition from enclave to integration in the regional context, a series of linked trends has emerged; although it should be emphasised that these have taken place at different rates in different countries, and even within countries – and, in some cases, have barely begun. Broadly, these may be characterised as shifts in the planning, design and management of conservation areas from: top-down to bottom-up, a combination of both (e.g., Gaymer et al., 2014) or multi-level (e.g., Lockwood, 2010); state-led to partnership-based, involving diverse non-state actors (Hodge and Adams, 2012); expert scientific to participatory (Schultz et al.,

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2011); and, often, small- to large-scale. Recently, Adams et al. (2013: 576) explored this series of trends with regard to large conservation areas in the UK using the concepts of territorialisation, "the demarcation and mapping inherent in the creation of protected areas and areas of conservation concern", and re-territorialisation, "changes in conservation's territorial claims".

Recognising that the concepts of territorialisation and re-territorialisation are connected to individuals' interactions and engagement with places, and to their self-identity (de Certeau, 2011; Glusac, 2015), this paper uses the approach of Adams et al. (2013) to analyse the evolution and implementation of the concept of biosphere reserves designated under the intergovernmental Man and the Biosphere (MAB) Programme of the United Nations Educational, Scientific and Cultural Organization (UNESCO). The first section of the paper has a global focus and is brief, given that many histories of this programme have been published (e.g., Batisse, 1993; Ishwaran, 2012; Bridgewater, 2016). The second, bringing together work conducted by the author and colleagues over more than two decades, analyses a case study in northwest Scotland. The final section draws conclusions on wider opportunities and challenges for biosphere reserves.

2. The concept of biosphere reserves: evolution, implementation, and re-territorialisation

UNESCO established its MAB Programme in 1970. At its first session, the programme's International Co-ordinating Council (ICC) agreed to establish an international network of protected areas, or 'biosphere reserves' (BRs). Consequently, a task force developed the concept of BRs as sites with three primary objectives: conserving biological diversity (the highest priority); providing areas for ecological and environmental research; and providing facilities for education and training. Zonation would be a key means to achieve these objectives, with a strictly protected 'core area' surrounded by a buffer zone or "buffer mechanism"; each BR should have a master plan (UNESCO, 1974: 24). The report also included a section on 'co-operation in establishment and maintenance of reserves', referring to staff and infrastructure.

During the 1980s, the concept of BRs evolved in line with the global trends in conservation described above. In 1984, the ICC approved an Action Plan for Biosphere Reserves, which stated that "People should be considered part of a biosphere reserve . . . (s)uccessful biosphere reserves constitute models of the harmonious marriage of conservation and development" (Batisse, 1985: 18). This evolution continued with the report of the Scientific Advisory Panel on BRs (UNESCO, 1996) which stated that BRs should combine and harmonise three functions – conservation, development, and logistic (research and monitoring) – through three types of zones: core area, "strictly delineated" buffer zone, and transition area. Stakeholder involvement appears to have been envisaged only after designation.

One outcome of this evolution was that, following work within its Commission on National Parks and Protected Areas (e.g., Eidsvik, 1979, 1990), IUCN (1994) decided that BRs should no longer be defined as protected areas. This was because, while all BRs contain such protected areas as core areas and, sometimes, buffer zones, the transition area, with its settlements and human population and focus on sustainable development, did not match IUCN's definition. Nevertheless, IUCN retained an interest in BRs and, in its evaluation of the 1984 Action Plan, concluded that local people should not only participate in biosphere reserve management, but also benefit from it (IUCN, 1995: 9).

This evaluation was a key input to the International Conference on Biosphere Reserves in Seville, Spain, in 1995, which had two major outputs: the 'Seville Strategy' and the 'Statutory Framework for the World Network of Biosphere Reserves' (WNBR), subsequently adopted by the UNESCO General Conference (UNESCO, 1996). Within the former, Objective II.1 recommended that local people should be fully involved "in planning and decision-making regarding the management and use of the reserve" (UNESCO, 1996: 8). Within the Statutory Framework, Article 4 defined criteria for designating BRs: they should "be of significance for biological diversity conservation . . . [and] provide an opportunity to explore and demonstrate approaches to sustainable development on a regional scale"; they should have all three zones, of which the first two had to be clearly demarcated; and diverse types of stakeholders should be involved in designing a BR and implementing it, with a management policy/plan (UNESCO 1996: 16–17). Article 9 established a ten-yearly periodic review process and offered Member States the option of withdrawing BRs under their jurisdiction from the WNBR (Price et al., 2010).

Thus, the concept of BRs evolved significantly from 1974 to 1995 (Price, 1996; Reed and Massie, 2013). First, it was re-territorialised, from the requirement for a legally-defined core area and a buffer zone or mechanism in 1974 to the additional requirements for a strictly delineated buffer zone and a transition area in 1986, which became formal criteria in 1996. Second, it evolved with regard to objectives and who should be involved in design and implementation. Until 1995, the concept involved a top-down science-led approach, prioritising biodiversity conservation and – if necessary – coordination with local stakeholders, particularly in relation to scientific research, but also "with a view to appropriate planning and sustainable resource development" (UNESCO, 1996: 73). The criteria defined in 1995 included achieving a balance between the three functions and involving a wide range of stakeholders in both designing and then managing BRs. The periodic review process was to ensure that every BR met these criteria, highlight issues requiring resolution, update governance mechanisms, and improve legitimacy (Amer et al., 2015). A corollary was that any BR that did not have the three zones would have to be extended. Over the following years, while governments did submit an increasing number of periodic reviews, it became clear that a large proportion of BRs designated before 1996 did not include all three zones (Coetzer et al., 2014; Ishwaran, 2012). Consequently, at its 25th session in 2013, the ICC instituted an 'exit strategy', requiring all countries to submit periodic review reports before its 2016 session, to show that all their BRs conformed to the criteria in Article 4 of the Statutory Framework (UNESCO, 2013).

The periodic review process has now been the impetus to extending 66 BRs in 26 countries (Table 1); more extensions are likely in the near future following the decision of the ICC in 2015 to effectively extend the 'exit strategy' by one year (UNESCO, 2015). This trend has clearly been influenced by the exit strategy: the reviews for 44 percent of these sites were submitted after 2013. These processes of re-territorialisation primarily concerned BRs designated before 1996 (71 percent) with only a core zone; buffer zones and transition area(s) were added during extension. As some of the original BRs were rather small, their re-territorialisation involved a remarkable increase in area. BRs designated since 1996 have also been extended, usually to take into consideration changes in regional contexts. For these cases, the relative increase in size has generally been less. While recognising that BRs are distributed very unevenly around the world, there are also significant regional differences in the proportions of extended BRs and concerned countries (Table 2). The highest proportion of BRs extended was in the Arab states; but five were in one country: Algeria. Conversely, the lowest proportion was in Africa, with only one BR extended, in South Africa. With regard to the proportion of countries concerned, the highest proportions were in Latin America (39 percent) and Europe/North America (38 percent). However, Table 2 only shows one side of processes initiated as a result of the periodic review. Eight countries have withdrawn a