STRANDED ASSETS

PROGRAMME

SMITH SCHOOL OF ENTERPRISE AND THE ENVIRONMENT

UNIVERSITY OF OXFORD

Project for Protected Area Resilience

Promoting value creation and value protection in a globally significant asset class

Overview

WWF

Luc Hoffmann Institute

UNEP WCMC

ZSL

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The Project for Protected Area Resilience (PPAR) is seeking to reinvigorate the discourse about Protected Area (PA) conservation by examining the value (broadly defined) PAs generate and how more value can be realised through new investment. The project is also concerned with how to safeguard PAs in light of current and emerging risks threatening their ability to generate value sustainably – in other words we want to avoid PAs becoming 'stranded assets'. The project is also looking at how to prioritise different types of PA funding and how to achieve the most impact with limited funds. The first phase of the project began in spring 2014 and will be completed in mid-2015, with subsequent phases beginning thereafter.

If you would like to be involved in the project or to support its work, please contact: ben.caldecott@smithschool.ox.ac.uk or paul.jepson@ouce.ox.ac.uk

The Project

Protected Areas form an important part of global conservation efforts and generate a host of important 'values' (or 'benefits') beyond species and habitat conservation, including economic (e.g. tourism, fisheries, ecosystem services), social (e.g. communities), cultural (e.g. identity), recreational (e.g. hiking, safari), political (e.g. institutions, international reputation), and option (e.g. land development, bio-prospecting) values.

They are a large and growing asset class with unique legal and social. As of 2010, terrestrial protected areas covered 12.2% of the Earth's land area and marine PAs covered 5.9% of the Earth's territorial seas (WDPA 2010). The Aichi Biodiversity Targets aim for at least 17% of terrestrial and inland water, and 10% of coastal and marine areas to be designated as PAs by 2020 and, partly in response to this international target, expansion is occurring.

However, PAs are coming under increasing pressure due to a number of threats, and these risk factors are impairing their ability to create value sustainably for a range of stakeholders, whether governments, communities, conservationists, or businesses. This has not been helped by PA conservation appearing to fall down the priority list of public policy makers.

In addition to reinvigorating arguments for PA conservation, in order for PAs to succeed in increasingly risky and volatile contexts, at least three things need to happen simultaneously: enhanced risk management, new investment from old and new sources, and greater 'value for money'. Each of these are a focus of the Project for Protected Area Resilience and are described in more detail below. The project is also seeking to make an important conceptual

contribution by determining the types of asset found within PAs, the forms of value they create, who captures this value, and how different risks might damage or strand the underlying assets and values they create.

Risk management – we need to enhance the capacity of Protected Areas to monitor and respond to current and emerging risk factors, otherwise PAs could become 'stranded assets', which are assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities. Risks already placing significant value-at-risk for PAs are physical climate change, the illegal wildlife trade, land encroachment, extractive industries, and unsuitable infrastructure development. Other risks might include changes in land designation, regulatory change, jurisdictional tensions between Ministries (e.g. mining and forestry), conflict between communities and authorities, shifts in visitor preferences, changing brand value, corruption, local conflicts, poaching, geopolitics, land use changes, and breached ecological thresholds and limits. Risks will affect Protected Areas in different ways and over varied time-horizons.

Research questions: *What are the risk factors, what is their geographical distribution and how are risks changing over time? How material are risks in terms of probabilities and size of potential impacts? How might risks affect the capacity of PAs to generate value? What are the best strategies to manage these risks? What risk management strategies have worked before? What risks might emerge in the future and how might horizon scanning be done effectively? How could risk factors interact with each another and what might the consequences of this be?*

New investment – more funding will need to flow into Protected Area conservation to grow and sustain the value PAs generate across a number of domains (e.g. conservation, economic, social, cultural, political and option) for a range of stakeholders. This will be essential, not least because of the risks threatening PAs, but also because the global PA estate is growing. Traditional sources of operational and capital funding, particularly from governments and conservation organisations, have been insufficient and are unlikely to increase at the scale or pace required to plug any funding shortfall. Consequently, two things should happen. First, limited public and philanthropic funds need to be concentrated more effectively on areas where alternative funding is scarce. Second, Protected Areas that could potentially attract other forms of investment should develop the competencies and frameworks required to do so.

Research questions: *What types of investment are required and where? What scale of investment is needed and how is this distributed geographically and over time? Where has investment gone to, what were the sources, and how much has been invested? Which PAs could attract private capital and which will be reliant on public or philanthropic sources of funding? How could these funds be prioritised or concentrated? Are there unintended consequences that should be avoided and how can they be avoided? How can non-financial returns be financed and by whom? How might capital seeking financial returns be invested in PAs effectively and what are the frameworks and business models required for this happen? Are there benefits, co-benefits, or disbenefits associated with different sources of capital? Where might new investment come from? What motivates investment from different stakeholders,*

whether governments, firms, investors, conservation organisations, communities, or individuals, and is this changing?

Better returns – funds invested in Protected Area conservation, regardless of source, will almost certainly need to deliver better returns and value for money – for any given investment, the value generated will need to improve over time. This is one important way of helping to reduce the size of any PA funding shortfall, while demonstrating value for money could also create virtuous cycles for attracting new investment.

Research questions: *What specific measures would help to improve value creation in specific areas? What evidence is there for this? What are the trade-offs and relationships between different types of value creation (e.g. economic vs cultural or conservation vs social) and how might these affect decision making? What ways of thinking or framing could be useful for improving efficiency? Where would capacity development be beneficial?*

Team

The project is led by Ben Caldecott and Paul Jepson at the University of Oxford. The project advisory board includes: André Abadie (Managing Director/Head of Global Environmental & Social Risk Management, J.P. Morgan), Professor Jonathan Baillie (Conservation Programmes Director, ZSL), Robin Bidwell (Chairman, Green Alliance), Glyn Davies (Director of Programmes, WWF-UK), Christian del Valle (Managing Partner, Althelia Ecosphere), Rupert Edwards (Senior Adviser, Forest Trends), Professor Marc Hockings (Program Director of Environmental Management, University of Queensland), Naomi Kingston (Head of Protected Area Programme, UNEP-WCMC), Kathy MacKinnon (World Commission on Protected Areas), Stephanie Maier (Head of Corporate Responsibility, Aviva Investors), Therese Niklasson (Head of ESG Research, Investec Asset Management), Sue Stolton (Director, Equilibrium Research), Joshua Tewksbury (Director, Luc Hoffmann Institute), Francis Vorhies (Director, Earthmind), and Sir Graham Wynne (former CEO, RSPB).

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University of Oxford and the Smith School

Stranded assets are assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities and they can be caused by a variety of risks. Increasingly risk factors related to the environment are stranding assets and this trend is accelerating, potentially representing a discontinuity able to profoundly alter asset values across a wide range of sectors.

Yet environment-related risks that could strand assets are poorly understood and regularly mispriced, resulting in an over-exposure to such risks throughout our financial and economic systems. Some of these risk factors include:

- Environmental challenges (e.g. climate change, natural capital degradation)
- Changing resource landscapes (e.g. shale gas abundance, phosphate scarcity)
- New government regulations (e.g. carbon pricing, air pollution regulation)
- Falling clean technology costs (e.g. solar PV, onshore wind, electric vehicles)
- Evolving social norms (e.g. fossil fuel divestment campaign) and consumer behaviour (e.g. certification schemes)
- Litigation (e.g. carbon liability) and changing statutory interpretations (e.g. fiduciary duty, disclosure requirements)

The Stranded Assets Programme at the University of Oxford's Smith School of Enterprise and the Environment was established in 2012 to understand these risks in different sectors and systemically. We research the materiality of environment-related risks over time, how different risks might be interrelated, and the potential impacts of stranded assets on investors, businesses, regulators, and policymakers. We also work with partners to develop strategies to manage the consequences of environment-related risks and stranded assets.

The programme is based in a world leading university with a global reach and reputation. We are the only academic institution conducting work in a significant and coordinated way on stranded assets. We work with leading practitioners from across the investment chain (e.g. actuaries, asset owners, asset managers, accountants, investment consultants, lawyers), with firms and their management, and with experts from a wide range of related subject areas (e.g. finance, economics, management, geography, anthropology, climate science, law, area studies) within the University of Oxford and beyond.

We have created the Stranded Assets Research Network, which brings together researchers, research institutions, and practitioners working on these and related issues internationally to share expertise. We have also created the Stranded Assets Forums, which are a series of private workshops to explore the issues involved. The Global Stranded Assets Advisory Council that guides the programme contains many of the key individuals and organisations involved in developing the emergent stranded assets agenda. The council also has a role in helping to informally co-ordinate and share information on stranded assets work internationally.

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