Rewilding and gazetting the Iberá National Park: Using an asset approach to evaluate project success

Hanna Louise Pettersson\textsuperscript{1,2} | Sergio Henrique Collaço de Carvalho\textsuperscript{1}

\textsuperscript{1}School of Geography and the Environment, University of Oxford, Oxford, UK
\textsuperscript{2}Sustainability Research Institute, School of Earth and Environment, University of Leeds, Leeds, UK

\textbf{Correspondence}
Hanna Louise Pettersson, Sustainability Research Institute, School of Earth and Environment, University of Leeds, Leeds LS2 9JT, UK. Email: eehlp@leeds.ac.uk

\textbf{Funding information}
Green Templeton College, University of Oxford, Grant/Award Number: Academic Learning Grant

\textbf{Abstract}
The rising demand for natural resources increases the pressure on conservationists to justify the protection and restoration of biodiversity. However, the benefits of protected wild spaces to people are not always evident. In this study, we analyzed a rewilding and national park project in the Iberá Wetlands. We deployed the Protected Area Asset Framework to analyze how investments made by an international NGO in local products, resources and relationships developed new value-generating practices in the area. We also studied the resulting impact on local stakeholders’ perceptions of the project. The results indicate that the NGO’s investments have enhanced Iberá’s perceived value, also of its less tangible assets such as its aesthetic beauty and cultural significance. This has generated a gradual shift in attitudes from widespread apprehension to increased local support for the new national park. The study contends that gaining local acceptance for protected areas may be facilitated by illuminating their diverse social, cultural and economic potential. The Asset Framework can be used to reveal values that emerge out of society’s interaction with nature and help managers develop new and engaging narratives for conservation projects. The lessons provided by the Iberá project can inform management of protected areas in Argentina and elsewhere.

\textbf{KEYWORDS}
asset-based community management, conservation land trust, Iberá, keystone species, protected areas, rewilding, social–ecological systems

\section{1 INTRODUCTION}
The movement to protect and restore natural habitats in order to combat biodiversity loss and climate change is gaining momentum across the world. The Bonn Challenge was launched in 2011 with a call to restore 350 million ha of degraded ecosystems by 2030 (bonnchallenge.org). However, the performance and legitimacy of the existing protected area (PA) estate is increasingly challenged (Cumming, 2016; Watson et al., 2014). To developing nations and cultures with pervasive traditions of agriculture, the opportunity costs of forfeiting lands to protect wild flora and fauna may appear high and in conflict with the needs or traditional lifestyles of local people (Green et al., 2018; Oldekop, Holmes, Harris, & Evans, 2016). Faltering support for PAs have led various nations, both rich and poor, to make significant cuts in PA management budgets, and the phenomenon of
PADDD (Protected Area Downgrading, Downsizing and Degazettlement) has escalated during the last two decades (Kroner et al., 2019). This has led some researchers to urge nations and institutions to (re)focus precious resources on resuscitating dysfunctional PAs in order to justify their existence and make conservation landscapes more politically and socially palatable (Pringle, 2017).

There is some evidence that protecting and restoring nature can improve livelihoods in rural communities (Andam, Ferraro, Sims, Healy, & Holland, 2010; Andrade & Rhodes, 2012; Turner et al., 2012). While the synergy between biodiversity conservation and poverty alleviation is the subject of an ongoing debate (see for instance Roe, 2014; Brockington & Wilkie, 2015), it is clear that PAs can provide a range of benefits to local populations, including protection of natural and cultural heritage, promotion of mental and physical well-being, nature-based enterprise, and research opportunities (Naidoo et al., 2019; Watson et al., 2014). Additionally, criticism notwithstanding, PAs retain their role as cornerstones for biodiversity conservation (López-Rodríguez & Rosado, 2017; Margules & Pressey, 2000). Thus, with gathering momentum to re-emphasize biodiversity strategies post-2020, the international push to declare new and expand existing PAs will most likely continue to build in strength (Dziba et al., 2019; Visconti et al., 2019).

To justify the expansion, there is a need to overcome prevailing issues associated with PAs: the lack of societal buy-in, inequities in governance, impermanence of protection, underfunding, and incomplete ecological networks (Cumming, 2016; Pringle, 2017). Another pertinent issue is the consistent underestimation of PAs' societal value, since some benefits (such as cultural and aesthetic attributes and relationships) are difficult to measure (Dacks et al., 2019; Gamarra et al., 2019). Surmounting evidence emphasizes the need for more holistic management approaches that acknowledge and promote these wider benefits of PAs (Cumming, 2016; UNEP, 2016; Watson et al., 2014). The concept of social-ecological systems has become increasingly influential as a framework to explore the complex feedback loops between nature, economies, societies and cultures that together make up our biosphere (Berkes & Folke, 1998; Folke, Biggs, Norström, Reyers, & Rockström, 2016). PA managers are now urged to understand local ways of governing, valuing interacting with nature in order to create PAs that work with and for local communities, especially in economically marginalized areas (Dziba et al., 2019; Kothari et al., 2013; Oldekop et al., 2016).

Asset-Based Community Development (ABCD) (Mathie & Cunningham, 2003) has gained traction as an approach that focuses development interventions on existing resources (or assets) in the communities, such as skills and local products, and how these can be developed by the community itself. ABCD rests on the principle that the mobilization of local actors and resources is more likely to empower communities and engender long-lasting environmental stewardship than approaches relying on external input and management (Mathie & Cunningham, 2003; Nel, 2018).

Local nature-based economies are likewise promoted within the rewilding narrative, which is gaining momentum along with global restoration agendas (Lorimer et al., 2015; Pettorelli et al., 2018). Rewilding is based on flexible and nature-led restoration, using the ecological and social past to inform future management (Corlett, 2016). It emphasizes increased trophic complexity, connectivity and the return of natural disturbance regimes, sometimes involving the (re)introduction of key-stone species to complete ecological networks (Perino et al., 2019). It furthermore advocates for the restoration of human relationships with nature, sometimes harking back to traditional ways of living with and within nature (Lorimer et al., 2015).

These approaches bring about new opportunities for conservation managers to engage with communities and build on local idiosyncrasies. To explore this potential, this research analyses a rewilding project in the Iberá Natural Reserve in Argentina. The project involves the establishment of a national park and the reintroduction of several flagship and keystone species to an area where local communities largely subsist on cattle farming. It is the first project of its kind in South America, and globally unique in the number and types of species being reintroduced. The project is particularly relevant because it involves the purchase of large tracts of land by a North American couple, Douglas and Kristine Tompkins, which was met with suspicion and occasionally outright antagonism by the local populace. The activities of the couple and their conservation NGO, Conservation Land Trust (henceforth denoted “the Trust”), moreover generated concerns over “green colonialism” in both national media and academic literature (Busscher et al., 2018; Goñi, 2007; Holmes, 2014). Iberá thereby offers an important case study for exploring social, cultural and economic impacts of rewilding and PAs.

We used the case study in Iberá to test the effectiveness of a recently proposed theoretical framework designed to illuminate and categorize PA benefits. The Protected Area Asset Framework (Jepson et al., 2017) is a conceptual tool that makes explicit assets inherent to PAs, how they generate value, and who benefits from this value creation. The framework departs from the notion of value standardized as money in trade relations, emphasizing the range of relational values derived by human-nature interactions. It aims to aid in identifying
the types of investments that enhance value generation and resilience of PAs in the medium to long term, thereby providing political and social justification for their existence and continued expansion (Jepson et al., 2017). The framework was used to analyse the activities assumed by the Trust in Iberá and understand the impact on local communities. The analysis was based on document analysis and qualitative field data collected during the month of June 2017.

The objectives of the research were: (a) To understand how the asset approach adopted by the Trust aided the achievement of their project aims. (b) To describe values generated by the project within the local social–ecological system. (c) To test the effectiveness of the Asset Framework as a tool to categorize investments and value generation within the project. (d) To explore the potential of the Asset Framework as a planning tool, particularly its potential to illuminate less tangible values generated by PAs.

This knowledge can aid conservation policy, planning, and project evaluation, particularly the illumination and promotion of holistic PA benefits within PA management plans, as well as education and outreach programs.

2 | STUDY DESIGN

2.1 | Study area

The Iberá wetlands are one of the most important wetland ecosystems in South America. Through its continuum of permanently flooded to dry areas, the wetlands forms a diverse mosaic of habitats that is home to around 25% of all vertebrate species found in Argentina (Administración de Parques Nacionales Argentina [APN, 2017]; Ramsar, 2012). Spanning 1.3 million ha, it covers almost 15% of Corrientes in North-eastern Argentina, a province heavily dependent on agricultural production (Busscher et al., 2018; Caruso & Pérez, 2013). In 2008, the province had the second highest poverty index in the country, with more than 45% of its population unable to meet their basic needs (IADER, 2008). The situation is perpetuated by low education levels, high unemployment rates and poor infrastructure (Busscher et al., 2018).

The continuous pressures from hunting and agriculture have over the last century impoverished local biodiversity, extinguishing at least nine species of mammals and four species of birds (APN, 2017). In 1983, the Iberá Natural Reserve (henceforth denoted the reserve) was declared, consisting of a mix of public and private land, to protect freshwater resources and remaining wildlife populations within the basin (APN, 2017; Ramsar, 2012). In 2009, 482,000 ha (2015). The provincial park marked out the area of public domain and increased accessibility, enhancing the tourism industry that had emerged on a small scale in the village of Carlos Pellegrini (GPC, 2015b), see Figure 1.

Conservation Land Trust began operating in Iberá in 1997, attracted by its unique landscape and biodiversity. Douglas and Kristine Tompkins, both renowned conservation philanthropists, had established the organization with the purpose of protecting biodiversity and creating “ecologically complete” national parks. The Trust procures land on which to establish ecologically grounded local economies through ecotourism, sustainable farming and environmental education, an approach they term “eco-localism” (Tompkins Conservation, n.d.). Their projects and strategies have attracted international attention, most notably their work in the Chilean Patagonia (Busscher et al., 2018; Holmes, 2014).

Iberá was the Trust’s first project in northern Argentina. They initiated their work by purchasing land, mainly old cattle ranches, which were available on the local market. Their property eventually formed a structure of several isolated blocks immediately adjacent to the wetlands. In order to protect the restored species and ecosystem processes in perpetuity, the Trust aimed to see this land gazetted as a national park, which would subsequently be donated to the Argentine government in accordance with the aims of the NGO (see Zamboni, di Martino, & Jiménez-Pérez, 2017 for further project details).

2.2 | Data collection

Data was collected through participant observation and key informant interviews conducted on site by the lead author in the summer of 2017; see Table S1 for the list of interviewees and assigned interviewee codes. Interview data was complemented by analysis of documentation from the Trust to illuminate their strategies and media articles to trace how their work was locally received. This research design was chosen to generate in-depth understanding of opinions and beliefs of stakeholders with specialized knowledge based on their positions in relation to the project (Nilsson et al., 2017; Yin, 2003). Interview participants were identified through an initial survey of key actors, which generated further recommendations when on site (Esiasson et al., 2007). The selection consisted of local residents, entrepreneurs and park guards in the four access points managed by the project (Portal Laguna Iberá (Pellegrini), Carambola (Concepción), San Nicolás (San Miguel) and Cambreytá (Ituzaingó), see Figure 1),
as well as NGO staff and government officials. A nearby PA (Mburucuyá) was included to provide a case of comparison. In total, 23 audio-recorded interviews were carried out. In addition, 14 informal conversations were conducted when recording was not possible, in which case notes were taken after the conversations had concluded. Interview questions were open-ended and structured around past and present states of the villages and the wetlands, perceptions of the Trust, the reintroduction of species, and the conversion of provincial land to national park.

2.3 Data analysis

The data was categorized and coded using the NVivo software and analyzed through the Asset Framework in three steps:

1. Identifying and describing past and present Iberá park assets within the five framework categories (see Figure 2 and Table S2). Assets are defined in the framework as “entities, attributes and relationships that can be protected, managed and/or invested in to

**FIGURE 1** Map of the Iberá Wetlands in 1997. Data credit: Conservation Land Trust
generate different forms of value” (Jepson et al., 2017 p. 184).

2. Categorizing the investments made into the assets, and the resulting value development (see Table S3). The analysis included utilitarian values that can be economically quantified, for instance income from ecotourism. It also included intrinsic or aesthetic (non-monetizable) values, such as nature-induced sensations of peace (Tadaki, Sinner, & Chan, 2017), perceived by local stakeholders.

3. Determining who captured the value of the developed assets by exploring how local communities and perceptions have changed over time. The framework structures the value generation of PAs in four domains of society: (a) Everyday life; (b) Professional and organizational life; (c) Politics and diplomacy; (d) Economy and enterprise (see Jepson et al., 2017).

Through these three steps, the strategies assumed by the Trust to deliver their project aims in Iberá were analyzed. The study furthermore discusses challenges and risks associated with the Trust’s strategies and use the insights to extract important lessons for PA and rewilding managers elsewhere.

3 | RESULTS OF THE ASSET FRAMEWORK ANALYSIS

The assets that drew the Tomkins to Iberá in 1997 were its unique flora and fauna and pristine landscapes. The fact that it was already a natural reserve was deemed promising for a future national park designation, which is a primary goal of the Tompkins’ work (6, 8); see Table S2. At this time, the reserve was managed by a small number of park guards mainly tasked with anti-poaching operations. Additional management was limited since the area was considered a financial burden for the province. In the words of a regional government official: “Iberá has been on the agenda for 20 years but as a ‘páramo’ [Spanish for desert or wasteland] that we had to deal with without knowing why. It had no productive value; it was a waste” (4).

3.1 | Asset development in Iberá

In accordance with their stated vision of eco-localism, the Trust began their work by identifying and investing in local resources to enable an economy compatible with their vision for the area. The following section will classify the most significant investments within the five asset categories of the framework.

3.1.1 | Biophysical assets

The Trust’s first investment was the purchase of nearly 160,000 ha of land from private owners between 1997 and 2002. This was followed by continuous investments into ecological restoration of this land, such as prescribed burnings and removal of agricultural infrastructure, see Table S3. In 2007, the rewilding program with fauna reintroductions and translocations was initiated. They focused on species such as giant anteaters (Myrmecophaga tridactyla), tapir (Tapirus terrestris) and collared peccaries (Pecari tajacu) that according to historic records had become locally extinct within the last
50 years (Di Blanco et al., 2015; Zamboni et al., 2017). By 2017, the Trust had introduced more than 200 animals, of which more than 50 (mainly pampas deer [Ozotoceros bezoarticus]) had been translocated, contributing to an increase in ecological integrity of the wetlands (Torres et al., 2018; 6). In 2011, the Trust constructed a breeding and reintroduction center for jaguars (Panthera onca), the missing top-predator of the ecosystem. The facility today holds five captive-bred jaguars, two cubs born in 2018 and two rescued wild-born individuals from Brazil. The latter two groups are intended for release within the next few years (CLT, n.d.-e). The outcomes of the rewilding project were continuously communicated through technical reports and scientific papers for the academia and politicians, as well as newsletters, social media, explanatory videos and brochures adapted for the press and general public (Zamboni et al., 2017).

3.1.2 Human and institutional assets

The Trust’s goals for Iberá initially appeared incompatible with regional policies, which at this time mainly focused on enhancing the extractive sector. The Trust was therefore perceived as a threat to economic development by stakeholders from local to national levels (4, 5). To enable rewilding and the gazettement of the national park, which are politically and legally complex processes, the Trust needed to gain the trust and respect of local and regional politicians as well as support from adjacent villages (7). The Trust adopted a strategy based on investments in human capital on various levels. They employed local people as area managers, provided environmental education in schools, and held workshops to enhance nature-based small and medium sized enterprise (SME). Efforts were focused on young and entrepreneurial individuals who appeared more open to new ideas. According to the Trust’s employees, the investments were intended to build local capacity and stewardship and to anchor their approaches in strategic locations and institutions (Zamboni et al., 2017; 6–9).

Staff was also hired to conduct advocacy and outreach, wielding newly developed framing strategies to justify the national park. The Trust’s concept of “Production of Nature” (translated from the Spanish Producción de la naturaleza”) is defined as “the task of promoting complete ecosystems that provide the highest benefits to society, especially local communities” (CLT, n.d.-c). It became a slogan with which the Trust could promise explicit and tangible benefits from the national park by using its natural assets to create business opportunities.

3.1.3 Cultural assets

The promotion campaign was combined with efforts to integrate elements of local culture and history into the project. The villages adjacent to the Trust’s land are defined by strong cultural identities and traditions (Seymour & Robberg, 2011; 4, 20). Many of their traditional practices are unique to Iberá, such as the modes of transportation used by hunters to access the interior of the wetland: the “canoa a botador” (a canoe steered with a long punting pole) and the “canoa con caballo” (a canoe pulled by a walking and sometimes swimming horse).

Over the last several decades, the influx of modernity and foreign customs has led to the abandonment and devaluation of parts of these cultures, including local gastronomy and craftwork (GPC, 2015b; 20, 27). Restoring and reappraising some of these cultural assets became the foundation of the Trust’s campaign “Corrientes Be Corrientes Again” (translated from the Spanish “Corrientes vuelva a ser Corrientes”), which was displayed on posters in public spaces around Iberá. Some of the posters depicted traditional activities (such as the “canoa a botador” and the local cattlemen, “gauchos,” at work) and cultural events, and some were beautiful images of ant-eaters and jaguars. The campaign connected the development of the national park to “production of nature,” biodiversity conservation, and the region’s cultural roots. It was framed as a joint endeavor to bring a more vibrant natural and cultural past, with teeming wetlands inhabited by pioneering people, into a new and more outward-facing chapter (CLT, n.d.-d). Through the campaign, villagers were supported to develop associated businesses such as boat tours, cultural walks and restaurants offering local specialities.

3.1.4 Infrastructural assets

The Trust developed the public portals to the wetlands by constructing campsites, restoring public buildings and improving roads and signage. A particular architectonic style was adopted, inspired by local construction methods and materials. The rationale was to create a template style that could be reproduced all over the region (6, 9).

The initial focus was on Pellegrini, a small settlement with around 900 residents immediately adjacent to the provincial park (Seymour & Robberg, 2011; 6, 7, 14); see Figure 1. By purchasing the land adjacent to the provincial park, the Trust was able to open up access from three other villages (Concepción, San Miguel and Ituzaingó) into the wetlands, which had previously been restricted to private landowners. As in Pellegrini, the Trust invested
in infrastructure to enable ecological management and ecotourism in the portals, but ensured that no other income-generating activities were located there. This was an explicit strategy to restrict all business and commerce (such as hotels and guide operations) to the villages, thereby benefitting local people and encouraging related entrepreneurship (6–8).

3.2 | Value-generating practices

As we have shown, the Trust made investments in all five asset categories of the Asset Framework within Iberá (see Table S3). Together with efforts from local and provincial actors, this work developed several new value-generating practices. The following section systematizes these practices within the domains of the Asset Framework.

3.2.1 | Politics and diplomacy

The rewilding and ecotourism programs have gradually increased in scale, and the support for and engagement in conservation and ecotourism in the villages has risen (Seymour & Roberg, 2011; 3–10, 14–35). This has generated political benefits on all levels, as Iberá receives growing attention as an ecotourism destination and a rewilding pioneer in international forums (Aizen, 2015; Torres et al., 2018; UNEP, 2019).

As a result, the political risk of buy-in declined and interest from local and regional politicians in the Trust’s approaches increased (Seymour & Roberg, 2011; Zamboni et al., 2017). This enabled the creation of “Committee Iberá,” a governance partnership for the development of the region that involves actors from the provincial and national governments, NGOs, and civil society (GPC, 2015b). The aims of the committee have been compiled into a strategic Master Plan for the Development of Iberá (the Master Plan), with the goal of local development based on “Production of Nature” in the 20 municipalities of the Iberá basin (GPC, 2015a). The project has open access to funding networks and relations with major international donors, which has contributed to socioeconomic development of the province (4, 9).

In 2018, after a long bureaucratic process, the Argentinian congress ratified legislation that officially gazetted the Trust’s land as a national park (APN, 2016; APN, 2017). The combined Iberá National Park and Iberá Provincial Park, referred to as the Greater Iberá Park, is now the largest PA in Argentina (see Supporting Information for a map of the donated areas and the new park). Amounting to more than 700,000 ha, it represents a major accomplishment for the Trust and forms a significant contribution to Argentina’s commitment to international conservation agendas (APN, 2016; UNEP, 2019). The new park management plan (see APN, 2017) is co-authored by the Trust and the Argentinian national park administration (APN). The plan emphasizes the importance of safeguarding both ecological integrity and local culture as a basis of nature-based local development, a framing familiar from the Trust’s strategy documents.

3.2.2 | Economy and enterprise

With the emerging profile of Iberá as an ecotourism destination, associated SME-development has increased over the last decades (Seymour & Roberg, 2011; Busscher et al., 2018; 6–9). The Master Plan includes major investments in infrastructure, electricity, museums, centers of interpretation, and local education facilities, in 2017 estimated at 1.5 billion Pesos1 (GPC, 2015a; 4). Due to Iberá’s location in relation to other national tourist destinations, Argentina’s ministry for tourism is planning to establish and promote a tourism “corridor” of national parks and cities with Iberá as its center (4). In Pellegrini, the investments have contributed to an increase from four to 39 hostels in the village in 2017, with more than 80% of the local populace directly or indirectly subsisting from tourism (Seymour & Roberg, 2011; 6, 7, 14). Although data on visitor numbers in Iberá have only been systematically collected since 2014, estimates point to a gradual increase over the last decade, surpassing 25,000 visitors in 2015 (APN, 2017). In 2018, Iberá was highlighted by the travel guide The Lonely Planet as a best value tourist destination (Butler, 2018).

3.2.3 | Everyday life

Today in Iberá, it is possible to participate in various types of outdoor recreation and cultural activities. Together with the new public access points, these activities have increased the ability of both locals and visitors to get to know and enjoy the wetlands (APN, 2017; 9, 15, 20). A consistent perception among interviewees was that the villages are changing, with ripple effects that extend beyond the tourism sector. The Master Plan’s investments in education, healthcare, recycling facilities and infrastructure are increasing the standard of living and improving connectivity and interaction among villages and nearby cities (GPC, 2015a; 4). One significant impact is a decrease in rural exodus by young people, owing to the increase in local opportunities (APN, 2017; 6, 14, 20). Several informants also reported increasing pride of Iberá
and its emerging international reputation, which increases the probability of sustained local stewardship (4, 14–16, 20–23).

### 3.2.4 Organizational and professional life

The hard manual labor associated with the productive sector (livestock, forestry and agriculture) had until 1997 restricted the formal local labor market mostly to men. The diversification of employment opportunities has therefore been significant, particularly benefiting women and young people, whose role in society has increased in importance through their role in the emerging ecotourism industry (9, 15, 20). There is a notable increase in civic mobilization, resulting in the creation of citizen associations, tourism councils and chambers of commerce in all four villages (4, 20, 21); see Figure 3.

The momentum of the project has influenced national regulation and there are now discussions about making wildlife restoration a state policy (1, 4, 5). Iberá has to some degree served as an incubator, equipping the Trust with knowledge and verified approaches that they now aim to apply in several other areas in South America (1, 8). Although the Trust is now gradually handing over their land, they will remain in charge of monitoring and managing the rewilding project until at least 2026, and many of their employees will gradually be incorporated within the new national park administration (6–8).

Another source of value generation has been the charismatic species of the rewilding program, about which the Trust disseminated engaging stories. According to NGO officials, the charisma of the animals has made rewilding easier to promote, making the Trust’s rewilding team the most successful in attracting funds and partnerships (Busscher et al., 2018; 6–10). Moreover, rewilding frequently provides positive news, since animals are continuously rescued, released and producing offspring. It thereby projects a sense of progress, which contributes to validating the ability of project managers to produce better outcomes for nature and society (Jepson, 2018).

## 4 DISCUSSION

Viewed through the lens of the Asset Framework, the Trust’s project in Iberá can provide some important lessons on how existing PAs can be expanded and ecologically upgraded, and what forms of value this may generate for their constituents. While the Trust has not officially defined their agendas according to ABCD, the narrative of eco-localism is well-aligned with the approach. The sociopolitical complexity of the area required the Trust to devote significant time and resources to understanding and creating alliances with local stakeholders. They have had to continuously adapt their rationales and attune to different types of value orientations among local and regional actors. As stated by a staff member at the Trust: “We have to say something concrete that touches people’s hearts, and sometimes their pockets” (9). We identified four key strategies through which the Trust gained legitimacy and momentum to realize their project aims:

1. **Integrating biodiversity and cultural conservation.**

   Conservation efforts often falter because they fail to engage with the history and sociocultural traditions of a place (Madden & McQuinn, 2014). However, cultures are often attuned to the dynamics of the local ecosystem, and inextricably link their practitioners to their landscape. This culturally ingrained capital can provide essential information about how nature can be sustainably managed (Dacks et al., 2019; Pretty et al., 2010). Instead of denouncing centuries of hunting and farming practices, which would have been perceived as an attack on local identities, the Trust engaged with and validated a selection of them within the project. This was essential to reconcile biodiversity conservation with local priorities and increase social receptivity to conservation goals, both in the political domain and among villagers (CLT, n.d.-a; Gavin et al., 2018; 4, 9).

2. **Making conservation comprehensible.**

   The discipline of conservation is often technocratic, with justifications that may seem abstract to laypeople. In Iberá, the rewilding program with its associated public engagement campaign proved to be an effective tool to convey the purpose and benefits of conservation and rewilding (Busscher et al., 2018; Zamboni et al., 2017). It enabled the Trust to give wildlife a public profile and create sympathy and engagement for the animals and recognition of the need to dedicate space for their survival. This was especially the case for the more charismatic species (see Lorimer, 2007): the tapirs, anteaters and jaguars (6, 8, 9).

3. **Being accountable and providing proof of concept.**

   The Trust supported Pellegrini to become a “model village” for ecotourism, with demonstrable economic benefits for its inhabitants, and continuously disseminated the positive results of the rewilding program in public and social media (see for instance CLT, 2017). These actions enabled the Trust to build both pragmatic legitimacy (meet direct needs or interests of


4. **Building on the local.**

The Trust’s work contributed to illuminating and increasing the perceived value of certain local assets while also promoting local stewardship. In combination with stronger networks for the transfer of information and experience between villages, it enhanced the prospects for sustainable livelihoods developed by the citizens themselves (Mathie & Cunningham, 2003; 6, 8, 20). The Trust thereby adhered to some of the key principles for building resilience in social–ecological systems: using local knowledge to understand and develop local ecosystems; promoting self-organization and institutional learning; and developing values consistent with system sustainability (Berkes & Folke, 1998).

### 4.1 The elusive win-win?

The Trust today has access to political networks and has become a strategic partner of decision-making bodies from the local to the national level (APN, 2017; GPC, 2015a). Iberá is an area in transition, and this transition is bringing direct and indirect livelihood improvements for its villages through upgraded infrastructure, enhanced social cohesion and diversified opportunities...
within the SME-sector; see Figure 3. However, while we have focused our analysis on the values generated by the project, we also identified a multitude of issues and challenges. Similar to concerns raised about community tourism ventures elsewhere (see for instance Lapeyre, 2010), the longevity of community benefits in Iberá may be questioned. The tourism sector is inconsistent, often with defined high and low seasons. Few business models presently exist in Iberá that do not demand an additional source of income, which thwarts entrepreneurial enthusiasm and start-ups (6, 14, 20, 29). Seasonality notwithstanding, the industry is growing, which creates a different issue: the value of land has increased, making it difficult for locals to buy property (15).

Concerns have also been raised relating to the governance of Iberá. Similar to most NGOs (see Jepson, 2005; Pasquini, Fitzsimons, Cowell, Brandon, & Wescott, 2011), the Trust needed to forge bonds with the political sector in order to navigate the complex legal frameworks in Argentina. The political sector’s approval of the Trust has to some degree come at the cost of the villages. Several informants indicated that linkages between the Committee and the local municipalities were deteriorating as the profitability of the area increased, and that the priorities of external and political actors were beginning to override local demands (15, 21, 34–36). If this trend continues, it risks exacerbating inequalities, as those who lack resources to take part in the emerging sector become further marginalized, reigniting concerns over appropriation and commodification of local assets by external actors. This issue epitomizes concerns expressed for the conservation sector as a whole, concomitant with the growing role of markets and the private sector in PA management and finance (Büscher, 2014; Smith, 2009). Studies have shown that these sectors hold great and largely untapped financial potential for conservation and rewilding, particularly within ecotourism and sustainable harvesting of natural resources (Richardson & Lefroy, 2016). However, in an unregulated market, the expectations on PAs to be profitable often compromise the ambitions of local co-management and community-run business models (Holmes & Cavanagh, 2016).

Research has highlighted that local livelihood improvement and compliance with conservation policy is enhanced by participatory decision-making, emotional motivation, and egalitarian sharing of benefits generated by conservation (Andrade & Rhodes, 2012; Czap, Czap, Lynne, & Burbach, 2015; Vedeld et al., 2016). The initial progress of the Iberá project supports these claims. As the management of the Iberá Park is passed from the Trust to the Argentinian state, the continued engagement within these areas will determine if the Trust’s vision for the wetlands will stand the test of time.

4.2 The utility of the asset framework to explore PA value generation

The case of Iberá illustrates the significance of integrated management of natural, cultural and social assets, and of acknowledging the different kinds of values derived from rewilding landscapes. This integrated approach requires managers to understand local realities and collaborate across various levels of governance, which is both time-consuming and costly. Most importantly, it requires careful framing and communication strategies, both when designing the project and when accounting for the results. The Asset Framework is a conceptual tool that can aid managers in these tasks.

In this research, the framework was deployed to explore the impacts of an ongoing restoration initiative. It proved useful to categorize the benefits and value-generating practices of the project and to structure analysis and interpretation. The strength of the framework is that it illuminates abstract and often overlooked forms of value generation, such as those within the cultural and institutional categories. This affords managers a more complete picture of PA benefits and highlights under-utilized potential or strategies which may be instrumental in achieving PA objectives. For the same reasons, the Asset Framework holds promise as a planning and decision support tool that may actively enhance value generation. It can aid in the process of deciding where and how to declare PAs, and where within the local social–ecological system investments are most needed to ensure a just provision of benefits from the area. It can moreover provide a structure for future visioning exercises, as recommended by Gamarra et al. (2019). Most importantly, the framework can support managers in the identification of local idiosyncrasies, such as customs and folklore, which could enhance their ability to form lasting local partnerships based on trust and understanding. Framing and narrating locally relevant stories about wildlife and conservation, be they cultural, economic or ecological, is a prime defense mechanism against future PADDD processes.

However, the framework is designed to evaluate assets at a given moment in time. Like other heuristic tools, it is only as good as the data that is put in, and good results are dependent on the manager’s or researcher’s ability to correctly interpret local value systems and the priorities of local people (Ostrom, 2007). When used in planning, the framework should therefore be applied in adaptive management cycles while the conceptualization of local values is co-produced with local stakeholders. For instance, a renewed analysis of the state of local assets could be conducted with local stakeholders every time the PA management plan is updated. Since it
delivers a snapshot of value generating practices, the framework should further be supplemented with analysis of trends and uncertainties that will shape the way assets are valued in the future.

The framework at present does not account for trust and legitimacy assets. As this research has shown, these are paramount for the advancement of conservation and restoration policy, as well as the social and political resilience of PAs. As described by Jepson (2005), these assets include the ability to stress cultural validity, associate with local or international goals, acquire a reputation for specialist or grounded knowledge, and represent important constituencies. We therefore suggest that a more defined inclusion of legitimacy assets within the domains of value generation would strengthen the Asset Framework, enabling managers to better consider how their actions and investments may impact local stewardship of PAs.

These points notwithstanding, our findings support that the Asset Framework can be used to restate the case for PAs and the nonmonetizable values of protecting biodiversity, throughout Argentina and globally.

5 CONCLUDING REMARKS

Achieving global conservation agendas during this new decade will be contingent on understanding how restored landscapes and nature-based economies not only maintain biodiversity, but also provide a diverse set of values for people, many of which are overlooked within the current economic paradigm.

The case study of Iberá illustrates that it is possible to build legitimacy for conservation and achieve rural development by using a place-based asset approach. The Trust for Nature’s success in Iberá is a result of using the Asset Framework to help explain how and why this was possible, by facilitating the classification and assessment of the various forms of values created by their project. Within the limitations discussed above, our findings support the use of the framework as a tool to measure progress and aid conservation planning.

In an age of unprecedented accumulation of private wealth, Iberá could provide an inspiration for how to build creative partnerships and secure new funding streams direly needed to restore, reinvigorate and expand PAs (Gavin et al., 2018; Pringle, 2017). When restoration and protection of ecosystems is harmonized with the needs and aspirations of local communities, it can generate lasting benefits and greatly increase the prosperity of both humans and wildlife populations.

ACKNOWLEDGMENTS

We would like to express our deepest gratitude to all the informants in this study for their time, flexibility and hospitality, to Jordan for support with the manuscript, and to Green Templeton College for funding the research.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Hanna Louise Pettersson was responsible for conceptualization, methodology, data collection, data analysis, drafting of manuscript, and visualization. Sergio Henrique Collaço de Carvalho assisted in validation, review, and editing of the manuscript.

DATA AVAILABILITY STATEMENT

In order to protect the anonymity of study participants according to the terms of our ethics approval, we cannot share the raw data, which may contain identifiable information.

ETHICS STATEMENT

The data collection was carried out in accordance with the ethical approval of The Central University Research Ethics Committee of University of Oxford.

ORCID

Hanna Louise Pettersson https://orcid.org/0000-0002-2347-5282

ENDNOTE

1In 2017 equivalent of close to £ 70,000,000.

REFERENCES

Andar de Parques Nacionales (APN). (2016). Parques Nacionales tomó posesión efectiva del portal Cambyréta en Iberá. Retrieved from https://www.parquesnacionales.gob.ar/2016/11/parques-nacionales-tomo-posesion-efectiva-del-portal-cambyreta-ibera/.

Administración de Parques Nacionales Argentina (APN). (2017). Plan de Gestión Parque Nacional Iberá. Retrieved from http://www.sinac.go.cr/ES/ac/aclap/pnch/Paginas/default.aspx.

Aizen, M. (2015). Argentina’s ambitious plan to restore wildlife in the wetlands. Huffington Post. Retrieved from http://www.huffingtonpost.com/entry/argentina-wetlands-wildlife_us_564219ddede4b0307ca6b041c.

Andam, K. S., Ferraro, P. J., Sims, K. R. E., Healy, A., & Holland, M. B. (2010). Protected areas reduced poverty in Costa Rica and Thailand. Proceedings of the National Academy of Sciences of the United States of America, 107(22), 9996–10001. https://doi.org/10.1073/pnas.0914177107

Andrade, G. S. M., & Rhodes, J. R. (2012). Protected areas and local communities: An inevitable partnership toward successful
protected_Planet_Reports/2445 Global Protected Planet 2016 WEB.pdf.

United Nations Environment Programme (UNEP). (2019). Return of the jaguar. Retrieved from https://www.unenvironment.org/news-and-stories/story/return-jaguar.

Vedeld, P., Cavanagh, C., Petursson, J. G., Nakakaawa, C., Moll, R., & Sjaastad, E. (2016). The political economy of conservation at mount Elgon, Uganda: Between local deprivation, regional sustainability, and global public goods. Conservation and Society, 14(3), 183–194. https://doi.org/10.4103/0972-4923.191155

Visconti, P., Butchart, S. H., Brooks, T. M., Langhammer, P. F., Marnewick, D., Vergara, S., … Watson, J. E. (2019). Protected area targets post-2020. Science, 364(6437), 239–241. https://doi.org/10.1126/science.aav6886

Watson, J. E., Dudley, N., Segan, D. B., & Hockings, M. (2014). The performance and potential of protected areas. Nature, 515 (7525), 67–73. https://doi.org/10.1038/nature13947

Yin, R. (2003). Case study research. Design and methods (3rd ed.). New York: Sage Publications.

Zamboni, T., di Martino, S., & Jiménez-Pérez, I. (2017). A review of a multispecies reintroduction to restore a large ecosystem: The Iberá Rewilding Program (Argentina). Perspectives in Ecology and Conservation, 15(4), 248–256. https://doi.org/10.1016/j.pecon.2017.10.001

SUPPORTING INFORMATION
Additional supporting information may be found online in the Supporting Information section at the end of this article.

How to cite this article: Pettersson HL, de Carvalho SHC. Rewilding and gazetting the Iberá National Park: Using an asset approach to evaluate project success. Conservation Science and Practice. 2021;3:e258. https://doi.org/10.1111/csp2.258