



Review of methods for assessing the social impacts of conservation

Helen Suich and Neil Dawson



INTERNATIONAL UNION FOR CONSERVATION OF NATURE



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Executive summary

There are a variety of methods, approaches and tools that can be used to investigate different impacts on people arising from conservation activities, regardless of whether they are implemented in protected areas, community conservation areas or via other conservation interventions. However, it can be difficult for practitioners to select and design the most appropriate approach to suit their needs and to contribute to existing governance arrangements.

This report first reviews the available methods, tools and approaches that have been designed to assess and document the social impacts of conservation interventions, and second, offers guidance for practitioners on good practice for designing studies and facilitating processes for such assessments. The focus of this report is on tools that can be used for assessing ex post impacts – i.e. after commencement of intervention – whilst recognising that good project design incorporates social impact assessment activities from the outset.

In this report, social impacts refers to the full range of economic, social, cultural, political, environmental and psychological impacts on people whose lives are connected in some way to the ecosystem, biodiversity or place in question, including but not confined to Indigenous Peoples and local communities.

In order to find the widest range of material possible to review, the literature search included four steps: (i) a search of the scholarly literature; (ii) a search of the grey literature; (iii) a snowball sample; and (iv) a request for information from the CEESP membership via the listserv (see Section 2). The reviewed papers were assessed across a number of categories including, but not limited to, the impact domains covered, whether assessed impacts were positive and/or negative, whether intended and/or unintended consequences were assessed, the distribution of impacts, whether the approach enabled disaggregated data analysis and the required resourcing (see Section 3).

A review of empirical papers assessing the social impacts of conservation initiatives was also conducted, and highlights the very partial nature of a majority of published social impact assessments (see Section 3.1). Few of the reviewed papers considered more than two or three different domains of impact, with a strong emphasis on economic and psychological domains, the latter associated with the increase in measurement of perceptions. In exceptional cases, studies justified their selection of domains explicitly and well, though rarely were these choices made with the involvement of local people/people impacted by the initiative, and few studies explicitly discussed ethical conduct.

This report reviews seven approaches to social impact assessment (Section 4), and in order not to duplicate other papers, summarises and links to papers and reports that review other appropriate

approaches. In the analysis and guidance presented, it is important to distinguish between Social Impact Assessment (SIA) the initiative, for which principles and methodological guidance have been developed, and the phrase ‘social impact assessments’ commonly used to describe approaches and efforts to assess social impacts.

Section 5 provides guidance on key issues that are critical to the design of good practice social impact assessments, with aspects selected for emphasis because of their significant impact on the quality and content of an assessment, and because they are often afforded insufficient attention in methods documentation, and are poorly integrated (or not integrated at all) in empirical studies. Three good practices are emphasised (Section 5.1), because while papers describing assessment methods note their importance in enabling an informative, inclusive and accountable social impact assessment, they appear to be infrequently implemented in published assessments. These are the practices of ensuring meaningful community participation and ethical conduct, ensuring an appropriate and informed design, and giving attention to the three aspects of equity: recognition, procedure and distribution.

This report also provides guidance on designing a social impact assessment (Section 5.2), selecting appropriate methods and good practice principles to be followed throughout the assessment process. Good design requires ample consideration be given to specifying the questions that are to be answered by the assessment, to identifying an appropriate assessment framework and approach to explore those questions, and instigating effective assessment procedures and interactions, including integrating with site-level governance and involving stakeholders. The empirical review suggests these design questions have often been treated superficially, and often implicitly, in assessments to date. Rather than relying on standardised toolkits to prescribe the scope and methods for any conservation social impact assessment, the framework, the domains to be assessed and appropriate data collection tools should be determined through deliberative discussions. Notably, empirical studies and assessment reports seldom provide adequate justification for the choices made, including why certain issues and potential impacts have been excluded (for example, cultural practices, customary governance systems and rights are often overlooked), and why those selected were prioritised.

Adherence to good practices and mainstreaming of robust and informative social impact assessments within conservation decision making are important to support progress towards better and more equitable governance. High quality, integrated social impact assessments are also a potentially crucial pathway to enhance accountability for social standards in conservation, particularly in the context of the rapid expansion of conservation initiatives that has been enshrined in the Global Biodiversity Framework targets for 2030.

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Acronyms

CCB	Climate, Community and Biodiversity Standards
FFI	Fauna and Flora International
FPIC	Free, Prior and Informed Consent
ILSMPs	Indigenous Land and Sea Management Programmes
IWAT	Integrated Wetlands Assessment Tool
MPAs	Marine Protected Areas
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SAPA	Social Assessment of Protected and Conserved Areas
SBIA	Social and Biodiversity Impact Assessment Manual for REDD+ Projects
SIA	Social Impact Assessment
SPECCS	Standardised Protocol for Evaluating Community Conservation Success
TALC	Toolkit for Assessment of Landscape Conservation

1. Introduction

There are a wide variety of methods, approaches and tools available that can be used to investigate different aspects of the range of social impacts on people arising from conservation activities, whether they are implemented in state protected areas or community conservation areas, restoration activities or any other conservation interventions. Although the same methodology is unlikely to be appropriate or practical for all impact assessments – different approaches are needed to suit different objectives, scales and circumstances – there are certain criteria and principles which are common to all forms of social impact assessment, and some to conservation efforts more specifically.

Previous reviews of social impact assessment practices in conservation have revealed both methods and their application to be disparate, with many constructed from scratch at a site, for a programme or organisation. Studies reviewing multiple assessments have also noted that conservation social impact assessments still have much to learn from standards and methodologies applied outside conservation (see Roe et al., 2013), and for this reason, some key references from outside conservation are utilised in this review.

As social and political norms around conservation practice evolve, it is important to periodically review how they are incorporated into assessment approaches and how lessons are subsequently fed back into conservation decision making. Conservation policy and practice has recognised the importance of social impacts for decades, with their prominence rising in the 1980s and 1990s with the shift towards integrated conservation and development, alternative livelihoods and poverty alleviation programmes that worked alongside conservation initiatives (Ghimire and Pimbert, 1997; Hulme and Murphree, 2001; Berkes, 2007). Conceptual frameworks, such as sustainable livelihoods, and social research methods, such as participatory rural appraisal, sought to uncover new levels of social complexity and diverse perspectives, as well as building understanding of social heterogeneity, vulnerability and the distribution of interventions' costs and benefits.

The form and characteristics of the social objectives of conservation policies and programmes has further advanced since the early 2000s, going far beyond the simple identification of material costs and compensating with benefits, and viewing social impacts as outcomes that could be directly managed. Social aspects of conservation now centre on rights, equity and associated principles of good governance, being inclusive and respectful of diverse stakeholders and rightsholders (Franks et al., 2016; Gill et al., 2019). Those standards now relate to transparency, accountability, free prior and informed consent, full and effective participation, recognition of and respect for cultural identities, knowledge systems and customary institutions of Indigenous Peoples and local communities (Schreckenberg et al., 2016). Indeed the principles identified as specific to Social Impact Assessment (SIA) incorporate these more recent changes, as can be seen in Box 1. It is important to note the distinction between SIA as a specific approach described in detail in

Section 4.1, and the use of the phrase 'social impact assessment' which refers generally to the range of approaches designed to assess social impacts.

Furthermore, contemporary site-level conservation initiatives are often complex, involving multiple public, private, civil society and local community actors. Rarely do they comprise a single initiative for protection, restoration or sustainable use, with distinct and specific social objectives. Conservation interventions more often involve conservation- and biodiversity-oriented actions and a mix of 'development' activities with overlapping aims and responsibilities, and interrelated decision-making processes and subsequent impacts (Game et al., 2014). Approaches to the assessment of social impacts must therefore build from frameworks that are capable of addressing these interrelations.

As policy commitments have been made to an unprecedented expansion of conservation efforts globally (Geldmann et al., 2021), approaches to the assessment of social impacts must be afforded appropriate standing. Contemporary social standards and objectives have frequently been committed to in conservation policy and programme designs, but are more rarely actively adopted on the ground, creating a conspicuous and contentious gap (Tan, 2021). Given the acknowledged role of conservation interventions in displacing Indigenous Peoples and local communities over centuries as part of colonial, postcolonial and neoliberal political structures (Suich et al., 2009; Holmes and Cavanagh, 2016). It is imperative that future initiatives to address biodiversity loss do not impose further burdens on Indigenous Peoples and local communities and reproduce such injustices. Well designed social impact assessments, that are integrated in to programme design, implementation and governance processes, have a key role to play in identifying potential social impacts, and in avoiding or minimising negative impacts and maximising positive ones.

Assessments also have the potential to shine a light on the importance of – and encourage action towards – more equitable approaches that recognise and respect rights. This report therefore reviews methodologies, methods and tools designed to assess and document the social impacts of conservation activities, and consolidates information from earlier reviews. Section 2 describes in detail the search methods used to find approaches to the assessment of social impacts for inclusion in the review, and describes the basic categories of analysis. Section 3 provides a summary of review papers and a rapid review of empirical studies. Section 4 provides a synthesis of each of the identified approaches for assessing social impacts (excepting those approaches that are well documented elsewhere).

However, ultimately, an understanding of social impacts is important to improve the design and adaptive management of conservation initiatives (see Kaplan-Hallam and Bennett, 2018), to respond to local people's needs (Indigenous Circle of Experts, 2018), and to meet conservation objectives. Thus, guidance is also provided in Section 5 on good practices and design decisions for impact assessments, in order to ensure practitioners are able to select the most appropriate method(s) to assess the social impacts of conservation interventions, taking into account site-level context. Drawing on both the review of these approaches and the empirical studies, three key good practices (Section 5.1) and six key steps to design a quality assessment (Section 5.2) are emphasised. The selection of these aspects was centred on ensuring assessments produce high quality output, rather than focusing on process-related steps. Section 6 summarises and concludes.

Box 1 – Social Impact Assessment-specific principles *Source: Vanclay (2003)*

Twelve principles have been identified that are specific to Social Impact Assessment (SIA) and highlight the importance of the consideration of social impacts from the design stage, all the way through project implementation, and the respect for, and active involvement of, affected populations. While these principles are specific to SIA, which focused initially on infrastructure and development projects, they are also relevant to other methods of assessing social impacts, and to other assessment contexts, including conservation.

The SIA principles are that:

- 1 Equity considerations should be a fundamental element of impact assessment and of development planning;
- 2 Many of the social impacts of planned interventions can be predicted;
- 3 Planned interventions can be modified to reduce their negative social impacts and enhance their positive impacts;
- 4 SIA should be an integral part of the development process, involved in all stages from inception to follow-up audit;
- 5 There should be a focus on socially sustainable development, with SIA contributing to the determination of best development alternative(s) – SIA (and environmental impact assessment) have more to offer than just being an arbiter between economic benefit and social cost;
- 6 In all planned interventions and their assessments, avenues should be developed to build the social and human capital of local communities and to strengthen democratic processes;
- 7 In all planned interventions, but especially where there are unavoidable impacts, ways to turn impacted peoples into beneficiaries should be investigated;
- 8 The SIA must give due consideration to the alternatives of any planned intervention, but especially in cases when there are likely to be unavoidable impacts;
- 9 Full consideration should be given to the potential mitigation measures of social and environmental impacts, even where impacted communities may approve the planned intervention and where they may be regarded as beneficiaries;
- 10 Local knowledge and experience and acknowledgment of different local cultural values should be incorporated in any assessment;
- 11 There should be no use of violence, harassment, intimidation or undue force in connection with the assessment or implementation of a planned intervention;
- 12 Developmental processes that infringe the human rights of any section of society should not be accepted.

2. Methods used in this study

In order to find the widest range of material possible, a literature search was undertaken involving four steps. The first was a search of scholarly literature, followed by a search of the grey literature, both of which were supplemented by the use of ‘snowball sampling’ and a request for information that was circulated to the CEESP membership via its listserv in October 2021.

A comprehensive search of journal articles, books and book chapters was undertaken using the search terms described in Table 1. These terms were used to search the [Web of Science](#) and [Scopus](#) academic journal databases, based on title, abstracts and keywords. A more purposive search of the grey literature was then undertaken, using a ‘generic’ Google search, in addition to searching the websites of 19 key international conservation organisations, research organisations, think tanks and other relevant organisations (see Appendix 1 for the list). Once these two searches were complete and the documents found added to a library, the third step was snowball sampling – identifying and adding key sources from the reviewed publications.

Once the searches were complete, the documents added to the library, and duplicates removed, the remaining papers were subject to a two-stage screening process. The search identified a total of i.e. 1,730 and 145 papers from the scholarly and grey literature, respectively, with approximately 154 duplicates removed. The first stage of screening involved excluding papers that were not considered to be relevant based on a reading of their title and abstract, after which, 177 and 127 papers from the scholarly and grey literature, respectively, remained. The second stage involved reading through the whole of the paper and determining (finally) its relevance and therefore inclusion. At the end of this process, 83 papers were reviewed (61 and 22 papers from the scholarly and grey literature, respectively), 47 were included in the assessment of methods, and 36 were included in the empirical review. The seven assessment approaches identified during the review process are described in Section 4 (excluding those already included in other reviews of social impact assessment approaches, for example, Schreckenberget al., (2010)).

Both stages of screening used the same criteria, and excluded documents for one or more of the following reasons:

- Documents that were not written in English;
- Documents that did not describe approaches to assessing actual social impacts. Despite recognising that they may include tools that could be adapted to suit impact assessment, this meant several categories of documents were excluded:
 - Documents that did not describe an approach to assessing actual, or ex post, social impacts or an empirical study, but instead described only general approaches to conservation planning, or only highlighted potential future impacts deemed to be of highest relevance (for example, conservation planning, standards and protocols);
 - Documents that described landscape assessment approaches, or approaches to determine linkages between people and nature and people’s use of nature (i.e. resource use, resource management practices), without considering implications for categories of social impact to assess or methods for their assessment;
- Documents that did not describe conservation interventions (for example, those related to regulatory measures dealing with energy efficiency, waste management, invasive species and similar, or that assessed the impacts of resource-based activities including marine fisheries, mining, agriculture or tourism);
- Documents dedicated to monitoring and indicator selection (this is a necessary but not sufficient step in the assessment of social impacts);
- Documents describing management effectiveness assessment methods or ‘single domain’ assessments (for example, those dealing only with economic valuation or with governance systems).

Table 1 – Terms used in the scholarly literature search

	AND	OR	AND	OR
Conservation		Method Evaluation Assessment Appraisal Tool* Approach*		Economic impact Social impact Political impact Environmental impact Psychological impact Poverty impact Well-being OR wellbeing impact Livelihood impact Socio-economic OR socioeconomic impact Non-material impact

Source: Compiled by the report authors.

'Toolkits' developed by conservation organisations were included because they provide a package that delivers some combination of a framework, methods and data collection tools. These toolkits are often freely available online, not hidden behind a paywall, as can be the case for approaches described in scholarly journals. Toolkits are often viewed as 'cheaper' (and simpler) because they include data collection tools, reducing the time investment and skills required to develop good quality tools. However, they can neglect to describe the conceptual or analytical framework used in the development of the toolkit, limiting users' full understanding of how and why choices have been made in the design stage.

In the literature reviewed, there is frequent confusion in the terminology of methodology, methods and tools. A methodology is the 'complete package' of the conceptual or analytical framework, the research design, the selection of methods to be used and an assessment process that links those methods. A method typically refers to the form of the data gathering or analysis activity, for example, focus group discussions, semi-structured interviews, surveys or participatory rapid appraisal methods. Finally tools are the specific instruments used to collect data appropriate to the method selected, for example a household survey instrument, a semi-structured interview protocol, etc. (Schreckenberg et al., 2010; Franks et al., 2018). The term 'approach' is used in this paper because of the mix of methodologies and methods reviewed. Social impacts in the context of this report refers to the full range of economic, social, cultural, political, environmental and psychological impacts on people whose lives are connected in some way to the ecosystem, biodiversity or place in question, including but not confined to Indigenous Peoples and local communities.

There are several broad approaches to the design of impact assessments, such as those that are experimental (including 'counterfactually-based' designs that require some kind of comparison between exposure and non-exposure to the intervention) and those that are theory-based (which can be further distinguished in to pre-existing theory, explicit programme theory and grounded theory) (Stern, 2015). Experimental (randomised) and non- or quasi-experimental approaches are largely quantitative approaches based on statistical comparisons or using statistical methods to simulate the counterfactual. These approaches are less well suited to answering questions that first require the identification of the social impact domains affected by an initiative, and are more appropriate for generating quantitative answers regarding whether impacts identified can be attributed to the intervention and/or whether it made a 'difference'. Ferraro and Hanauer (2014) provide an [overview of experimental designs](#) (including randomisation), conditioning designs (including matching and regression methods) and the use of instrumental variables and discontinuity designs.

Most approaches discussed here fall within the scope of a theory-based design, though typically focus less on pre-existing theory and more on explicit programme theory or grounded theory. These approaches typically answer questions related to how the intervention has made a difference and whether it is likely to work elsewhere, and often, though not always, take a mixed methods approach¹.

The reviewed conceptual and methods papers were assessed across a number of categories. Determining which impact domains are assessed was of primary importance, and followed the categories of social impacts used in SIAs – environmental, economic, social, cultural, political (including governance), psychological (including perceptions), health and wellbeing, and livelihoods, as defined in Box 2.

The extent of the impacts assessed was determined, including whether the approach described was able to identify and assess direct, indirect, implied and unintended or unforeseen impacts. The direction of impacts (i.e. whether they were positive or negative, or both) was recorded.

The review also determined whether the approach assessed the distribution of impacts amongst different social groups, particularly women and other vulnerable groups. Approaches were also characterised according to their identification of the groups for whom impacts are assessed – whether for individuals, households, natural resource user groups or some aggregate level of community, region or other scale, and whether the approach recommended or required the collection of disaggregated data based on these characteristics.

The categories used to code the reviewed empirical papers found in the search (and reviewed separately) were the same as for the review of methods and approaches, with additional exclusion criteria, limiting the papers to those describing conservation initiatives implemented in low and middle income countries.

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¹ There are four distinct mixed methodology designs – triangulation, embedded, exploratory and explanatory – which differ in the way the qualitative and quantitative aspects interact and/or inform. (For a detailed definition of the different types of mixed methods approaches, see Clarke et al., 2008 cited in Idrobo et al., 2016.)

Box 2 – Social impact domains used and defined in the SIA approach *Source: Vanclay et al. (2015)*

The SIA approach identifies social impacts as changes to any of the following ‘impact domains’:

Environment – including air and water quality; availability and quality of food; dust and noise hazards or risks; adequacy of sanitation, physical safety, and access to and control over resources (though the latter is categorised as political in this study).

Economic – including personal and property rights, particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties.

Social – including community cohesion, stability, character, services and facilities.

Cultural – including shared beliefs, customs, values and language or dialect.

Political – including the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose.

Psychological – including people’s fears and aspirations, their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

Wellbeing – including people’s health and wellbeing – health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity.

Livelihoods – including how people live, work, play and interact with one another.

3. Reviews of assessments of social impacts and empirical studies

Several studies are referenced heavily throughout this paper, in particular Schreckenberg et al.'s review of rapid methodologies for the social assessment of conservation initiatives (2010), Woodhouse et al. (2016), which provides guidance about the process of designing social impact evaluations and Vanclay et al. (2015) which provides guidance specifically on the SIA approach. A number of additional key review papers were identified during the literature search and are summarised below.

As part of a protocol for systematic mapping, Bottrill et al. (2014) synthesised the state and distribution of evidence linking conservation and human wellbeing, and used a theory of change approach to identify the causal linkages between conservation and human wellbeing. Roe et al. (2013) focuses on providing an overview of the trade-offs between rigor and practicality in different approaches to social impact assessment. As part of a series of lessons learned from reducing emissions from deforestation and forest degradation (REDD+) projects implemented by Fauna and Flora International, (2014) discusses the implementation of the SIA approach in that context. Jones et al. (2017) identify directions to assist in designing effective tools to understand and measure social impacts, and address issues of displacement, power and human rights explicitly. One paper focused solely on quantitative approaches, and Ferraro and Hanauer (2014) provides a detailed review of experimental and quasi-experimental designs and discusses these in the context of improving environmental programmes. Data collection methods for assessments capturing wellbeing impacts are a focus of de Lange et al. (2016), which also discusses study design and attribution.

Several review papers focused on indicators – even if that was only part of the objective – including an unpublished study that reviewed existing indicators and methodologies that could be used to assess the human impact of protected areas, largely reflecting poverty–environment linkages (Giuliani, 2007). Turrall and Studd (2009) synthesised good practice, frameworks and methodologies that aimed to identify and understand changes in people's lives and livelihoods (specifically by identifying frameworks used and developed by agencies focused on international development), which was particularly relevant to the design of monitoring and evaluation systems. Homewood (2013) focused more specifically on socio-economic monitoring of conservation, and includes discussion of the main challenges of monitoring such impacts. More recently, Corrigan et al. (2018) analysed indicators relating to social impact and wellbeing (with specific attention to local communities and Indigenous Peoples' contexts), specifically those that have been used in protected area effectiveness tools, while Bennett (2016) presents evidence on the use of perceptions to improve conservation, as an alternative to quantitative studies that can be expensive and complicated.

Finally, several reviews of the empirical literature have also been conducted, each with their own angle of interest. Holmes and Cavanagh (2016) reviewed case studies of neoliberal conservation projects to identify patterns and trends in social impacts, and which deals more explicitly with issues of power, conflict and contestation than most other reviews. The empirical literature on the social and environmental impacts of government-controlled protected areas and conservation concessions in South America was reviewed by Schleicher (2018), while the literature about social impacts of European protected areas was reviewed by Jones et al. (2020), which also highlights new directions for current policy frameworks in the region. Smallhorn-West et al. (2020) reviewed and synthesised evaluation studies from the South Pacific relating to marine protected areas, and Ma et al. (2020) reviewed cases from Asia, Africa and South America assessing the conservation effectiveness of nature reserves and national parks, thought examining only positive impacts.

3.1. Empirical studies included in the review

Within the papers identified for inclusion as part of the methods review, a total of 36 papers were identified as conducting some kind of assessment of social impacts of conservation initiatives in low and/or middle income countries, and an overview of these is provided. All of the reviewed papers were published since 2006, the bulk of them since 2014, and all but one were scholarly publications (i.e. published in academic journals).

As noted above, these empirical papers were coded using the same categories as the review of methods and approaches. Figure 1 illustrates the domains that were explicitly stated as being considered in the empirical social impact assessments reviewed, including environmental impacts.

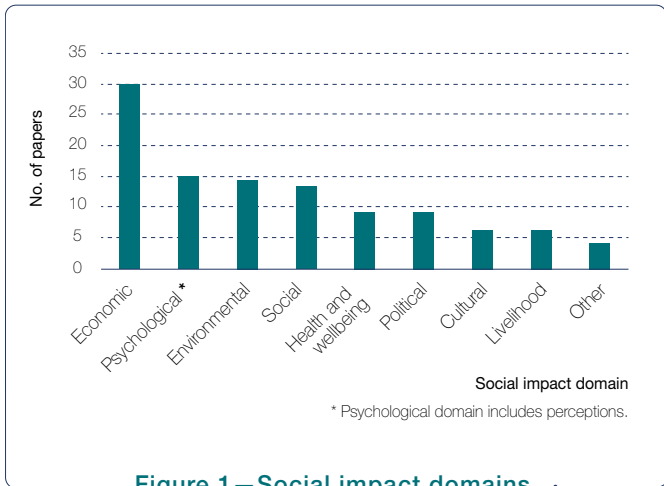


Figure 1 – Social impact domains assessed in reviewed empirical studies

Source: Compiled by the report authors.

It can be seen that around two-thirds (64%) of the papers assessed impacts on three or fewer domains, and that the 8% of papers (three) that appear to have covered all domains, in fact describe the potential of the methods to identify impacts on any or all of the eight domains, depending on context. Just over half (56%) of the studies stated that they were examining both positive and negative impacts; the remainder did not state explicitly the direction of the impacts being considered. Table 2 shows the number of domains covered by each of the reviewed papers.

Table 2 – Number of social impact domains assessed in reviewed empirical studies

No. of domains assessed*	No.	%
8	3	8.3
7	1	2.8
6	0	0.0
5	5	5.6
4	4	19.4
3	11	27.8
2	10	30.6
1	2	5.6

* The domains assessed were those listed in Figure 1 excluding 'other'

Source: Compiled by the report authors.

In approximately 71% of the empirical studies, the variables measured were selected by the researchers or authors.² Local people were involved in approximately 10% of cases, with local institutions/organisations involved in a further 7%, a mix of stakeholders in 7% of cases and other combinations in 5% of cases.

Given the importance of understanding issues around equity, and the distribution of positive and negative impacts, it is perhaps surprising that so few studies utilised disaggregated data, with almost three quarters of the papers (72%, or 26) not doing so. Five papers disaggregated by wealth or income, while only three disaggregated by gender and three by age.

Not one of the papers explicitly stated that they were dealing with indigenous knowledge systems, and very few discussed explicitly any ethical protocols that were followed (or required).

The methods sections described more practical aspects of their studies more explicitly, and often in greater detail than their conceptual or methodological approach (the latter being described specifically in 10 papers). The selection and justification of data collection methods was perhaps the most comprehensively discussed. 33% of studies used surveys, 28% used interviews (semi-structured or structured), and 11% used focus group discussions. Other participatory methods were used by 7% and participant observation was used by 6%. Two studies (3%) used participatory rural appraisal/rapid rural appraisal, while one did not specify, and 11% used 'other methods'. 91% of papers used data collection tools that were designed specifically for the study being described, with only approximately 6% using 'standardised' tools (such as the basic necessities survey) or standardised tools with modifications. Seven in 10 studies used primary data only, and almost three in 10 utilised both primary and secondary data (and for one paper, the data source was not specified).

Studies used exclusively qualitative data in just 14% of the papers, and exclusively quantitative data in one third (33%), as can be seen in Figure 2. Half of the papers (50%) used mixed methods, reflecting a growing trend for combining methods for more informative assessment of impacts. One paper did not specify their use of qualitative, quantitative or mixed methods approaches in the methods section of the paper – a significant oversight. As studies of poverty have revealed, different methodological choices can lead to potentially divergent understandings of social impacts and their drivers being generated from the same communities (Dawson, 2015), so it is surprising that 15 out of the 18 mixed method studies did not specify the type of mixed methods utilised (i.e. whether a triangulation, embedded, exploratory or explanatory approach). The three that did, all used a triangulation approach, employing qualitative and quantitative methods concurrently (to provide potentially complementary insights). However, triangulation does not integrate them strategically to adapt to, and build on, one another. The importance of the way in which methods are selected and combined cannot be overstated and is discussed further in Section 5.2.3.

From this overview, it can be seen that the bulk of empirical papers are not comprehensive in their coverage, with their approaches and methods often relatively poorly explained and justified. However, four papers in particular were more clear about their approach, and are summarised below to highlight good practices in their design, in their application, and/or in the use of the information derived from the assessment.

Steadman (2021) assessed perceived changes attributed to the Atlántida seascape in Honduras, encompassing three well-established marine protected areas and the non-legally

2. In several cases, those responsible for measure selection were not explicitly identified, and it is assumed in these cases that the researchers/paper authors were responsible.

managed waters between them, using the 'most significant change' method. The assessment looked at the breadth of changes across any wellbeing dimension when answering the question of 'what are the most significant [positive or negative] changes you have experienced through the seascape project in the past 2–5 years?'. The questions focus on the most significant change, meaning the most material and visible impacts are emphasised, whereas non-material resources and intangible aspects of wellbeing such as cultural values and trust are likely to be understated. The analysis considers causal mechanisms, based on exploring people's perceptions of causes, and is strong in analysing relationships among variables and including environmental links either causing or caused by social change. Participatory evaluation methods have the dual benefit of encouraging iterative, collaborative and adaptive project management (i.e. through shared lesson learning) and being driven by 'perceptions of intervention beneficiaries', thereby requiring minimal baselines or counterfactuals (Woodhouse et al., 2016). However, a weakness of this analysis is that it is not disaggregated and does not explore social differentiation.

Allgood et al. (2019) assessed nine community based wildlife conservation projects, using the framework of the Government of Bhutan's Gross National Happiness index, to systematically identify wellbeing factors through a community-driven method. By using this framework with an holistic approach to the impact dimensions incorporated, cultural impacts, governance and customary institutions were included, and did not rely on local participants identifying these, reducing the chance they would be overlooked in favour of more tangible, material impacts. However, while the approach was useful in obtaining an overview and assessment of the planning processes for the projects, it was only able to generate a superficial level of understanding. While the study showed that five dimensions – community vitality, good governance, psychological wellbeing, cultural diversity and resilience, and time use – were infrequently explicitly included in planning, it provided several examples of how incorporating each of these dimensions in planning and implementation led to positive conservation outcomes and project sustainability, implying that excluding those factors can compromise the ability to meet conservation objectives.

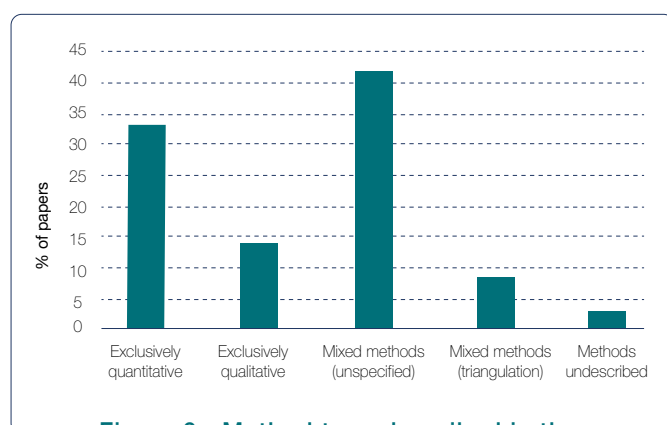


Figure 2—Method type described in the empirical studies reviewed (% , n=36)

Source: Compiled by the report authors.

Larson et al. (2020) is highlighted because of its focus on Indigenous Peoples, and on allowing local communities to identify impacts of importance (though the study is from Australia, a wealthy nation compared to the other empirical studies reviewed). This assessment used a wellbeing impact evaluation approach, and was a broad exploratory study, open to impacts on multiple dimensions being identified. 'Yarn-ups' (interviews) were undertaken with Indigenous participants from communities involved in Indigenous land and sea management programmes (ILSMPs). These prioritised wellbeing aspects that were perceived to be important to individuals' personal wellbeing, identified whether these aspects were impacted on by ILSMPs (or not), and determined changes in satisfaction with these aspects over time. This self-definition has implications for the potential of ILSMPs to improve local communities' wellbeing, by highlighting which aspects are of most importance and adapting the design and implementation to improve the benefits associated with them.

Gurney et al. (2015) employed a quasi-experimental methodology to assess socioeconomic impacts of marine protected areas (MPAs) in Sulawesi (Indonesia), specifically seeking to disentangle different drivers of change and ascertain, in the face of considerable complexity, whether the MPAs had contributed to poverty alleviation. The authors utilised the 'difference-in-difference method' to analyse changes and patterns over 15 years (spanning pre-, mid- and post-MPA implementation). The analysis compared four project villages with four control villages, and disaggregated results by age, religion and gender within the villages. The indicators of wellbeing and poverty were not determined by communities, but were based loosely on a World Bank framework for multidimensional poverty, and comprised dimensions of security, opportunity and empowerment. The analysis was able to detect short-term poverty alleviation impacts in project villages during implementation of the MPAs relative to control villages, and to determine that those positive effects weakened after external support ceased. This was an informative finding for donor organisations and partners, elaborated on in Gurney et al. (2014). Semi-structured interviews were also conducted to triangulate and provide complementary understanding of social and institutional dynamics behind the changes in poverty indicators. However, the assessment could have been further nuanced through greater integration of qualitative methods, either to provide initial exploratory insights to contextualise the questions posed, or to subsequently reveal local perspectives to provide explanatory detail to complement some of the ambitious quantitative research.

4. Approaches used to assess the social impacts of conservation initiatives

There are several important papers that review a subset of social impact assessment methods, especially Schreckenberg et al. (2010) and Jones et al. (2017) and others summarised in Section 3. In order to build on rather than replicate these reviews, where approaches have been included in other papers, a description of what is reviewed elsewhere is provided, and readers are recommended to seek details (using the provided links) in the original documentation (see for example Box 3). This section therefore describes the seven remaining approaches in detail.

Excluding approaches already reviewed, those found in this search have largely been developed in the past decade and, with the exception of SIA, have been developed by conservation organisations. The strengths and weaknesses of the reviewed approaches are summarised in Section 4.8, and information on the financial resourcing required is collated in Section 4.9.

The approaches are presented in alphabetical order, except for SIA which is presented first, given the use this review has made of the 'impact domains' drawn from SIA, the attention given to the good practices of the approach in Section 1, and its direct or indirect influence on several of the subsequent approaches.

4.1. Social Impact Assessment³

SIA is an overarching approach that assesses all impacts on humans and their interactions with their socio-cultural, economic and biophysical surroundings. The approach is designed to be applicable across the life of a project – from project identification through implementation and project closure – and has not been designed specifically for conservation. It is relevant because of its guidance in the identification and monitoring of social impacts of interventions, and it can be utilised after project implementation has begun. However, the approach is ideally implemented from the project development stage, and as such is able to establish potential impacts, and incorporate appropriate mitigation or avoidance measures. This early integration can provide an explicit framework for monitoring and evaluation, which may also help in the identification of any unintended and/or unanticipated impacts.

SIA aims to capture all social impacts, and so covers all domains and the linkages and interactions between them. Box 2 describes how social impacts are understood within SIA (and was the basis for their categorisation into domains for this study). It should be recognised that there are overlaps between them, and the domains are not mutually exclusive, for example, between the 'economic' and 'livelihood' domains.

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3. This section draws on information in Vanclay (2003), Vanclay et al. (2015), Climent-Gil et al. (2018) and Vanclay (2020).

Box 3 – Social assessment of conservation initiatives. A review of rapid methodologies, Schreckenberg et al. (2010)

The purpose of this paper was to help fill a gap identified in the availability of standardised methods to rapidly assess the social impacts of protected areas. It reviewed a range of tools, methods and methodologies used for assessing social impacts in order to inform a more standardised process of methodology design – that is to use a 'standardised decision-making process to design locally appropriate assessment methodologies' (p.ix).

For each of the approaches reviewed, the authors provide a summary of its objectives, how it is used, what is assessed, potential scales of assessment, level of differentiation possible, how attribution is assessed, who has used it, feasibility issues, main merits and main disadvantages and key references

Of particular relevance are the summaries of the approaches reviewed including:

- appreciative inquiry
- the basic necessities survey
- committee on sustainability assessment
- comparison group approach
- coping strategies index
- household livelihood security assessments
- landscape outcomes assessment methodology
- matched method approach
- most significant change
- outcome mapping
- participatory economic valuation
- participatory impact assessment
- participatory impact pathways analysis
- poverty–forests linkages toolkit
- protected areas benefits assessment tool (since updated to PA-BAT+)
- quantitative participatory assessment
- rapid social impact assessment, the CARE/IUCN/AFW variant and MPA-poverty reduction variant
- socio-economic assessment toolbox and
- the global socio-economic monitoring initiative for coastal management.

These summaries can be found in Appendix 3 of the report. The report was an output of the Social Assessment of Protected Areas Initiative, which subsequently developed the social assessment of protected and conserved areas described in Section 4.4 of this report.

SIA examines direct and indirect impacts, and allows for information on unintended consequences to emerge. The approach examines both positive and negative impacts, focusing on enhancing benefits from project activities, while still identifying and mitigating negative impacts, rather than trying to determine a 'net' impact. Indeed this is identified as an important distinction of SIA from environmental impact assessment.

The distribution of impacts in SIA is discussed in part as impact equity, 'the notion that the impacts in a society or of a project should be shared in an equitable manner, at least that there should be consideration given to the fair distribution of negative and positive impacts' (Vanclay et al., 2015, p.85). There is potential for any group to be affected, and in particular, gender analysis is essential to understand how men and women are differentially affected (see also Götzmann and Bainton, 2021). The selection of measures will depend on who conducts the SIA, but they are ideally co-developed with stakeholders, and particularly rightsholders, and the guidance recommends that some indicators are disaggregated to build understanding of the different issues faced, in particular by women and vulnerable groups.

4.2. Integrated Wetlands Assessment Tool⁴

The Integrated Wetlands Assessment Tool (IWAT) investigates links between biodiversity, economics and livelihoods in wetlands. Although it does not set out to assess social impacts of conservation interventions, the types of data collected would allow better understanding of the livelihood and valuation implications of changes to resources that may occur through conservation interventions. It was designed specifically for use in wetlands, however, with some modification of the data collection tools, and by following the high-level approach, IWAT could be adapted for other ecosystem types.

The impact domains assessed are environmental, economic (in terms of generating an economic valuation of ecosystems, aiming to make those goods and services directly comparable with other sectors of the economy) and livelihoods (livelihood status, patterns and strategies of wetland-dependent individuals and households, and how these are changing over time, particularly for poor households). There is some coverage of the political domain with respect to consideration given to the institutions affecting livelihoods, and specifically of natural resource management.

IWAT explicitly examines direct and indirect impacts and the interactions between them, but because it is not specifically an impact evaluation approach, it does not explicitly address unintended consequences.

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4. This tool was developed by IUCN, and this section draws on the information provided in Springate-Baginski et al. (2009). This assessment tool is included for three reasons: (i) the tool can be adapted to suit an impact assessment (though not designed for that purpose); (ii) it explicitly focuses on the poorest; and (iii) it adopts an ethical approach.

Though the valuation exercise explicitly covers both costs and benefits, the overall approach does not determine the net impacts – because of its focus on examining linkages rather than impact evaluation. However, its focus on the poor (see Table 3) means that the distribution of costs and benefits are examined, at least in part.

4.3. Toolkit for Assessment of Landscape Conservation⁵

The Toolkit for Assessment of Landscape Conservation (TALC) is an approach to conducting a landscape-level assessment of progress in implementing conservation programmes. Broadly, it is a tool to assess effectiveness at the landscape level, but it does incorporate some assessment of whether some environment, economic, social and political outcomes can be judged to be being met, though it does not attempt to assess or measure these outcomes or impacts itself. It can be implemented as a self-evaluation, or externally. It is anticipated to be used at regular intervals to assess change over time, though not comparison between different sites.

The approach is suitable in larger landscapes, where a range of direct and indirect threats to conservation can be addressed, and while it was designed largely with terrestrial and freshwater areas in mind, the authors note it may also be relevant to marine conservation areas.

There is little attention to the distribution of impacts (there is one indicator on whether economic or non-economic benefits arising from the conservation actions have reached the local community (or a significant proportion thereof)), and no recommendations about the collection of disaggregated data.

4.4. PRISM – Toolkit for evaluating the outcomes and impacts of small/medium-sized conservation projects⁶

PRISM is a toolkit designed specifically for small to medium sized conservation projects, to take evaluation beyond that of actions and outputs and to outcomes and impacts, while promoting learning. It is designed for situations with constrained finances and technical capacity, and short time frames.

The assessment covers the domains of environment (species and habitat management), politics (which addresses issues of

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5. This section draws on information in Senior et al. (2007). The authors note that the approach was intended to be further developed, but no additional information on the approach could be found in the literature search.

6. This toolkit was developed as part of the PRISM project (Practical Impact Assessment Methods for Small and Medium-sized Conservation Projects), and this section draws on the information provided in Dickson et al. (2017).

governance and policy, psychological (in terms of attitudes and awareness), wellbeing (covered in livelihoods), livelihoods, as well as incorporating specific modules on capacity development and policy.

Change is evaluated for both direct and indirect impacts, and for unintended consequences with respect to project outcomes and impacts. Both positive and negative impacts are considered, but the overall approach does not determine the net impacts.

Section 4 of the toolkit provides method factsheets and annexes providing information on many relevant topics, including theory of change and an evaluation feasibility checklist, developing ethical and gender protocols, and the analysis of qualitative and quantitative data, amongst others.

4.5. Social Assessment of Protected and Conserved Areas⁷

The Social Assessment of Protected and Conserved Areas (SAPA) methodology is useful for assessing and learning about the most important positive and negative impacts of a protected or conserved area on surrounding communities. It is relevant in assessing the social impacts of protected areas and other conserved areas, and any related conservation and development activities (as long as the feasibility criteria are met).

The approach examines impacts that have already been experienced, identified by communities across a suggested range of three to five years. Once these most significant social impacts are identified, the authors suggest the key is to take action in response to the assessment to increase and more equitably share positive social impacts, and reduce negative impacts.

SAPA does not define which social impact domains are included in the study, but it has the potential to assess impacts across the range of social impact domains, allowing the most significant impacts (whether positive or negative) to be identified locally.

As part of this identification process, the approach allows the identification of both positive and negative impacts, and also has potential to identify direct, indirect, interaction impacts, as well as unintended consequences.

The documentation suggests that an important question asks to what extent the benefits related to the protected or conserved area are equitably shared, but does not seem to extend this to the distribution of negative impacts.

The characteristics of gender, age, ethnicity, race, wealth/income and geographic location are noted to be characteristics of interest, and are asked about in the household survey, thus there

7. This approach was developed by the International Institute for Environment and Development, FFI and UNEP-WCMC, and this section draws on information in Franks and Weng (2017) and Franks et al. (2018).

would be potential for disaggregating data, noting that sample sizes would have to be relatively large to enable disaggregated analysis.

As noted, a key to SAPA is to take action in response to the assessment, and the documentation discusses actions to improve the likelihood of achieving this (see Franks et al., 2018, Phase V). The SAPA approach overlaps significantly with the Governance Assessment of Protected Areas, or GAPAs, as described in Booker and Franks (2019).

4.6. Social and Biodiversity Impact Assessment⁸

The Social and Biodiversity Impact Assessment Manual for REDD+ Projects (SBIA) was designed to help monitor land-based carbon projects' impact on local biodiversity and the livelihoods of the people living in and around a project site. Though designed (in part) as a project-level, ex ante assessment, it is also relevant for meeting the requirements of the Climate, Community and Biodiversity (CCB) Standards (or other standards), which include undertaking a verification audit within five years of validation – to determine whether a project has actually generated net-positive social and biodiversity benefits, and so to identify and monitor short- and medium-term outputs and outcomes.

Social impacts are understood in SBIA in the same way as described in formal SIA, and the approach enables the analysis of impacts across all of the domains identified. The authors noted 'the general lack of social impact assessment (SIA) is a key factor impeding stronger social designs of land-based carbon projects' (Richards, 2011, p.11).

SBIA can assess direct or indirect impacts, as well as intended or unintended consequences. The approach allows the identification of both positive and negative impacts, but is really focused on identifying negative impacts and mitigating them.

A challenge is to determine whether identified positive impacts outweigh negative ones, because the CCB Standards do require the estimation of net social and biodiversity benefits. Further, the authors note that for social impacts in particular, local communities themselves should feel that the net effect is positive.

The approach acknowledges that communities are not homogeneous, that differences in social groups (for example, by gender, age, wealth, ethnicity, etc.) should be recognised, and suggests methods be designed to identify positive and negative impacts on vulnerable groups. The documentation describes a variety of tools that could be used, and data can be disaggregated using some of these, but not others.

8. This section was developed by the Climate, Community and Biodiversity Alliance in collaboration with Forest Trends, FFI and the Rainforest Alliance, and this section draws on information in Richards and Panfil (2011) and Richards (2011).

4.7. Standardised Protocol for Evaluating Community Conservation Success⁹

The Standardised Protocol for Evaluating Community Conservation Success (SPECCS) is a comprehensive performance assessment evaluation tool, designed for self-assessments based on secondary data. SPECCS is designed to be adapted to suit project-specific goals and variable data availability, and to yield standardised performance scores and indicators of evaluation quality.

It is designed for use in community conservation areas, regardless of whether they are data rich or data poor.

SPECCS uses secondary data to assesses numerous domains, including environmental (habitat and biodiversity), economic (covering socio-economic benefits and socio-economic resilience), social (social capital to problem solve), cultural (fostering cultural diversity), governance (community rights to land and resources), and psychological. As can be seen from the description, there is some overlap between domains.

The use of standardised indicators in the approach means that only the direction of changes in those indicators are recorded (whether the situation has worsened, remained the same or improved), and does not allow for either positive or negative impacts outside of those indicators to emerge. The approach does not assess indirect or unintended impacts, nor does it try to determine net impacts.

depending not only on the choice of approach, but on the scale of the assessment (for example, site- vs landscape-scale), on the level of technical expertise required, and in some cases the logistical costs of facilitating high levels of community participation.

4.8. Assessment approaches' strengths and weaknesses

The strengths and weaknesses of each of the approaches to assessing social impacts are summarised in Table 3.

4.9. Assessment approaches' financial resourcing requirements

The necessary financial and technical resources are obviously critical concerns for any organisation wishing to conduct a social impact assessment, but they are not always explicitly addressed (see Table 4).

Of the approaches described, few described in detail the resources and technical capacities necessary to implement the approach. The cheapest and easiest to use will plainly be those approaches that rely on existing data (for example, SPECCS) or self-assessments (for example, TALC). However, where there is no existing data, or its quality is poor, it is not clear how useful these assessments will be, compounded by the limited range of positive and negative impacts considered in both of these approaches. Further, actual costs are likely to vary substantially

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9. This section draws on information in Brichieri-Colombi et al. (2018).

Table 3 – Strengths and weaknesses of approaches to assess social impacts

Approach	Strengths	Weaknesses
SIA	<p>Good practice SIA accepts that social, economic and biophysical impacts are inherently and inextricably interconnected – that change in any one domain will lead to changes in other domains, and following these impact pathways is necessary to understand second order and other impacts. It is not only comprehensive as a result, but the approach is also iterative and adaptive.</p> <p>A major benefit of the method is that community engagement in participatory processes of identification, assessment and management of social impacts is considered a right, not as best practice. Where SIA occurs from an early project design stage, this requires proponents taking the free, prior and informed consent (FPIC) process seriously – that communities can reject or change the shape of a proposed project. The respect for participants extends to respect for alternative cosmologies and epistemologies, rather than incorporating only western, scientific ways of thinking. This is the only approach to specifically address knowledge systems.</p> <p>The approach deals explicitly with a range of ethical issues, which cover issues around respect for participants and enabling their (voluntary) participation; ensuring appropriate research design and implementation; the collection, confidentiality, use and verification of data, amongst others.</p>	<p>SIA recognises that there will always be some unintended and unanticipated impacts, regardless of how well the SIA is implemented, and to minimise these, the social impact monitoring plan should ensure ongoing monitoring and adaptive management.</p> <p>Most of the limitations identified are related to the management of social issues, in particular because individuals' sense of place (known as place attachment) will be altered, which is often perceived to be undesirable and may therefore cause anxiety and concern.</p>
IWAT	<p>In contrast to other approaches, IWAT places an explicit emphasis on the poorest members of wetland communities, and suggests that the socio-economic boundaries of a study using the approach should be chosen taking this into account. Though the main data disaggregation occurs for a wealth/income variable, the approach does also allow for some intra-household information to be collected and analysed. Results can also be presented spatially, which can assist with interpretation.</p> <p>An ethical approach to research is central to IWAT, with the implications of this explained fully to team members and participants or respondents. With respect to respondents, this requires clear explanations of what data are being collected and why, and what will be done with it – including not sharing collected data without prior informed consent – and respecting every participant's right to anonymity.</p>	<p>The authors note the desire to integrate social and ecological systems because it generates a more complete picture than would otherwise be achieved, and helps to identify where conflicting social and ecological objectives may arise. However, they also recognise and discuss the challenges of such integration of such systems.</p>
TALC	<p>The authors note that TALC is easy to use and widely applicable, in part because of the simple scoring criteria, and extends the more general approach to landscape assessments to include consideration of outcomes and impacts are being achieved – that is, to monitoring the delivery of outcomes.</p>	<p>While also a strength, the wide applicability of the questions included in TALC also means that they are rather general, and the assessment is therefore relatively non-specific and not appropriate for assessing landscape management in detail.</p> <p>With respect to the purpose of assessing social impacts (the focus of this review), this tool is primarily useful for tracking management effectiveness.</p>

Source: Compiled by the report authors.

Table 3 – Strengths and weaknesses of approaches to assess social impacts

Approach	Strengths	Weaknesses
<p>PRISM</p>	<p>PRISM provides an excellent, stepped process of how to design an evaluation, which could be adapted to be equally applicable to a study focused solely on social impacts.</p> <p>Attribution is explicitly addressed: ‘data collection needs to be designed in a way that will allow you to distinguish the amount of change that can be claimed by the project, or by a particular project action, from the total change that takes place (i.e. how much of a particular outcome or impact is the direct result of the project’s actions). This is known as attribution.’ (Dickson et al., 2017, p.50).</p> <p>Though ethics are not front and centre to the approach, the toolkit does allude to the principle of FPIC, and recommends evaluations follow ethical protocols. The documentation notes that it is most useful for each study to define specific indicators based on the specific evaluation questions rather than using a standardised list, though once they are identified, existing tools for measuring them can then be used</p>	<p>The comprehensive assessment of the range of positive and negative social impacts that may arise is less well developed in PRISM. While livelihoods and governance are important, there are numerous other domains that are not touched on. Thus, the approach is not as comprehensive as scholarly studies can be, because it is designed specifically for use where technical and financial resources are constrained, though the designers do note that it should still allow rigour in assessments.</p>
<p>SAPA</p>	<p>The authors indicate that SAPA should be suited to analysing intra-community inequality, noting that household survey methods are thought more likely than focus group discussions to reflect impacts on different types of households, and as noted above, several characteristics are identified as of interest with respect to disaggregated data.</p> <p>The approach facilitates multiple stakeholders (including community members and other local-level stakeholders) to discuss and validate the assessment results, and explore potential actions in responses to the findings, building local stakeholder ownership. Following the process rigorously should mean the approach can produce credible results to inform national-level policymaking on protected areas.</p> <p>SAPA is relatively simple and low-cost – see Section 4.9 for more detailed discussion of this point.</p>	<p>The participation of multiple stakeholder groups is essential to the SAPA approach to enhance transparency, improve the ownership and credibility of results, and to subsequently build support for actions to be taken in response to the assessment findings. While this is not a weakness in and of itself, it does mean the approach has a strong reliance on the constructive participation of key actors. This can be problematic, in particular where there is a lack of trust, or conflict, between protected area management and surrounding communities, or in high-conflict areas. The authors note that a feasibility study should be carried out prior to implementation.</p>

Source: Compiled by the report authors.

Table 3 – Strengths and weaknesses of approaches to assess social impacts

Approach	Strengths	Weaknesses
<p>SBIA</p>	<p>The SBIA process – including an ethical responsibility to share data with stakeholders, and to validate them – has the potential to facilitate a number of benefits, including upwards and downwards accountability, building political acceptability, and achieving social sustainability. Effectively addressing the social aspects helps achieve carbon permanence and reduce project risk. The authors also note a potentially important link between the social side of SIA and the FPIC process, and in certain circumstances suggest undertaking SBIA as part of the FPIC process, for a more robust process and improved credibility while meeting a set of multiple-benefit carbon standards.</p> <p>The approach highlights the importance of identifying negative impacts, despite the difficulty and the reluctance of most project developers to do so. However, the early identification of these risks should mean that they can be more effectively prevented or mitigated. The authors also note that the analysis of potential negative impacts is also important as part of the process of obtaining free, prior and informed consent.</p> <p>Attribution is explicitly addressed, because of the CCB Standards, which require establishing that improvements will be caused by project activities, and not by other factors such as other policies or projects.</p>	<p>The most significant limitation of SBIA is that related to the relevant context, given that it was designed for REDD+ projects, though the authors note it should be applicable not just to land-based carbon projects, but also to payments for ecosystem services schemes.</p> <p>Several reasons why SBIA is challenging are identified specifically, including that:</p> <ul style="list-style-type: none"> - It is difficult to prove cause and effect – this is the challenge of showing attribution. - Social and biodiversity impacts tend to be long-term phenomena – it is hard and unrealistic to identify them in the short term. - Social and biodiversity impacts may be subtle and are not easily measured; for example, social impacts are often indirect (or ‘side-effects’) and related to contested social and political values. - Social and biodiversity impacts are often unexpected, especially negative ones. - It can be difficult to distinguish between impacts and outcomes. - There has been a lack of research data on the social and biodiversity effects of land-based carbon projects. - The diversity of project types means there is no ‘one-size-fits-all’ approach to SBIA. - There has been a lack of user-friendly guidance for project proponents.’ (Richards and Panfil, 2011, p.10).
<p>SPECCS</p>	<p>The authors suggest that the standardised format for assessing both performance and evaluation quality can facilitate comparison within and among projects, and that the approach answers calls for more comprehensive and frequent success monitoring.</p> <p>The authors note that SPECCS is suitable for data-poor and data-rich areas, in part because it also incorporates an assessment of the quality of the available data, and if the data is available to support it, the approach allows tracking over time. Because it is reliant on the availability of secondary data, the approach can be rapidly implemented, and should also therefore be relatively cheap. However, it is likely that results will be limited in data poor locations. .</p>	<p>One of the standardised indicators addresses the equitability of benefit sharing, but there is otherwise little consideration of the distribution of impacts, and because of its reliance on secondary data there is no specific requirement for disaggregated data.</p> <p>Its reliance on secondary data availability means that it is likely that results will be limited in data-poor locations.</p> <p>SPECCS is said to enable comparison of outcomes between data-rich and data-poor locations because of the assessment of data quality, but it is not clear how this would work practically in locations where data was either not available and/or of very poor quality.</p>

Source: Compiled by the report authors.

Table 4 – Financial resource requirements of approaches for assessing social impacts

Approach	Resource summary	Detailed estimates
SIA	Argues that doing SIA properly should not be seen as a cost but an investment in risk management and brings benefits to companies and communities (Vanclay et al., 2015).	None available.
IWAT	Addresses the cost of some standard ecological sampling, and states that livelihoods methods were selected, in part to balance cost, feasibility and statistical representation or defensibility (Springate-Baginski et al., 2009).	None available.
TALC	No information available.	None available.
PRISM	Is said to be designed for resource-constrained situations, and provides suggestions for reducing time and costs associated (Dickson et al., 2017).	None available.
SAPA	Relatively simple and low-cost SAPA methodology, which is intended for use at site level (Franks et al., 2018).	The cost is in the range of US\$5,000–15,000 excluding the facilitation team costs (assumed to be provided in-kind). Estimates of the time taken for each phase are (depending on the scale of the assessment): Phases I-IV, up to 12 weeks part-time (but can be completed in two weeks full time, though this is not recommended); Phase V, taking action, requires further time (Franks et al., 2018).
SBIA	Deals explicitly with credibility and cost effectiveness (Section 2.2), and meeting the cost challenge of SBIA (Section 10). Identifies some key factors determining the cost-effectiveness: methodology choice; advisory support requirements (related to methodology choice); contextual factors (e.g. scale, location) and integration with other project tasks (Richards and Panfil, 2011).	Exact costing depends on the complexity, scale and location of the project being considered. An approximate cost for the social monitoring plan, using an experienced consultant, is in the range of US\$25,000–35,000 (Richards and Panfil, 2011).
SPECCS	No information available.	None available.

Source: Compiled by the report authors.

5. Guidance on good practice in assessments of social impacts of conservation initiatives

There can be no question that the process of design and implementation of an assessment should be appropriately governed.¹⁰ This report focuses on highlighting aspects that make important contributions to the quality and substance of assessments, but that have sometimes been poorly incorporated in the assessment approaches (see Table 3), and where the empirical studies reviewed were demonstrably weak (see Section 3.1). This section, therefore, provides guidance on some of the key principles that should be followed, and on good practice design features and associated processes for assessments of social impacts.

Naturally, the aspects discussed below assume that available financial and technical resources are clear from the outset – including that the bulk of the team conducting the study has been formed and is in place (ready to participate in the detailed design process) – as are expected time frames, though all of these may need adjusting depending on the specific needs identified.

5.1. Key good practices for social impact assessment

The key principles to guide SIA practice are shown in Box 1, and it is recommended that they be followed by those designing and implementing all approaches to social impact assessment. These are supported and complemented by principles identified by other authors, both relating to impact assessments in general (Davidson-Hunt et al., 2016b; Jolly and Thompson-Fawcett, 2021) and those relating to specific approaches (Richards and Panfil, 2011).

Rather than simply repeat these principles, three key good practices are emphasised here in some detail, which support, and are supported by, the SIA principles and values (Vanclay, 2003). Though their importance is often highlighted in documents describing impact assessment methods, the review of empirical papers suggests that they are infrequently applied: most papers reviewed covered only relatively few impact domains with focus skewed towards financial aspects; study authors overwhelmingly selected what was measured; rarely used disaggregated data; while fewer than 10% explicitly acknowledged giving due consideration to indigenous knowledge or diverse worldviews, which have an important influence on how people experience conservation interventions.

¹⁰ Step-by-step guidance is available relating specifically to the approaches reviewed in many cases, or dealing with practical aspects of implementing assessments more generally (Roe et al., 2013; FFI, 2014; Woodhouse et al., 2016; Bennett et al., 2021).

The three good practices emphasised are:

- (i) Ensuring meaningful community participation and ethical conduct. Decisions on the participation of local communities in the impact assessment and the stage at which participation is facilitated, influences a majority of assessment design decisions and the implementation process, particularly with regard to ethical conduct.
- (ii) Ensuring an appropriate and informed design. Assessments should be explicit about methodological choices, including how the selected method or combination of methods fit together to effectively answer the overarching questions guiding the assessment, and which domains of wellbeing and social practice are included and excluded, and why. These decisions should be strongly influenced, if not driven, by local communities' perspectives and contextual understanding.
- (iii) Giving attention to the three aspects of equity. In order to fully understand matters of equity, issues of recognition, procedure and distribution should be covered as comprehensively as possible.

These three practices are interrelated and relevant across all stages of designing a social impact assessment as described in Section 5.2.

5.1.1. Meaningful participation and ethical conduct

There are a large number of studies demonstrating the beneficial effects of the meaningful participation in conservation efforts, and the converse (Hulme and Murphree, 2001; Li, 2002; Oldekop et al., 2016; Sowman and Sunde, 2018). The full, meaningful and effective participation of relevant Indigenous Peoples and local communities is widely acknowledged as a principle of good conservation governance for ethical, instrumental and relational reasons.

The type of participation that is facilitated in the impact assessment, and the stage at which it begins has a significant influence on decisions about the assessment design, the way it is implemented and how the results are utilised. Facilitating meaningful participation recognises that people have a right to be involved in decisions taken that affect their lives, and to timely access to relevant information. This means that, ideally, the participation of local communities would extend across all stages of assessment design and implementation and, critically, in the feedback and use of assessment results.

Facilitating meaningful participation requires that different knowledge systems, worldviews and values be recognised, respected and valued in the assessment process (CBD, 2004; Indigenous Circle of Experts, 2018; Vanclay, 2020). Indeed, because social impacts

can be interpreted as anything as long as they are valued by, or important to, a specific group of people (Vanclay et al., 2015), it is important that assessments identify social impacts based, at least in part, on what aspects local communities perceive to be important.

Ensuring effective and inclusive participation among Indigenous Peoples and local communities, and particularly the most marginalised and vulnerable among them, can be a challenge, especially if there have been negative past experiences and if an assessment is led by an external team with no prior relationships and trust to build upon. Establishing relationships, intercultural understanding and agency can take time and require use of appropriate methods and forums for communication. This has clear resource implications and demands a level of adaptability that needs to be considered in preliminary planning.

The ethical obligations of studies have often been interpreted as obligations relating to obtaining consent to participate (for example, in surveys), what questions are being asked of whom, ensuring data confidentiality or anonymity, in providing clarity around the purpose of data collections, the process timeline, and safe data storage.

Good practice suggests that the ethical obligations of the study team should be interpreted more widely – though obligations to date have rarely extended to data validation (Dickson et al., 2017) or returning study findings to local communities (data repatriation) (Deutsch et al., 2016).

A critical element of ethical conduct is the obligation of the assessment team to not waste the time of local communities, which extends to a responsibility to utilise secondary data, and to not collect data that is already in the public domain, to not collect data that there is not a clear and explicit purpose for, and to support data validation and repatriation processes. It is also likely to emphasise the importance of a transparent, accessible grievance mechanism so that any shortcomings can be raised by communities and responded to in an appropriate and timely manner.

The negotiation of specific ethical standards or protocols with communities can also be an important element of the participation process, in particular where assessments utilise community knowledge. These agreements govern the identification of the assessment objectives and its implementation and data management, including what data can be made public (Davidson-Hunt and O’Flaherty, 2007 cited in Davidson-Hunt et al., 2016a). Box 4 provides some resources on ethical guidelines and protocols.

The results of assessments – subject to the agreement of local communities – should be transparent and publicly available. Though difficult without a data repository, if results were accessible, they could be utilised in improving adaptive management, and in sharing lessons learned, about whether and how to maximise positive impacts, mitigate or minimise negative impacts, or how to improve the impact assessment process.

Note that this section has discussed meaningful participation and ethical approaches in the context of the assessment of social impacts, but these principles are equally relevant to the design

Box 4 – Resources on ethical guidelines and conduct, and Indigenous Peoples’ rights

Ethical conduct: There is a wealth of information available regarding ethical conduct. Much is developed by academics and researchers, including some related to specific academic disciplines, but the principles and guidelines are applicable to conservation practitioners. Some of the more commonly referenced are (in alphabetical order):

The American Anthropological Association [ethics and methods](#)

The Association of Social Anthropologists of the UK [2021 ethical guidelines](#) and [EthNav: a tool for navigating ethical complexities](#)

British Psychological Society [code of human research ethics](#)

British Sociological Association [guidelines on ethical research](#)

Convention on Biological Diversity [Akwé: Kon guidelines for the conduct of cultural, environmental and social impact assessments](#) and [The Tkarhwaí:ri code of ethical conduct to ensure respect for the cultural and intellectual heritage of indigenous and local communities](#)

National Science Foundation [responsible and ethical conduct of research](#)

Social Research Association [2021 ethical guidelines](#)

UK Research Institutes [framework for research ethics](#)

Relevant international conventions on Indigenous Peoples:

International Labour Organisation Convention No. 169, [Indigenous and Tribal Peoples Convention](#)

United Nations [Declaration on the Rights of Indigenous Peoples](#) (UNDRIP)

and implementation of the conservation initiative that is being assessed, and indeed to any conservation initiative.

5.1.2. Appropriate and informed design

Social impacts have been described in this paper as the full range of direct and indirect, intended and unintended, positive and negative economic, social, cultural, political, livelihood, environmental and psychological impacts on people whose lives are connected in some way to the site of the conservation initiative. However, it can be seen from the empirical review of studies that the domains covered by many studies are typically only partial (see also Schleicher, 2018), that the range of direct, indirect, intended and unintended consequences are rarely assessed, and that local communities are rarely involved in determining the domains of importance.

Inattention to social and cultural values, and to indigenous and local knowledge systems risks neglecting different ways of life, cultural practices and customary institutions and associated

impacts that shape peoples' experiences and responses, particularly for cultural minorities and marginalised groups. In many countries and contexts, customary institutions (for example, swidden agriculture, seasonal grazing access, harvesting of medicinal plants and traditional fishing grounds) are not well supported by policies and laws. In such circumstances, mirroring the *de jure* tenure structures, which often prioritise legal property rights, may not be an appropriate – or ethical – approach to designing an assessment of social impacts.

There are important implications arising from the ethical obligation to recognise different knowledge systems that relate, in particular, to the difficulty of splitting aspects of those domains 'into environmental, social or cultural ... [where] indigenous worlds and approaches comprise seamless interconnections of a multitude of domains' (Jolly and Thompson-Fawcett, 2021, p.106541). The explicit recognition of indigenous knowledge was almost entirely absent in the empirical cases reviewed, and only in a minority of cases were local people involved in the choice of what was measured in the assessment.

There is still much we do not know about the social impacts of conservation interventions, so it remains important for assessment design to be appropriate – balancing the need for comprehensive coverage with the selection of domains that are of relevance and importance to affected communities, and of course, to fit with the resources available to complete the assessment. An essential element of an informed design is that design choices should be made explicit and clearly communicated and justified, so those affected by the decisions, those using the assessment to make decisions, or those not familiar with the study or the site, can understand the motivation for the selections made.

It is undoubtedly challenging – and not appropriate to every assessment – to cover all possible forms of current and past impact, to attend to every form of social disaggregation, and to consider all potential drivers of impacts at various scales. However, in designing an assessment where Indigenous Peoples and local communities are likely to be impacted, omitting certain issues must be carefully justified, particularly those relating to rightsholders and their customary institutions, cultural practices, tenure security, the extent and quality of their participation, associations with past conservation and development interventions and relationships with other stakeholders.

5.1.3. Equity

Equity is consistently included as a social objective for conservation governance and commonly defined as comprising three interrelated dimensions – recognition, procedure and distribution (see for example the Convention on Biological Diversity's voluntary guidance on equitable protected area governance (CBD, 2018)). There is typically a hierarchy with most assessment approaches when considering these three dimensions. The focus tends to be on distribution, and primarily on material impacts, while recognition and procedure are often overlooked, despite their potential to be significantly impacted. Recognition pinpoints cultural factors, intercultural recognition and relationships, respect for knowledge systems and collaboration between them, and overlaps with procedure, which can be interpreted at its most basic as comprising the quality of participation, the extent to which customary institutions

are considered and included within wider governance, and whether free, prior and informed consent has taken place.

Both recognition and procedure encompass important human rights, such as freedom of cultural and spiritual practice, rights to water and basic human needs and so on, which should be covered by any assessment of social impacts unless strong justification exists for omitting them. Indeed including rights within assessments is an important step to be made in increasing accountability for rights and promoting progress towards rights-based conservation approaches (Roe et al., 2010).

The inclusion of aspects such as autonomy, social institutions and political relations in definitions of human wellbeing means the line between social impact and governance assessments is blurring. Local customary and communal institutions are increasingly acknowledged as forming a fundamental part of social and cultural practice. Therefore, if such institutions are strengthened, supported or disrupted through conservation initiatives, these are significant impacts that should be recognised.

Conservation is a political process, and impact assessment approaches should consider the profound effects on the lives of local people that are contingent on whether conservation efforts are characterised by conflict or collaboration. Questions of territory, identity and autonomy should also be afforded attention.

However, the politically sensitive nature of these topics mean they are very difficult topics to assess, even when there are strong relationships with communities – and especially in short-term engagements and in the absence of meaningful participation by local communities in the assessment process itself.

Distribution tends to be the more straightforward element of equity to discuss and assess. The distribution of impacts in SIA is discussed in part as impact equity – that impacts 'should be shared in an equitable manner, at least that there should be consideration given to the fair distribution of negative and positive impacts' (Vanclay et al., 2015, p.85). Gender analysis, in particular, is essential to understand how men and women are differentially affected (Cinner et al., 2014; Götzmann and Bainton, 2021), but there is potential for any group to be more vulnerable to certain impacts.

However, even distributional issues are often poorly addressed, including those where impacts are difficult to compare (such as changes in behaviours and attitudes) and where trade-offs of impacts occur at different scales (for example, where substantive positive impacts are felt at the national level, whilst negative impacts take place at the local level, see for example Mancini and Sala (2018)). Impacts that are perceived and cause psychological harm, rather than being experienced through an interaction or change in resource access are also often overlooked. The methods to address these shortcomings are imperfect, but data aggregation can render the distribution of impacts invisible and therefore an *ex ante* analysis of social difference and potential for heterogeneous impacts should be considered and is a motivation behind the push for data disaggregation.

5.2. Designing assessments of social impacts¹¹

The elements of design that are emphasised in this section have been selected for their focus on the aspects that are critical to generating high quality information and not with specific reference to the process of design and implementation.

Historically, assessments of social impacts were often considered as a monitoring and evaluation exercise for social development projects, with the aim of providing baseline information or ex post information about the effectiveness and efficiency of delivering targeted outcomes, and the approaches included in this review are largely designed to achieve this.

However, the aspects of design that are discussed below are equally relevant to approaches that are initiated at an earlier, project inception and design stage, which are largely designed to anticipate potential project outcomes and impacts. While local and affected communities more rarely participate in these types of assessments currently, they can be designed to foster empowerment among different stakeholders, as part of collaborative, transparent and adaptive learning processes. This is likely to become increasingly important given the focus on the scaling up of future conservation interventions (Dawson et al., 2021). In this sense, inclusive and transparent social impact assessments could offer an opportunity for greater influence of Indigenous Peoples and local communities in conservation governance where currently their role is limited, particularly if those assessments are continuous or repeated, embedded in governance processes and if they foster progressive changes in governance.

The first three steps of designing a social impact assessment relate to specifying the questions that are to be answered by the assessment, to identifying an appropriate assessment framework that can help frame the way the answers to these questions are sought, and selecting a methodological approach for the assessment. These three steps are often treated superficially, but are critical to good design and to generating high quality information. Once these decisions have been made, the subsequent steps are to determine the scope of the study, what dimensions need to be considered and – from the answers to those questions – what needs to be measured and what are the appropriate data collection tools to be utilised.

5.2.1. Determine the question(s) to be answered by the assessment

This first stage of any assessment requires study team to describe, very specifically, the purpose of the impact assessment they are designing and the questions that need to be answered. These decisions will need to consider who will use the information generated – whether it is to demonstrate outcomes and impacts to external stakeholders (for example, as many one-off ‘snapshot’ studies are) or whether it is largely designed to build understanding and learning internally (i.e. as part of ongoing management or governance processes), or something in between. In either

¹¹ This section draws heavily on Schreckenberg et al. (2010), Davidson-Hunt et al. (2016b), Woodhouse et al. (2016) and Dickson et al. (2017).

case, the design should be informed by an appropriate risk assessment detailing relevant human rights, for whom they need to be considered, and how they might potentially be affected by the programme being assessed.

Relevant questions may relate to: what the social impacts of a conservation intervention have been; what size the impacts have been; whether impacts were positive and negative, and/or what the net impacts have been; and how the impacts were generated (i.e. what were the pathways which led from action or activity to impact)?

Depending on the design or implementation stage, studies may wish to determine whether or how a project is moving toward its objectives, though this latter study design is not truly a social impact assessment, even if assessing progress toward some social impact or impacts. In determining appropriate question(s), the project goals can be a good starting point, focusing attention on whether the study aims to assess the impacts of the whole programme or some more targeted objective (for example, such as an initiative to increase inclusion or support tenure rights of women).

Most studies are likely to want to establish answers to many, if not all, of these questions, but given that financial and technical resources are usually constrained, those of most importance or interest are likely to need prioritisation. When selecting the relevant assessment questions, some reflection is required on who is setting them, what the normative position that arises is, and whose values and ways of doing are reflected, and this process should be conducted with the meaningful participation of affected communities (see also Section 5.1.1).

The processes of refining and prioritising assessment questions will also help to determine whether the study needs to adopt a qualitative, quantitative or mixed methods approach (and if the latter, which of the mixed methods approaches, see Section 5.2.3).

5.2.2. Describing an appropriate assessment framework

Based on the questions selected to be answered by the impact assessment an appropriate assessment (or conceptual) framework, or multiple frameworks, should be identified and used to describe the possible relationships between the activities of the conservation initiative and the lives and livelihoods of those that are, or will be, affected by it.

This may, at first glance, seem too academic an approach, but in practice using these frameworks can help practically, to define the key issues to be considered. The process of critically examining potentially relevant frameworks helps to identify the relationships between people and nature at site, to identify explicitly which domains are being prioritised for attention in the assessment and why (and those that are not worthy of attention), and what needs to be assessed in detail.

For example, if the sustainable livelihoods approach were adopted, it would help to guide data collection around the human, financial,

natural, social and physical assets used in the framework, as well as contextual factors. In contrast, if the SIA were to be used as a framework for categorising potentially affected domains, this would guide data collection across the range of domains described in Box 2.

Few of the empirical papers reviewed explicitly identified the frameworks informing their research design, which may help to explain why the justifications for including and excluding certain domains from the assessment were often unclear. However, where conceptual frameworks are discussed, there appears to have been relatively little change in the main frameworks used over time, though there has perhaps been an increase in the integration of social and ecological aspects.

5.2.3. Finalising the assessment approach

This is the stage at which decisions must be taken about the approach the study should take – whether an experimental or theory-based design – a decision which overlaps with whether to take a qualitative, quantitative or mixed methods approach (and, if the latter, which mixed method design – triangulation, embedded, exploratory or explanatory). Both decisions should be influenced by local community participation and the levels of secondary data available about the site and the initiative, though the technical resources available to the project team often takes a leading role in this decision.

As described in Section 2, experimental approaches broadly answer questions of the extent that impact(s) can be attributed to the intervention and whether the intervention made a difference. These approaches are typically quantitative (for example, using statistical methods to determine whether impacts can be attributed to the intervention and/or whether it made a ‘difference’), though mixed methods approaches can generate complementary qualitative information on how and why impacts may have occurred. Theory-based designs deal more with how the intervention has made a difference and whether it is likely to work elsewhere (Stern, 2015). Most approaches discussed in this paper fall within the scope of a theory-based design and many have taken a mixed methods approach.

Mixed methods approaches are increasingly common because of the complementary insights the different data types can bring for exploring, characterising, comparing, triangulating and explaining different issues and dynamics, and were the favoured approach of the empirical studies reviewed. If a mixed methods design is selected, there are numerous ways to strategically combine or integrate qualitative and quantitative methods, concurrently or sequentially, to suit the questions posed. Different forms of mixed methods can be applied to balance needs for consistency in reporting, the depth of context-specific insights desired and the levels of existing knowledge, uncertainty and complexity (Shaffer, 2013), and in ways that are appropriate to the time and resources available. Extensive guidance is freely available (see for example, Bamberger et al., 2010; Roelen and Camfield, 2015; Schoonenboom and Johnson, 2017; Kinnebrew et al., 2021); the important point is that the choice should be explicit, discussed in advance and based on a strategic rationale. The availability, form and quality of any existing data should be explored and may influence the approach

taken, as well as subsequent choices on scope and methods. The decision tree illustrated in Figure 3 links assessment questions to design choices and is based on five design categories, rather than the two used in this review. The experimental approach described in this review includes the statistical and quasi-experimental approaches in the figure, while theory-based approaches in this study include the theory-based, case study and participatory approaches in the figure.

Establishing whether the effects or outcomes observed can be causally attributed to the studied intervention – they would not have occurred in its absence – typically requires the use of experimental approaches, including quasi-experimental and other statistical approaches. However, this is often hampered by a lack of baseline data. Indeed, Cheng et al. (2020) suggest that only 20% of papers on the links between conservation actions and human wellbeing impacts used causal models, and most of those did not meet the criteria for being credible. However, an understanding of a plausible counterfactual – what would have happened if the intervention had not occurred – is important in trying to understand the causes of observed changes and there are a range of ways to do so which do not necessitate an experimental or quantitative approach. It does require appropriate weight to be given to contextual factors and distinguishes, as far as possible, the effects of other factors occurring at site, identifying evidence of the pathways between actions and impacts and eliminating alternative explanations.

5.2.4. Defining the scope of the study

This next stage requires the definition of the geographical and temporal scope of the study – determining the appropriate spatial scale and time frame over which to measure impacts. Answering both of these questions requires an understanding of who the impacted population(s) are in order to help define these boundaries (and to assist with the next step).

In most cases, affected populations are likely to be located relatively close to the conservation area, or to the activities of the conservation intervention, though sometimes – depending on the value chains originating there, and extending outwards, and how the conservation initiative affects these value chains – they might be located considerably further away.

The selection of an appropriate time frame is typically based on when the initiative commenced and/or the timing of significant changes in its design or implementation.

5.2.5. Selecting domains to be assessed

The process of explicitly defining the assessment questions and frameworks and the methodological approach will have initiated the process of determining which domains of impact need to be assessed in the study. The level of community participation in the study is central to the selection of the relevant domains of impact – whether the decision is made by the conservation initiative participants, by those in the assessment team or some combination of these groups.

Having identified the relevant domains for inclusion (and possibly exclusion), the selection of relevant indicators¹² can be made, which should cover outcomes and impacts of the conservation initiative – depending, in part, on the time frame selected for the study, and how long the initiative has been being implemented. This selection should also incorporate assessments of positive, negative and neutral impacts (i.e. those that could be either positive or negative). This will also involve deciding which data should be qualitative and which quantitative, if taking a mixed methods approach. It is at this stage, especially, that the idea of ‘appropriate imprecision’ can be useful – that is, not gathering data with more accuracy than is needed to understand the issues (Chambers, 1983 cited in Richards and Panfil, 2011).

In making these selections, assessment designers should heed the contrast between the relatively narrow set of domains and indicators that have been used in most studies to date (see Table 2) with the good practice of ensuring study design is appropriate and informed (see Section 5.1.2). Where relevant, studies can also usefully combine a range of locally-defined indicators of particular relevance at a site with a set that may be important to the implementing agency (for example, in order to make comparisons across their portfolio). Any limitations of previously collected data should not be used to justify the omission of particular domains in assessments.

Note that quantitative studies often require relatively large sample sizes if conclusions drawn are to be generalisable – and even larger samples if impacts are to be analysed at disaggregated level (for example, by gender, age or other characteristic, or combination of characteristics). The adoption of qualitative approaches typically means that smaller sample sizes can be used to determine variation in experience, as long as the data collected is good quality. A high quality design can be achieved, even if resources do not allow for a very large-scale data collection.

5.2.6. Select and design appropriate data collection tools

Finally, only once the design decisions described above have been made, should the selection of appropriate data collection tools be made. Relevant secondary data should also be reviewed in order to feed in to the design and/or modification of data collection tools, and once these have been finalised then data collection and analysis can proceed.

The review of empirical papers found that they were far more focused on the selection and justification of data collection tools and instruments, than on the identification of the key questions of the study and the selection of the most appropriate methods to answer them, a conclusion also made by earlier studies (Schreckenberg et al., 2010).

However, reality checks remain necessary, even where the tool selection is well justified and documented, because of the difficulty of undertaking a quality impact assessment and in particular in

encouraging people to speak candidly about what they do and think, and the reasons for doing so. There are considerable difficulties in reaching the most marginalised population groups in any context, in even identifying them, and in building sufficient trust to encourage people to talk openly about cultural values and practices and types of informal governance. Homewood notes that it is ‘not so much the tools themselves, but rather the qualitative subtleties of the ways in which those tools are applied, which determine whether the data that result are both meaningful and useful in understanding impact. Those seeking to monitor the social and economic impacts of conservation interventions would do well to learn from and build upon established social impact assessment experience’ (2013, p.267).

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¹². While the term ‘indicators’ has been used here, it refers to both variables to be measured quantitatively, as well as sub-domains or topics to be assessed qualitatively.

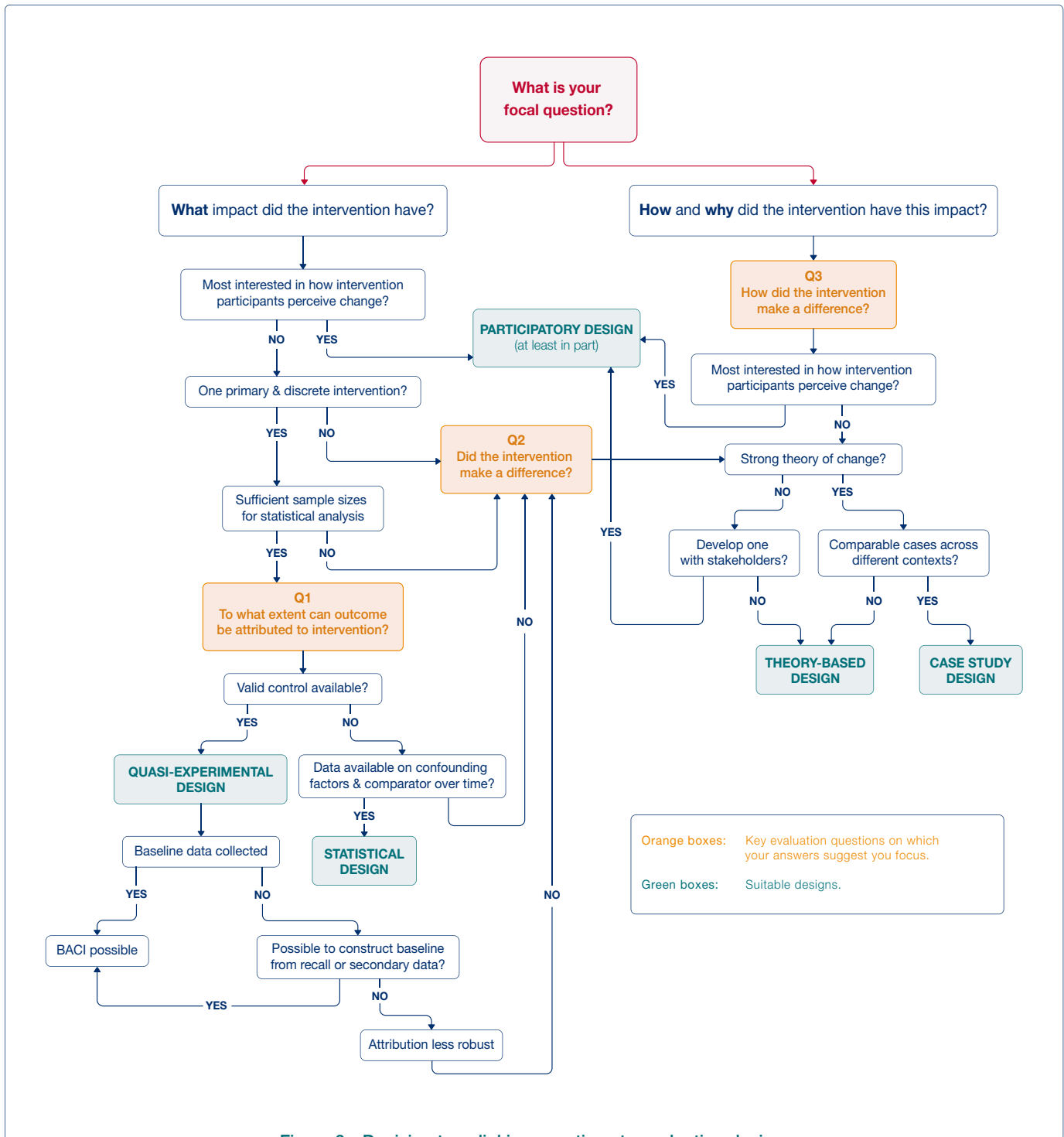


Figure 3—Decision tree: linking questions to evaluation design

Source: adapted from Woodhouse et al. (2016)

6. Conclusions

Overall, this paper provides a comprehensive review of methodologies, methods and tools that have been designed to assess and document the social impacts of conservation activities. The paper focuses on those approaches not reviewed elsewhere, describing seven approaches, their strengths and weaknesses, with references and links provided to documents providing useful complementary information.

The overview of empirical studies found that most studies considered only few domains of social impact. In many cases it is unclear how these had been chosen and rarely did that decision benefit from the explicit input of local communities affected by the conservation intervention being assessed. Few studies used disaggregated data to understand differential impacts, and where mixed methods were said to be used, a majority did not describe what kind of mixed methods they had used. All together, these shortcomings in the reviewed body of works indicate there are common deficiencies in the design and application of social impact assessments for conservation. Those weaknesses may hold back the identification, avoidance or mitigation of negative social impacts resulting from conservation actions, overlook opportunities to optimise and manage distribution of positive impacts, and also preclude learning processes within and across sites and initiatives that may improve conservation governance.

This review is timely because of the growth and evolution of social and governance standards associated with conservation policy (see for example the numerous social principles included within the 2030 targets of the Kunming-Montreal Global Biodiversity Framework), the diversity and extent of conservation interventions being implemented, and the persistent gap in recognising rights and adhering to ethical and governance standards in practice. The wide variety of types of conservation initiative and actors, and tendency to develop impact assessments independently, has produced a vast array of potential approaches to assessing social impacts of conservation. The overall aim of this report is to improve the quality of such assessments, to help develop a good reflective process – leading to enhanced and adaptive governance – and to help funders promote accountability and further integration of social standards around governance, equity and rights into conservation practice.

In order to contribute to the improving quality of assessments, the report provides some guidance on good practice in designing assessments. This guidance emphasises aspects that make important contributions to the quality and substance of assessments but that have often been poorly incorporated, particularly in empirical studies.

Key principles to guide assessments have been identified for the specific SIA initiative, and following these principles is recommended (Box 1). Three principles in particular are recognised as important, though infrequently applied. They are interrelated and relevant to all stages of design and implementation.

These three good practices are:

- (i) Ensuring meaningful community participation and ethical conduct – local communities' participation, and the stage at which it is facilitated, influences a majority of assessment design decisions and the ethical conduct of the study.
- (ii) Ensuring an appropriate and informed design – methodological choices should be made explicitly in response to the overarching questions of the assessment, decisions which should be strongly influenced (if not driven) by local communities' perspectives and understanding of the site.
- (iii) Giving attention within the assessment to the three aspects of equity – recognition, procedure and distribution – which should be covered as comprehensively as possible.

There is plainly a trade-off between the technical and financial resources available for assessments and how comprehensive and complete an assessment can be. The empirical review suggests that the approaches are often chosen to fit perceived resourcing constraints, rather than to answer the questions that need to be answered. However, as described in this paper, a robust, wide-ranging and informative impact assessment design can be selected and applied, even for studies with limited resources.

The paper emphasises six aspects in the process of designing a high quality social impact assessment. The first three are foundational to generating high quality information. However, the review of empirical studies indicates that providing background rationale and the methodological foundations for assessments is frequently overlooked and disproportionate attention is prematurely afforded to the subsequent steps (in particular, what data collection tools to utilise). The six aspects are to:

- (i) Determine the question(s) to be answered by the assessment (for example, what the impacts were, their size, how they were generated, etc.). It is especially important that these questions are explicitly stated where resources are limited, so the study can be most effectively designed to answer the questions of interest.
- (ii) Describe an appropriate assessment framework, which can be used to help define the key issues to be considered (for example, relationships between people and nature, priority domains, etc.) and which also guides data collection efforts. Choices regarding concepts and theories of change, and particularly any domains or relationships to be omitted, should be well justified.
- (iii) Finalise the assessment approach, using information from the previous two steps to decide whether to take an experimental or a theory-based approach, and whether the approach should adopt qualitative, quantitative, or mixed methods.

Local participation is key to these decisions. The complexity of impacts and drivers means qualitative understanding almost always has a useful role in guiding quantitative data collection, or providing explanatory support to disentangle complex dynamics, provide counterfactuals to, or validate, quantitative findings.

- (iv) Define the scope of the study, including the geographical and temporal scope to be considered.
- (v) Select the social impact domains to be assessed. The level of community participation in the study is central to the selection of the relevant domains of impact – whether the decision is made by the conservation initiative participants, by those in the assessment team, or some combination of these groups.
- (vi) Select and design appropriate data collection tools. Only once the design decisions described in the previous steps have been clearly and explicitly stated should the selection of appropriate data collection tools be made.

Social objectives are considered integral to contemporary conservation efforts, recognising the rights of Indigenous Peoples and local communities, and their constructive role in equitable and effective governance, whether in a collaborative role or themselves providing leadership and stewardship through their own cultural practices, customary institutions and knowledge systems. These subjective, intercultural and relational features of conservation governance make it imperative that local perspectives form part of social impact assessment, and that communities and knowledge holders influence the approach, the forms of data collected and its use. High quality social impact assessments have an important role to play in supporting inclusive and adaptive forms of governance, as continual processes of monitoring, reviewing, learning and improving can enhance social and ecological impacts simultaneously and in an integrated way. Moreover, quality social impact assessments are vital to flag where minimum standards such as respect for established human rights are not being met and to instil high standards of accountability, responsibility and transparency across global conservation practice.

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Appendix 1 Individual website searches

The following websites were searched individually for relevant documentation. Each was searched using two combinations of terms (in no particular order): (i) (tool OR method) AND (impact OR assessment) AND social AND conservation; and (ii) toolkit AND conservation.

Documentation was added to the library and then screened and reviewed following the methods described in Section 2 of the main report.

1. BirdLife International (birdlife.org)
2. Conservation International (conservation.org)
3. Conservation Standards (conservationstandards.org)
4. Earth Conservation Toolbox (earthtoolbox.net)
5. Fauna and Flora International (fauna-flora.org)
6. Forest Peoples Programme (forestpeoples.org)
7. International Institute for Environment and Development (iied.org)
8. International Institute for Sustainable Development (iisd.org)
9. IUCN (iucn.org)
10. Nature & People (nature-people.org/)
11. PCLG (formerly the poverty and conservation learning group, povertyandconservation.info)
12. Rights and Resources (rightsandresources.org)
13. The Nature Conservancy (nature.org)
14. United Nations Development Programme (undp.org)
15. United Nations Environment Programme (unep.org)
16. Wildlife Conservation Society (wcs.org)
17. World Bank (worldbank.org)
18. WWF International (wwf.panda.org)
19. WWF US (worldwildlife.org)



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