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Luc Hoffmann
Institute



**Creating successful valuing
nature initiatives:
A guide to analysing local
context and developing strong
theories of change**

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PREFACE

Do you work for an environmental NGO or institution and want to assess the values of nature to generate social and political change?

Do you think an ecosystem services assessment or natural capital account might help achieve your conservation and sustainable development goals?

If the answer is yes, this guide is for you. It outlines important considerations and questions to help develop effective strategies for 'valuing nature' initiatives and projects.

The guide aims to help practitioners understand local context and external pressures – the formal and informal institutional, political, legal, economic and social setting of conservation – to guide action for better ecosystem management.

What is valuing nature and why undertake such an initiative?

'Valuing nature' initiatives include strategies to demonstrate, capture and increase the value of nature to people. Over the past decade, the assessment and valuation of ecosystem services, using multiple metrics of value, have been increasingly used by conservation NGOs and others.

These initiatives include:

Ecosystem services assessments that:

- Identify natural capital and ecosystem services important to stakeholders, through collective or participatory processes
- Measure, map and value nature's benefits to people (ecosystem services) in qualitative, quantitative and monetary terms, and/or the status and trends in stocks of natural capital
- Identify trade-offs and synergies among these values
- Translate these values into conservation incentives, development plans, policies, investments and decisions by the public and private sector

Natural capital accounts that:

- Use a replicable structure so they can be repeated and regularly recorded in a way that is comparable over space and time
- Distinguish between the value of ecosystem service flows and underlying values of stocks of natural capital

WHY CONTEXT MATTERS ?

There is emerging evidence that valuing nature initiatives lead to conservation success by changing resource- and land-use decisions with positive impacts for nature and people. However, not all projects succeed.

Where do people go wrong?

Valuing nature initiatives often assume that recognising the social and economic values of nature to people will lead to changes in policy and decision-making which, in turn, will lead to increased investments in conservation. But such logic is often over-simplistic and unrealistic. There are many complex factors at play that affect outcomes. The process through which science influences decision-making is rarely, if ever, linear. It is more a case of understanding the bigger 'system', its various components and how they interact, and using ecosystem services assessments strategically.

It often boils down to:

- Insufficient understanding of the governance system influencing resource and land use
- Poor problem definition when designing the project and a lack of learning, adaptation and iteration practices. This can lead to the work becoming less relevant over time
- Mismatched expectations of the true purpose of the project between management, team members and stakeholders

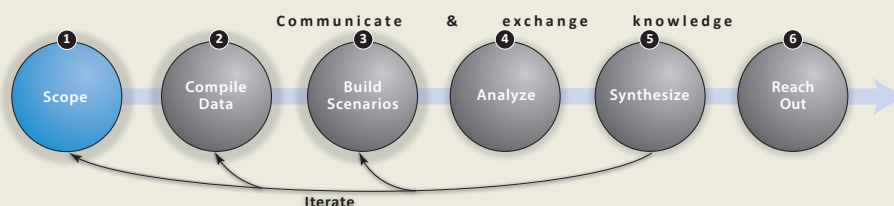
SCOPING

What can we do to improve?

The first step in any good valuing nature initiative is scoping. A context-driven scoping study can increase the likelihood that ecosystem services assessments will produce relevant and feasible recommendations and influence public or private decision-making.

Figure 1

'Scoping' – the first critical step in the ecosystem services assessment framework, adapted from Rosenthal et al (2015)



‘Context’ includes formal institutional, policy and legal processes, general social and economic conditions, and deeper underlying dynamics of action, power and interaction.

‘Context analysis’ can help identify useful questions and organise insights to guide strategic design of the ecosystem services assessment to take context into account.

Context-driven scoping studies should help programme staff and their partners to:

- Understand local conditions, institutions, legal instruments, social norms, political barriers and opportunities
- Identify problems (and solutions) from the perspectives of different institutions and stakeholders
- Clarify assumptions and develop reasonable expectations for what an ecosystem services assessment can achieve for conservation

Scoping should take place in early stages of project development. It helps develop a theory of change, study design and terms of reference.

Projects can benefit when scoping is revisited regularly so that the project’s assumptions are tested and the understanding of context is updated.



SIX ESSENTIAL STEPS

Six steps are essential in analysing context of ecosystem services assessments. These are iterative steps, and not always sequential.

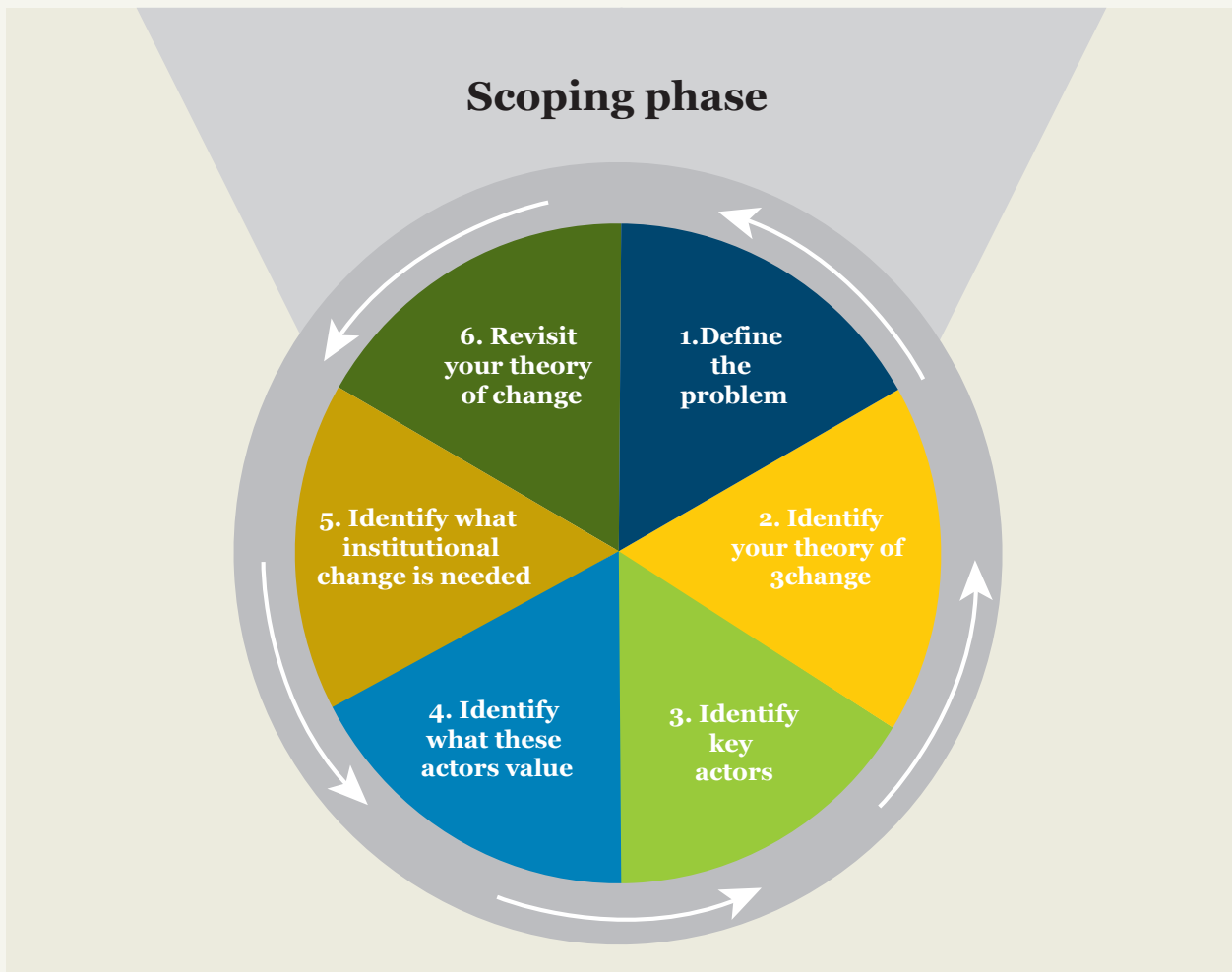


Figure 2: Six essential steps to analysing context of ecosystem services assessments.

1. DEFINE THE PROBLEM TO BE ADDRESSED

What is good problem definition?

Opening up a problem to understand root causes and deeper underlying dynamics, from more than one point of view.

Why is it important?

Albert Einstein once said “If I were given one hour to save the planet, I would spend 59 minutes defining the problem and one minute resolving it.” A well-defined problem is more likely to lead to an effective solution.

How to do it well?

People often find it difficult to recognise the critical challenge to address because they focus on symptoms rather than causes or make incorrect assumptions about cause-and-effect chains. Understanding the wider context and associated issues is an essential part of problem definition. Problem statements and problem definition templates can help.



Checklist of questions

- Should we really take this problem into account?
- Is it the real problem, or a symptom of an underlying problem? What are the deeper problems or root causes at work?
- Who is it a problem for and how?
- Who agrees or disagrees that it is a problem?
- Who are the critical ‘authorisers’ that must accept the problem exists before a solution can be advanced?
- Does the problem need action by a single actor or does it need collective management?
- Do the actors have the ability to address the problem? What are their capability gaps?
- What are the political cycles and windows that will force, limit or complicate actions to address the problem?
- What are our assumptions about the problem?

2. IDENTIFY YOUR THEORY OF CHANGE

What is a theory of change?

The sequence of cause-and-effect by which resources and actions are assumed to achieve an intended impact. It provides a conceptual roadmap for how an organisation expects to achieve its desired results.

Why is it important?

Valuing nature initiatives and conservation projects often have vision statements that are too broad or aspirational to be useful for decisions about resource allocation. Theory of change can help to:

- Plan, design, implement and evaluate feasible valuing nature projects and programmes
- Understand how these activities fit within a wider context and mesh with the activities of others
- Identify any missing links that are essential to creating desired impact
- Communicate internally and externally about strategy, priorities and results

How do you apply it?

A theory of change helps define clear, specific goals. It clarifies how and why strategic efforts on biodiversity and ecosystem service assessments will create a desired conservation outcome and connections to other required actions. It is best developed with multiple stakeholders, or at least checked against different perspectives to overcome biases. It is often displayed in a diagram known as a logic model, using a framework of activities, inputs, outputs, outcomes and impacts.

Checklist of questions

- Who are 'we', and what goals are we trying to achieve? What is the impact we intend to create?
- What changes in ecosystem management do we think are necessary? What changes do others think are necessary?
- What 'innovation' (activities, actions) do we want to introduce through our valuing nature initiative? What actions are required in addition to an ecosystem services assessment?
- How and why do we think this will create the change we seek?
- What stage are we at now in the 'change process'?
- What is proving challenging in attempting to get to the next stage?
- What assumptions underpin our theory of change?



CASE STUDY PART 1

Problem definition

The national government of a coastal east African country is working with regional partners and an interdisciplinary research group to develop and implement a Natural Capital Management System. They aim to enhance the management of natural capital to improve inclusive prosperity (jobs, income, access to basic services), productivity (food, water, energy and forest industry value chains) and climate resilience.

The government wants to use biodiversity, ecosystem service and climate information to make the capital city a model example for city planning at a systems scale. Climate change and sea level rise threaten the city's coastal neighbourhoods, farming and fisheries productivity and transport connectivity. Industrial expansion and urbanisation are also putting pressure on communities' livelihoods. Ecosystem degradation has led to declining surface water quality and availability, scarcity of fuel wood and lower agricultural productivity, while prices of basic commodities are rising.

An assessment team is established to examine which actions on biodiversity and ecosystem services could be included in an integrated green economy plan. The team is comprised of members of the national government, city officials, water authorities, international and national civil

society groups and international research institutions.

Theory of change

The assessment team believes that improving mangrove protection along the city's coast could increase resilience against sea level rise and secure coastal water quality. The team wants to increase protection of the city's watershed to secure a clean, reliable water supply in particular. They believe that framing environmental problems in terms of how nature benefits people (ecosystem services) and using cost-benefit analysis and mapping tools will encourage the adoption of information on biodiversity and ecosystem services in city and land-use planning.

Biodiversity and ecosystem service assessment and valuation can:

- provide city planners with convincing arguments and data to gain financial support from the national government for conservation investments.
- convince the city water authority to include nature protection in its portfolio of investments and interventions.
- help make the city a convincing demonstration site, raising the awareness of coastal communities on the role of mangroves for their livelihoods and galvanising action to stop mangrove degradation.

Eventually, the team hopes that the city can provide lessons and inspiration for national-scale biodiversity and ecosystem service valuation, assessments and accounting across East Africa.

3. IDENTIFY THE KEY ACTORS

What actors are involved?

Different ecosystem management strategies imply trade-offs that will have costs for some actors and benefits for others. Valuing nature initiatives assess and compare the consequences of different solutions and can provide information about the costs and benefits of different options to different stakeholders. This requires mapping relevant actors, their mandates, interests and capabilities with respect to the ecosystem management goals and strategies (in the project's theory of change).

- Who is affected by ecosystem service trade-offs implicit in different ecosystem management approaches?
- Who wins and loses under different ecosystem management approaches?
- Who sets the norms and rules that govern or affect ecosystems?

How to analyse key actors?

Compile details about each relevant actor before moving to:

- Current goals and needs
- Obstacles they face to achieve their goals
- Who are 'allies' in the change we want to create?
- Who are 'opponents' who create inertia or resist the change we want?

How to get key actors engaged?

To encourage engagement of key actors and their adoption of the tools, results and/or recommendations that are part of a valuing nature initiative, it may be helpful to think about:

- Possible ways to address key actors' goals, needs and obstacles
- How to gradually form alliances around the solution
- Are some actors' needs not possible to fulfil? Are there needs that are currently met that might no longer be? Could these actors oppose or block the change we seek? How can we react if they do?
- What are the different actors' strategies and their relationships with others? How does that affect the strategy for engagement?



CASE STUDY PART 2

Key actors

The actors that the assessment team need to engage with closely as they conduct scoping are:

- the municipality, in close association with the national government. These actors want to have a good reputation and profile in order to be re-elected. For that, they need to overcome their current difficulties in delivering security, water and food;
- the city water authority that wants to deliver water at low cost while limiting new investments. Their obstacle is declining water quality due to watershed and mangrove degradation;
- the coastal communities who want to avoid inundation and flooding during tropical storms and sea level rise. They also need fish for food, which is an important source of nutrition. Their obstacle is the city's growing population and competition for limited resources which encourages overexploitation. A further factor is the need to conserve the city's remaining mangroves in the face

of wood harvesting for charcoal by local communities.

The team reflects on opportunities to:

- meet with other city and national government officials to show them the preliminary ecosystem service maps and data that demonstrate how protecting remaining mangroves will significantly reduce the risk of flooding and inundation, improve livelihoods of poor communities and increase the water quality and security in coastal areas;
- meet with the water authority to develop a portfolio of projects that increase water quality cost effectively;
- consult with local community leaders to discuss the role of mangroves as fish nurseries and in storm protection and evaluate if intervening to improve mangrove management is effective enough to include in the overall options analysis;
- study carefully the local mangrove ecology and socioeconomic influence to determine a sustainable level of use with local communities; and
- propose a locally co-developed plan for mangrove protection and replanting that could provide employment for local people and help lower resource competition for inclusion in a broader green economy management plan for the city.

4. IDENTIFY WHAT THE ACTORS VALUE

What are the values of the actors?

Actors have 'orders of value' that affect how they judge worth and legitimacy. These orders of value also affect how actors react to proposals (like a valuing nature initiative) to significantly change policy or investments. Each order of value rests on 'shared common principles' about what contributes to the common good. Actors can have multiple and contradictory orders of value.

Order of value	Shared common principle
Order of inspiration	Contributes to creativity, spirituality or aesthetic beauty
Civil order	Contributes to public common interest through law and democratic procedures
Industrial order	Promises to be successful and effective in solving a practical issue
Market order	Makes participants more prosperous through active involvement in mutually advantageous trade and economic competition
Domestic order	Is based on the respect of traditional values, familiar practices and hierarchies
Order of fame	Increases attention from others and contributes to increased reputation and media visibility
Environmental order	Increases the care taken for nature, prioritising natural processes, individual species, critical habitats and biodiversity.

Table: 'orders of value' held by actors, adapted from Boltanski and Thévenot, 2006

How to identify actor values?

- As you listen to other people speak (to you or to each other) about the issues at hand, identify the orders of value that they use as a basis for decisions and to justify actions.
- Do not classify people or organisations in pre-assigned categories. Every person can use multiple, different orders of value, depending on the situation.

What can you do to manage and influence these values?

- Understand that you will always be negotiating with actors who hold different, evolving values.
- Reflect on the orders of value at play among the different actors.
- Consider how to use and change these values strategically to push for the change you seek. Can you help actors articulate and consolidate new values?
- If a conflict arises among people that share the same order of value, try to resolve it by applying an appropriate 'test' and relevant knowledge. For example, a conflict between two individuals using the 'industrial order' to decide on protection of a watershed could be resolved by evaluating the most efficient level and location of protection.

5. IDENTIFY WHAT INSTITUTIONAL CHANGE IS NEEDED

What are institutions?

Institutions are systems of established rules that structure social interactions to allow for a measure of certainty around what different actors can do, given that they encourage, constrain or enable particular behaviours.

Institutions are formed and embedded at different scales and are both:

- formal (e.g. legal systems and rules, a protected area)
- informal (e.g. customary property rights, social conventions and norms, local codes of behaviour)

Why is it important to think about institutions?

- Institutions influence the way people gain access to and control over ecosystem services and how they use them for their wellbeing.
- An ‘institutional’ perspective can help reflect on how a valuing nature initiative affects institutions in ways that improve (or not) ecosystem management and the wellbeing of local communities.

How to identify the institutional change needed?

- Reflect on how people gain access to and control over ecosystem services for their wellbeing.
- Reflect on the different components of wellbeing that are affected.
- Identify the institutions and infrastructure that affect how people can:
 - ◊ access an ecosystem service
 - ◊ use capital, skills, labour or rights to obtain effective control over an ecosystem service
 - ◊ transform and use ecosystem services to improve their wellbeing.
- Reflect on how a valuing nature initiative affects these institutions. Can it help to renegotiate and change institutions to improve ecosystem management and local communities’ wellbeing? Where and by whom are these institutions negotiated or changed?

6. REVISIT YOUR THEORY OF CHANGE

Steps 1-5 should help to clarify, challenge and test the assumptions in an evolving theory of change for your valuing nature initiative.

Identify a quality process for testing identified assumptions.

Keep reflecting on key questions:

- What are feasible chains of cause and effect, given the context?
- What do we know about actors' evolving identities, interpretation of problems, their needs, challenges and obstacles?
- How does this challenge our assumptions and theory of change?
- Are the actors we are negotiating with representative of others? Will our innovation eventually be mobilised by others?

CASE STUDY

PART 3

Actors' values

1. The assessment team is motivated by the 'environmental order': a desire to protect this important mangrove forest for marine biodiversity. This motivation is expressed in the team's work plan.

2. To launch the project, the assessment team used the 'order of fame' to garner support from the government agencies. At high-level international meetings on green economy development the assessment team spoke directly to countries' leaders about increasing their reputation and visibility by supporting the green economy management plan.

3. To obtain the support of the African Development Bank, World Bank, the European Union and other international development partners the team highlighted in a report the flood control, food security, recreational, tourism and biodiversity values of mangroves and the need to preserve their aesthetic beauty, using a mix of the industrial, market and inspiration orders.

4. Since charcoal harvesting by local communities threatens the viability of mangroves, the assessment team engaged with these groups to discuss sustainable use options. The team essentially used 'market order' justifications showing the economic risk of mangrove collapse affecting local fishing livelihoods. They also drew on 'civil order' arguments when illustrating how mangroves enable flood control for many districts in the city and surrounding areas.

Institutional changes needed

Both formal and informal institutions and infrastructure mediate local communities' ability to access and control areas of the mangroves, including land leases issued by the Ministry of Environment; protected area regimes and spatial regulations administered by the Ministry of Environment; and cultural resource access rights determined by local family and village hierarchies. The institutions and infrastructure that affect the ability of villagers to use the mangroves will need to be reformed, to establish conditions that allow mangroves to thrive. Without these conditions, the likelihood of mangrove 'green infrastructure' becoming an effective green economy investment is low. A feasible plan for reform will need to be included in the integrated green economy management plan.



FURTHER READING

Bibliography

Boltanski, L. and Thévenot, L. 2006. *On Justification: Economies of Worth*, translated by Porter, C. Princeton University Press, Princeton.

Guerry, A.D., Polasky, S., Lubchenco, J., Chaplin-Kramer, R., Daily, G.C., Griffin, R., Ruckelshaus, M., Bateman, I.J., Duraiappah, A., Elmqvist, T., Feldman, M.W., Folke, C., Hoekstra, J., Kareiva, P.M., Keeler, B.L., Li, S., McKenzie, E., Ouyang, Z., Reyers, B., Ricketts, T.H., Rockström, J., Tallis, H., Vira, B., 2015. Natural capital and ecosystem services informing decisions: From promise to practice. *Proceedings of the National Academy of Sciences* 112, 7348–7355. doi:10.1073/pnas.1503751112

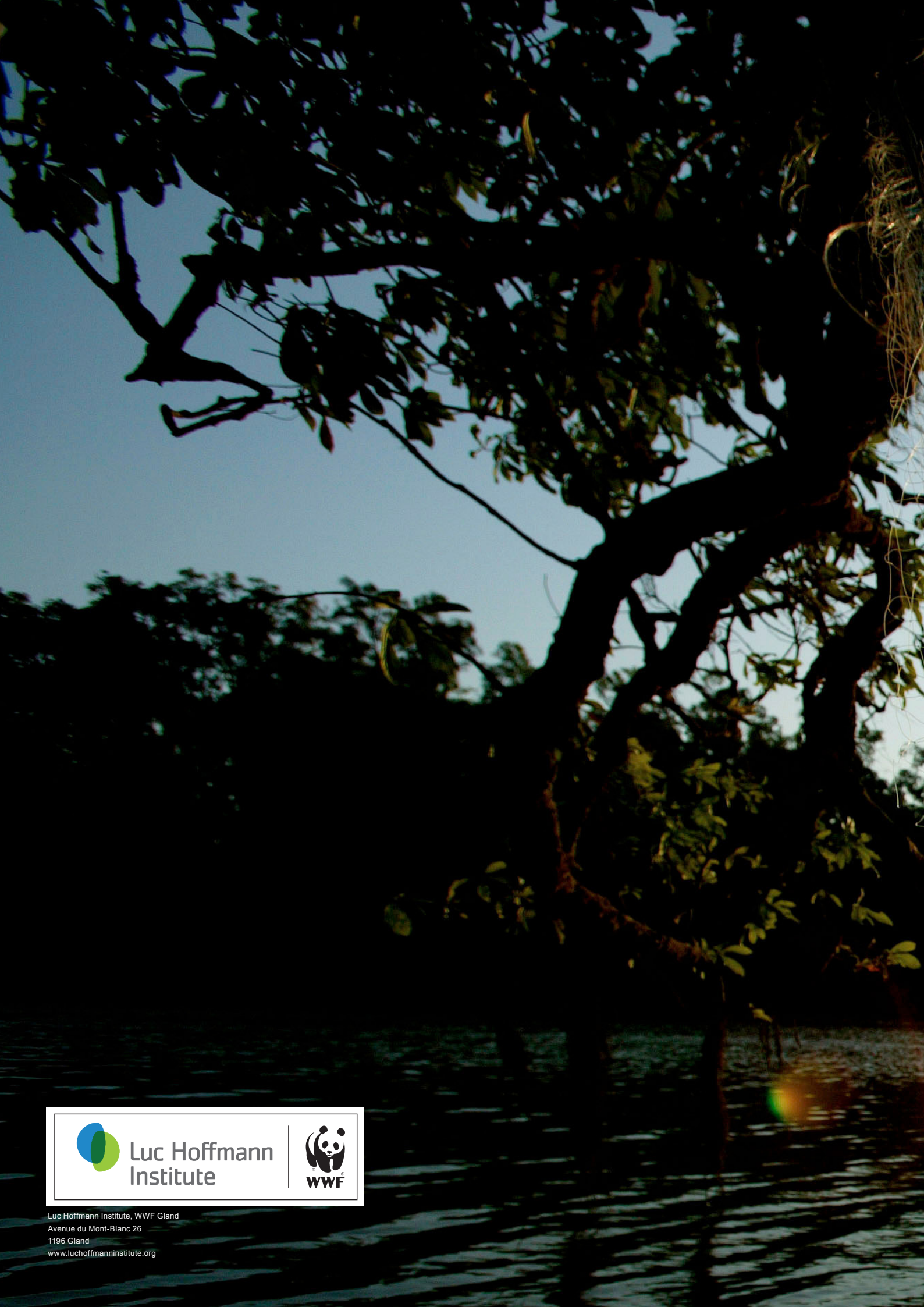
Rosenthal, A., Verutes, G., McKenzie, E., Arkema, K.K., Bhagabati, N., Bremer, L.L., Olwero, N., Vogl, A.L., 2015. Process matters: a framework for conducting decision-relevant assessments of ecosystem services. *International Journal of Biodiversity Science, Ecosystem Services & Management* 11, 190–204. doi:10.1080/21513732.2014.966149

Ruckelshaus, M., McKenzie, E., Tallis, H., Guerry, A., Daily, G., Kareiva, P., Polasky, S., Ricketts, T., Bhagabati, N., Wood, S.A., Bernhardt, J., 2015. Notes from the field: Lessons learned from using ecosystem service approaches to inform real-world decisions. *Ecological Economics* 115, 11–21. doi:10.1016/j.ecolecon.2013.07.009

Useful Resources

For more information on the concepts and theory that this guidance document is based on, see:

Feger, C., Mermet, L., McKenzie, E., and Vira, B. March 2017. **Improving Decisions with Biodiversity and Ecosystem Services Information: A Theory-based Practical Context Diagnostic**. Technical Working Paper available at: https://www.researchgate.net/publication/316656516_Improving_Decisions_with_Biodiversity_and_Ecosystem_Services_Information_A_Theory-based_Practical_Context_Diagnostic_for_Conservation



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