Principles for setting up long-term monitoring plans

Context

Developing long-term monitoring for nature-based solutions (NbS) is essential for assessing and understanding the sustained impact of interventions over time, developing the understanding and evidence needed to plan future projects. This requires revisiting NbS projects several years after a project has concluded to understand any environmental, social and economic outcomes and how these have come about. However, in practice, this can be challenging. Long-term monitoring requires ongoing commitment and buy-in to ensure that data collections processes are in place. Often, this is not possible due to lacking resources.

Here, we share a short guide on setting-up long term monitoring in practice, providing a short overview of the key benefits of undertaking this work and the key principles to consider.

Key benefits

Undertaking long-term monitoring of nature-based solutions projects offers several key benefits:

- **Understanding the full value of NbS:** Long-term monitoring allows for a comprehensive assessment of the effectiveness of nature-based solutions over extended periods. This is likely to provide a fuller understanding of the value of nature-based solutions, once they have embedded within local spaces, and an understanding of the environmental, social and economic aspects can be understood (as well as any ripple effects and unintended outcomes).

- **Validating assumptions and hypotheses:** Over time, long-term monitoring validates assumptions and hypotheses made during the project's planning and implementation phases. It helps ensure that the intended outcomes align with the actual results.

- **Learning and improvement:** Continuous monitoring facilitates learning and improvement. Project managers and practitioners can learn from successes and challenges, leading to more effective project design and implementation in the future.

- **Adaptative management:** Nature-based solutions' performance may vary in response to changing environmental conditions, urban development, or societal needs. Long-term monitoring helps understand how these solutions adapt and remain resilient in the face of dynamic challenges as well as supports adaptive management based on emerging information and feedback.

- **Building the evidence-base for NbS:** Long-term monitoring data contributes to the scientific and policy knowledge base, enhancing understanding of the long-term impacts and effectiveness of nature-based solutions.

- **Supporting future decision-making:** Long-term data collection and analysis support evidence-based decision-making for policymakers, funders, and stakeholders. Such evidence can enable informed choices regarding the continuation, scaling, or modification of nature-based solutions.

- **Building stakeholder trust**: Transparent long-term monitoring builds stakeholder and trust by demonstrating accountability, openness, and commitment to achieving project objectives, including for local communities.

Key principles

As part of the legacy of CLEVER Cities, we are looking at how to put in place long-term monitoring plans in the different cities involved.

In London, we have developed the following key principles to follow to support the development of a monitoring plan that will be used by local stakeholders to keep track of the long-term changes in Thamesmead. This will support the development of an approach that 'measures what matters'.

Key principles for long-term monitoring

- **Involve key stakeholders throughout:**
  Involve relevant stakeholders, including local communities and decision-makers, in designing and implementing the monitoring plan. This will ensure that their perspectives and needs are considered, fostering ownership and support for the long-term monitoring process, making it more likely to be implemented and fit for purpose in the long-run.

- **Define clear and proportionate objectives:**
  Clearly define the project's monitoring objectives, specifying the outcomes and impacts to be measured that are proportionate to the scale of the nature-based solution. Select relevant and measurable indicators that align with the project's goals, ensuring they are feasible to collect over the long term.

- **Use 'stats and stories':**
  Use a mix of quantitative and qualitative data collection methods to capture the diverse impacts of the nature-based solutions, inncluding social impacts. Prioritise collecting insight that will enable you to understand the context of any changes and will support future decision-making.

- **Take an adaptive and iterative approach:** Embrace an adaptive and iterative approach to monitoring, as flexibility allows for adjustments that strengthen the monitoring process. Review and refine the monitoring plan regularly based on local developments, emerging challenges, and new knowledge.

- **Openly share learning:** Maintain transparency throughout the monitoring process by establishing clear communication channels and reporting mechanisms. Make results publicly available, fostering accountability and trust among stakeholders and local communities, and sharing best practice and learning with other projects and initiatives.

- **Develop the mechanisms for long-term commitment**: Continuity is essential, and this requires establishing roles, responsibilities and commitment for monitoring upfront. Plan early to secure adequate funding, resources and permissions for evaluation and integrate monitoring and analysis activities into existing management processes.

The development of a long-term monitoring plan is currently in progress, including stakeholder engagement to shape design of the long-term monitoring plan. For example, we have worked with the local Community Design Collective who have been involved in co-designing the South Thamesmead Garden Estate to prioritise what outcomes it will be vital to keep track of over time. We have also consulted with colleagues at the Greater London Authority to understand where long-term monitoring can add value and common pitfalls of where monitoring does not provide relevant information for future decision-making.