

**PANFIL, STEVEN** [S8-P30]

*Monitoring climate-smart landscapes to meet the requirements of internal and external stakeholders*

Co-authors: Celia A. Harvey; Madeleine McKinnon; Katherine Malpeli; Ruth Martinez

Landscape approaches are increasingly seen as essential for simultaneously achieving multiple objectives, which often include poverty alleviation, food security, and conservation. A growing number of landscape managers also recognize the need to add climate change mitigation and adaptation to these objectives, applying a concept termed climate-smart Landscapes. Given the complexity of landscape management, mechanisms for continual learning and adaptive management are essential to the success of these initiatives, and these mechanisms require effective social, environmental, and climate-related monitoring.

In practice, monitoring is often dictated by the need to satisfy a dizzying array of externally imposed requirements. A landscape may include activities that are subject to the monitoring requirements of international agreements like the UNFCCC, funder safeguards policies, and sustainability certification schemes for agricultural and forest products. This range of requirements promotes ad hoc monitoring rather than integrated, long-term monitoring applied at the landscape scale.

With the goal of promoting coherent monitoring that supports the goals of climate-smart landscapes, we identified commonalities and differences among the social, environmental, and climate-related requirements of 6 international agreements, 13 donor policies and 18 voluntary certification systems. We also conducted a literature review to identify recommended indicators for landscape management. We used this list of indicators to identify a sub-set of indicators that satisfy the externally required criteria and also contribute to the continual learning and adaptive management needs of climate-smart landscapes. We found that a number of indicators can satisfy both internal and external monitoring needs, and that consistent monitoring of these indicators may reduce duplication of effort and facilitate adaptive management of the landscape. We also identified important indicators that are not widely required by external systems, but which have been identified in the literature as important for successful landscape management.

The findings from this analysis can be used to design coherent social, environmental, and climate-change monitoring programs for climate-smart landscapes that promote continuous learning and adaptive management and simultaneously simplify the monitoring required by a diverse set of external stakeholders.