

Learning from Others: Research and Analysis of Monitoring and Evaluation Programs as Analogues for Climate Change Adaptation Measurement

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Project Overview

Developing methods to track progress and assess effectiveness of adaptation at early stages of planning is critical. Results help to determine what is working, what is not working, and inform subsequent adjustments to adaptation practices, programs and policies.

In Canada, measuring the progress and effectiveness of adaptation has not yet become well integrated into adaptation planning. A range of programs have been successful at raising awareness of the need for mainstreaming climate change into planning and policy, but no methodology has been accepted for evaluating adaptation.

There is documented success for monitoring and evaluation (M&E) of both progress and effectiveness in other, more mature program areas. For example, areas such as health care, transportation, coastal management, resource management and forest management have demonstrated success in measuring the outcomes and effectiveness of various programs.

With the goal of informing the development of adaptation measurement programs in Canada, we conducted an in-depth analysis of two Canadian M&E programs in areas of study outside of climate change adaptation:

✓ Forest and Range Evaluation Program (FREP)

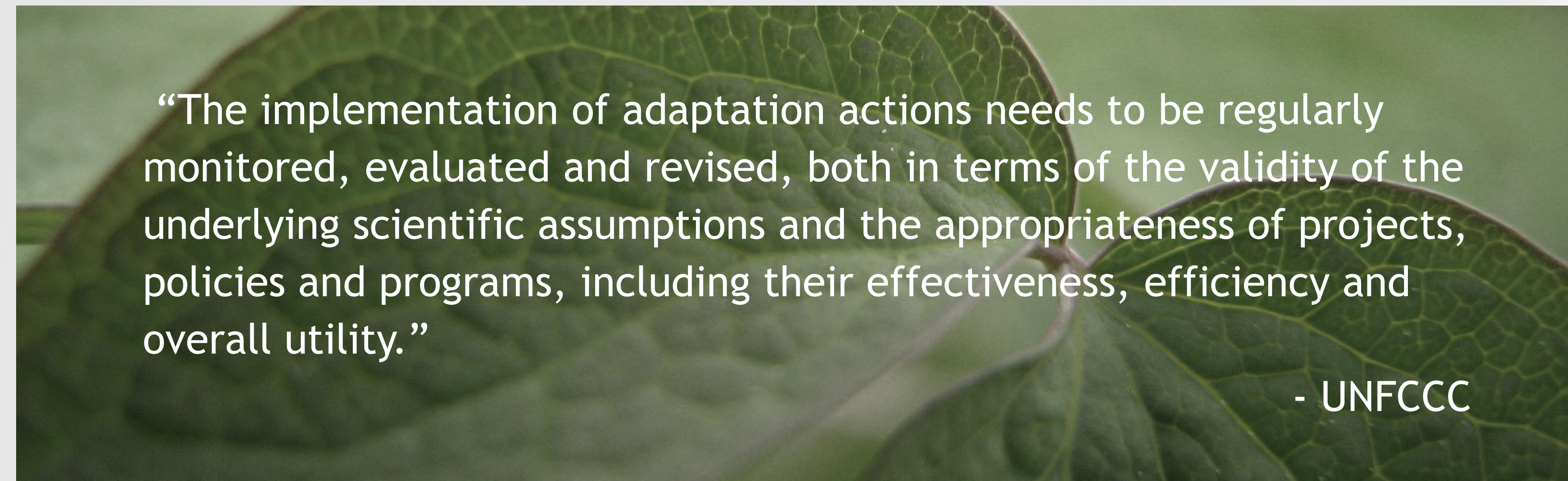
FREP is a provincially-run program in British Columbia designed to monitor and evaluate the implementation and effectiveness of forest and range practices throughout the province in meeting government objectives for sustainable forest management.

✓ School Health Action, Planning and Evaluation System (SHAPES)

SHAPES is a tool that can be used at a variety of scales in order to provide evidence of influence of school policies, programs, and contextual settings on youth health behaviour programs, to support public health planning, research and evaluation.



NOTE: Not all lessons are directly transferrable to each adaptation M&E scenario. E.g. FREP is more applicable to adaptation in natural resource sectors, while SHAPES is more applicable in the health sector or social sciences. Thus, the lessons that stem from this analysis are high-level and can be modified to suit the specific context of a climate change adaptation program.



Lessons Learned

In total, 65 transferable lessons were pulled from the in-depth analysis of FREP and SHAPES and organized into 10 core themes. The following represents a selection of the lessons learned:

1) General

- By design, an M&E program collects information to assess the effectiveness of implemented measures. It offers suggestions on how to adjust activities in order to achieve the desired outcomes or improve success.
- Aspects of an M&E program are specifically designed and suited for the context in which they are applied - there is no 'one-size-fits-all' approach.

2) Program Structure & Components

- Early on in the process, develop a clear policy direction (i.e., goals and objectives) as well as clearly defined roles and responsibilities for the key actors involved.
- Internal and external stakeholder feedback, including a role for the public, will lend credibility and transparency to the M&E process.
- The central agency responsible for overseeing a provincial M&E program can help to ensure the program runs efficiently and effectively, while providing guidance, training, and ensuring quality.

3) Ongoing Support

- Political support, sufficient human, financial and technical resources, as well as sustained operational and managerial commitment are crucial to the success of an M&E program.
E.g. SHAPES harnesses institutional support from the Propel Centre for Population Health Impact at the University of Waterloo and financial support from the Canadian Cancer Society, the Public Health Agency of Canada and Health Canada.
- Identifying M&E 'champions' can help advance implementation, contribute to program sustainability, and sustain commitment over time.

- Running an M&E program at the provincial level can provide the necessary institutional capacity and sustained resources; however, a smaller and more narrowly defined M&E program can be a suitable substitute if resources or time are limited.

4) Choosing Indicators

- A clearly defined method for selecting indicators should be developed early on and indicate how and when indicators will be evaluated and renewed/expanded.
E.g. FREP's indicators are developed by experts, based on scientific literature, peer-reviewed by stakeholders, and then tested in the field.

- Ensure consistent use of indicators in order to assess and compare various facets of the program over time.

- Include both process (implementation) and outcome (effectiveness) indicators, and utilize both quantitative and qualitative indicators.

5) Data Collection

- Since adaptation is multi-sectoral in nature and will likely involve collecting data from various sectors, utilize existing information sources where available.

- Data collection procedures vary depending on the scale and context of an M&E program.
E.g. FREP sends staff out in the field to enter quick, yet statistically valid measurements and to scribe visual estimates onto field cards, which are then entered into FREP's Information Management System.
E.g. SHAPES uses a quick, simple and inexpensive survey method administered to students in a classroom setting in order to gather raw health data.

6) Data Quality, Management & Storage

- A centralized data storage and management system, internal and external peer review of data reports, and robust quality control systems help to maintain high standards of quality and increase credibility.
E.g. FREP has a rigorous validation and verification procedure to ensure data is error free, including a final data quality check by team leaders.

- It is beneficial to have at least one staff member solely dedicated to data coordination and management to ensure consistency in how data is managed.

7) Evaluation Methods

- Evaluation methods vary depending on the scale and context of an M&E program.
E.g. FREP implements routine evaluations (i.e., inexpensive, rapid data collection) on a continuing basis, with more intensive evaluations (i.e., expensive, in-depth data collection) at a larger scale when necessary.
- Measuring against a set of pre-determined criteria or various baselines allows program managers to monitor implementation, gauge success of the activities, and continuously work toward program goals and objectives.

8) Expertise & Training

- Develop teams of specialized individuals to help guide the development of indicators and protocols.
- Training programs are viewed as investments for the delivery of timely and accurate results, and overall program effectiveness.
E.g. FREP has a rigorous staff training program that occurs prior to the start of each field season.

9) Communication

- Develop a strong communication plan that helps to frame key messages for the range of specific audiences.
- Publicly posting results signals transparency and accountability in the process.
- Giving local stakeholders the opportunity to ask questions about the results helps enhance local buy-in.
E.g. SHAPES emphasizes local empowerment and ownership by disseminating results and recommendations directly to participating schools.

10) Continuous Improvement

- M&E is not an end in itself; the results of M&E programs are designed to continuously improve policies, projects, tools or activities.
- Results are communicated to decision-makers, policy-makers, practitioners and stakeholders, and serve as information to enhance knowledge and improve practices.
- Internal continuous improvement of M&E programs can be realized through adaptive management (i.e., learning from the results and adjusting program components).

To view the project report, please visit: www.climateontario.ca/p_ECCC.php

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