As current sustainability challenges continue to threaten the wellbeing of communities around the world, new and innovative approaches to sustainable community planning become increasingly urgent. Understanding what successful planning looks like and transparently monitoring the process through indicators is essential for empowering communities to lead the path toward a sustainable future.

**Measuring Success: Indicators for Strategic Approaches to Sustainable Community Planning**

**Core Concepts**

The Framework for Strategic Sustainable Development (FSD) – the foundation upon which this research is built – offers a science-based and principled definition of sustainability, as well as a method for structuring, evaluating, and informing the selection of indicators to effectively measure the community planning process. At the heart of the FSD is a process called backcasting from Sustainability Principles, which was used throughout the research to help inform the selection and identification of sustainability indicators for community planning.

**The Sustainability Principles**

A set of Sustainability Principles (SPs) derived from an understanding of the system (community within society within the biosphere) that describe the basic minimum requirements for a sustainable society.

1. concentrations of substances extracted from the Earth's crust,
2. concentrations of substances produced by society,
3. degradation by physical means, and
c4. people are not subject to conditions that systematically undermine their capacity to meet their needs.

**Backcasting from Principles**

Backcasting is a method for planning in complex systems by which a successful sustainable outcome is imagined in the future, followed by the question “what do we need to do today to reach a successful outcome?” Success in this case is defined by outlining the four Sustainability Principles for a sustainable society. Backcasting can be distinguished from the common practice of extending and incrementally influencing current trends known as forecasting because it removes the constraints of historical and present limitations by placing oneself in the future where success has already been achieved.

**Backcasting from Vision**

At every point in time a vision of the future is necessary as a reference point to measure the extent to which the strategic sustainable development process has been achieved. Vision is defined as the set of interventions initiated by the communities to make the future sustainable. A well-defined vision will reflect the community’s core values and will guide the decision-making process. Vision is also a statement of the core values for the community’s sustainability efforts, with a focus on increasing community capacity and developing and implementing processes to achieve these values.

**Socio-Ecological versus Process Indicators**

In sustainable community planning, there are two key categories of indicators:

1. Socio-Ecological Indicators: measure how a community’s initiatives are performing relative to its vision of sustainability (e.g., number of fish in a stream can reflect the success of a stream restoration initiative) and
2. Process Indicators: relate to the success and structure of an organization’s planning process (e.g., how frequently results of process indicators are communicated to the public).

**Why Process Indicators?**

This research confirms that applying whole systems and strategic approaches to identifying indicators is relevant in any context. While a vast array of indicators are available to measure the outcomes of sustainability initiatives, without monitoring if the planning process is participatory, strategic, and inline with a science- and systems-based definition of sustainability, initiatives are unlikely to be successful in the long term. Process indicators provide the structure in which to monitor planning at every level and across disciplines. By looking upstream and collecting information about the performance of the planning process, appropriate socio-ecological indicators can then be derived, while simultaneously ensuring more effective governance. Quantifying the steps, impacts, and outcomes of community planning will ensure greater accountability and transparency to the community. As an essential component of moving towards a sustainable future, process indicators can uncover strengths and weaknesses of a planning process. This ensures mistakes can be learnt from by allowing successes to be shared and repeated around the world.

**Applying Backcasting to Develop Indicators**

A practical example of how backcasting was implemented to develop a set of planning process indicators

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