

Risk assessment Research on this function traces changes in understanding the nature, causes, consequences, likelihood, and timing of the risk in question. Particular attention is paid to the subset of all causes and consequences addressed by particular actors.

Monitoring Research on this function traces the evolution of efforts by any of the actors to document actual changes in aspects of the environment affected by the risk in question, relevant emissions, human responses, and results of management strategies and specific implementation measures.

Option assessment Research on this function documents and explains changes in the assessment of possible options for responding to the problem in question. Options are particular measures that an actor might undertake to help manage a risk. Assessments of options are systematic examinations of the feasibility, costs, or benefits of particular options.

Goal and strategy formulation Research on this function traces changes in management goals, the design of a package of options appropriate for achieving them, and the selection of modes (such as command and control, incentives, and persuasion) for implementing those options. Goals are statements of objectives or of conditions that an actor wishes to bring about. Strategies are plans for how—in what combination and at what time—particular response options will be combined to achieve a goal. Strategies thus organize particular means (options) to achieve particular ends (goals).

Implementation Research on this function traces changes in the actions actually taken by various social actors with regard to management of the issue in question. Implementation may include persuasion through normative pronouncements, educational activities, the exchange or dissemination of information, rule making, provision of incentives, supervision or enforcement of compliance, and coordination of programs.

Evaluation Research on this function documents self-conscious efforts of actors to reflect on and evaluate their own and others' performance in contributing to management of the risk under consideration.

Box 1.2 Management functions

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