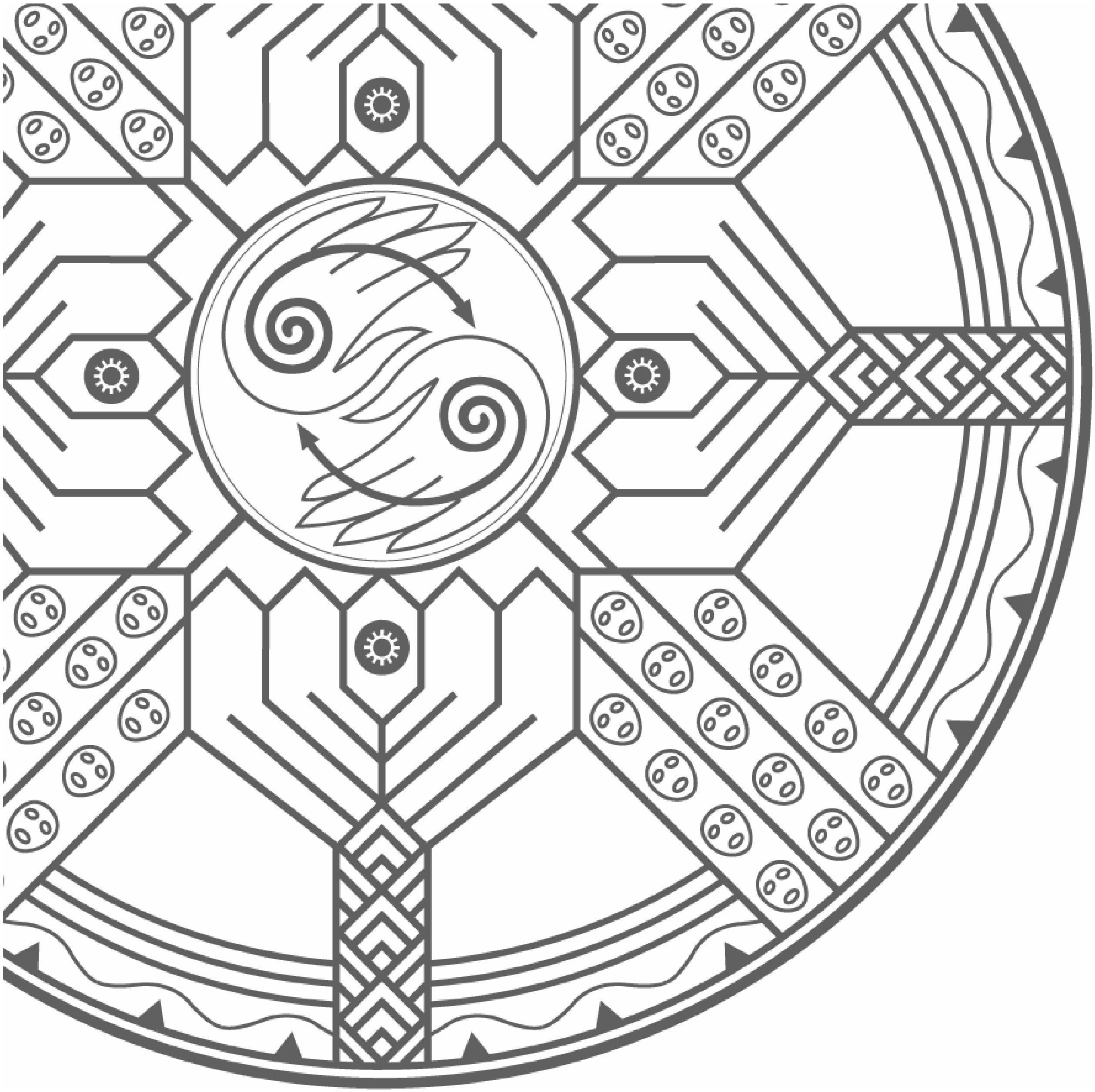

Measuring while you manage:
Planning, monitoring and evaluating knowledge networks

Heather Creech

Version 1.0

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I The challenge of network evaluation

> *Formal knowledge networks consist of groups of expert institutions working together on a common concern, strengthening each other's research and communications capacity, sharing knowledge bases and developing solutions that meet the needs of target decision makers at the national and international level*[1].

In our series of working papers on knowledge networks, we have articulated a number of operating principles for networks, recommended approaches for engaging decision makers through networks, reviewed the creation and management of relationships within networks, and discussed some of the mechanics of internal communications. In these papers, we often refer to what we see to be the “network advantage” over other individual or collaborative approaches to change:

- Knowledge networks emphasize joint value creation by all the members within the network (moving beyond the sharing of information to the aggregation and creation of new knowledge);
- Knowledge networks strengthen capacity for research and communications in all members in the network; and
- Knowledge networks identify and implement strategies to engage decision makers more directly, linking to appropriate processes, moving the network’s knowledge into policy and practice. Partner organizations bring with them their own contacts and spheres of influence, thereby extending the reach and influence of all partners to a wider range of decision makers.

This final paper in the series takes a closer look at the evaluation of networks. In particular, we hope to provide some insight into how to monitor and assess whether the network advantage is being realized.

While the literature on institutional planning, development project evaluation and social marketing is rich, extensive, and almost overwhelming, we have found very little specifically related to monitoring and evaluating the performance of networks. In our own networks, and in several others, we have observed a number of significant difficulties with planning and evaluation.

Network evaluation, when it takes place, is usually driven by requirements to report to funders on whether goals and objectives for the network and its related projects have been achieved. Depending on the financial model for the network, reports are required for:

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[1] Heather Creech, *Strategic Intentions: Principles for Sustainable Development Knowledge Networks*. IISD Working Paper. (Winnipeg: IISD, 2001). p.17.

1. A large grant from one or two donors, which has been provided to a lead institution to cover all network activities; or
2. Specific project funds from a variety of donors which have been granted to individual members for individual projects, or to groups of members for joint projects.

When a large grant to cover all the costs of network activities is being sought, the lead institution often defaults to more traditional project planning and evaluation methodologies when preparing the grant proposal. The methodology selected may be required by the prospective funder. Usually the lead institution sets the framework in consultation with the funder and assesses the performance of its peers in the network within that framework. This leads to several problems:

a) The lead institution treats the network as a single project among many projects managed by the institution. Consequently, in evaluation, the institution looks at specific project deliverables, rather than at the value of the relationships that have emerged from working collaboratively. The network advantage – joint value creation, mutual capacity development and collective engagement of decision makers – which results from those relationships, goes unmeasured and unvalued.

b) Rarely does the lead institution review its own performance as a member of the network.

c) Rarely are the members involved in joint discussions around what they think might be indicators of success for network activities. What is eventually achieved by individual members might turn out to be quite different over time from what the lead institution speculated in the grant proposal. But, because the organizer is tied to a pre-set assessment framework, those achievements might go unrecognized because there is no process in place to capture and report on them.

The second financial model leads to additional problems. As a network grows and matures, the members will manage many different projects, supported by different funders. The cumulative cost of detailed evaluation of the full range of network projects can be prohibitively high. The members leading individual projects report on results to their own funders, often without sharing the evaluation with other members. No opportunity is available to aggregate the individual successes to see whether the network as a whole is really fulfilling its potential, or whether it is simply a convenient umbrella for a set of projects run by a number of organizations.

Whether there is a single grant or a number of project grants, current evaluation practices rarely provide opportunities for the network members to learn from each other about what is working well in their activities, whether the network is having the influence it wishes to have, and what needs to be adjusted during the funding contribution period.

II The Case for Evaluating Networks

We believe that networks need to be evaluated on two fronts.

1. The effectiveness of the network (doing the right thing)

   In a network supported by only one or two major grants, there is a certain cohesiveness of objectives which makes it somewhat easier to monitor whether the network is building capacity, creating joint value and influencing policy processes. This becomes much more difficult when the network is supported by a variety of grants for a variety of projects within the network. Nevertheless, in both cases it is necessary to find the means to demonstrate the value added of the network modality, for three reasons:

   a) Formal knowledge networks come together to lever change in policies and practices, supportive of sustainable development. A network needs to be able to determine what changes it has effected through its research and communications work. It needs to monitor whether it is fully realizing its "network advantage". This requires a methodology that not only assesses individual activities, but provides some means for identifying changes as a result of its combination of efforts.

   b) Value added propositions – ones which demonstrate real leverage of money and influence -- are highly attractive to funders. Networks need to be able to make the case that operating in a network mode does lead to focused collaboration, better informed research results, new knowledge and real influence.

   c) Networks often require a great deal of in-kind support from member institutions, especially during gaps in specific project funding. The network coordinators need to be able to demonstrate to the members whether it is worth the additional investment of time and effort in order to sustain network momentum over the long term.

2. The efficiency of the network (doing things right)

   This point is often overlooked in traditional evaluation frameworks, and yet over and over we hear about the transactional costs of networks, that they are cumbersome and time-consuming to manage, that motivation and performance of individual members is often at issue and that the cost effectiveness of the network approach is in question. Is it better in the end for a funder to give $200,000 to each of five organizations to carry out research on a given issue, rather than $1 million to a network of five organizations? And yet, in spite of these ongoing challenges to the network modality, networks rarely put in place the means to monitor, review and adjust the internal operations of the network.

The purpose of this paper is to highlight current approaches, identify in those approaches the elements most useful for networks, and develop our experimental framework for planning, monitoring and evaluation. This is an area requiring more research, more experimentation and more implementation of executable monitoring and evaluation frameworks. This paper may raise more questions than solutions at this stage in our research.

III Overview of available methodologies

We have scanned several of the most common project planning and evaluation approaches:

- SWOT analysis [Strengths, Weaknesses, Opportunities, Threats]
- Results Based Management
- Logical Framework Analysis
- Outcome mapping
- Appreciative inquiry

These approaches have a number of elements in common.

a) They are intended to be planning tools, as well as project monitoring and evaluation tools. The evaluation components are embedded in the plan from the beginning.
b) They should all be participatory, with input coming from all those involved in the project.
c) Several provide for the identification of both qualitative and quantitative indicators of success.
d) Some anticipate some form of regular monitoring throughout the life of the project, although only outcome mapping actually prescribes a monitoring approach.
e) Most require some form of evaluation report at the end of the project, either looking back over the project, or forward to future activities, or both.

In looking at the most common approaches, we observed that none drew from lessons in the field of human resources performance evaluation. Since networks are about relationships, we thought it useful to also look at evaluation methods from the human resources field. We were delighted to find many of the elements needed for network evaluation that were sometimes lacking in other evaluation methods: simplicity, learning/feedback loops, and the ability to acknowledge and address the unexpected.

The following table is a cursory overview of common planning and evaluation techniques.

Technique	Description
SWOT Analysis	**Context:** Used by marketers in the private sector to assess the performance of current product lines, and openings for new products. Used by organizations in strategic planning to assess current activities, directions for new activities. It can be used as a gap analysis tool – where an organization is today, and where it needs to be tomorrow. **Core elements:** It requires a participatory process. By filling in a simple grid, planners can collaboratively highlight internal capabilities and external factors.

	Positive	Negative
Internal	Strengths	Weaknesses
External	Opportunities	Threats

Using strengths and opportunities, planners can assess whether to initiate or continue with a product or activity, and mitigate against apparent weaknesses and threats.

Results Based Management RBM

Context:
Used by development practitioners to plan and monitor projects. Focuses project managers on short, mid-term and long term development results. Considers a result as a describable or measurable change resulting from a cause and effect relationship.

Core elements:
The results chain:
Project→Output→Outcome→Impact

Inputs	Activities	Outputs	Outcomes	Impacts
Money, staff	What you will do, who you will work with	Short term results/products, (within one year of a project) affecting individuals	Mid-term accomplishments (by the end of the project) affecting organizations [corresponds to LFA purpose level]	Long term results: what you would like to see happen as a result of the project [corresponds to LFA goal level]
Operational Results		Development Results		

Usually developed by project proponent and donor, without input from project partners, using a framework prescribed by the donor.

Logical Framework Analysis LFA

Context:
Used by development practitioners to plan and monitor projects. Requires project planners to be clear and specific about the project, its objectives, obstacles and results. The LFA is a key tool in Results Based Management.

Core elements:

	Description	Indicators	Means of verification	Underlying assumptions /risks
Goal				
Purpose				
Outputs				
Activities				

Outcome mapping

Context:
Developed by the International Development Research Centre.

Recognizes that within the RBM/LFA approaches,
1st, there is an implied causality to project work that is not necessarily true: a desired goal or result may be achieved but there may be other factors leading to that result;

<table>
<tr>
<td></td>
<td>
2nd, that results or goals may not be seen until some time after the life of the project.
3rd, that the “outcome” component in these approaches is often not well understood by users.

Draws from the social marketing field the emphasis on behaviour change, reflected in changes in activities and relationships. Concentrates on “outcomes” as changes in behaviour, relationships, activities/actions in those with whom the project works directly.

Introduces grades of change: what would the assessor want or expect to see a partner change; what would they like to see, and what would they love to see.

Provides a methodology for defining who partners are; and for mapping progress towards outcomes as a more reasonable indication of a project’s success.

Acknowledges that anecdotal information, if collected systematically over time, can provide a reliable indication of desired changes and outcomes.

Core elements:
<table>
<tr><td>Intentional design</td><td>Why (vision)
Who (boundary partners)
What (outcome challenges and progress markers)
How (strategy maps)</td></tr>
<tr><td>Outcome and performance monitoring</td><td>Systematized self-assessment:
Journals for recording progress marker, strategy performance</td></tr>
<tr><td>Evaluation planning</td><td>Review of project</td></tr>
</table>
Can be developed in consultation with project partners.
</td>
</tr>
<tr>
<td>Appreciative Inquiry
AI</td>
<td>
Context:
Developed by Case Western Reserve as a process for identifying the positive within a company – strengths and success – and focusing the energy of the company on pursuing the positive. AI is one of many participatory evaluation methodologies.

As with Outcome mapping, stories become the indicators of success.

Core elements:
The four “D” cycle:
<table>
<tr><td>Discover</td><td>Identifying what is working well and where the energy in an organization lies:
Participants each describe best experience within the organization
Participants describe what they value most in themselves, in their work and in the organization</td></tr>
<tr><td>Dream</td><td>Participants look to the future:
what would they consider to be a success for the organization;
what would they like to see for themselves, their work, their organization</td></tr>
<tr><td>Design</td><td>Participants scope out a plan of work based on what they have discovered about their strengths, values and visions</td></tr>
<tr><td>Delivery</td><td>Participants execute the plan</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><td></td><td></td></tr>
<tr><td>Human Resource performance evaluation frameworks HR</td><td>Context:
Most organizations have in place a process for reviewing and evaluating the performance of individual staff members, on an annual basis. The key is regular, systematic assessment of activities against a clear terms of reference for the staff member.

The objectives of the process are to:
Recognize success and identify ways to address problems
Identify strengths and potential contributions not formerly recognized
Create a learning cycle, from one year to the next
Do so in a fair, objective manner
Core elements:
<table>
<tr><td>Terms of reference</td><td>Description of the position and tasks to be undertaken. Individual to be assessed on performance of those tasks.</td></tr>
<tr><td>Grading assessment</td><td>A simple rating for each task, usually from 1-4:
Does not meet expectations;
Occasionally meets expectations
Consistently meets expectations
Exceeds expectations</td></tr>
<tr><td>Descriptive assessment</td><td>Short examples (stories) of individual’s accomplishments or challenges for each task</td></tr>
<tr><td>Future expectations set</td><td>A statement of where performance needs improvement and how that will be achieved; a statement of new goals and expectations.</td></tr>
</table>
There are often common elements or “job parts” in performance evaluation frameworks: for example
Substantive/technical knowledge
project management and supervision
communications with stakeholders
new project development and fund raising
contribution to institutional planning
Evaluation is always conducted jointly by three parties: the independent HR manager, the immediate supervisor and the staff person.</td></tr>
</table>

IV Frameworks for network planning, monitoring and evaluation

In order to create what we hope might be a simpler, but useful approach for network assessment, we have taken components from the various methodologies available to design our experimental frameworks.

We have taken from Outcome Mapping four key components:

1. The sequence of planning, monitoring and evaluation. We have attempted to reduce the number of steps involved in order to provide a simpler, more executable process for small and mid-sized networks with limited staff and resources.

2. Outcome mapping's core premise, that the emphasis in project evaluation should be on identifying outcomes as changes in behaviours, actions, and relationships.

3. Its recognition that it is the people one is working within the network, including the lead institution and network coordinator, who will change activities, behaviours, and relationships as a result of working together in the network. In outcome mapping, the "boundary partners" are primarily the network members themselves, although in outcome mapping, each boundary partner in a major program like a network can have its own boundary partners. To avoid confusion between levels of boundary partners, we have chosen instead to use the term "stakeholders": those individuals and groups outside of the core group of partners in the network, which the network wants to influence. Some would call this the "target audience, although we prefer not to use that term as it conveys an image of receivers of messages rather than those engaged in action.

4. Its core methodology, that stories recorded systematically over time can provide a reliable indication of changes, and therefore outcomes, brought about through network activities.

From Results Based Management, we have adopted the distinctions between Operational Results and Development Results. "Development Results" correspond to our "Network Effectiveness" or "doing the right thing". We consider that "Operational Results" are an outcome of "Network Efficiency" or "doing things right".

From Logical Framework Analysis we have recognized the importance of metrics and indicators. We reflect in our frameworks the points at which those are captured, and how they are determined. As a tool for measuring outputs, we continue to be interested in how we might make better use of web traffic statistics, imperfect as they are, to provide broad indicators of levels of use of products and services coming from networks.[2]

From Human Resource Management, we have taken the concept of annual evaluations with both a grading component and an anecdotal report, as well as the emphasis on revision of plans and expectations based on performance.

Using these components, we have created three frameworks:

- Planning: used at the beginning of network activities, to record the work plan, the beneficiaries of the work (partners and stakeholders), and the indicators of change desired,
    - For major projects or programs of work within the network
    - For the network as a whole

- Monitoring: used quarterly, to track activities.

[2] Scott Anderson, et al. *Tools for assessing web site usage*. IISD Working Paper. (Winnipeg: IISD, 2000.)

- Evaluation:
    - Annual:
        1. used to assess whether the network's component programs are on track, whether anticipated outcomes are being achieved, and whether adjustments need to be made in activities
        2. used to assess whether the network as a whole is realizing its potential:
            - Is the network linking effectively into relevant policy processes; is the level of recognition and influence of the network and its members increasing within these circles?
            - Are members adding value to each others' work, and creating new work together that might not have happened otherwise?
            - Is there an exchange and building of capacity across the network membership?
    - End of project evaluation: used to aggregate information to report to the donor.

A. Planning Framework

In our working paper "Form follows function: management and governance of a formal knowledge network", we outline the requirements for setting goals, objectives and workplans for a network. The key point in the process is the need to establish a workplan for the network as a whole. Many networks tend to keep workplans at the individual project level. While the individual projects may be highly successful, they may not serve to drive forward the broader strategic intention of the network. The network plan would at the very least aggregate the individual project plans, in order to monitor timelines, budgets, deliverables and the implementation of communications strategies for each project. But the network plan would also encompass the bigger picture: the checkpoints for reviewing progress on strategic intent and the stages for building relationships with decision makers.

Planning a network has two stages: first, the development of the concept, the proposal and the securing of startup grants; and second, the first meeting at which the new members get together to discuss what they are going to do together.

Stage1: Proposal development

This stage is largely dictated by the interests of the dominant partner(s), the prospects for funding and by the planning and evaluation framework required by the most likely funder. The lead institution(s) traditionally determines the goal, but can (and probably should) refine this in consultation with potential network members. Our only advice at this stage is to review the planning framework below, as it may influence or clarify the identification of outcomes in the proposal.

Stage 2: The first network meeting

We have observed over a number of years that network meetings (no matter what type of network it is) tend to follow the same patterns of discussion. There are always three key issues under debate.

a) Whether members are still in agreement with the goal and objectives they have committed to previously among themselves or with the funders;
b) Substantive discussions on the work itself;
c) Logistics on how the work will get done.

Given the limited amount of time available to bring members together, and given that, for the most part, members want to discuss in depth the substantive work and financial matters, it is unlikely that most networks will ever be inclined to allocate a full day to a day and a half for either Outcome Mapping or Appreciative Inquiry approaches for putting monitoring and evaluation frameworks in place. We have therefore drafted a planning session that is responsive to how members normally behave in a network meeting. The key to our approach is the insinuation into the substantive discussion the four questions which are often overlooked at network meetings:

a) what can members contribute to, as well as receive from, the network;
b) what will success look like for the network as a whole;
c) for each activity, who is going to benefit, be changed or influenced by the work;
d) what will be the indicators of success for each activity.

In its simplest form, the process is as follows:

1. When the network meets, the first item on the agenda should be a review of the goals of the network as stated in the project documents. Members should then consider their own views for the vision, mission and objectives of the network as a whole. Objectives for their participation should include what they hope to contribute to the network (to other members and to the network as a whole). The chair/ facilitator/ network coordinator should ask members for their views on what success will look like for the network as a whole. The refined views on goals, objectives and measures of success for the network as a whole are recorded by the coordinator, for revisiting at the time of network evaluation.

2. When members begin to discuss individual projects, they are asked by the chair/facilitator/network coordinator:
    a. how they see themselves benefiting from the project, what they expect to learn or gain from it; and
    b. who else will benefit from the project, be changed or influenced by the work

3. At the end of the substantive discussion of the project, members are asked for indicators of success. Again, the beneficiaries and indictors are recorded by the coordinator, for revisiting as part of monitoring and evaluating the network.

This simple approach was partially and informally tested at the inaugural meeting of the Integrated Management Node of Canada's Ocean Management Research Network One project, community based monitoring, was selected for testing. Right at the outset of discussions, members were asked who they most wanted to influence through their work. Initially, members discussed in broad terms general audiences (government and government funding agencies). However, as the discussion progressed into the substantive areas, the members themselves kept returning to the question of influence. This led to a refinement of the research questions, and the research outcomes. These were, among others, to:

- Bring forward what each member in the activity area already knows about community-based monitoring (CBM) and develop a common framework to assess the variety CBM approaches, for members' use. [Indicators: individual contributions; participation in web discussion; creation of framework]
- Using the framework, develop a number of case studies on different CBM approaches, to create a practitioners' guide to CBM. [Indicators: contribution of case studies; members' review of case studies; creation of guide; requests for guide]
- Based on members' increased understanding of the range of CBM approaches, examine how to link CBM to decision making, within communities and within relevant government departments. [Indicators: academic paper prepared].

The simple questions of influence and indicators helped to focus the discussion, and led to better defined and measurable activities of the group. The next step would be to recast this information into a monitoring framework so that members can record their progress against these more specific activities and desired outcomes.

A more detailed Planning Framework follows.

Detailed Planning Framework

<table>
<tr><td colspan="2">A. Doing the right thing: Network Effectiveness</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Steps</td><td>Explanation</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Step 1:
What are we going to do?</td><td>This is the opportunity to sit down with all the members to revisit and refine goals and objectives as described in funding agreements, whether the agreements are for the network as a whole, or for specific projects funded within the context of the network. The purpose of the discussion is to:

Seek clarity and endorsement of the overarching goal of the network
Refine specific objectives: these could be amended, enhanced or prioritized so long as they remain consistent with the goal.
Seek from members what they can contribute to, and hope to gain from, participating in the network as a whole.
Seek from members a preliminary view of what success would look like for the network.

This discussion may make clear several major projects or programs of work for the network.
For example, the Climate Change Knowledge Network has three objectives, but five major projects:
<table>
<tr><th>Objectives</th><th>Projects</th></tr>
<tr><td>To undertake collaborative research and action on issues such as the Kyoto mechanisms, adaptation to climate change, and technology transfer;
To build capacity in developing and developed countries to better understand and address climate change issues; and
To communicate information and knowledge within and outside the network</td><td>1. Climate Compendium
2. Capacity Building for Negotiators
3. Vulnerability and Adaptation
4. Decentralized Renewable Energy
5. Kyoto Mechanisms</td></tr>
</table></td></tr>
<tr><td></td><td>Process:
Chair leads roundtable discussion of goals, objectives.
Network coordinator, or meeting facilitator, records notes on what members view success to be, for revisiting during Step 4, on the discussion of the overarching network plan.
Network coordinator, or meeting facilitator, consolidates discussion into 2-5 projects.</td></tr>
<tr><td></td><td></td></tr>
<tr><td>For Project 1 (2,3)</td><td>Steps 2 and 3 may need to be repeated for each of the major projects, if there are significant differences in stakeholders, activities, and outcome for each project.</td></tr>
<tr><td></td><td></td></tr>
</table>

Step 2: Who are we going to influence or change?	In a network, there are two groups that will be changed or influenced by their interaction with the network and its work program(s): a) the network members themselves b) the stakeholders
	Process: It is difficult to ask the question "who are we going to influence or change" at the outset of the discussion, as members usually think first in terms of their particular research interests, field projects, etc. Only after that discussion do they consider who might be the target audience for their work. But if the question is left to the end of the discussion, the members may overlook how they themselves can benefit from the work; and they may well develop activities and outputs that may not be influential or lead to change. It is our view that asking from the beginning who they expect or want to influence or change will help to focus the substantive discussion.
	a) The network members themselves. Network members were chosen based on their strengths as maevens, connectors, and/or salespeople[3]. They each have some measure of influence in the world. However, participation in the network can serve to strengthen the effectiveness of each member, including the dominant/lead partner. The resulting changes in their behaviours, relationships and activities can fall into three categories: o Changes in individual member activities as an outcome of network participation o Progressive levels of interaction among network members o Progressive levels of effort to engage the stakeholders each member wishes to influence
	Process: Group discussion on which members will be participating in this project. Chair asks the relevant members to present what they can contribute to and hope to gain from participating in the work program.
	b) The stakeholders: those individuals and groups outside of the network which the network wants to influence: those who should have a vested interest in the work of the network, with the ability to act or to influence others to act. This includes decision makers, maevens, connectors, salespeople outside of the network. Specificity is needed in this discussion – broad categories of stakeholders (government, media, and academia) will not be helpful, as it will be difficult to articulate desired outcomes as behaviour changes for broad categories. This list of stakeholders may vary for each member and for each project. • Government ministers – which ones? Name positions [eg, the trade minister for Chile] • Mid-level bureaucrats – which ones? Name positions [eg, the climate change negotiator for Senegal] • Private sector: CEOs or environmental managers? Multinationals or small and medium sized enterprises? • Journalists – for which papers or networks? Mainstream or alternative? • Top researchers—at which institutions? • Web communications professionals – at which organizations? Changes in behaviours, relationships, and activities of stakeholders can be determined by progressive levels of their awareness of and interaction with individual network members, and with the network as a whole.
	Process: Members to develop a list of those whom they wish to influence within this project; Roundtable discussion

[3]We have adopted these characteristics from M. Gladwell, *The Tipping Point: How little things can make a big difference* (Boston: Little, Brown, 2000). Maevens are the research experts; connectors are those with connections to decision makers; salespeople are those with the ability to craft and communicate messages. Selection of members with reference to these characteristics is discussed in our working paper "Form follows function: management and governance of knowledge networks".

Step 3: **How** are we going to effect those changes?	This is the substantive discussion of the workplan for the project.		
	Process: The members will tend to focus on the details of research, or field projects, or other tasks. It will be the key challenge of the chair/facilitator/network coordinator to insinuate the additional questions for each activity: what are the outputs and metrics; what are the outcomes and indicators for members; what are the outcomes and indicators for the stakeholder group for this project.		
	Workplan and outputs: Specific activities to meet objectives; metrics of deliverables on workplan	**Outcomes :** **Network members** Assessing change in behaviour, relationships, activities in network members	**Outcomes:** **Stakeholder group** Assessing change in behaviour, relationships, activities
	Types of activities; sample outputs, indicators	*Types of outcomes; sample indicators*	*Types of outcomes; sample indicators*
	• individual members undertaking new research / communications projects done under the auspices of the network, measured by # specific research outputs • two or more members undertaking new projects or services jointly, measured by # products, services • holding electronic consultations on research findings, measured by # public electronic conferences held; # of participants in e-conference • presentations at peer-oriented conferences (professional, academic associations), measured by # presentations given • Face to face workshops with stakeholder group, measured by # workshops held	• Members strengthening each other's work, indicated by circulating research papers to each other for comment, peer review. • Members creating new knowledge together, indicated by co-authoring papers. • Members improving their linkage to policy process, indicated by hosting of workshops with stakeholders invited; securing face to face meetings with key decision makers.	• Stakeholders interacting directly with network members, as indicated by # participating actively in electronic conferences, # attending workshops; level of representation at workshops. • Stakeholders approaching network members for more advice or research, indicated by #accepting face to face meetings; # decision makers contracting network members for further work. • Stakeholders changing activities based on network actions/outputs, as indicated by replicating workshops on their own; by preparing position papers drawing from network research.
REPEAT FOR ADDITIONAL PROJECTS BEFORE GOING TO STEP 4			

Step 4: The Network Plan	Once the specific projects and research interests have been addressed, members can revisit the general objectives, and begin to consider how to capture the cumulative effect of the individual projects and whether there are activities that all members can contribute to, which help to consolidate the network as more than an umbrella for individual projects. This step should refocus members on how to realize the network advantage: joint value creation, linking to stakeholders in the policy process; capacity development across the network.		
	Process:		
	Workplan and outputs: Specific activities to meet objectives; metrics of deliverables on workplan	**Outcomes :** **Network members** Assessing change in behaviour, relationships, activities in network members	**Outcomes:** **Stakeholder group** Assessing change in behaviour, relationships, activities
	Types of activities; sample outputs, indicators	*Types of outcomes; sample indicators*	*Types of outcomes; sample indicators*
	• Creating a network website and public listserv to share information about network activities, measured by website traffic, # subscribers to listserv • Capacity development among the members in strategic communications (media, electronic communications, publishing) • Identification of major events related to the interests of the network; plans for displays, side events, presentations, etc. • Development of young professionals through exchanges; measured by # of young professionals participating in exchanges across the network. • Monitoring the activities of the network for their cumulative "network advantage".	• Members sharing information with each other across the network, indicated by linking materials to website, posting notices to listserv. • Members working together on articles related to network objectives, for publication in main stream media outlets. • Members actively participating in major events they otherwise would not have had access to. • Young researchers developing their own project proposals as a result of their interaction with the network.	• Stakeholders demonstrating increased levels of interest in network activities/outputs, indicated by # users from stakeholder group downloading content from website, joining network listserv for further information. • Stakeholders approaching network members for more advice or research, indicated by #requests for materials, # decision makers contracting network members for further work. • Stakeholders hiring young professionals from network for further work.

Doing things right: Network efficiency		
Step 5: **How are we going to work together?**	**Process:** Network coordinator reviews with members the internal operations of the network. This is usually the last item on a network meeting's agenda, and deals largely with logistics and finances. The Network coordinator should encourage members to provide some indicators of efficient operations.	
	Types of activity	**Sample Indicators**
	Network meetings • Face to face • Virtual (electronic /teleconferencing)	# held, participation by members
	Institutional support	# institutions which sign governance agreement # presentations which network members make to their institutions # references to the network in individual member corporate communications
	Systems and procedures	Interaction with coordinator: timely, helpful Completion of quarterly progress journals Contract management on projects: on time, within budget
	Prospecting for new ideas, opportunities, and resources [network sustainability]	Information shared on network listserv about new funding prospects, requests for proposals # new proposals developed by members: bringing forward prospects, vetting others
	Financial efficiency	Attracting additional funds to network activities Renewal of grants Amount of direct financial contribution and in kind support from member institutions to network activities

Example of a Network Planning Framework for the Climate Change Knowledge Network

<table>
<tr><td colspan="4">Doing the right thing: Network Effectiveness</td></tr>
<tr><td></td><td colspan="3"></td></tr>
<tr><td>Steps</td><td colspan="3">Notes from Network Discussion</td></tr>
<tr><td>Step 1: What are we going to do?</td><td colspan="3">Limited resources, knowledge and capacity in developing countries, and lack of dialogue and understanding between industrialized and developing countries, obstruct progress toward international efforts to address climate change. The Climate Change Knowledge Network aims to help address these gaps by facilitating focused research and capacity building in developing and developed countries, supportive of sustainable development.</td></tr>
<tr><td>For Project 2</td><td colspan="3">Capacity building for negotiators: Achieving a robust and equitable climate treaty requires a negotiation process in which all parties have confidence and participate as equals. But fewer resources, smaller delegations and limited access to information frequently hinder a level playing field for developing countries at the climate change negotiating table.</td></tr>
<tr><td>Step 2: Who are we going to influence or change?</td><td colspan="3">• a) Members: IISD, ENDA-Energie, Institute for Environmental Studies (IVM), Center for Sustainable Development of the Americas (CSDA)
• b) Stakeholders: negotiators on developing and transitional country delegations to the Conference of the Parties (COP) to the UN Framework Convention on Climate Change.</td></tr>
<tr><td>Step 3: How are we going to effect those changes?</td><td>Workplan Activities and Outputs
Specific activities to meet objectives; metrics of deliverables</td><td>Outcomes : Network members
Assessing change in behaviour, relationships, activities in network members</td><td>Outcomes: Stakeholder group
Assessing change in behaviour, relationships, activities of parties targeted by network members</td></tr>
<tr><td></td><td>1 week training session with African negotiators; Workshop materials prepared (metrics: # participants)

3 day training session with Latin American and Caribbean negotiators; Workshop materials prepared (metrics: # participants)

Publication of handbook , CD Rom, and website version (metrics: # books/CDs distributed; # accesses for online version)

Launch (promotional event) of book at COP6 (# attending launch)</td><td>IISD, ENDA, IVM learn how to structure, deliver this type of workshop. (indicated by evaluation reports from participants)

CSDA learns how to structure, deliver this type of workshop. (indicated by evaluation reports from participants)

IISD, IVM, ENDA, CSDA share experiences on regional differences in training programs

Members refine materials suitable for handbook; IISD, IVM, CSDA, ENDA strengthen each others' work through joint writing, peer review of handbook

Members increase profile and promote</td><td>Key outcomes:
• Problem recognition and acceptance of solution offered by network: Stakeholders acknowledge that their resources are limited and respond positively to network efforts to work with them to address the gaps.
• Workshop participants gain better understanding of negotiating process (both on the substance and on negotiating techniques)

Indicators:
Negotiators themselves attend workshop (rather than more junior staff); responses on workshop evaluation forms; responses follow-up surveys after subsequent round of negotiations; Stakeholders endorse book</td></tr>
</table>

		expertise at key stakeholder venue.	(willingness to contribute to book, demand for book, recommendations to others); Other stakeholders request similar workshops and materials for their countries/regions.
Step 4: **The Network plan**	**Workplan Activities and Outputs** Specific activities to meet objectives; metrics of deliverables	**Outcomes : Network members** Assessing change in behaviour, relationships, activities in network members	**Outcomes: Stakeholder group** Assessing change in behaviour, relationships, activities of parties targeted by network members
	1. Establish network website and public listserv to increase accessibility of developing country-generated content on climate change policy (metrics: amount of webtraffic to the site.) 2. Anchor website with Compendium; all members contribute to compendium analysis of domestic / regional policies 3. Assist developing country member organizations to participate in COPs (metrics: # members participating). 4. Monitor activities for their cumulative "network advantage"	1. Developing country members working together to aggregate knowledge about climate change, indicated by actively adding content to network website and compendium; keeping project sections of network website up to date 2. Increased input by developing country NGOs to climate change policy process, nationally & internationlly, indicated by # of CCKN member senior staff attending COPs. 3. Identification of strengths & gaps of the CCKN	Greater use by policy- & decision-makers of relevant, developing-country produced knowledge on climate change & sustainable development, demonstrated by types of organizations accessing network website, participating in listserv, interacting with network members at COPs, etc.

Doing things right: Network efficiency

Step 5: How are we going to work together?	**Activity**	**Sample Measures**
	Annual Network meeting, held concurrently with the annual COP Work program consultations	# of member organizations represented; level of representation (the principal researcher or a delegate) # of members actively involved in one or more of the five work programs; # of conference calls held for members in each work program; participation in listserv discussions on work programs
	Institutional support	# of member organizations which have signed the governance agreement # which have accepted and provide financial/in-kind support to an IISD intern
	Financial sustainability	# members which prepare project proposals and secure grants for network projects $ secured for network coordination

B. Monitoring Framework: Progress Journals

We have also adapted from Outcome mapping the systemized recording of work carried out by members in the network. We have one significant variation on the Outcome mapping approach: we do not attempt at this stage to embed any subjective valuation or grading of accomplishments ("expect to see; like to see; love to see") in the progress journal. This is the data gathering stage, not data evaluation. The evaluation of members' work (similar to human resource performance evaluations) is done annually, and at the conclusion of project grants.

Quarterly Progress Journal for each Network Member

Activities tracked should be consistent with the planning framework; and should only be no more than 10 or 12. The Journal should be completed quarterly by the member and shared with the Network Coordinator. A separate journal should be kept for each major work program. This is simply a record of what happened during that quarter, the interesting stories about what is being done, but not an assessment of the work. At the evaluation stage, outcomes for the member and the stakeholders will be derived from the record of progress that has been made by that member, and the member's interaction with representatives of the stakeholder group.

What the journal for CCKN Member Institute for Environment Studies (IVM – Amsterdam) October-December 2000, might reflect.

Project 2 Activities	**Member's Progress notes**	**Stakeholder interaction**
1. Training Workshops	Nothing this quarter	A follow up round table was held with developing country negotiators at the beginning of COP6, to discuss what to look for in the COP6 round.
2. Handbook, CD		
	Handbook drafted; to be called "On behalf of my delegation". CSDA handled printing; IISD handled editing, layout; contracted CD-ROM production; online version put on CCKN website. 2,000 printed After COP6, French and Spanish translations prepared: 1,000 each printed IVM intern suggested doing a youth version of the book	Raúl A. Estrada Oyuela Ambassador of the Republic of Argentina and Chair of COP3 agreed to write the Foreword to the handbook Swarmed by delegates at COP 6 for copies of book ; copies all taken from every venue where displayed Requests for French, Spanish translations of the Handbook
3. Launch at COP6	Launch organized by IISD, attended by many CCKN members.	

Quarterly Progress Journal for Network Coordinator

Activities tracked should be consistent with the planning framework. The Network Coordinator reviews network-wide activities, including monitoring of network efficiency. Note that the cumulative impact of network activities is reviewed at the annual evaluation. Consequently, there may be very little to record for the network plan on a quarterly basis. The Journal should be completed quarterly and shared with Network members.

What the journal for the CCKN Coordinator, Oct-Dec 2000, might reflect:

The Network Plan	Progress notes	Stakeholder interaction
1. Network website	Established	
2. COP6 participation	Senior staff of member organizations attended	Increased level of southern participation at COP6.

Network efficiency	Progress Notes
1. Network meeting	12 members attended CCKN meeting at COP6, November 2000
2. Institutional support	3 IISD interns started with network members (Cicero; ENDA; IVM); all three members providing cash and in-kind support to interns
3. Financial Sustainability	US AID approached for funding support for Climate Compendium.

C. Evaluation Frameworks

We propose two points at which Network activities are evaluated.

1. An annual evaluation is needed in order to make adjustments to objectives, workplans and expected outputs and outcomes. Such adjustments are expected and encouraged when working within Results Based Management: we have simply described here the process by which the necessary adjustments are identified and agreed to by network members.

2. A final evaluation is usually required by the funder, consistent with the evaluation framework (such as the Logical Framework Analysis) used in the original proposal.

1. Annual Evaluation

It is at this point that we diverge from Outcome Mapping and draw upon lessons from human resources performance evaluations.

- The Network Coordinator completes the annual evaluation form for each project, in consultation with the relevant members participating in that project. All forms should be shared across the Network
- A “level of success” assessment (grading) is introduced.

- This process provides the opportunity to adjust activities and expectations, in response both to problems encountered and new opportunities which have arisen since the work plan was compiled.

Adjustments to objectives, activities, outputs and anticipated outcomes should then be forwarded to the funder, together with notes on unexpected opportunities and problems (which may correspond to or revise original assumptions and risks noted in a Logical Framework Analysis for the project).

Level of success:

I/P – in progress D/C – discontinued
1-did not meet expectations
2-met expectations
3-exceeded expectations

What an annual evaluation for the CCKN, April 2000-March 2001 might look like.

Project 2		
Capacity building for climate change negotiators		
Activity	**Level of success**	**Outputs**
Workshops	3	2 workshops held: African negotiators workshop, Dakar, Senegal, July 2000: 20 negotiators, from 18 countries attended. Latin American and Caribbean negotiators workshop, Miami, July 2000: 19 negotiators from 13 countries attended. 1 follow up roundtable with developing country delegates held at the beginning of COP6, as a special briefing on what to look for in the COP6 round. An analysis by IVM of the two workshops was published in Tiempo magazine, http://www.cru.uea.ac.uk/tiempo/floor0/archive/issue3637/t3637a6.htm
Handbook, CD ROM, online version	3	English version: 2,000 printed; 1,600 distributed to date; Spanish and French versions: 1000 printed of each, with 700 of each distributed to date
Launch	2	Formal side event planned during COP6; 60 attended (standing room only); most negotiators however were unable to attend as the negotiations were unexpectedly still in session at the time of the event.
Outcomes: Members	Members undertook the project jointly and added significant value to each others' work, without which the workshops and book would not have been as influential. Increased profile for all members involved, which has led to approaches from distance learning specialists to develop online versions of the training program and handbook.	
Stories: Members	The workshop led to the idea for the handbook; ENDA reviewed the handbook to ensure that it responded to developing country needs, and reflected southern viewpoints; IISD provided editorial, design and production support to ensure a professional product branded by the network. All English versions of the handbook (book; CD-Rom; online) completed on time for release at COP6.	

	Increased profile was reflected in the willingness of senior negotiators to become actively engaged in the project. Raul Estrada, chair of COP3 (the Kyoto negotiations) agreed to write the forward to the handbook and to speak at the launch; the chair of the African group of delegates to COP6, Mamadu Honadia, agreed to speak at the launch; as did Papa Cham, former negotiator for Ghana and currently working with ENDA, one of the CCKN members.
Outcomes: Stakeholders	Increased levels of contact, interaction and trust built with developing country negotiators with each other (through the workshop process) and with the members of the CCKN. Increased demand from negotiators for similar, regular training on both substance and skills, combined with materials like the handbook, in French and Spanish as well as English.
Stories: Stakeholders	The preparatory round table with African delegates held at SB-12 in June 2000 was used to gather input and buy-in to the African workshop in July. Consequently the level of representation and participation in that workshop was high. The end of workshop evaluation led to the recommendation that such training should be carried out more regularly and in a similar fashion, combining substance with simulated negotiations. The Latin American workshop focused primarily on negotiation skills and tactics rather than substance. Some participants indicated an interest in having more training in the substance. A follow-up roundtable was therefore held for developing country negotiators at the beginning of COP6, with a special briefing on what to look for in COP 6. Participation in this roundtable was high. These outcomes were also reflected in the demand for the handbook (published first in English and subsequently (as a result of the demand) in French and Spanish). Delegates at COP6 were heard to ask where they could find copies; copies made available at various meetings of developing country delegates were all taken almost immediately (an unusual event given the amount of briefing papers and other materials routinely distributed by NGOs and other actors at international negotiations).
Unexpected	The failure to conclude the COP6 round and the US withdrawal from Kyoto The IVM intern has begun to develop a similar guide for youth delegates to other major international negotiations, in particular the World Summit for Sustainable Development 2002. Interest has been expressed by negotiators for the Desertification convention for similar training and materials for that process.
Adjustments	Plans for replicating the climate change negotiators workshops are on hold until it is clear that the negotiating impasses can be resolved in July 2001. Follow up survey with negotiators in the African and LAC workshops should be conducted, to find out whether they believe their effectiveness at COP6 was improved as a result of the training; and if so, in what ways was it improved?

Network workplan		
Specific Activities	**Level of success**	**Outputs**
1. Network website	2	Website established, anchored by Compendium
2. Member input to Compendium	1	More work needs to be done to approach members for input, and to provide easy means for them to do so.
3. Support member attendance at COPs	3	Senior staff of member organizations attended
Monitoring the Network Advantage:		
	Note: this section is where the Network Coordinator consolidates the findings from the individual work programs into an assessment of whether the network is fulfilling its potential	

Joint value creation:	This is working extremely well at the individual project level, as demonstrated by the success of the negotiators workshops and handbook and the planning for the decentralized renewable energy project. The handbook would not have had the impact it did without the recognition that it was a joint project of the network, legitimized by the contributions of both north and south expert institutions. Across the network as a whole, however, joint value aggregation and creation is not as evident. Members are not yet making enough of their own climate change research available so that the network can integrate it on the website; members are not yet notifying all the members of spin off products from network activities, such as the Tiempo article on the negotiators workshops. Members which are not involved directly in one of the projects have not found any other means to add value to the network.
Capacity development across Network	There is a growing understanding of southern perspectives within the network, in particular related to energy as the entry point for the south into the climate change debate. This understanding is strengthening research proposals, training, and other activities. The annual meeting, held during COP, is providing an excellent forum for the exchange of perspectives. Almost all members participate actively in this exchange. More work needs to be done on strengthening individual member communications capacity, to improve their effectiveness within their regions (this includes northern members).
Link to policy process	Choosing COP as the key policy process to connect with has led to increased levels of contact, interaction and trust built with key climate change stakeholders in NGO and government communities.
Unexpected	Server traffic not being tracked, therefore unable to get metrics of website use
Adjustments	A review of the status of members that are not actively involved in projects may need to be carried out.

What an annual evaluation for the CCKN Network efficiency component, April 2000-March 2001, might look like.

Network efficiency	Level of success	Comments
Meetings	3	12 out of 14 members attended the network meeting at COP6, The Hague
Institutional support	2	14 members have signed the governance agreement; 3 members are supporting an IISD intern; CSDA would like to host an intern in 2001-02
Financial sustainability	3	Core funding for the network from IDRC and CIDA levered additional funding for the capacity building project, from Norway's Royal Ministry of Foreign Affairs and Canada's Dept. of Foreign Affairs and International Trade.
Unexpected		New US administration; US withdrawal from Kyoto has put US funding for Compendium in 2001-02 on hold
Adjustments		Compendium project on hold until funding confirmed or new funding secured Funding proposals will be prepared to transfer the negotiators workshop methodology to the Desertification arena.

2. Evaluation Report to Funder at end of grant

This report should be completed by the Network Coordinator and circulated to members for comment, prior to submission to the funder. Not all funders require reporting against methodologies such as Results Based Management and Logical Framework Analysis. For those that do, we have shown below how our approach corresponds to the relevant sections in RBM and LFA.

Sample final evaluation framework

Grading overall:
1 Did not meet expectations 2 Met expectations 3 Exceeded expectations

Network effectiveness: This section corresponds to Results Based Management (RBM) Development Results		
Overall network goals and objectives: what did we think success might look like for network and did we achieve that? General observations		
Network Advantage Summary	**Level of success**	**Comments** This section corresponds to LFA purpose and points towards the likelihood of contributing in a positive way towards the longer term LFA goal.
Engagement of stakeholders in policy process and action		
Joint Value Creation		
Capacity Development		
Specific Projects 1(2,3)		
Activities; Cumulative Outputs	**Level of success**	**Comments** This section corresponds to Logical Framework Analysis (LFA) outputs
Cumulative Outcomes: Network members		This section corresponds to LFA purpose
Cumulative Outcomes: Stakeholder Group		This section corresponds to LFA purpose and points towards the likelihood of contributing in a positive way towards the longer term LFA goal.

Network efficiency: This section maps to RBM Operational Results		
Cumulative activities	**Level of success**	**Comments**

V Further Research

The frameworks we have proposed are experimental. We have drawn from our experience with web site traffic analysis, with networks and project evaluation in order to create frameworks which we think might provide us with useful information, but we have yet to test these systematically across our own networks and alliances. We are in the process now of putting the planning and monitoring frameworks into place for the second phases of the Climate Change Knowledge Network and the Trade Knowledge Network. We also anticipate that we will be able to promote these frameworks to other networks of which we are members, including IIED's Regional Internetworking Group (the RING). We will also use the evaluation framework in our retrospective look at the two phases of the Sustainable Development Communications Network.

In our first working paper in this series on knowledge networks, we stated that the rationale for investing in knowledge management and knowledge networks,

- filling the knowledge gaps that inhibit policy development for sustainable development,
- generating recommendations that will fast track innovation for sustainability,
- resolving current frustrations with inadequate or inappropriate policy development and implementation, and
- learning from each other across sectors and regions about best practices,

has been more than adequately explored by others[4]. What we do not know yet is how to monitor and evaluate whether this investment is paying dividends in current and emerging knowledge networks.

Over the next two to three years, IISD will be developing a research program to explore the "network advantage" further. We will be seeking answers to the following questions:

1. Can a network determine what changes it has effected through its research and communications work? Will our methodology help networks not only to assess individual activities, but provide some means for identifying changes as a result of its combination of efforts?

2. Can network coordinators demonstrate to their own members that it is worth the institutional investment of time and effort in order to sustain network momentum over the long term?

We will also be looking carefully at questions of network efficiency. Are there standard practices for networks, much as there are standard practices for human resources management, and can we identify these through improved performance evaluation of networks? Ultimately, can we answer the question, whether it is better in the end for a

[4] Creech, *Strategic Intentions*, p.24.

funder to give $200,000 to each of five organizations to carry out research on a given issue, rather than $1 million to a network of five organizations?

Our research program will have a number of components:

- Retrospective analysis: we will look at evaluations of older networks; interview network organizers and members and cast the evaluation into our framework, to see whether we can demonstrate consistent achievement of the network advantage.
- Analysis of current projects: we will put our planning, monitoring and evaluation frameworks in place for IISD's networks and alliances, to see whether we can achieve some consistency in identifying and cumulating our successes.
- Comparative analysis: We will attempt to compare similar projects being conducted by one or two networks, and by several independent institutions, to see whether we can validate our assumptions that networks do operate more efficiency and effectively than single source research efforts.

We know that there will be some major challenges to overcome in promoting our approach to network evaluation. Network members tend to view evaluation as the responsibility of the member that received the grant for the project or network; and the network managers tend to view evaluation as a task that can wait until the funder requires a report. We need to effect at least one significant behaviour change with our research: that network members and managers will begin to monitor their work more regularly, to see whether their collaboration is in fact leading to better-informed research results, new knowledge and real influence.