



Integrated Environmental Assessment Training Manual for the Arab Region

Module 8

Improving the IEA Process and Increasing Impact through Monitoring, Evaluation and Learning



- **Introduction**
- Foundation of effective monitoring and evaluation
- Framework, attributes and measures
- Self-assessment matrix
- Improvement opportunities

In Module 8, you will learn to develop a monitoring and evaluation plan, based on seven questions:



1. What is the **purpose** of the evaluation?
2. Who will **use** the evaluation results?
3. Who will **do** the evaluation?
4. What evaluation framework is **practical**?
5. **What needs to be monitored** and evaluated?
6. What are the steps to develop a **self-assessment matrix**?
7. How can you use the evaluation to enhance a **learning culture** that keeps improving your IEA process?

Stages of National IEA Process – Monitoring and Evaluation Marked in Grey



Note: Monitoring and Evaluation Marked in Grey

Monitoring



- A planned, systematic process of observation that closely follows a course of activities, and compares what is happening with what is expected to happen. Monitoring the IEA process makes sure the environmental assessment meets its ***goals***, while working within the scope of allocated resources (i.e., time, financial, human, informational and technical).

Evaluation



- A process that assesses an achievement against preset criteria.
- Evaluations can have a variety of purposes (Section 2.1), and follow distinct methodologies (process, outcome, performance, etc).
- Evaluation of the IEA process determines the extent to which **achievements** (outputs, outcomes and impacts) are comparable with the originally intended purpose, and what **lessons can be learned** for the next environmental assessment and management cycle.
- The evaluation of the process is, first and foremost a **capacity-development** opportunity.

Learning



- An emotional and/or cognitive transformation taking place during information collection and information processing. Learning brings about behavior change or in the ability to act differently. Learning can happen whether it is intended or unintended. Monitoring and evaluating the IEA process offer learning opportunities. Planning for and making use of these learning opportunities can bring about lessons that comprise key inputs to improve an iterative IEA process.
- Learning that has lasting influence is embedded in communities of practice. It is a social process, not individual.

Upon successfully completing Module 8, you will be able to:

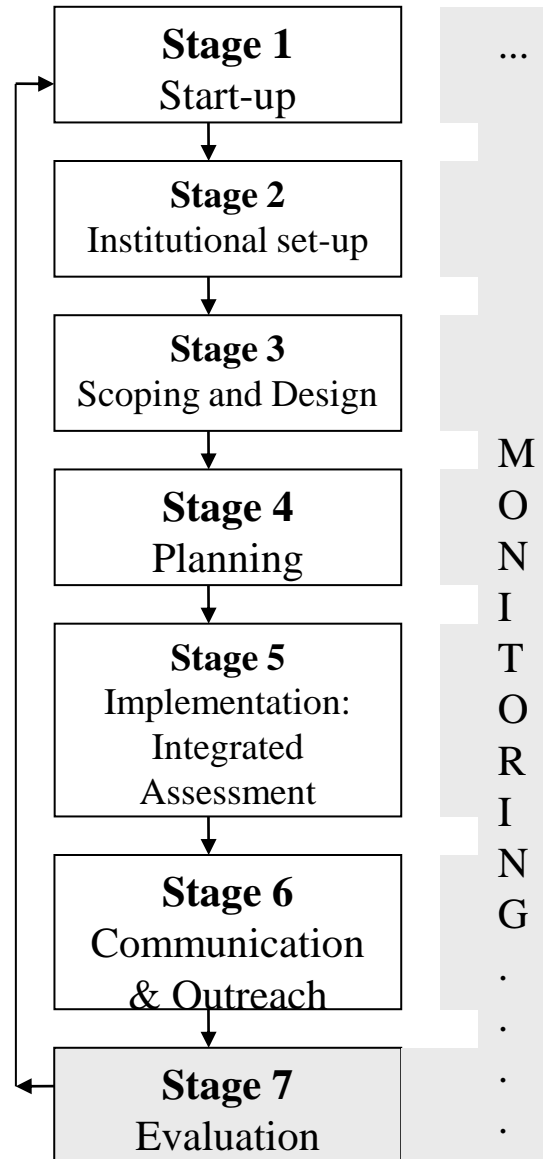


- Explain the importance of monitoring and evaluating;
- Recognize monitoring and evaluation as learning opportunities for improving your IEA process; and
- Develop a draft plan for monitoring and evaluating your national IEA process and its impact.

Key Elements



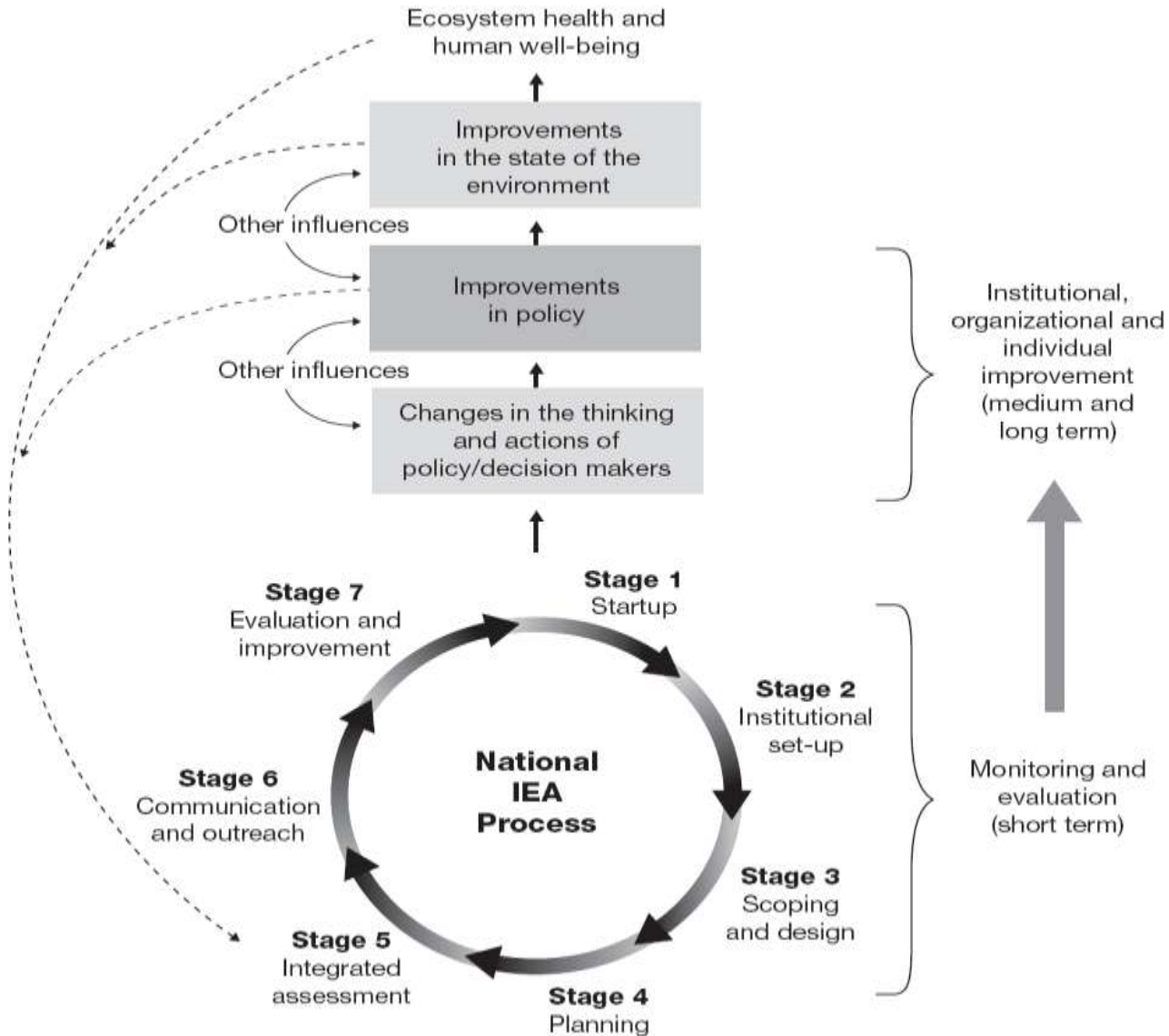
- **MONITORING**...enables
- **EVALUATION**...which leads to
- **LEARNING**



Something to think about:

What you invest in monitoring can also be used for other purposes:

**Transparency
Peer Review**



Why Monitoring and Evaluation?



- **Lessons learned** from IEA helps improve policy making processes, policies and state of environment.
- The IEA process **builds capacity** for periodic policy revision through monitoring and evaluation.
- Capacity is built among **individuals** and **organizations**.
- Builds **trust and acceptance**.

How monitoring and evaluation became a tool to make the national process a success in India:



- Monitoring and evaluation increased:
 - The perception of **saliency**,
 - **Credibility**, and
 - The **legitimacy** of the environmental assessment
- Embedding SoE reporting in state-level governance to:
 - Addresses environmental issues,
 - Strengthen capacities at the level of individuals, organizations and institutions.

Monitoring and Evaluation can be part of a process of communication and transformation



- The SoE reporting system of India has been monitored and evaluated closely, with the aim of **embedding the reporting system in the practice of state governments**. This ongoing programme involves building capacities for the preparation of SoE reports within the state/regional institutions and governments and the national government, and supporting triennial SoE reporting by state and national governments.



- SHIs are responsible for **identifying and mobilizing partners, facilitating a participatory process**, collecting and analyzing information, interacting with NHIs and developing SoE products.
- At the national level, the **Indian Ministry of Environment and Forests, the lead ministry for the programme, periodically evaluates the progress made by NHIs and SHIs through review meetings**. Funding is tied to the demonstration of progress.
- A two-stage monitoring and evaluation process is in place. The NHIs' performance evaluation (done by the ministry) is linked to the level of success they achieve, as indicated by the number of states that have made significant progress towards establishing systems for SoE analysis, and for publishing a final SoE report.



- The second element relates to the **linkage between NHI and SHIs**, and it is only through NHI certification that an SHI receives funding. In this case, the tangible indicator is the SoE report, but interim continuity in the process is ensured by the NHI, as their ultimate evaluation is based on the number of reports they supported. As for the imperatives at the state level, a careful selection of SHIs is essential for the success of this programme. A proactive SHI, with its linkages and wherewithal, will ensure a close monitoring of the actors/institutions involved, and will deliver results.



- Monitoring and evaluation of an IEA process **enhances communication between the cycle of scientific data collection and processing, and the cycle of policy making**. This “coupling” function can help to ensure that evidence originating from either scientific or indigenous knowledge is fed into policy making early enough. Because it can take decades and a series of political cycles to develop the right set of policies after discovery of the first evidence of an emerging environmental problem, the role of monitoring cannot be overstated.
- Without an impact strategy (Module 3) and monitoring and evaluation (Module 8), the IEA process could run the risk of not being able to influence policy making.



- Introduction
- **Foundation of effective monitoring and evaluation**
- Framework, attributes and measures
- Self-assessment matrix
- Improvement opportunities

Foundation Steps for Effective Monitoring and Evaluation



- Identifying your **purpose**.
- Identifying your **primary users**.
- Deciding whether **internal or external evaluators** best serve your purpose.





The purpose:

1. Judgment
2. Improvement
3. Knowledge creation

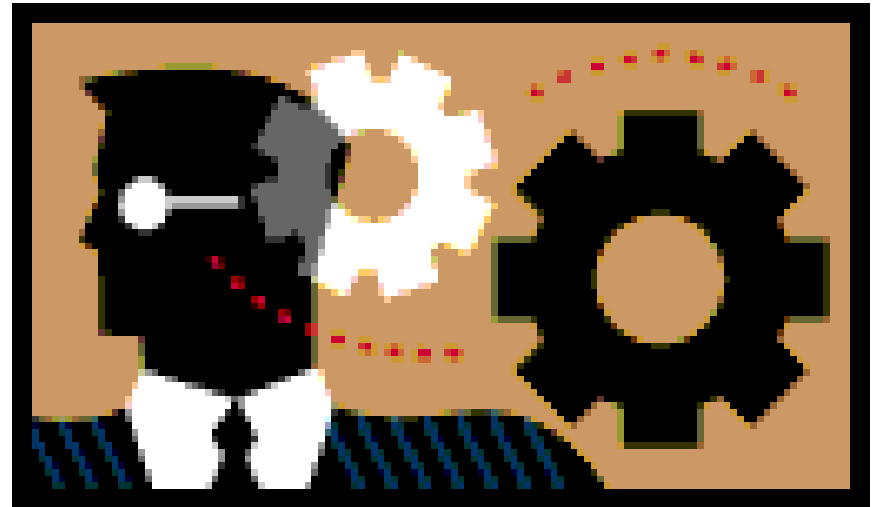
Don't forget secondary effects as well

**Community building
Transparency
Trust
Acceptance**



People who:

- *Can* revise the GEO process
- *Want to* revise the GEO process





- Identifying the users
 - IEA core team (may include policy-makers);
 - Policy and decision-makers in the broad sense (the primary users of the IEA-*the more active*); and
 - The evaluation team (internal and/or external).

Don't forget that there are other groups who may not be direct users, but who are important observers

2.3 Evaluators

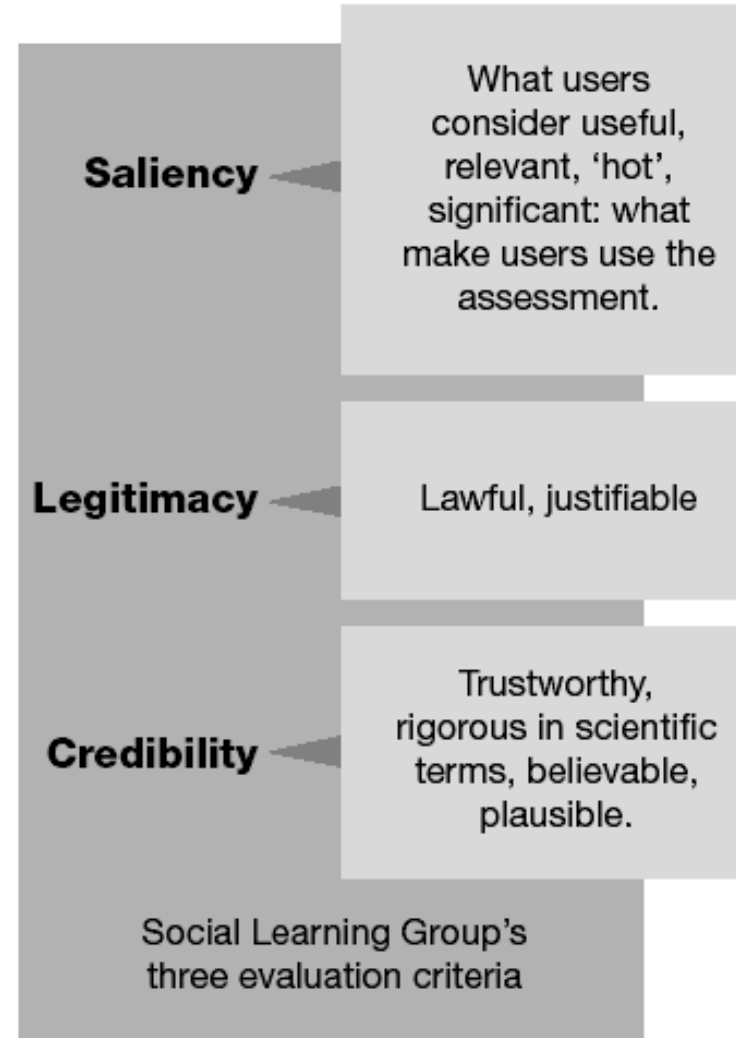
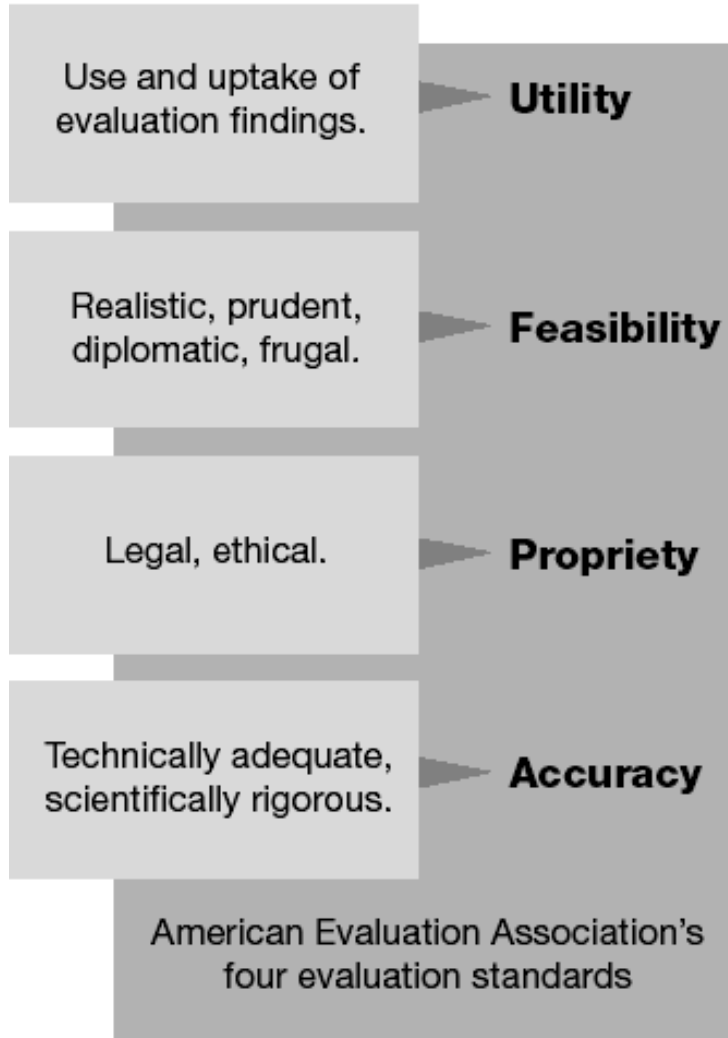


- A combination of internal and external evaluators is the ideal solution.
- Evaluators may include:
 - A small internal evaluation task force (including the IEA core team, which is recommended).
 - External evaluators (consultants and internal evaluators of another IEA).
 - A combination of internal and external parties.



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Corresponding Attributes of Effective Evaluations





Perceived by policy-makers as salient, credible and legitimate:

- **Salient.** Because it addressed a global threat to survival that called for immediate attention and action from decision-makers.
- **Credible.** Because it involved high-profile research institutions from different countries, triangulating their observations and results.
- **Legitimate.** Because of the transparent process, engaging all relevant stakeholders and acknowledging their investment.

3.2 Framework



- Develop a basic conceptual understanding of how the activities and outputs are linked with intended outcomes and impacts.
- The intended outcomes of an IEA process are the changes in the thinking and actions of policy-makers that can bring about improvements in policies and policy making processes, which, in turn, can result in environmental improvements
- As a manager you know that you manage what you measure. What should you be keeping track of in your IEA process to manage it for the intended outcomes?

Focusing the evaluation



OUTCOMES

Improvements in Policies and Policy Processes

Measuring changes in policies and policy process both during and after the IEA process and comparing to the desired impacts from your impact strategy (refer to module 3).

Effective Relationship Management:

Measuring changes in the thinking and actions of policy and decision makers
Measuring aspects of effective relationship management (e.g., stakeholder identification and engagement)



ACTIVITIES and OUTPUTS

Effective Knowledge Management

Measuring saliency, credibility and legitimacy of the IEA process and findings

Effective Opportunity Management

Measuring communication opportunities that are being leveraged

Timely Completion

of key activities and associated outputs
Measuring the timely completion of key activities and outputs

Five measures

1. Outcome-based Measures for Improvements in Policies and Policy Processes



- Measures to track improvements in policies and policy processes.
- Measurement should relate to the change statement you identified in your impact strategy
- Measurement should also track other observed improvements in policies and policy processes.

2. Outcome-based Measures for Effective Relationship Management



- Relationships among people jointly processing and communicating ideas are what initiate change
- Other important relationships to manage include people in civil society who can bring pressure to bear on decision-makers; those who can support, reinforce and strengthen your recommendations, in particular the academic community and other research institutes; and the media, through whom you reach the public and influence decision-makers.
- Make sure your evaluation keeps up with changing social media landscape



- Key actors and target audiences have been defined
- Up-to-date contact and mailing lists are available
- Relationships with local, national and international media have been cultivated
- Funders are informed of the progress and impact of your work



Identifying relationships based on behaviour

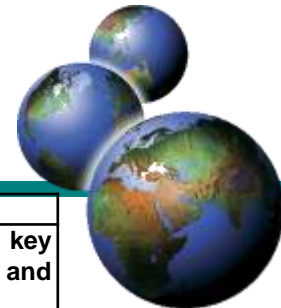
Behaviour Type

1. Receiving (individual, organization)
2. Seeking (individual, organization)
3. Acting Upon (individual, organization, institution)
4. Demanding (individual, organization, institution)

Behaviour Exhibited

1. Reports, emails, listserv
2. Target users seek new information.
3. Technical expertise is sought to revise policies.
4. Specific needs, such as monitoring data for the next IEA cycle.

Possible Measures for Effective Relationship Management



Key Question	Possible Measures	Possible Targets
<p>Have key decision makers and potential influencers been identified?</p>	<p>Number of key persons identified for each relationship group, including specific names from each of the potential audience categories identified.</p>	<p>At least one key name per sector and discipline.</p>
<p>What important changes in the thinking and actions of key decision makers have been observed?</p>	<p>Types of Receiving behaviour observed (see Module 3). Such as:</p> <ul style="list-style-type: none"> • Number of decision-makers as subscribers (individuals and organizations) to listserve/ e-mail newsletter. • Receive and request SoE reports. • Cell phone text messages. • Number of PDF files downloaded from the national IEA website. <p>Types of Seeking behaviour observed (see Module 3). Such as:</p> <ul style="list-style-type: none"> • Keywords entered into search engines of the national IEA website by decision-makers. • Number of targeted users (key decision makers) attending new types of meetings and using IEA vocabulary in interviews with media. (Policy-makers get IEA messages from media.) <p>Types of Acting behaviour observed (see Module 3). Such as:</p> <ul style="list-style-type: none"> • Number of times IEA technical experts are contacted by decision-makers for consultation on budgeted activities. <p>Types of Demanding behaviour observed (see Module 3). Such as:</p> <ul style="list-style-type: none"> • Number of cases targeted users (i.e., decision makers) contact national IEA leaders to request new information or process changes to be included in the next IEA cycle. 	<p>For each target actor, clarify the following:</p> <ul style="list-style-type: none"> • What behaviour would you expect to see from this person(s)? • What behaviour would you like to see? • What behaviour would you love to see? <p>[based on Outcome Mapping approach (Carden <i>et al.</i> 2001)]</p>



- Requires that changes in behavior be identified and mapped
- Can be a time intensive process, so it is important to set up simple ways to monitor your strategy against those measures.
- Can set up a small contacts database with a journaling function



- Number of subscribers to listserv
- Number of subscribers to newsletter
- Number of page requests for download from web site
- Number of unsolicited comments on the usefulness of reports and other outputs
- References in scientific literature, newspapers, blogs, other media

Activity- and Output-based Measures for Effective Knowledge Management



Possible Measures for Effective Knowledge Management

Key Question	Possible Measures	Possible Targets
Is the information and analysis salient for decision-makers?	<p>Views of decision-makers on what they feel/think the key issues are.</p> <p>The types and forms of information decision makers require have been made available</p>	<p>Responses from at least five decision-makers.</p>
Is the information and analysis credible?	<p>Peer reviewers have been identified.</p> <p>Data and analysis have been peer reviewed.</p>	<p>Responses received from at least three peer reviewers.</p>
Is the information and analysis produced legitimate?	<p>Stakeholder analysis has been carried out.</p> <p>Relevant stakeholder groups have participated in identification of priority environmental issues.</p> <p>Relevant stakeholder groups have had an opportunity to comment on the findings of the analysis.</p>	<p>Stakeholder analysis completed.</p> <p>Participation from as many stakeholder groups as possible.</p> <p>Comments received from most stakeholder groups identified.</p>

4. Possible Measures for Effective Opportunity Management



- Number and location of launch events
- Number and level of conferences & workshops
- Number of news releases and articles
- Number of presentations to target audiences

Activity- and Output-based Measures for Effective Opportunity Management



Possible Measures for Effective Opportunity Management

Key Question	Possible Measures	Possible Targets
Are appropriately different outputs planned for targeting specific stakeholder groups?	Number and type of unique communication outputs for each stakeholder/audience group.	At least one each.
Have interim products been developed?	Decision-makers have been briefed on analyses being conducted and interim results.	At least at the beginning, and midway through the process. (Best if they are part of the analysis process.)
Have you communicated regularly with your stakeholders?	<p>A scenario exercise is being conducted as part of the IEA (Module 6).</p> <p>Key stakeholders and target audiences are involved in the scenario analysis.</p> <p>Positive feedback has been received from stakeholders on the scenario analysis process.</p>	<p>At least a qualitative analysis is carried out.</p> <p>Number of stakeholder groups represented.</p> <p>All stakeholder groups have been part of the analysis in some manner.</p>

5. Timely Completion of Key Activities and Outputs



Suggestions for General and Stage Specific Questions and Exercises for Monitoring Progress and Promoting Learning at Specific GEO Stages

General questions for monitoring meetings	GEO Stage	Major activity	Prevailing learning condition	Stage-specific activities for monitoring meetings (see Box 7)
<p>(1) What were the most revealing lessons for you in this stage?</p> <p>(2) How can you use this knowledge, attitude to improve the next stages process, outputs or targeted changes?</p> <p>(3) Have you achieved what we planned for in this stage? If yes, what factors helped? If not, what factors hindered. How can we reach the desired goal?</p> <p>(4) Are there any unexpected results, emerging phenomena, trends or questions you want to discuss?</p> <p>(5) How did this stage contribute to the perception of saliency, legitimacy and credibility of the national IEA process?</p>	1	Inception		
	2	Institutional setup	Mandate	Articulate, confirm mandate
	3	Scoping and design	Trust	Nurture trust Force-field analysis
	4	Planning	Information processing	Create opportunities for collective information processing
	5	Implementation	Shared understanding of learning	Remind participants of how they learn best Keep, start, stop doing
	6	Communication	Motivation	Revisit motivation Carousel discussion
	7	Evaluation	Application	Focus on lessons learned for application Samoan circle



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3 Recommended steps for self-assessment



- Step 1. Identify major issues and monitoring questions, and develop specific measures.
- Step 2. Identify sources of data and data collection methods.
- Step 3. Set priorities and frequency of monitoring.

Step 1. Identify Major Issues and Monitoring Questions, and Develop Specific Measures



- The first step in a self-assessment is to identify major issues that should be monitored and evaluated, and the key questions associated with these issues.
- Based on the framework introduced in Section 3, key issues and questions to be addressed include the following:

Outcomes



- Your Change Statement – Have the desired improvements in policies and policy processes that you identified in your impact strategy been realized? What other improvements in policies and policy processes have you observed during and following your national IEA process?
- Effective Relationship Management – What changes in the thinking and actions of policy makers and decision makers (and other important relationships) have you observed?

Activities and Outputs



- Effective Knowledge Management – Is the right knowledge being generated, and is that knowledge salient, credible and legitimate?
- Effective Opportunity Management – Are opportunities being leveraged for effectively communicating that knowledge to those persons in a position to influence change?
- Timely completion of activities and outputs – Are the key activities and outputs necessary to complete your national IEA being completed on time and at the desired level of quality?

Write the story of your assessment before you start – how will it make the world a better place?
That guides your evaluation

Outcome-based Measures: Possible Organization of Your Self-Assessment Matrix



Key Issues/Questions	Specific Measures and Target (See Tables 2, 3 and 4 for guidance)	Data Source	Data Collection Method
<p>Your Change Statement</p> <p>Have the desired improvements in policies and policy processes that you identified in your impact strategy been realized?</p> <p>What other improvements in policies and policy processes have you observed during and following your national IEA process?</p>			
<p>Effective Relationship Management</p> <p>What changes in the thinking and actions of policy-makers and decision-makers (and other important relationships) have you observed?</p>			



Stage of the National GEO Process	Key Issues/Questions	Specific Measures and Targets	Data Source	Data Collection Method
Stage 1 Inception	Timely completion of activities and outputs	See Figure 6 for guidance		
Stage 2 Institutional Setup	Effective Knowledge and Opportunity Management Timely completion of activities and outputs	See Table 3 and 4 for guidance		
Stage 3 Scoping Design	Timely completion of activities and outputs Effective Knowledge and Management			
Stage 4 Planning	Timely completion of activities and outputs			



Stage 5 Implementation of IEA	Timely completion of activities and outputs Effective Knowledge and Management			
Stage 6 Communication and Outreach	Timely completion of activities and outputs Effective Knowledge and Management			
Stage 7 Evaluation	Key Issues/Questions			
	Timely completion of activities and outputs Effective Knowledge and Management			
	Timely completion of activities and outputs Effective Knowledge and Management Timely completion of activities and outputs Effective Knowledge and Management			

Step 2. Identify Sources of Data and Data Collection Methods



- With a list of specific measures developed, it is now possible to identify sources of data and data collection methods for each measure.
- The data will come from a variety of sources. Accessing these data sources will demand a variety of data collection methods.



Questionnaire survey

It is distributed—or made accessible if online—to a predetermined selection of individuals.

Individuals complete and return the questionnaire or submit online.

Face-to-face interview

Interviewer asks questions, usually following a guide or protocol.

Interviewer records answers.

Telephone interview

Interviewer asks questions, usually following a guide or protocol.

Interviewer records responses.



Group techniques (interview, facilitated workshop, focus group)

This involves group discussion of predetermined issue or topic in person or through teleconferencing.

Group members share certain common characteristics.

Facilitator or moderator leads the group.

Assistant moderator usually records responses.

Document review

Researchers review documents, and identify relevant information.

They keep track of the information retrieved from documents.



Use a surface mail or a faxed questionnaire survey when:

- The target population is large (for example, greater than 200).
- You require a large amount of categorical data.
- You want or require quantitative data and statistical analyses.
- You want to examine the responses of designated subgroups, such as male and female.
- The target population is geographically dispersed.
- You want to clarify your team's objectives by involving team members in a questionnaire development exercise.
- You have access to people who can process and analyze this type of data accurately.



Use an e-mail or web page questionnaire when all of the above conditions are met and:

- You have the appropriate software and knowledge of this method.
- Your respondents have the technological capabilities to receive, read and return the questionnaire.
- Time is of the essence.
- You want to provide the option of typing long answers to questions.
- You want to reduce production and dissemination costs.

Use face-to-face interviews when:

- You need to incorporate the views of key people (key informant interview).
- The target population is small (for example, less than 50).
- Your information needs call for depth rather than breadth.
- You have reason to believe that people will not return a questionnaire.



Use telephone interviews when:

- The target population is geographically dispersed.
- Telephone interviews are feasible.

Use a teleconference interview when:

- The target population is geographically dispersed.
- Teleconferencing equipment is in place.

Use group techniques when:

- You need rich description to understand client needs.
- You believe that group synergy is necessary to uncover underlying feelings.
- You have access to a skilled facilitator and data recorder.
- You want to learn what the stakeholders want through the power of group observation (one-way mirror or video).



Use document reviews when:

- The relevant documents exist and are accessible.
- You need a historical perspective on the issue.
- You are not familiar with the organization's history.
- You need hard data on selected elements of the organization.

You can't do everything,
and costs can get very
high. Choose carefully.
TEST

Step 3. Set Priorities and Frequency of Monitoring and Evaluation



- Given resource and time constraints, indicators that are identified for monitoring should be prioritized.
- Establishing the frequency of monitoring for each indicator, and the person responsible for that stage will help to clarify the level of effort required.



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Improvement Opportunities



The following evaluation steps show how a conscious learning approach can improve the IEA process:

- Formulate your change statement.
- Identify measures for your change statement and other supporting measures for key outcomes and activities/outputs.
- Examine performance against making the desired changes and summarize results.
- Formulate lessons learned and recommendations.
- Integrate (feed back) recommendations to improve the next planning cycle.

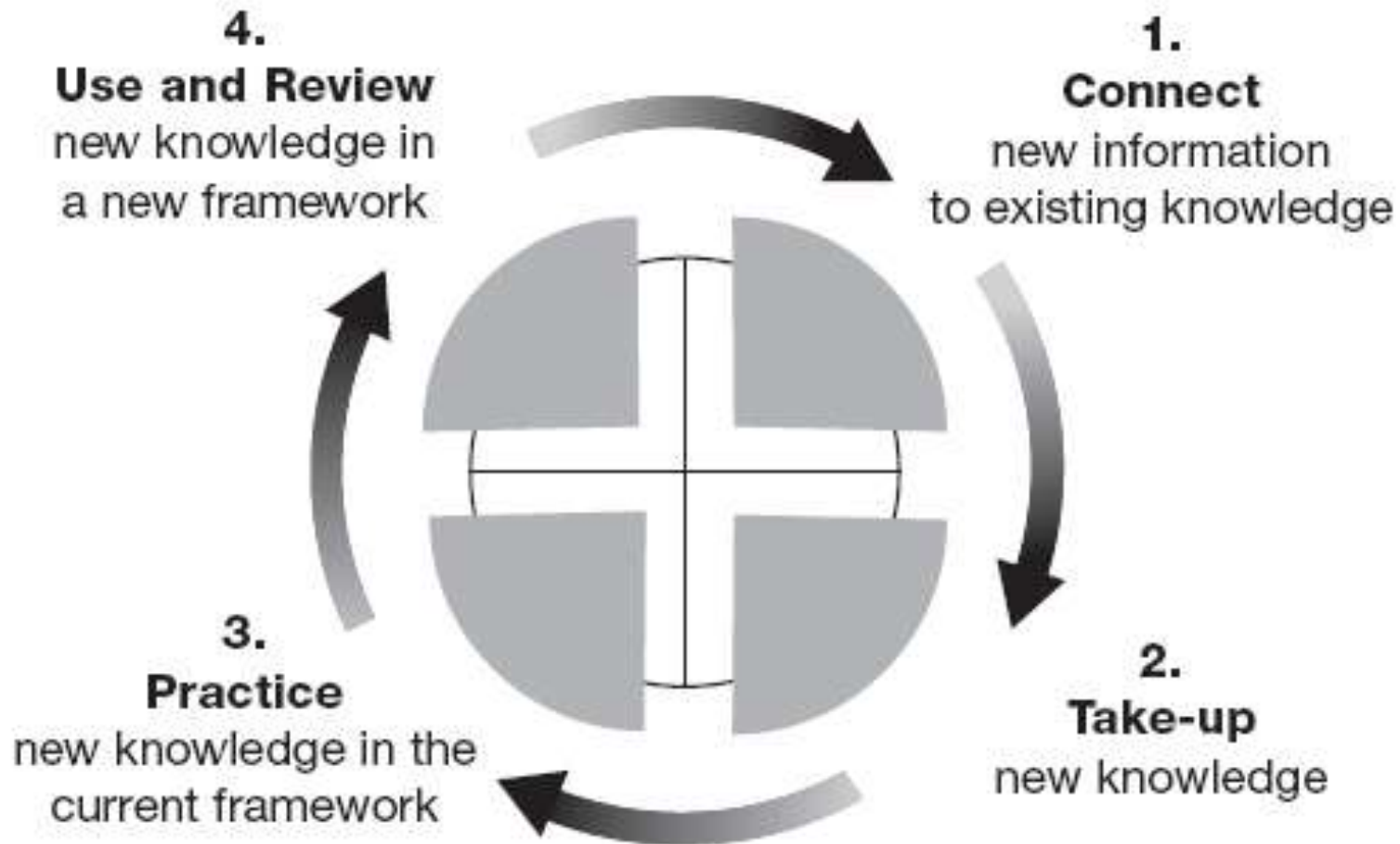
4 phases in an individual learning process



1. Linking the new experience to existing knowledge (connect).
2. Using the new experience to seek new information (take-up).
3. Applying the new information in an existing context (practice).
4. Using and reviewing the new information in a new context (use and review).

Social Learning is a process in which these kinds of transformations take place within a group, affecting norms, behaviors, frameworks, goals, strategies in a shared context

The Learning Cycle



How Can We Use Learning Opportunities?



- Learning opportunities naturally present themselves at the beginning and end of each IEA stage and each IEA cycle. These are the times when you need to reflect and articulate lessons learned to improve the next course of action.
- Given the limited time available, we suggest that your core IEA team organize regular, mid-stage and/or stage-end monitoring and evaluation meetings to serve two purposes:
 - 1. Monitor progress toward and capture lessons learned to improve the next IEA stage and the next IEA cycle.
 - 2. Cultivate a learning, improvement-oriented approach throughout the whole IEA process.

Recognizing Learning Opportunities



- *Learning opportunities arise when there is a possibility or a pressing need to act in a new way.*
- *Conditions apply to fully realize learning opportunities including:*
 - Motivation, which often is the urgency to solve a problem, or act with the support of new knowledge;
 - Trust to discuss values, assumptions and ideas without repercussions;
 - Mandate and opportunity to apply the new knowledge; and
 - Shared understanding of the importance of learning (not only what to learn but also how to learn).

Using Learning Opportunities



- *Core IEA team may organize regular but brief, mid-stage and/or stage-end monitoring and evaluation meetings to serve two purposes:*
 1. Monitor progress toward and capture lessons learned to improve the next IEA stage and the next IEA cycle.
 2. Cultivate a learning, improvement-oriented approach throughout the whole IEA process.

**What makes
this picture
possible?**

Clarity of vision
Specificity of actions
Intelligibility of benefits



Bono and Jesse Helms discuss poverty and health MDGs, 2005

**An example of
learning through
assessment**



شكرا جزيلًا



Exercise 2: Constraints Time: 20 minutes.



- The purpose of this exercise is to map constraints that organizations have in monitoring and evaluation.
- In small groups, ask participants to point out areas of the IEA process where their organization could have constraints that could limit monitoring and evaluation. Compile the constraints, putting them on an enlarged IEA process chart for later use.



1. Why do you need to plan for monitoring and evaluating your IEA process and its impact at the beginning of the planning process?
2. Why is improvement-oriented evaluation relevant to your IEA process?

Exercise 3: Identify the users Total time: 20 minutes



- *The purpose of this exercise is to identify the primary users of monitoring and evaluation of the IEA process.*
1. List the names, positions, and departments of potential primary users of the results of monitoring and evaluation. (Small groups. Time: 5 minutes.)
 2. Record the interest of these potential primary users in using the monitoring, evaluation and impact data, and if they have the mandate for revising the IEA process. (Small groups. Time: 5 minutes.)
 3. Report on their candidates, and compare results. (Whole group).(10 minutes).

Exercise 4: Identify the evaluators

Total time: 20 minutes.

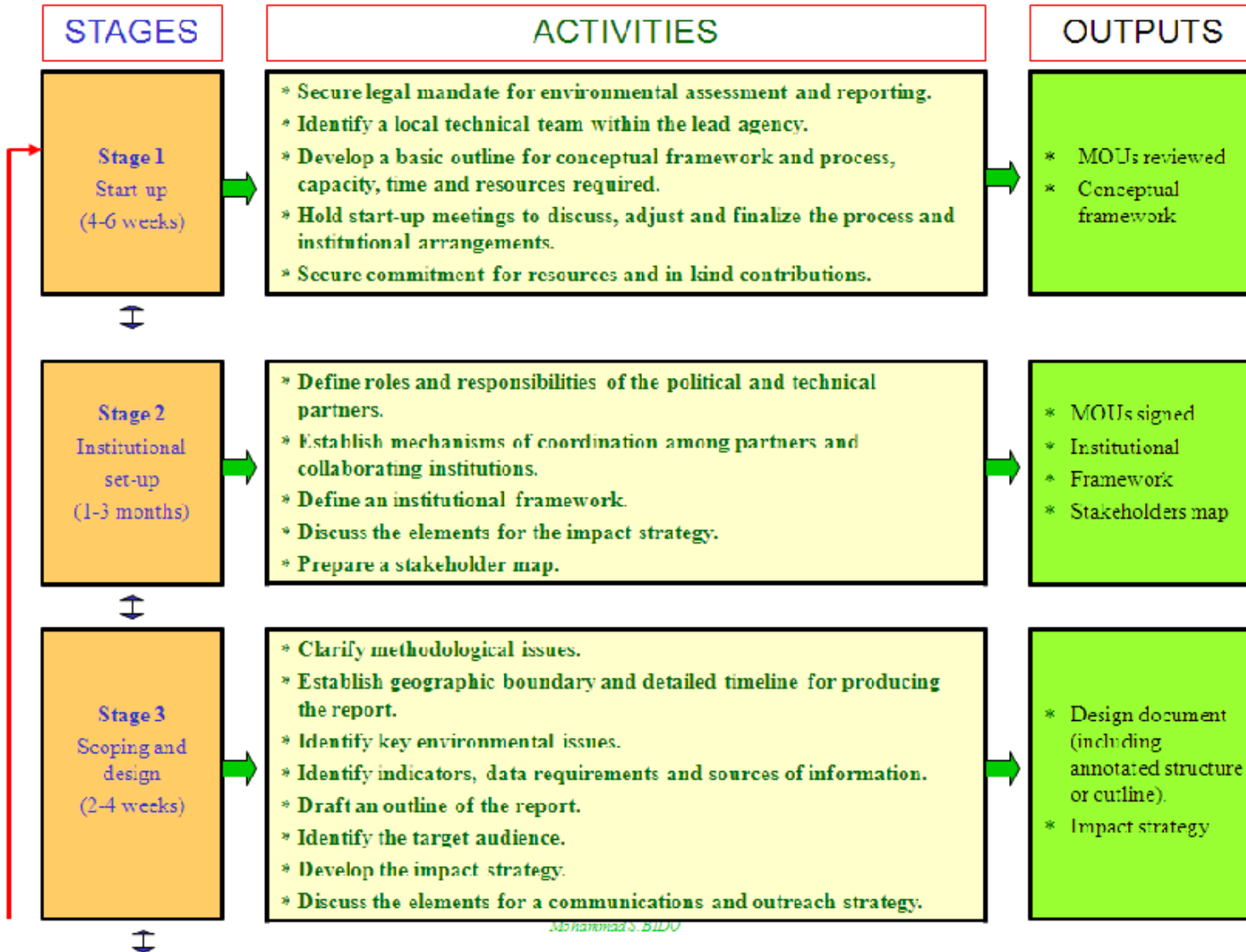


- The purpose of this exercise is to identify the evaluators of monitoring and evaluation of your IEA.
 1. Ask participants to decide on and justify the types of evaluators they would use for monitoring and evaluation: external, internal or a combination. Ask for suggested names, if possible. (Small groups. (Time: 10 minutes.)
 2. Initiate whole group discussions. (Whole group. (Time: 10 minutes.)



1. Can you think of important measures of effective opportunity management not included in the table above?
2. Which measures do you think are most important?
3. What do you think are reasonable targets for the measures you identified?

5. Measures for timely completion of activities and outputs





Exercise 5: Preparation of a Self-Assessment Matrix (Time: ~ 40 minutes.)



- The purpose of this exercise is to gain experience in identifying major issues and questions, and developing specific measures relating to both outcomes and activities/outputs.
- In plenary, complete Table 5 relating to outcomes by identifying specific measures for the key issues and questions outlined in the table. Also in plenary, discuss and establish targets for each measure and identify data sources and data collection methods.

Exercise 7: Design a monitoring meeting



The purpose of this exercise is to design a monitoring meeting that supports learning to improve the national IEA.

- In groups of four or five, design a full-day monitoring meeting for any stage of the process using the guidance provided above. *(Time: 15 minutes.)*
- One group presents their monitoring meeting design and in plenary, discuss the important elements of monitoring meetings. *(Time: 10 minutes.)*

Total time: 25 minutes.