INTERNATIONAL LESSONS OF EXPERIENCE AND BEST PRACTICE IN PARTICIPATORY MONITORING IN EXTRACTIVE INDUSTRY PROJECTS

GUIDANCE NOTE ON DESIGNING PARTICIPATORY MONITORING PROGRAMS

Developed by International Financial Corporation (IFC) and On Common Ground

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Social and Environmental Participatory Monitoring

INTRODUCTION

In the last decade, extractive companies, project-impacted communities and stakeholders have developed increased skills and knowledge in monitoring procedures. Numerous experiences have raised awareness and supported the assertion that multi-party participation in environmental monitoring provides a unique opportunity to receive timely contributions and feedback which in turn result in the overall improvement of the monitoring process. Better social and environmental monitoring and evaluation contribute significantly to improve relationships, to reduce social tensions, and to the adoption of preventive measures to manage conflicts. Yet, participatory monitoring is not exempted from challenges: multiple actors bring multiple perspectives, interests, and cultural conceptions; the same monitoring approach produces different outcomes for different projects; data gathering and interpretation vary from one setting to another potentially compromising the reliability and objectivity of the information; the presumption that environmental monitoring is 'easier' than social monitoring repeatedly results in a bias in favour of the former; and there are limitations to sustaining the initial enthusiasm for participatory monitoring among company personnel and community members alike.

Notwithstanding the experience gained from these important efforts, it is often challenging for extractive companies to design and implement social and environmental participatory programs. Participatory monitoring programs are often implemented during the production phase and, in many instances, they are reactive rather than proactive frequently responding to conflict situations. Another significant challenge relates to the inadequate attention given to the designing of participatory monitoring programs: it is common for these programs to be designed away from the field (desk-designed) and with little input from the affected communities and other stakeholders. While the implementation of these programs strives to be truly participatory, the designing is frequently the result of top-down approaches; a deficiency that hampers companies and project-affected communities from anticipating and acting upon common problems and foreseeable risks.

In the last few years several comprehensive handbooks and tools have been developed to implement participatory monitoring programs; however, there is a noticeable lack of guidelines for the design of social and environmental participatory monitoring programs for the extractive industry. This guide recognizes this need and constitutes a first attempt at filling the gap based on the conviction that participatory monitoring constitutes good practice for socio-environmental management. The concepts and examples presented here are drawn from the many experiences and cases of the extractive industries. Best international practice has served as a guiding principle to organize the information and to incorporate the lessons learned from these experiences.

PART I: HOW TO DESIGN AN EFFECTIVE PARTICIPATORY PROGRAM

Chapter 1 The Need for Participatory Monitoring

Participation is increasingly being recognized as being integral to the monitoring and evaluation (M&E) process since it offers new ways of assessing and learning from change that are more inclusive and more responsive to the needs and aspirations of those most directly affected by extractive projects. Participatory monitoring and evaluation (PM&E) is geared towards not only measuring the socio-environmental management effectiveness of a project, but also towards building ownership and empowering beneficiaries; building accountability and transparency; and taking corrective actions to improve performance and outcomes.

Box 1.1 Participatory Monitoring by Other Names

Some of the terms commonly used are:

- Participatory Evaluation (PE)
- Participatory Monitoring (PM)
- Participatory assessment, monitoring and evaluation (PAME)
- Participatory impact monitoring (PIM)
- Community monitoring /citizen monitoring (CM)
- Stakeholder-based evaluation / stakeholder assessment
- Process Monitoring (ProM)
- Self-evaluation (SE)
- Auto-evaluation

Source: Estrella, M. & Gaventa, J. (1998). Who Counts Reality? Participatory Monitoring and Evaluation: A Literature Review. IDS Working Paper 70.

Participatory monitoring is primarily an awareness-raising tool for both the data collectors and data users, depending on reliable, accurate and useful data. PM&E requires a good system for obtaining and analysing information so that the extractive project can recognize weaknesses, adapt methods, correct course and respond more quickly to unexpected events. Yet, PM&E is regarded not only as a means for reporting and auditing, but also as a means for expecting greater social responsiveness and ethical responsibility.

What is participatory monitoring?

Participatory monitoring is “a collaborative process of collecting and analyzing data, and communicating the results, in an attempt to identify and solve problems together. It includes a variety of people in all stages of the monitoring process, and incorporates methods and indicators meaningful to the stakeholders concerned. Traditionally, companies and agencies initiate and undertake monitoring. Participatory monitoring requires changing the dynamic so

that a wider range of stakeholders assume responsibility for these tasks and learn and benefit from the results. Participatory monitoring is not only scientific, but also social, political, and cultural. It requires openness, a willingness to listen to different points of view, a recognition of the knowledge and role of different participants, and the ability to give credit where credit is due."[1]

Conventionally, monitoring and evaluation has involved outside experts coming in to measure performance against pre-set indicators, using standardized procedures and tools. PM&E differs from more traditional approaches in that it seeks to engage key project stakeholders more actively in reflecting and assessing the progress of the project and in particular the achievement of results.

PM&E constitute an extension of the planning process and, at the same time, should be an area for community involvement. Participatory monitoring improves trust between company and community, empowers communities, and helps build community members knowledge of key environmental and social issues related to an extractive project. By learning from mistakes en route, it can lead to timely corrective action. By highlighting the successes of people's efforts, it can increase motivation.

Box 1.2 Definition

Participatory monitoring and evaluation (PM&E) is a process through which stakeholders at various levels engage in monitoring or evaluating a particular project, share control over the content, the process and the results of the M&E activity and engage in taking or identifying corrective actions. PM&E focuses on the active engagement of primary stakeholders.

Monitoring is continuous. Evaluation is periodic. Evaluation can be defined as: any effort to increase human effectiveness through systematic data-based inquiry. Continual and careful monitoring of relevant indicators and processes provides the information for evaluation and, more importantly, for the corrections that may be needed when projects are being implemented.

PM&E Principles

Core principles of PM&E are:

- Primary stakeholders are active participants – not just sources of information.
- Building capacity of local people to analyze, reflect and take action.
- Joint learning of stakeholders at various levels.
- Catalyzes commitment to taking corrective actions.

In sum, although there are many variations of PM&E, there are at least four common features which contribute to good PM&E practice: participation, learning, negotiation, and flexibility.

What are the basic questions to ask when designing a participatory monitoring program?

The design of an effective PM&E program requires answers to two core questions: *Why is monitoring needed? Who needs and will use what data?*

In turn, other questions must be asked:

ISSUES	QUESTIONS
Participation	▪ Who should and would want to participate in monitoring and evaluating what? ▪ Is the level of stakeholder participation appropriate for the overall purpose of the PM&E system (e.g., for local learning or external accountability)?
Data Collection	▪ How will the information be obtained and used? ▪ Is the information collected useful for those involved and does it help them to achieve their aims?
Data Analysis	▪ Who measures change and who benefits from learning about these changes? ▪ Is the information registration and analysis feasible for participants to carry out in the long term?
Program Design	▪ Who initiates PM&E and why? ▪ Under what conditions? ▪ What is the social, political, and institutional context of PM&E practice?
Control of Process	▪ Who manages the evaluation process? ▪ Is the facilitator facilitating or driving the process – what are the implications for sustainability?
Resources	▪ What are the time and other resource constraints? ▪ How will these issues be addressed?
PM&E Approach	▪ Under what conditions can what type of PM&E approach be used? ▪ When do we know using the practice of PM&E would be a mistake, e.g. by increasing vulnerabilities of already marginalised groups?

Chapter 2 The Need for Stakeholder Participation in the Design Phase

Extractive industries are increasingly questioned about the social and environmental impacts caused by their activities on project-affected communities and other stakeholders. Companies in the oil, gas and mining sectors have internalized the need to constantly improve their environmental and social management; yet these efforts have often been company-directed with little or no stakeholder involvement. PM&E programs redress this omission by meeting the company business objectives as well as those of project-affected communities.

What are the key components for designing a participatory monitoring process?

The design of participatory monitoring programs requires being aware of key elements that may help avoid future mistakes, identify potential pitfalls, and learn from experiences where certain common aspects have proven to be crucial for success. The design stage is considered by many to be the most critical to the success of establishing a PM&E process. This is when different stakeholder groups first come together to articulate their concerns and negotiate differing interests. Often, however, project stakeholders are left out of this initial planning process.

There is no one-size-fits-all formula for establishing a PM&E process. Yet, certain conditions must be met:

- Receptive context.
- Commitment to participation.
- Structured in a way that ensures meaningful participation.
- Capacity building as an objective.
- Adequate allocation of time and resources.

The key components for designing a PM&E are: stakeholder participation and involvement; an effective data collection and analysis system; and wide dissemination of findings to diverse audiences.

Participation is good practice

The success of PM&E depends on involving the right people at the right time. The necessity for a flexible approach and especially the role of participation is a fundamental conceptual and practical element of M&E. To avoid viewing PM&E as a mechanical sequence of procedures using qualitative participatory methods, those participating in the design of a PM&E program must question their own understanding of the participatory M&E system, which should not be driven by the information needs of external agents.

Project managers must ask if their company really wants to make the M&E more participatory. It is important to consider whether hiring others or the beneficiaries themselves to find the information that is important only to the extractive company will constitute genuine

"participation." All stakeholders participating in the design of a PM&E program should understand that the process must:

- Be participatory with the key stakeholders actively involved in decision making.
- Acknowledge and address inequities of power and voice among participating stakeholders.
- Use multiple and varied approaches to collect and codify data.
- Have an action component in order to be useful to the program's end users.
- Aim explicitly to build capacity, especially evaluation capacity, so that stakeholders can control future evaluation processes.
- Ensure that the issues to be monitored are of genuine interest to the partners involved.
- Be educational and a learning process for all those involved.

To apply participatory methodologies, extractive companies must pay particular attention to:

- Encourage marginalized members to participate.
- Actively engage their participation.
- Ask participants about the characteristics they thought M&E people should have.
- Use examples of women's contributions.

Data Collection and Analysis

One of the factors that will motivate those involved in PM&E is the clear and direct usefulness of collecting and analysing information. Who will use the information and for what purpose is a most relevant question. Therefore, it is essential to identify:

- Who is going to collect and register which piece of information?
- Who is going to collate information?
- Who is going to analyze information?
- Where it is going to be carried out (which community/area/camp site/project area)?
- With which methods?
- When will all this happen (how often and which month/week/day)?
- Who is going to disseminate the final findings, how are they going to do it and with whom will they share it?

Dissemination of Findings

Stakeholders must agree beforehand how findings are to be used and by whom, so their content and the format in which they are to be presented can be tailored to the target audience(s). To be effective, dissemination strategies must be incorporated into the design stage. In fact, the most successful dissemination processes are typically designed prior to the start of the PM&E program. In creating a dissemination plan, stakeholders should consider several key questions:

- *Goal:* What are the goals and objectives of the dissemination effort? What effect is the dissemination plan aimed at producing?

- *Audience:* Who is affected most by the findings? Who would be interested in questioning/contesting the findings?
- *Medium:* What is the most effective way to reach each audience? Which resources does each group typically access?
- *Implementation:* When should each aspect of the dissemination plan occur (e.g. at which points during the project cycle)? Who will be responsible for dissemination activities?

What are the most common oversights when designing a PM&E process?

Three issues consistently hamper the design process: unclear objectives and indicators, complexity of data collection, interpretation and processing, and lack of an M&E system for the social and environmental participatory monitoring program.

Unclear Objectives

In terms of what is monitored, often no distinction is made between objective, input, output, outcome and impact. Measuring change can include tracking inputs, outputs, processes, outcomes, and/or impacts. It may also include monitoring intended and/or unintended consequences.

Box 2.1 Definitions of Other Types of M&E Components

- ✓ **Input:** Resources invested (money, labor, materials, training)
- ✓ **Output:** Product or service produced as a direct result of inputs made in order to achieve a specified goal or target
- ✓ **Outcome:** Indirect or mid-term result arising from the use of both inputs and outputs.
- ✓ **Impact:** Final or long-term results, may not be seen until many years afterward and may change the living conditions of project participants.

SMARTT Objectives

Objectives are regularly confused with specific tasks or activities, and in most instances, it is difficult to define what the indicators are attempting to measure if they are not expressly linked to the objectives. Identification and formulation of objectives has to be done smartly. Objectives and indicators must be:

- **S**pecific – related to intended results.
- **M**easurable – clearly defined with agreement on how to measure/collect evidence.
- **A**ttributable – project is responsible for observed changes.
- **R**ealistic – target change can be achieved.

- **T**argeted – identifies the groups the project aims to impact.
- **T**imely – lay out time frame to meet objectives.

Why is Measuring Success so Difficult?

Unclear objectives and indicators often mean that an opportunity is lost to demonstrate a company's value in the community. Several reasons explain why measuring the efficiency and effectiveness of PM&E is challenging; here are some of the most commonly cited:

- PM&E objectives are not clearly defined: both broad objectives and specific programmatic ones.
- Indicators are developed too late in the process: without the input of end users.
- Lack of baseline data: there is no initial information to benchmarking.
- "Success" is a relative term: viewed differently by different stakeholder groups.
- Focus on inputs and outputs rather than outcomes: e.g., change resulting from inputs/outputs.

EXAMPLES OF CORE BUSINESS OBJECTIVES	
Goal	**Objectives**
Reputation	▪ To foster community commitment to protect its environment. ▪ To enhance company reputation as socially responsible both locally and globally. ▪ To create a lasting positive legacy for the local population. ▪ To promote business development / competitive advantage.
Risk Mitigation	▪ To establish a community culture of protection and sustainability. ▪ To secure a social license to operate. ▪ To reduce and mitigate social risks.
Productivity Gains	▪ To build community capacity to monitor and evaluate productive activities. ▪ To boost employee morale and attract new employees. ▪ To meet future needs for labour and services by enhancing the M&E skills and capacity of local labour force.

Complex Data Collection Systems

Where possible, the information collection and analysis, and the use of the results should be undertaken by the same people, who should agree that the method is appropriate and they can understand it. Therefore, simplicity of methods is paramount. With respect to social and environmental monitoring, identification of local indicators can serve as a starting point to encourage stakeholders to set up their own, independent monitoring system.

Stakeholder participation, including people with dissimilar education levels, has raised questions about the validity, objectivity and reliability of the data collected by stakeholders who will be satisfied with informal M&E and will not, at least initially, see any need for systematization or for written recording. That is why PM&E is viewed – incorrectly – by some as solely using qualitative methods. Instead, it is about negotiating what needs to be assessed and measured, and then finding appropriate methods. In a participatory process, negotiation about what each stakeholder group considers 'rigour' will be required.

In short, PM&E requires learning about people's concerns, and how different stakeholders look at (and hence measure) project results, outcomes, and impacts.

Monitoring and Evaluating the PM&E Program

Another important component of the design phase is the inclusion of a monitoring and evaluation system for PM&E. It must be recognized that PM&E is a process that needs, like any other process, to be continuously monitored and evaluated. Yet, this crucial aspect is often overlooked when designing PM&E systems.

Monitoring and evaluating a social and environmental monitoring program – especially one that claims to be operating in a participatory mode – is not simply a matter of looking at program activities. A close look must also be taken at the short-term and long-term impacts that the PM&E has on the project-affected stakeholders and communities, and particularly on their capacity to make use of newly acquired monitoring and evaluation skills.

In this sense, clear objectives and indicators must be identify to monitor and eventually evaluate the PM&E system, emphasizing how it has achieved its goals and identifying gaps in its design and implementation.

What are the steps to take when designing a PM&E process?

The challenge is how to design an effective PM&E process with different stakeholders, who have different ideas as to what the PM&E program should be and ultimately how it should be implemented. Yet, behind the diversity lies a common set of steps. That is, though each PM&E process is unique, experience suggests that, irrespective of the particular circumstances, several critical steps must be taken.

Basic Steps

The goal is to establish a PM&E system that will provide useful information on an ongoing basis so social and environmental performance can be improved. M&E purpose, key questions, and methodology should be defined in advance. It is also advisable to conduct a needs assessment before developing the PM&E program. To design a PM&E framework there are at least six major stages needed to start the participatory monitoring process:

Designing the PM&E framework: define objectives and indicators – PM&E processes are best done slowly. It takes time to develop and agree on a PM&E design that is appropriate for an extractive company. Rushing through this phase can result in a flawed design that does not adequately serve the stakeholders' objectives and goals. Once the overall PM&E framework has been defined, program designers must recognize the need for flexibility and the need to continually review the relevance of objectives and indicators.

WHAT YOU NEED TO ASK IN STAGE 1: DEFINING THE PM&E FRAMEWORK	
Why monitor?	PM&E strives to be a learning process which enables people to reflect on past experience, examine present realities, revisit objectives, and define future strategies, by recognising different needs of stakeholders and negotiating their diverse claims and interests.
What are the collective goals of the PM&E process?	Extractive projects promoting participatory approaches must remain constantly aware that reconciling interests of multiple stakeholders is a highly political process.
What is it that the stakeholders want to monitor or evaluate?	Some activities are more difficult to evaluate than others. Experience has shown that evaluating social conditions is extremely challenging and that the level of expectations increases proportionally to the attention given to these issues. Social and environmental monitoring may require, in addition to adequate resources and time, longer training periods and in some cases use of varied equipment and data gathering techniques.

Setting up a PM&E structure and assembling the core team – Not only do PM&E processes require volunteers, they require leaders. If an extractive project is committed to a participatory approach, then a staff member of relatively high seniority should be in charge of PM&E, for this is the key element in such an approach. Equally important, community 'buy-in' of the monitoring process must be assured.

The collection of data should not take place until the PM&E structure and procedures have been agreed and reviewed with the project stakeholders and approved by the representatives and/or authorities of the project-affected communities. Two incentives are key to fostering PM&E processes: tackling important issues (e.g., addressing community concerns about company performance and compliance) and having appropriate resources (e.g., PM&E processes are costly, requiring firm commitment on the part of the extractive company and the project-affected communities to engage in a long-term process).

This is the time when committee members or monitors are approached to establish the appropriate structure and select the monitoring and (internal or external) evaluation team. Also at this stage, the core elements for the participatory monitoring plan are identified and the providers of technical assistance are identified and selected.

WHAT YOU NEED TO ASK IN STAGE 2: SETTING UP THE PM&E STRUCTURE	
Why is having the adequate structure critical for the success of a PM&E process?	Selecting the appropriate PM&E structure, team and participatory monitoring plan will enhance the stakeholders' planning and management capacity, strengthen the organizations involved, promote institutional learning, and inform policy. PM&E can be introduced deliberately as a means of shifting power relations in the sense of giving voice to previously marginalized user groups.
Who should be involved, and what will everyone's contribution be?	When stakeholders are not appropriately involved, M&E findings are likely to be ignored, criticized, or resisted. When stakeholders are involved, they can provide valuable assistance during the monitoring and evaluation process and become advocates for the PM&E's findings.
What are the collective responsibilities of those involved in the PM&E program?	Depth of participation can range from "shallow" consultation (with no decision-making control or responsibility) to "deep" participation (full involvement in all aspects of the PM&E from design, data collection, analysis and reporting to decisions about dissemination of results.

Numerous companies, particularly in the mining sector, have designed and implemented diverse types of environmental and social participatory monitoring programs. A good number of these programs have been established with the purpose of monitoring water quality and quantity; others have a wider scope to monitor environmental changes, and/or environmental corporate performance and compliance, and implementation of mitigation and remedial actions. A few include also monitoring of social issues, conflict assessment, or compliance with company-community commitments (e.g., contributions to build a health clinic).

In most cases, the different PM&E modalities are coordinated by the extractive company's community relations personnel, with significant technical contributions from the environmental division. Companies consider these types of programs as part of their communication strategy to inform communities about their environmental management, and for many, as a means to prevent conflicts.

The most common practice in the oil, gas and mining sectors is the creation of a *Participatory Environmental Monitoring and Oversight Committee.* These committees have the purpose of taking water samples in pre-established collection points; usually are integrated by community-appointed representatives –elected for specific periods of time– who either take the water samples themselves or witness a third party (technical team, university professor, consultant, etc.) take the samples, which are sent –strictly following a technical protocol for handling water samples– to laboratories chosen by the parties. When the results are available, the Committee convenes the community assembly to inform it about the findings. This information becomes

part of the minutes of the assembly. The taking of samples could be done monthly, bimonthly, every three months or quarterly. Committees meet regularly and keep meticulous records. Funding is frequently provided by the extractive company, and it is becoming quite common for the environmental government agencies to take part in these Committees, sometimes providing financial resources and more often technical assistance and credibility to the process. Company representatives take their own water samples at the same time that community representatives take theirs, which are later compared at a Committee meeting convened for this purpose. In some cases, the Committees have multi-stakeholder representation (local, regional and/or government, extractive company, civil society, and community members).

The *Social and Environmental Participatory Monitoring Programs* are commonly proposed by the extractive company to the project-affected communities, requesting them to select monitors who will then be trained by the company or a contractor to perform the tasks of taking water samples to monitor water quality and quantity, inform their communities, and serve as a communication channel receiving community grievances and observations which are transmitted to the extractive company, and taking back to the communities the company's response to those grievances and observations. The monitors could be volunteers or hired for certain days to perform the monitoring tasks. In this case, a rotation system is usually adopted to give opportunity to more community members to be a part of the monitoring process.

The *Associations for Water/Air Quality and Quantity Monitoring* or *Environmental Monitoring Community Associations* are established to provide communities with information about the water quality. Usually the Associations are registered as civil associations, which allow them to seek funds from sources other than the extractive company. They receive technical assistance either from national universities and research centres or private consultants and non-governmental organizations. The monitoring process is similar to that of the Monitoring and Oversight Committees, as is the selection of the community representatives. The Associations sometimes include multi-stakeholder representation, but in some instances they are integrated exclusively by community members. The Associations are subjected to wide fluctuations in their ability to secure funds, making them dependent in these cases on company financing.

Gathering data and creating a data processing system – Environmental and social management efforts are a worthwhile investment. Therefore, the selection of relevant information is critical to achieving stakeholders' goals. The principal objective of a user-friendly data gathering and processing system is to develop an independent, transparent, legitimate and objective mechanism to provide the opportunity for project-affected communities to participate, in coordination with local and regional authorities, non-governmental organisations and other stakeholders, in the monitoring of the company's social and environmental performance, framed by a relationship of trust and goodwill between the stakeholders and the extractive project.

Data collection needs to be done in a form that partners can manage, e.g., simple PM&E systems with low intensity of data collection, using methods of recording and analysis that depend more on memory and discussion than on written records. Yet, creating a data gathering and processing system provides the opportunity to introduce community representatives and other stakeholders to more systematic ways of organizing information; a database is a good

mechanism to record and manage – in an straightforward way– the data obtained during the monitoring activities, and safe-keeping the information.

A database has two additional advantages: it is a useful means for the extractive company to respond in a timely manner to any incident or accident reported during the monitoring activity, and it is a means to disseminate the information recorded during the monitoring as well as the actions taken by the company in response to concerns or any potential incident. Making the database part of the monitoring program website, for example, allows the general public to access the information gathered by the monitors and the responses of the extractive company.

It is necessary to define procedures for the regular update of the database as well as mechanisms for managing the information. The database design could be done by a consultant specialist in information systems (IT), with the support of the community relations team and the project stakeholders. However, prior to database design it is essential to:

- Define the selected monitoring areas, the environmental and social variables, and the indicators for monitoring.
- Develop procedures and protocols (including questionnaires for the social and environmental monitoring) to define, among others, frequency of monitoring periods and use of tools and equipment.
- Adopt security measures and select equipment needed for field work.
- Standardize the writing and presentation of progress reports and procedures to track company responses to the monitors' reports.
- Define roles and responsibilities for database management and updating.

Finally, extractive companies should aim at having a steady stream of information flowing about the environmental impact as well as the monitoring activity, without overloading anyone. The information collected must mean something: data should not be collected just to keep busy; data gathering should be done to find out what the project stakeholders want to know. Information should be at all times easy to access.

WHAT YOU NEED TO ASK IN STAGE 3: CREATING A DATA COLLECTION AND PROCESSING SYSTEM	
What is the relevance of stakeholders participating in methodology design?	The extractive company and its contractors commonly bring in their own concepts of M&E, proposed indicators, modes of measurement (almost exclusively quantitative) and forms of recording and reporting; however, they can adapt these in interactions with the local people. This approach is most commonly taken by environmental management projects that wish to bring in local perspectives.
How can data collection and processing systems be adapted to suit stakeholders' needs?	Starting with the local people's informal practices of M&E, including their indicators of change, trying to understand/validate these practices and indicators, and seeking ways to combine local capacities and external capacities for M&E. This approach is more commonly taken by stakeholders that are pursuing aims going far beyond environmental monitoring.

Developing a training program for social and environmental monitoring – Extractive company personnel, project-affected communities and other stakeholders require training in social and environmental participatory monitoring and evaluation. Extractive industries today are committed to continual improvement in the social and environmental management of their operations. Stakeholder closer scrutiny and increased expectations for a higher standard of social and environmental performance (and transparency) require personnel to be adequately trained and competent in many different aspects of monitoring, including the design and conduct of participatory monitoring programs, and the ability to interpret and report on data produced in such programs. Similar training is required by stakeholders, including personnel in government agencies with responsibility for assessing industry environmental performance.

The objective of the PM&E training program is to provide some basic knowledge and gain a better understanding as well as practical skills about social and environmental monitoring and evaluation for extractive projects. The training program is expected to enable participants to plan and implement monitoring and evaluation tasks as part of general social and environmental management processes.

The basic training principle is to combine a conceptual framework with practical applications, based on the participants own experiences in monitoring and evaluation as well as identification and management of local environmental and social issues, to increase stakeholders understanding and capacity about the M&E process. While formal learning is important, PM&E requires a more iterative approach to provide participants with a hands-on experience, spending more time in the field and less in the classroom.

Developing a training program must also take into account the extent to which participants change over time (e.g. if they are elected officials or seasonally absent farmers), the range of participating stakeholders in each step, and the degree or depth of stakeholder participation in each step.

WHAT YOU NEED TO ASK IN STAGE 4: DEVELOPING A TRAINING PROGRAM FOR SOCIAL AND ENVIRONMENTAL MONITORING	
What do the stakeholders need to learn and why?	Start by identifying current capacity for monitoring/evaluation and those areas that should be strengthened to ensure sustainability of PM&E efforts. Is it the process of collating/calculating the information that is important, or only the final information?
How will the participants find what they need to learn?	It is important to identify stakeholders that may have a perspective or knowledge essential for the training program. It is also necessary to identify those whose absence will jeopardize the M&E efforts.
How will participants make sense of and use the information?	Clearly define who is going to use the final information. Monitoring involves establishing indicators of efficiency, effectiveness and impact; setting up systems to collect information related to the indicators; collecting and recording data; analyzing the information, and more significantly, use the information to inform day-to-day management.

Developing the participatory monitoring plan – The aim of the participatory monitoring plan is to monitor both the social and environmental performance of the company and its contractors, in order to identify direct and indirect, social and environmental impacts. Developing the participatory monitoring plan requires:

- ***Consulting with stakeholders***. Write down all actions needed to develop the participatory monitoring plan (e.., training, acquisition of field equipment); focus on generating and writing as many different options and ideas as possible***.***
- ***Convening a planning workshop***. Brain-storm with the stakeholders about the steps that should be completed before action is undertaken.
- ***Clarifying goals jointly***. Develop a visual picture of the collective expected outcome; identify potential constraints, like the limits on time, money, or other resources; and together find ways to simplify the monitoring plan even more.
- ***Building, in a participatory way, monitoring indicators***. Based on technical and scientific knowledge but also on traditional and empirical knowledge, develop social and environmental monitoring and recording indicators.
- ***Establishing a baseline***. On the basis of the information independently obtained and provided by the company (e.g., in the environmental and social impact assessment – ESIA), define variables to monitor, according to the local people's perceptions and local values as well as international technical standards.
- ***Prioritizing and analyzing issues***. Select primary stakeholders and priority issues, particularly those that are absolutely necessary to develop the plan.
- ***Ensuring efficient information management.*** Design mechanisms to coordinate information flows and database management.
- ***Preparing to implement the plan and reviewing it regularly***. Progress towards gradual achievement of the goals must be continuously monitored and evaluated; identify what new information has been obtained; define how to use this information to further adjust and optimize the participatory monitoring plan.

WHAT YOU NEED TO ASK IN STAGE 5: DEVELOPING A PARTICIPATORY MONITORING PLAN	
What difference does the extractive company want to make?	The proper application of best management practices and the extractive industry commitment to improve social and environmental performance constitute an important developmental opportunity to foster positive local economic and social benefits for the host communities of the extractive industries.
What are the risks to implement the participatory monitoring plan?	Risk management is one of the most important parts of the participatory monitoring plan. By understanding the potential risks which may affect its implementation, the likelihood of unpleasant surprises that may jeopardize the achievement of the objectives is diminished. Risks may arise as a consequence of changing circumstances and new project developments, further refinement of the monitoring plan, changes to the scope of the extractive project, and discussions/negotiations with the stakeholders.

Documenting, reporting and sharing information – As the effectiveness of PM&E is based on sharing information, it requires careful identification of those to share information with and

what information is worthwhile sharing. To demonstrate the commitment to share information, many extractive companies, for example, have become signatories to the Global Reporting Initiative (GRI); the environmental performance of their operations is thus subject to formal scrutiny. Local communities and other stakeholders also closely monitor extractive industries' activities, all of which have the potential to impact the lifestyle and well-being of the communities in which they are situated.

To disseminate information resulting from the participatory monitoring activity in a transparent manner, several factors must be taken into account:

- Local degree of understanding of environmental and social issues relating to the extractive project.
- Willingness to learn more about the company and about environmental and social impacts.
- Main concerns about the company's performance.
- Main sources of information about the company's performance.
- Preferred means to access information (including access to news).
- Main sources and reasons for misinformation.
- Dynamics of communal or association meetings.
- Social structures and mechanisms to make decisions.
- Availability to attend public meetings.
- Educational levels and literacy rates.

WHAT YOU NEED TO ASK IN STAGE 6: SHARING INFORMATION AND RESULTS	
Why disseminate information?	By disseminating information in a given community, the overall vision and purpose of the PM&E program can be validated and criteria established to measure success at various stages of implementation, or improvement of performance and compliance. Companies with positive environmental disclosure perform significantly better in the market than companies that disclose negative environmental information.[2]
Where is the demand for information disclosure coming from?	The demand for information regarding corporate environmental responsibility comes from many different interested parties. Stakeholders are demanding more disclosure of company environmental information because of their concerns about the magnitude of costs and liabilities associated with environmental issues.[3]

Chapter 3 Designing PM&E Programs for the Extractive Industries

Several trends explain the current interest in PM&E programs: First, and arguably the most significant trend, has been the huge surge of experience with participatory appraisal and planning in general, and in the natural resource sector in particular. Second, increased interest about PM&E is arising from the natural resource sector. Third, many multi-national businesses are being challenged with new communication requirements to satisfy the increasing number of stakeholder requests for information depicting a company's environmental performance.

The accountability for continuous improvements in the extractive industries' environmental performance must compliment the interests of targeted audiences which can vary by country, geographic regions and stakeholder groups. In addition to addressing the emerging interests of traditional stakeholders (i.e., shareholders, lenders, regulatory and policy makers), businesses are now faced with compiling additional information in response to a growing number of emerging stakeholder groups representing: employees, trade associations, professional institutions, surrounding communities, consumers and citizen action groups. These stakeholders are requesting information in various formats that gauge progress in relation to established goals and commitments.

Acceptability of the PM&E Framework

For a PM&E program to be effective, the strategic social and environmental *impact* of the extractive project must be given primary importance. This means an emphasis on what outcomes the project is trying to achieve in the short and long term, and looking critically at the *effect* of the extractive project and who benefits from it as well as describing activities and their immediate outputs.[4] The indicators should be used over time to monitor changes in social and environmental conditions and corporate performance and to ensure that communities and other stakeholders have an up-to-date understanding of the situation.

The PM&E framework often is used with external encouragement (e.g., when international financial institutions request an extractive company to use it), mostly during the production phase, and frequently framed within a limited concept of "participation," which excludes stakeholder participation from the design phase, and in many instances, from decision making about the implementation of the PM&E program. Generally, other challenges include the fact that no clear distinctions are made between monitoring and evaluation: many people use these terms interchangeably. The terms 'monitoring' and 'evaluation' take on different meanings when used and interpreted in the local language and context, which can make introducing PM&E problematic. Monitoring activities and evaluations are often conducted within a short time-scale due to time and resource limitations or demands from funders and/or extractive companies for a quick idea of the results of their investment.

Participatory monitoring and sustainable development

Yet, preconditions for successful PM&E strongly overlap with those for participatory development. For extractive industries, the rational supporting PM&E is not “are we making a profit?” but rather “are we making a difference?” Through PM&E, extractive companies can:

- Review progress.
- Gain information and insights and act on the information and insight.
- Raise questions about assumptions and strategy.
- Identify problem and their causes in planning and implementation.
- Develop possible solutions to problems.
- Make adjustments so that they are more likely to make a difference.

When should participatory monitoring be used in extractive projects?

It is important to note that the PM&E framework must be used as early as possible from the beginning of an extractive project, so as to establish a very clear picture of the initial situation, manage expectations and involve key stakeholders. The planning of the PM&E from an early stage is essential to ensure that it is gradually built into the project cycle and not tacked on at the end. This also has important implications for baseline data collection, which will need to take place before proper participatory monitoring activities begin, or at least in the early stages of project implementation.

Some extractive companies consider that PM&E may be introduced at anytime throughout the project cycle, depending on stakeholder priorities and the available resources to establish the system, while others consider PM&E to be relevant only as an activity at a particular stage of the project cycle (e.g. midterm evaluation, local population as monitoring agents during production, or evaluation at the end of project or policy cycle). With regard to timing, some corporate advisors outline the various stages at which participatory monitoring or evaluation activities may take place within the project cycle, from diagnostic activities at the planning stage, through collection of baseline data, regular monitoring, mid-term evaluation, ex-post evaluation, etc. and the function of each of these stages.

Best international practice requires that PM&E should be made an integral part of the entire project cycle. The M&E program should be designed as participatory (including both project staff and local beneficiaries); however, initially external support may be needed while a social and environmental monitoring committee is being built up – but with a view to establishing an autonomous process by the local organisation/community as soon as possible. Participatory monitoring and evaluation is therefore not simply a new set of techniques for employing at a different stage of the project cycle. Rather, it is the outcome of a whole new environment within which development thinking and planning is taking place, in which many norms are being questioned such as who initiates M&E, who undertakes it, how and who benefits from the results, and how most efficiently to use the information gathered.

PM&E systems during exploration[5]

Although environmental baseline studies are normally done at the advanced exploration phase, extractive companies are nowadays undertaking environmental baseline work (e.g., studies of soil and vegetation types, wildlife, and water analysis) during the exploration activity period. This data provide a reference point that can be used to measure the impacts of a project over time and, if the project goes ahead, that can be used in the environmental assessments. That is why it is critical to involve communities in some initial environmental participatory monitoring at this stage. Early community involvement allows both the community and the extractive company to learn from each other. With their in-depth knowledge of the land, community members may be able to suggest acceptable remedial practices for the community as a whole and also assist the extractive company in identifying early concerns or raise questions.

Companies during the exploration phase must manage expectations. The dynamics of company-community relationships at the exploration stage are driven by some unique characteristics; most notably that there is no certainty that any individual exploration project will go ahead. Yet, numerous voluntary codes of conduct[6] recognize that, above all else, extractive companies engaged in exploration have to respect the local community and its rights, real and perceived. A participatory monitoring program with a narrow scope is a good way to establish dialogue.

PM&E systems during construction

As the project construction begins, permits will be required. This starts the environmental assessment process and provides an opportunity for broader participatory monitoring, particularly during the elaboration and approval of the ESIA. Community and stakeholder participation is required to monitor not only the extractive company's social and environmental performance and compliance with national law and international standards, but also the actions of construction companies and contractors hired to build the roads and plant sites, put up the buildings, and construct the infrastructure needed for an extractive operation to go into production.

Environmental participatory monitoring provides early warning of negative impacts so that corrective actions can be quickly put in place. Environmental monitoring is usually a condition of the environmental permitting process. Environmental monitoring makes sure that a company's Environmental Management Plan (EMP) is being implemented as proposed. The objective of environmental monitoring is to make sure that all impacts are mitigated. At this time also social issues (e.g., jobs, business opportunities, community health and security) gain an additional importance, frequently linked to the management of the environmental aspects.

During construction, the importance of meaningful community input is critical. This is the time, before a project goes into operation, for communities to "get their issues on the table" and "say what they mean." In other words, this is when communities can gain a complete understanding of the extractive project, ensure that the developer understands the potential impacts from their perspective and knowledge base, and raise issues of community concern. Yet, few extractive industries set up participatory monitoring programs during construction.

PM&E systems during production

The essence of social and environmental monitoring is to start a participatory process before disputes arise. Once a project is operating, community input and consultation focuses on monitoring the effectiveness of impact management plans (mitigation) established during the environmental assessment. In this phase, the purpose of monitoring is to measure and evaluate impacts compared to baseline conditions before the operation. Typically, monitoring activities include: waste water; wildlife; air quality; water quality; aquatic effects; fisheries and fish habitat; and reclamation.

Communities may decide to set up a number of committees shortly before production starts to ensure impacts are recognized and mitigated. Possible committees include, in addition to the environmental and socio-economic monitoring committee: a community wellness committee; business development opportunities committee; training/hiring committee; and community sustainability upon project closure. All of these activities need PM&E processes to making effective and transparent the adaptations in planning, implementation and institutional behaviour that can result from a participatory approach.

Challenges include increased level of opposition arguing lack of credibility and reliability of the information provided by both the extractive company and the water quality and quantity monitoring committees; increased overlapping of social and environmental issues, where a technical solution for the latter may not address the former; and stakeholders' demands for a greater saying in how they will be consulted.

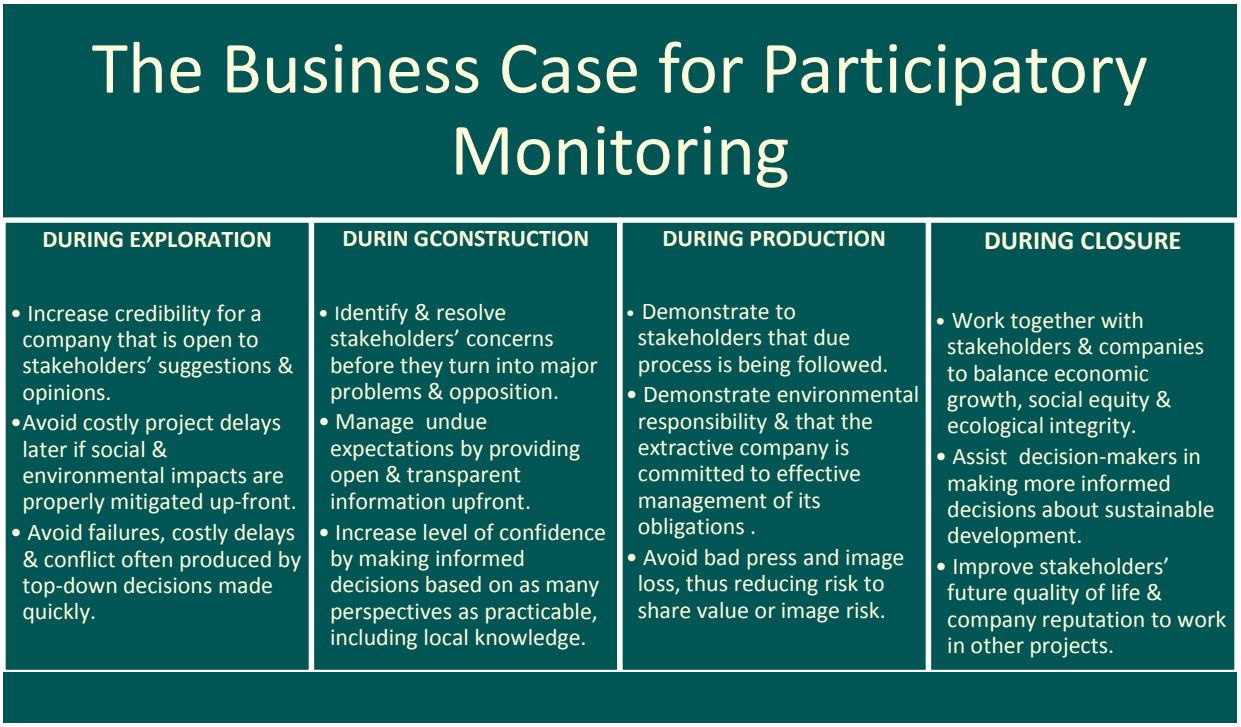
PM&E systems at closure

Participatory monitoring during closure should prepare stakeholders to manage the impacts of project closure by planning well in advance, constantly communicating with the extractive company and understanding the closure process and providing input. The goal is to develop strategies to lessen the negative impacts of the closure and post-closure. The length of the monitoring phase is reviewed and confirmed when the extractive activity closes and depends on the potential impacts and risks to the environment.

At this stage, the participatory monitoring program is used to assess the effectiveness of reclamation and mitigation measures after site shut-down and to identify corrective actions where needed. The PM&E program assesses the accuracy of the environmental assessment; any unforeseen environmental impacts; and the effectiveness of the mitigation measures. Also, it monitors changes to the environmental management program to address unpredicted changes and impacts.

Project-affected communities and other stakeholders can work with the company to reduce the negative impacts of extractive activity closure by building community capacity to manage opportunities and impacts; providing training and competency development; and developing alternative and secondary industries.

Making the business case for participatory monitoring



What are the main criticisms related to participatory monitoring in extractive projects?

Today, the oil, gas, and mining sectors face serious criticism about the social and environmental impacts of their industries. Companies must deal with several difficult challenges to meet expectations of economic development, the creation of quality jobs, respect for human rights, and high returns for investors. Public perceptions of the extractive industries as a whole are rather negative, and enterprises are vulnerable to local and international pressure. Maintaining a "social license to operate" requires companies to make major investments in social and environmental performance. Although steps have certainly been taken to improve performance, extractive industries must accept that they will be judged by the actions of the poorest performers.[7]

GENERAL CRITICISMS ABOUT PM&E PROCESSES IN THE EXTRACTIVE SECTOR

PM&E programs are initiated without adequate consultation with impacted communities; failure to engage meaningfully with civil society.
Monitoring may find significant noncompliance with social and environmental loan conditions; yet, the extractive company does nothing to respond to participatory monitoring findings.
Many local affected indigenous communities and vulnerable groups (e.g., women, youth, Elders) feel particularly excluded from the decision-making process.
There are inadequate, un-integrated and largely non-transparent monitoring mechanisms, resulting in confusion and a lack of information about project impacts, whom to report problems to, and whether and how issues are resolved.
Monitoring mechanisms do not address some of the project's most critical impacts, such as most social, health, and biological issues.
The community monitoring programs have been particularly flawed in their design.
Monitors are not empowered to enforce compliance.
Some extractive companies do not engage in good faith; civil society expertise and input is not heeded, and some companies are more interested in getting the project done than in getting it done right.
Extractive company or project sponsors are not complying with international standards regarding stakeholder engagement and indigenous peoples consultation.
Project sponsors have failed to require basic environmental due diligence prior to loan approval.

Chapter 4 Selecting and Training Social and Environmental Monitors for Extractive Projects

What are the criteria for the selection process of community monitors?

Participatory monitoring requires people with specific skills such as bookkeeping or mathematics. It also requires a certain amount of labour and time from project-affected people and company staff. When identifying potential participants in PM&E, extractive companies and project-affected communities must realize that there can be a conflict between the desire for expert knowledge versus the individual community member's lay knowledge and experience. Clearly both are valuable, but there can be a tension as to which should dominate in decision making.

Those potential candidates with the skills and the time can either self-identify or be identified by their communities, which may see this activity as a service that the individual provides to the community as a whole. Extractive companies must abstain from 'selecting" the candidates, which must be strictly a community decision. Intervening in this selection may later on question the credibility of the PM&E process.

Training monitors for the monitoring tasks is essential; however, this is just one component of a good participatory monitoring system. Dealing effectively with issues related to monitor selection, motivation and provision of incentives is equally important.

Candidate Selection

Project stakeholders' input should be solicited to define the criteria to identify and select potential participants in the participatory monitoring system; such criteria are context-specific and embedded in a complex web of cultural dynamics and norms related to gender, social status, inter-generational relationships, etc. that must be taken into account when writing up the profile of potential monitors. Language proficiency is another important factor; particularly considering the difficulty that exists to translate many of the terms used in PM&E into native languages.

Some of the most commonly suggested criteria to identify PM&E participants include:

- Primary educational level as a minimum, although high-school/technical educational level is highly desirable.
- Potential candidates should be bilingual.
- Communication skills to deliver information in a manner that is culturally appropriate and accessible to community members and other stakeholders. It also requires written communication skills to use the training materials, write reports, and make presentations.
- Basic computer skills to operate most commonly used computer programs and access the internet.
- Good standing and relationships with their community or social organization; sound moral character.

- Inclusion of vulnerable groups: women, youth and the elderly, being respectful of local traditions and customs.
- Time availability for the monitoring work; it is not advisable to consider potential candidates already employed. In some cases, however, people in a position of authority in the community may be considered.
- Firm commitment to improve the quality of life in their communities, particularly from emerging leaders.
- Physical strength to walk long distances and in areas that may be far from their village.

Compensation

When there is compensation for the task of monitoring, the community may feel that as many individuals as possible should benefit from this activity. This is of special concern to participatory monitoring which by principle does not wish to offer payment so as to ensure a maximum of legitimacy for the judgement obtained at the end of the process. The increasingly problematic issue of time requirements for marginalised social groups to be able to participate in M&E of any kind, and hence who can afford to become involved in a PM&E process needs to be tackled by the program designers.

However, harsh economic realities have to be acknowledged and recognize that potential candidates cannot afford to volunteer for monitoring tasks. A compensation mechanism works best when it is coordinated and agreed upon with the project-affected communities. Monetary compensation can also be complemented with other incentives: provide meals and transportation or establish a reward procedure (e.g., the monitor of the month), but always in coordination with the project-affected communities.

Motivation

While recognizing that there are benefits (and partial or short-term costs) of PM&E, program designers must also acknowledge that the success of participatory monitoring is linked to the relevance of PM&E to the priorities of the participating project-affected communities and other stakeholder groups. Keeping people motivated to participate in monitoring is a real challenge. Common factors that lead to disillusionment with the program include: boredom; repetition of uninteresting mechanical tasks; perceptions that the monitor's work is devalued by the extractive company and/or their communities; demanding physical work; sense that monetary compensation is not at a par with the work required; little or no opportunity to apply knowledge; and perception that the monitors' ideas are not given due consideration, devaluing their contributions as "unscientific."

Extractive companies and project-affected communities can motivate monitors by:

- Providing timely, quick and relevant feedback to monitors' findings.
- Enhancing capacity to act on recommendations that might arise from PM&E findings.
- Understanding local political history, as this influences communities' openness to the monitors' initiatives.

- Dealing with short-term survival needs of participants, while pursuing longer-term information needs.
- Providing continuous material support to make the PM&E possible (e.g. pens, books, training, monitoring equipment, etc.)
- Showing a high degree of maturity by improving monitors' capabilities and promoting, leadership and identity of the groups involved, including openness to share decision-making power.

What type of training plan is needed for community monitors?

Before designing the training plan, program designers must consider how the people involved prefer and are able to communicate, as this determines the choice of medium: written, oral, visual or dramatic. A well-designed PM&E training plan will include the following:

- *Preparation Phase*: time to consult project affected communities about the training plan: content, timing, duration, format, etc.
- *Introductory Phase*: Introduction to communities of the monitoring and evaluation concepts.
- *Development Phase*: Joint design for the community's monitoring and evaluation training program.
- *Practical Applications Phase*: Classroom content must be kept to a minimum; monitor activities in the field should follow the philosophy "Learning by Doing."
- *Evaluation Phase*: Evaluate and re-appraise the overall training plan and how it has contributed or not to the achievement of the PM&E work.

The training plan should include as well a mechanism for evaluating the monitors' work, to assess the extent to which each monitor has internalized content, their long-term commitment to the program, and determine who needs personal couching.

Additionally, it is highly recommended to promote the exchange of experiences with community monitors from other extractive projects in the country as a powerful training mechanism. Organizing field trips could constitute a means to have the project monitors share their experiences, provide and receive advice, exchange tips and other useful information, and more importantly, it is an excellent vehicle to motivate the monitors.

Experience has also shown that involving monitors to assist with the training of new monitors has the added benefit, on the one hand, of reinforcing knowledge and transmitting the information in a colloquial way which makes for a far richer learning experience, using in many instances native languages to explain complex concepts. On the other hand, co-teaching contributes to take ownership of the monitoring program.

The suggestion has been advanced that the monitors engaged in social and environmental participatory monitoring programs should receive some form of 'accreditation' from the national environmental agency and/or a local university as another way of recognizing their work and

contribution to their respective communities. Extractive projects have yet to act in this direction for their PM&E programs.

Model Training Plan: Suggested Content [8]

Essentials of PM&E Monitoring	Monitoring Techniques and Practice	Communication and Dissemination of Information
▪ Concepts related to extractive industry: what it is, and why it is important. ▪ Phases and impacts of the extractive cycle. ▪ Introduction to environmental and social concepts. ▪ Company's ESHS, ESIA, social and environmental commitments and standards of behaviour. ▪ Introduction to monitoring processes: what is environmental monitoring, and what is social monitoring. ▪ Understanding the work of the monitor: what it is to be a monitor: role, functions, and responsibilities. Monitors' code of behaviour.	▪ Basic monitoring parameters, indicators (including biological indicators) and technical procedures to monitoring social and environmental impacts. ▪ Management of monitoring tools and equipment. ▪ Development and use of monitoring protocols and questionnaires, for both, social and environmental monitoring. ▪ Techniques for impact mitigation, including soil erosion control, revegetation, solid waste, drinking water and wastewater treatments, among others. ▪ Introduction to IT systems, basic computer skills and use of databases. ▪ Introduction to the project's database.	▪ Foundations of the national environmental law and international standards. International best practice for extractive industries. ▪ Techniques to improve communication and presentation skills, including techniques to make presentations, facilitate group meetings, and write reports. ▪ Dissemination of monitoring findings to diverse audiences. ▪ Feedback mechanisms and management of stakeholders' contributions.

What is the required technical equipment for monitoring?

Monitoring different extractive projects require different equipment to do the job. At a minimum, monitors should be provided with photographic camera, GPS, water analysis equipment, equipment to measure air quality and levels of noise, photocopies of questionnaires and other recording forms, and protective clothing, including that for outdoor work.

Monitors should also be provided with field manuals to serve as reference for the monitors during their field activities. The manuals summarize key concepts of the monitoring plan, as well as the main topics of the training program and must be developed and properly written and illustrated according to cultural characteristics of each region. Design and layout should be more graphic rather than written text, which will require extensive translation into the native language; it is necessary that the graphics show the reality of the area, and it is even better to include

pictures where the people to be trained can recognize themselves, their friends and the area where they live. In general, the field manuals must contain:

- Standard procedures and protocols emphasizing the correct way to use monitoring instruments (GPS, camera, etc.) and take water samples, record observations, and fill in the forms.
- A summary of the company's environmental and social commitments and standards as well as those of its contractors.
- Procedures to follow for managing the information resulting from the monitoring activities.
- Procedures to be followed in case monitors are not able to do their work and/or record observations and other important information.
- Contingency/security procedures and contact list for immediate response.
- A glossary of basic concepts.

What is required to ensure the objectivity of data?

Imbalances in skills and capacity discourage some PM&E program designers from incorporating community representation and input into the design of the participatory monitoring system. The weakness of community monitoring and evaluation is tied to the lack of well-developed, consistently supported methods for doing so. In this type of M&E, communities are placed in the wings, part of but not central to the project's monitoring and evaluation system.

Those involved with PM&E often underestimate the length of time needed to negotiate what is to be monitored. It is better to start simply and monitor only some aspects of the extractive project. Then, as experience grows and capacities build, the system can be expanded to include all the important aspects that are needed for good project PM&E and to enable overall impact assessment. Information must be trustworthy and as objective as possible. These criteria can be used to check overall suitability of data collection methods:

- *Validity:* do the people who are to use the information believe the methods are valid?
- *Reliability:* will the methods work when needed?
- *Relevance:* do the methods produce the information required?
- *Sensitivity:* are they able to pick up data variations sufficiently and be adapted?
- *Timely:* are they likely to avoid delay between information collection, analysis and use?

In addition to determining the type of information that is needed to meet the objectives of project-affected communities and the extractive company, it is important to consider for what purpose and in which context the information is best collected, registered and analysed. It should also be remembered that statistical data is not the only form of information of potential interest. Stories and other qualitative data may be just as important.

Indicators

A well formulated objective makes it easier to develop indicators. It is paramount to minimize the number of indicators to keep the PM&E process manageable. Indicators must be both

quantitative and qualitative and must be reviewed regularly to ensure that they are providing information that is relevant. Selecting indicators is therefore: one of the most difficult steps in setting up a PM&E. While there are no set rules to select indicators, these should be participatory, communicable, empowering, and disaggregated.

Box 4.1 Definition of Indicator

An indicator is simply a means to help communicate complex changes to a wider audience. Indicators describe and express conditions and represent some kind of simplification or approximation of a situation.

Distinguishing between more immediate and longer-term objectives is important when selecting indicators. Monitoring often focuses on the immediate, more tangible, and easily accessible information like 'the number of monitors trained.' By comparison, evaluation will focus on assessing whether, for example, the training efforts are worthwhile and the effect of those trained monitors on their communities and organizations. Indicators must be simple and capable of communicating something to the people wanting to act on the results. The recording needs to be done in a form that partners can manage.

In the extractive sector and for natural resources management, changes are more likely to be monitored through changes in the condition (health, productivity, and well-being) of the animals. For this reason, indicators associated with people's animals (e.g. milk yield, energy levels, sleekness of skin) are likely to be more important to monitor than, e.g. vegetation.

Box 4.2 Other Considerations about Indicators

- Indicators must be developed through a process of dialogue and negotiation with stakeholders on the ground.
- Indicators need to be clear and appropriate for the people involved at any given level.
- Progress toward long-term social change is at certain times an acceptable measure of effectiveness.
- Lack of clarity about the end-use(r) leads to the collection of excessive amounts of overly detailed indicators.

Baselines

PM&E by definition compares changes over time, or 'before and after'/ 'with and without-project' situations. However, the practical reality of most extractive projects is that few have baselines against which judge change at the start the monitoring process or the funding to create them. Baselines deal with the economic situation, with institutions, with autonomous resource management groups, etc. The most streamlined baselines are objective driven – they only measure the status of those aspects that are the focus of the monitoring.

Chapter 5 Building Corporate and Community Capacity

Extractive companies planning to design a social and environmental participatory monitoring program to strengthen the M&E system of their project, and ensure that results are communicated effectively to the local populations could consider creating a best practice third party-facilitated monitoring program. Contributions from relevant actors, such as local organizations, non-governmental organizations, local and regional authorities and governmental organizations, can also be solicited.

In addition, the work – especially during the designing phase – could be supported by an international consultant to provide expert advice to conform the PM&E system to best international practice and standards. This consultant can provide advice and recommendations as needed to the extractive company and the contractor in the following areas:

AREA	EXPERT ADVICE ON BEST PRACTICE
Objectives of the PM&E framework	To feed the relevant information on the program's performance into the decision making process of the company, identify successes and areas for improvement as well as how to monitor the program performance against the targets.
Facilitation of workshops	To facilitate a workshop with company and contractor to jointly review the scoping analysis and recommendations, and agree on the potential contributions, as well as the roles and responsibilities of each party going forward. To support the design and delivery of a formal workshop with local stakeholders to discuss and agree on the proposed design of the social and environmental monitoring program as well as secure understanding and agreement on the roles and responsibilities of each party going forward.
Management structure for the PM&E system	To advice on how to manage the PM&E framework to track progress, independence, accountability and effective decision making processes that are transparent and expectations management.
Monitoring plan & determination of monitoring areas	To develop a monitoring plan including issues such as size and composition of monitoring units, representation of the project-affected communities, compensation scheme for the community monitors, field manual and database, relevant qualitative and quantitative indicators, targets, and milestones.
Training plan	To build capacity for the community monitors in line with existing capacity, appropriate level of resources (time, staff, etc.) to undertake it.
Communication strategy	To develop effective processes for communicating the findings of the community monitors and timely company responses, ensuring that there is a mechanism for sustainable flows of information to and from the communities on the issues important to them.
Exit strategy	To develop sound exit strategy; ways to institutionalize the participatory monitoring process, potentially involving the trained community monitors in other projects.

What are the criteria for selecting a qualified local implementing partner?

It is highly advisable for extractive companies to secure the services of a contractor who has ample experience in PM&E to assist in the design, and eventually, implementation of the PM&E program. It is also important to bear in mind that the success of the PM&E is dependent on the degree of ownership that the project stakeholders develop towards the program; the company or its contractor should be seen only as the initial facilitators of the process and not the 'owners' of the program.

It is also advisable when designing a PM&E system to incorporate best international practice and standards taking into account, among others, issues related to Stakeholder Engagement; Social and Environmental Assessment and Management Systems; Pollution Prevention and Abatement; Community Health, Safety and Security; Biodiversity Conservation and Sustainable Natural Resource Management; and Indigenous Peoples and Cultural Heritage.[9]

An independent contractor can assist the extractive company in designing and implementing a PM&E system for genuine participation of project-affected communities in the monitoring process and transparent communication of the project's environmental and social performance, while enhancing the knowledge and skills of the local population and local community monitors.

The selected contractor should have ample experience in the sustainable use of natural resources to minimize the negative effects of human activities on the social and natural environment. Its core team should be multidisciplinary (e.g., biologists, foresters, economists, geographers, anthropologists, sociologists, educators, communicators) and have extensive experience working with companies in the extractive sector, to provide technical support to implement participatory monitoring, environmental education, and reforestation and natural resource management programs (See Tool No. 2 for Sample Terms of Reference).

SCOPE OF INDEPENDENT CONTRACTOR'S WORK	
Planning for the Participatory Environmental & Social Monitoring Program	▪ Create baseline ▪ Evaluation & organization of monitoring committees and selection of monitors ▪ Preparation of monitoring plan
Implementation of the Training Program	▪ Training program for the communities ▪ Training program for the community monitors

Implementation of the Participatory Social and Environmental Monitoring Program	▪ Implementation of monitoring activities ▪ Implementation of a monitoring database ▪ Implementation of supervision activities ▪ Implementation of corrective actions
Implementation of a Communication Strategy for Disseminating Monitoring Results	▪ Design of the results-communication strategy ▪ Implementation of the result-communication strategy

How to build the capacity of local communities?

Local environmental monitoring is closely linked to the strengthening of the social organisation for managing the resources, particularly common property resources used by several families or even ethnic groups. Community members often lack the skills to organize, plan, monitor or evaluate; without an explicit focus on building these skills, PM&E programs stand little chance of empowering communities to realize a brighter future.

Box 5.1 Building Community Capacity

Terms such as community development, community empowerment and community capacity describe a process that increases the assets and attributes which a community is able to draw upon in order to improve their lives.

PM&E is an integral part of local capacity building and institutional development. It can create a feeling of ownership among all partners. To support capacity-building, for example, M&E training could be combined with functional literacy classes. Creating social capital increases the possibilities for co-operative action in solving problems; facilitates the diffusion of innovations by increasing inter-linkages among individuals; reduces information imperfections; and increases informal safety nets between households, thereby allowing households to pursue higher returns and productive activities.

Box 5.2 World Bank's Definition of Social Capital

"….the rules, norms, obligations, reciprocity and trust embedded in social relations, social structures and society's institutional arrangements which enable members to achieve their individual and community objectives."

Chapter 6 Integral Components of an Effective PM&E Program for the Extractive Industries

Why must a grievance mechanism be integrated into the design?

Grievance mechanisms are increasingly important for extractive projects where ongoing risks or adverse impacts are anticipated. They serve as a way to meet requirements, prevent and address community concerns, reduce risk, and assist larger processes that create positive social change. Today, many companies employ ad hoc or exclusively internal processes to address grievances.[10]

Company-community grievance mechanisms are locally based and a formalized way to accept, assess, and resolve community complaints concerning the performance or behaviour of a company, its contractors, or employees.

Box 6.1 Definition of Grievance

An issue, concern, problem, or claim (perceived or actual) that an individual or community group wants a company or contractor to address and resolve.

Few PM&E systems have well-funded and well-coordinated linkages to already existing company grievance mechanisms or anticipate the need to establish such procedures for the better handling of community concerns and questions when designing PM&E programs.

Six guiding principles must be considered for an effective grievance mechanism for a PM&E system:[11]

1. Procedures should correspond with universally accepted human rights standards.
2. Concerns, complaints and grievances from individuals and communities should be treated with respect and responsibility.
3. Access to remedy, disciplinary actions and corrective measures; should the case be, include extractive companies and their suppliers, contractors, agents and subsidiaries, employees and directors.
4. Accessibility of information in the appropriate language for communities, available at all stages.
5. Accountability and transparency including public disclosure of investigation results to ensure transparency, trust and accountability. Compliance should also be monitored regularly.
6. Funding should be transparent to ensure independence and impartiality, and it should be free of charge to complainants.

Why must a communication plan be integrated into the design?

Communication with primary and secondary stakeholders is essential. Misconceptions about the project often spread if there is no adequate communication strategy. To develop an effective communications plan in support of PM&E, extractive companies need to ask several questions: What is the connection between the communication plan and PM&E? When should it be developed? Where does the information in the plan come from? How soon is it needed? And more importantly, why should the company bother?

Communication and participatory monitoring

Viewing PM&E as 'systematic communication' focuses attention on its fundamental social and political nature. It also helps clarify the objectives of the PM&E program. It must be stressed that the development of the communication plan should also be participative. By receiving the stakeholders' contribution at this stage, the communication strategy effectively becomes a two-way communication by soliciting people their opinion; anticipating how they will react, the questions they will raise, and the issues that may affect them.

In this sense, the communication plan must aim at:

- Explaining changes in language people understand.
- Explaining changes in terms of how they will affect them rather than what is in it for the extractive company.
- Designing the company's communication to answer those concerns immediately.
- Being direct in stating the change and explaining the rationale for it in relation to the overall goals the stakeholders wish to achieve.
- Expecting change to generate a corps of resisters and appreciate them. Encourage them to participate in the implementation of the change and listen to what they have to say.
- Soliciting ideas that will strengthen what the company wants to do.
- Identifying the people in the community who the company can come to for advice regarding new ideas.
- Keep communicating after changes have been made. Recognize and celebrate their successful implementation.

In sum, the monitoring system must therefore include an education and communication component to ensure a range of stakeholders understand why the monitoring system was implemented, what questions are being (and equally importantly, not being) addressed, why the particular areas and social and environmental variables used were originally chosen, and what the implications for resource management are.

Why is there a need to design an exit strategy?

Strategic management requires developing an exit plan as a way to transition the company's involvement in the PM&E program to communities' managing their own monitoring and

evaluation processes. It may be seem odd to design an exit strategy when the PM&E program is still being developed; however, by planning at an early stage there will be ample opportunity to review and revise the exit strategy, adjusting it to changing conditions related to PM&E, to the company's overall plans, and the socio-economic and political context of the area of influence. In other words, an exit strategy prepares those involves in the PM&E program to assume different responsibilities and to think about means to make the program sustainable in the medium-to-longer term.

The Case for Sustainability

Although many acknowledge that PM&E requires considerable time and financial investment, few experiences actually document the amount of resources needed to build and sustain a PM&E process over time. These resource requirements include financial resources, as well as human resources in terms of commitment, effort and capacities to carry out PM&E. There is further a need to identify the types of skills and capacities necessary for conducting and sustaining PM&E.

Key components to ensure the sustainability of participatory monitoring

Funding

The challenge in sustaining the PM&E effort is to develop a more diverse funding base by integrating the monitoring effort with other community initiatives. Having inadequate resources negatively impacts a community's ability to effectively conduct environmental monitoring. Resources will be required to facilitate routine monitoring, data collection, data quality review, evaluation, communication, and building the capacity of stakeholders.

Continuous training and capacity building

A key question is whether PM&E can become part of formal community institutions. Other key questions: What type of capacity building is needed, for whom, and at what level (personal/group, organisational/institutional, etc.) to maintain and reinforce community PM&E? What types of skills, knowledge, changes in behaviour and attitudes are required in conducting PM&E in the long-term?

Multi-stakeholder participative process

Once communities are on their own, emphasis must be placed not only on what will be monitored and evaluated, but more on who will measure and how different community concerns and interests will be negotiated and represented. Partnerships will be the key to success.

Technical capability

In addition to training communities to continue operating and updating information processing systems, installed and operated with company funding and technical support, communities will need to make sure that results from early data collection are not incompatible with later data.

Government support

Support from government agencies will be needed to provide advice on logistical and funding implications. It is important to attribute a significant responsibility for PM&E to local governments, so it is imbedded and institutionalized within the local planning and budgeting processes.

Democratic decision making-processes

The process will need to be iterative and should include a broad range of input. Continuity of community support is essential for the system to be sustainable. Success will depend on community commitment to a long-term monitoring system as the optimal way to address common resource management issues.

PART II: IDENTIFYING SUCCESSES AND CHALLENGES

Expectations and Risk Management

If the PM&E program is the first organized effort on the part of the company to engage with project-affected communities, the risk that expectations (on both sides) will uncontrollably increase is high. Unmanaged expectations, in turn, increase the social risk for the extractive company. High levels of socio-political risk often translate in high conflictivity and tensions in the relationship.

Designing, and particularly implementing, a PM&E system necessarily require expectations and risk management on the part of the company. While it is impossible to foresee all potential risks and types of expectations, some of the most common are provided below.

Examples of expectations that extractive companies typically encounter

Expectations	Expectation Management
The monitoring committee and/or the monitors will address every single issue the community has with the company.	Objectives and outputs from the PM&E program need to be clear to avoid confusion. Yet, the risk for the program to be seen as an all-encompassing negotiation mechanism is high.
The company and the technical team will always be there – PM&E is seen as a permanent company activity.	This is a matter of sustainability: the PM&E program must include in its design means to make social and environmental monitoring sustainable and managed by the project-affected communities.
PM&E system will provide technical assistance for other areas (e.g., farming, animal care) of interest to communities.	There is a need to establish close coordinating mechanisms between the PM&E program and the company's social investment programs so to address community concerns and channel requests.
Company staff assumes that PM&E program is going to be less costly than other social programs and will require less time commitments.	How much time stakeholders and company staff are willing to invest in the work and those aspects on which they wish to focus their efforts on is a matter to be dealt upfront.
Company's assumption that participation by local people in M&E will benefit them just because a program has been set up.	Extractive companies have to work hard with communities to make PM&E programs sustainable and for the benefit of the community. Some communities will benefit more than others.

Examples of risks that extractive companies typically encounter

Risks	Risk Management
The relative simplicity of working "in theory" during the design phase turns into an absolute complexity of diverse realities once implementation starts.	The weakness of such initiatives is that they emerge in response to conflicts, rather than before the onset of extractive activity, and are initiated by the company.
Competing visions about monitoring programs between company and contractor create uncertainty.	While recognizing the value of the water monitoring system, extractive companies sometimes see PM&E as a stand-alone program, unconnected to other company social initiatives. External consultants emphasize issues of sustainability and benefit for the communities.
The rotation ratio of monitors is higher than expected and for unanticipated reasons (e.g., competition in the labour market between company and contractors).	Among the reasons: the community demands this rotation as a way to distribute benefits more widely; or monitors simply do not find the conditions they need to continue being part of the program.
Changes in the communities leadership is greater than anticipated forcing a new strategy to deal with the situation, which in some cases leads to questioning the already selected monitors.	Local institutional changes occur. Agreements for the design of the PM&E system may not be sustained by the new administration. Already selected monitors may not be "acceptable."
Participatory monitoring programs respond more to company's needs rather than community needs.	What distinguishes the more innovative participatory processes is their inclusion of end-users in PM&E design.
Monitoring programs must have an effective project manager who also understands project management from the company's perspective.	Lack of effective program management has been one of the main reasons for program failure.
Safety and security issues become an issue between company and contractors, but for different reasons for each.	Having monitors wandering off on project sites is a serious security risk. Companies and contractors must establish clear protocols to allow the monitors to perform their job safely.
Misperceptions that PM&E may turn out to be a tool to "monitor" local authorities and their performance are extremely difficult to manage and may greatly affect the program.	Political sensitivities have to be dealt well in advance and should be an important consideration for the PM&E design process.
Involving local people in PM&E often proves to be limited to data collection, notwithstanding substantial time and financial investments.	Data collection may be too demanding in terms of time and yield too few data regarded as useful by the company's environmental team.
Project-internal resistance.	Some difficulties in realizing PM&E can doubtless be attributed to resistance among personnel of extractive projects, probably more among administrative than field staff. PM&E makes administration more complicated.
Lack of coordination among company internal divisions.	Truly participatory approaches make public relations to the outside world more difficult and can affect the "corporate identity" of a project.

Allocation of Financial Resources

Sufficient allocation of staff and financial resources is vital for developing effective PM&E systems. A failure to ensure the spending of a reasonable proportion of resources on this important aspect of project management is likely to reduce internal learning and result in poor performance. In any type of monitoring and evaluation activity time, technical capacity and cost constraints are commonly identified as limiting factors.

Developing a PM&E system requires much time and funds. When considering costs and benefits of PM&E at project level, it must also be taken into account that PM&E can contribute to capacity building. However, it must still be assessed whether the substantial funds that need to be invested in developing a PM&E system bring the expected benefits in terms of capacity building.

Acknowledging the cost of participatory monitoring

Even if actual application costs are low, the final cost of implementing participatory monitoring will be much higher than was originally anticipated.

Although designing a PM&E system and training can initially be costly and time consuming, it does not necessarily have to use vast time and financial resources in the long run. If beneficiary community members are trained in self-monitoring or indicator measurement then the job and the (time) costs can be distributed. Also, it must be noted that there are costs to not evaluating, in terms of failure to adjust extractive projects with early signs of problems, and wasting resources on unnecessary or unproductive activities.

Systematization of Experience

Systematization is a methodology that offers a way to organize and document what stakeholders have learnt through their work; better understand the impact of their work and the ways in which change happens; develop deeper understanding about their work and the challenges they face to inform new ways of working; and capture and communicate the complexity and richness of their work. Systematization is very closely related to other knowledge production activities, such as participatory monitoring and evaluation.

Systematization of Lessons Learned

Systematization helps stakeholders involved in PM&E to organize and communicate what they have learned: the lessons learned, about which everybody talks nowadays, but which are not so easy to produce.

Company' experiences about participatory monitoring need to be systematically documented and systematized. Seldom is it possible to find documentation on how the PM&E system actually worked (maybe due to a lack of funds for documenting the experience). Few or no details are given about what is actually monitored and evaluated and how this is done.

Although many extractive companies believe that their environmental management and technological innovation have genuinely reduced impacts, to date there is also little documentation available on how capacity building approaches, including formal training and hands-on experiential learning for PM&E, have altered communities' perceptions about environmental change in their midst. In other words, what has been people's experience regarding changes in their environment and how those changes have been monitored and evaluated.

Equally important, there is no documentation on how communities affected by extractive projects' activities conduct their own monitoring of environmental changes. Conventional approaches attempt to produce information that is 'objective', 'value-free' and 'quantifiable.' Yet, there are many local forms of PM&E that go unrecognised, as they are often regarded as common-place practice and part of daily activity. Communities and community-based organisations have long been monitoring and evaluating their work (without labelling it as such). They have developed their own procedures for recording and analyzing information, and using that information for making decisions.

Systematization of PM&E experiences presumably is based on the practice that it aims to document. Systematization requires certain conditions:

- A stakeholder team or group that assumes the responsibility of leading the systematization process: even though systematization should be a group commitment, one person must assume the leadership of the process.

- A critical resource in systematization is time. The 'size' of the experience that will be systematized: its length, its complexity, the number of people involved, and the characteristics of the geographic area as well as the amount and quality of available documentation on the experience will affect the time needed to undertake and complete the systematization process. Another critical aspect: how much time can the group, realistically, dedicate to the systematization?

- Systematization is more manageable if it is based on a thorough problem analysis. Yet, its purpose has to be clearly defined: What do you want to systematize this experience for? What do you expect to learn by doing it? What product do you expect to develop (a written report, a video, or a case study)? Who would find this product useful?

- Systematization should be incorporated into the original PM&E design. Identify the main question that will organize the process, and the way the systematization will be carried out. But, above all, the systematization effort has to be realistic, depending on the time, financial resources and human capacity that is available.

PART III: LESSONS LEARNED FROM LATIN AMERICAN EXPERIENCES

Example of a Community Environmental Monitoring Association (CEMA) for an Operating Mine –Design and Implementation Phases

The Project

The gold mine is a conventional milling operation with a combination of open pit and underground mining which began commercial production in December 2005. The project lies within approximately 100,000 hectares that encompasses the main deposit and other important mineralized zones.

Setting up the PM&E Process

The Community Environmental Monitoring Association (CEMA) was established in September 2005. At the time, mine construction had just started. The communities conditioned their participation to four requirements: no company participation, no government participation, funds should be handled by an independent organization, and the management of CEMA was to be a communal responsibility. CEMA was set up as an "association" to have legal status (recognition under national law) and eventually be able to manage its own funds. A non-governmental organization organized workshops with the communities to explain the monitoring process, identify the communities that wished to participate, and assist them to organize.

CEMA's Structure

Each community selected two representatives (currently: 10 communities participating).CEMA's normative framework is constituted by the Annual Monitoring Plan, the Monitoring Protocol, and its Internal Charter. CEMA exclusively monitors water quality in 12 monitoring sites (company: 20 sites). It monitors surface waters and subterranean waters. CEMA may occasionally address some communities' concerns such as monitoring in a particular point rather than in the regular sites or undertaking basic air quality monitoring. CEMA is assisted by a technical team integrated by 4 professionals (mining engineer, biologist, environmental expert, and communications specialist). The technical team visits the area at least once a month. CEMA has not promoted exchange of information/experiences with other monitoring bodies in the country or elsewhere.

Program Funding and Compensation for Monitors

A University foundation handles CEMA's funds and prepares a draft annual budget which is discussed with the monitors before submission to the company. Operating funds for CEMA

Achievements

- ✓ In the opinion of the monitors, the communities in the area of influence of the mine trust CEMA.
- ✓ Community members actively question their monitors about the monitoring activities showing a high level of interest.
- ✓ Other communities have expressed interested in joining CEMA.

Challenges

- ✓ Insufficient funds.
- ✓ CEMA's activities are not well-known by external actors or even by mine workers.
- ✓ Difficulty to distinguish between rumours and misinformation from proper claims and grievances.

come entirely from the company. CEMA's annual budget is US$ 40,000. The technical team estimates that to function properly it requires US$ 100,000 annually.

The foundation pays the monitors a per diem for each working day, equivalent to the rural minimum wage. Monitors do not sign a labour contract. CEMA monitors do not have an expectation that they will get a job in the company.

Characteristics and Selection of Monitors

Requirements to select monitors are: to be elected in communal assembly, following the voting procedures established by that decision-making body; not to be a company employee; and to be able to write and read. There are no age limitations or minimum schooling. Monitors are selected for two years to allow for ample rotation among community members. Each monitor is provided with a uniform (vest and hat) and basic multi-parameter equipment (bottles, etc.). No GSP systems are used. Particular attention is given to gender balance for the selection of monitors.

Monitors Training

The technical team's training consists of three main modules: (1) environment – basic chemistry; (2) mining and geology, and (3) constructive communication and conflict resolution. Additional basic training is provided for water sampling and special training is provided on an as-needed basis. Training is continuous (given the high rotation of monitors) and open to community members. Training sessions take place for two days during weekends.

Monitoring Process

It has three components: (1) monitoring activities, (2) training, and (3) communication of results. The reference points for the monitoring activities are identified in the ESIA of the mine. In total four monitoring activities (sampling) are undertaken every year. These activities coincide with those of the company when it takes its own water samples. Comparison of both results is made with the standards set up by the national Ministry of Environment and Natural Resources. Two samples are taken from each river; one upstream and one downstream. Two types of analyses are made: (a) in situ with basic field equipment, and (b) samples in special bottles, whose characteristics are defined in the Monitoring Protocol. Detailed instructions are provided in the Monitoring Protocol to take the water samples (needed equipment, distances, depth, etc.) for both surface and groundwater sources. Samples are sent to a laboratory abroad, chosen by the communities. The technical team interprets the results (in English) and provides a summary (in Spanish) for the monitors.

No questionnaires are filled when taking water samples, but there is a Log Book to record data. No database has been created to manage the information collected. CEMA does not have a hydrological map or has undertaken a hydrological study of the area. Up-to-present no indication of higher than acceptable levels of contamination in the water have been found. In general, the technical team has concluded that there is no contamination but only bad practices (e.g., leaks, diesel spills resulting in some dead birds). The company has accepted its responsibility.

Dissemination of Results

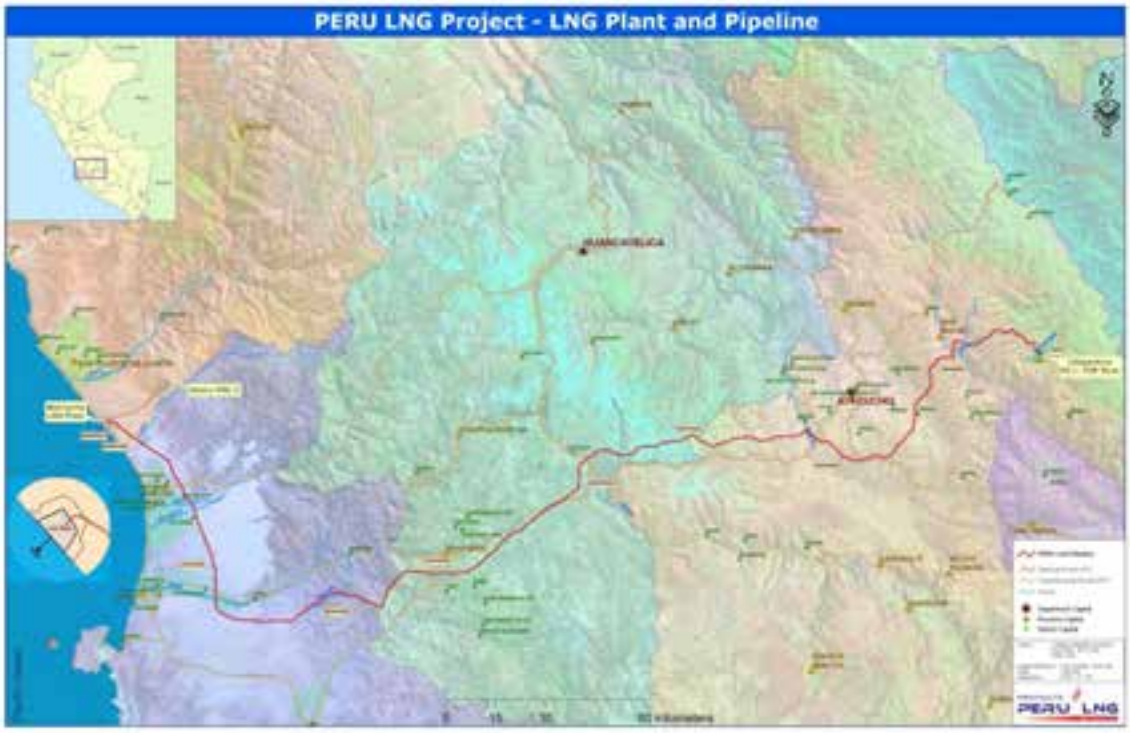
Monitors convene their assemblies to inform about the results, once the analysis is sent back. There is a high level of participation in these assemblies. CEMA has prepared some brochures for community distribution, has occasionally transmitted radio spots and is reorganizing its webpage. Copies of its reports are sent to several stakeholders (e.g., church representatives, government agencies).

Example of a Social and Environmental Participatory Monitoring Program (PMSAP) for a Natural Gas Pipeline Project

The Project

The project involves the construction of a new 34 inch diameter transportation pipeline to transport natural gas along 408 km (254-mile) from the Andes to the Pacific coast. There are 35 rural communities, 30 annexes, 26 localities, and 12 associations within the direct area of influence of the Project.

This is the first experience in the country to implement a social and environmental monitoring program during the construction stage of a project.



Setting up the Participatory Monitoring Process

The Company selected a national non-governmental organization to act as the local independent operator to design and implement the appropriate monitoring mechanism, associated management and communication structures, and capacity building program for local communities, as well as develop relevant training materials, monitoring plans, field manuals, and an information database.

Objective

To monitor through community monitors the Company's social and environmental performance during the construction of the natural gas pipeline. PMSAP is "to provide the communities and local population with a record of trustworthy and objective information about the social and environmental impacts that the construction activities of the project may cause."

Specifically, the PMSAP:

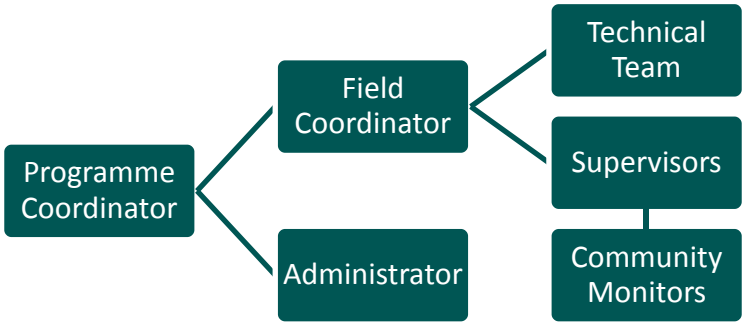
- Addresses perceptions about impacts of pipeline construction
- Integrate community participation into Project assurance processes
- Build trust among monitors and communities
- Guarantee community concerns are addressed
- Ensure communities and local authorities receive accurate information

Design Process

The company and its operating partner defined jointly the conceptual and operational framework; consisting of two main phases, program design which lasted about seven months, and program implementation which is scheduled to last 16 months. The design phase comprised several stages: program validation, selection of monitors, and training of monitors. The implementation consists of field monitoring and results presentations to communities.

For the program validation, informative meetings were held with local communities to review the proposed design of program and to discuss the implementation of specific objectives. Specific social and environmental monitoring protocols were subsequently developed.

PMSAP's Structure



The contractor established a technical team (TT) and three regional offices to deal with an equal number of culturally and geographically distinctive areas. Each of the three technical team consists of field experts (environmental specialists and a social scientists), whose role is to provide training and accompany the monitors in their initial monitoring activities. In addition, the TT is assisted by field supervisors who supervise the monitors in the field.

Characteristics and Selection of Monitors

Monitors selected by communities. The total number of candidates for monitors who received training was 178; a total of 84 PMSAP monitors were selected. The monitors' selection process was voluntary & participative (Project affected communities, Local authorities, Civil society, Governmental offices participated) – all monitors were appointed by the communities' assemblies (majority voting) – and took

into account the extension of the Right-Of-Way (RoW) through each community: communities were the extension of the RoW was small have one monitor. A maximum of four monitors were selected for the larger extensions. The requirements to become monitor include: Fluent in Spanish and Quechua, Fluent in Spanish and Quechua, Minimum high school education, Respected by the community, Not a local authority. Women and young people encouraged to seek nomination.

Monitors Training: Learning by Doing

To introduce the PSMAP, 57 workshops in 48 locations were organized, with aprox 2,000 people in attendance. Basic classroom training (video recorded) included these modules: introduction to participatory monitoring, environmental and social issues, description of the project, public communication and presentations, tips to conduct interviews, use of monitoring equipment (camera, GPS, etc.), and instructions to fill out the social and environmental questionnaires.

Subsequent continuous training is provided regarding during the Construction phase, use of monitoring protocols and equipment, potential impacts of specific activities, Measurements and record keeping.

A pilot monitoring called “monitoring zero” (monitoring exercise not a part of the actual monitoring) was carried out to validate the monitoring protocols (monitors, supervisors and technical teams), test field equipment, evaluate interview protocols and visit work fronts, and assess interaction between monitors, Company, and contractors. All information is registered in the user friendly Monitoring Register Information System (MRIS) database; determine action priorities to communities.

Implementation

Monitors in field 10 days every month with Program Operator specialist

- Findings classified as “No Action” or “Action”
- “No Action” findings automatically closed-out by Company
- Action items recorded for Company to address

Achievements

- ✓ Effective entry strategy which allow PMSAP to engage communities and authorities respectfully.
- ✓ Pilot monitoring allowed program to make timely changes in the overall approach to the monitoring process before implementation.
- ✓ Participatory model has strengthened community and monitors' capacity to understand monitoring processes, and benefit from experience to improve community environmental management.
- ✓ PMSAP has empowered female monitors by strengthening their personal self-esteem.
- ✓ Monitors are providing the Project timely and valuable information, guaranteeing community concerns are addressed
- ✓ Independent Operator ensured effective community participation
- ✓ Community receives accurate information on social and environmental performance; inaccurate perceptions are addressed
- ✓ Monitors feel confident, better informed, communicate more efficiently and are gaining respect of community
- ✓ Community involvement has promoted transparency
- ✓ Positive impacts viewed as outweighing negative impacts, preventing social conflict

Example of a Multi-stakeholder Environmental Monitoring, Oversight, and Enforcement Committee for a mine in operation –Design Phase

The concentrator plant is currently the largest polymetallic treatment plant in the world

The Project

Located at more than 4,300 meters above sea level, the copper-zinc mine connects to the port through a 302 km pipeline that runs underground and transports the concentrates produced by the company.

Setting up the Participatory Monitoring Process

In 2001, the national government established a Multi-sectoral Technical Commission (MTC) to improve the tense situation between the company and some communities. After four months of intense work, MTC presented its final report recommending the creation of a monitoring committee. On December 10, the independent and multi-stakeholder Huarmey Environmental Monitoring, Verification and Oversight Committee (CMVFAH) was created.

Objective

To guarantee adequate citizen participation to obtain information on the mining company's operations related to the quality and management of human and natural resources in the region; to promote local capacity building in connexion with concerns about environmental actions; and to promote the sustainable use of natural resources and the adoption of an environmental culture.

Design Process

Based on the work of the MTC, the government's environmental agency convened a meeting to formally establish CMVFAH and to create a Transition Commission to draft CMVFAH's internal chart. The same environmental agency provides training to CMVFAH members and technical assistance to develop the monitoring and work plans.

CMVFAH's Structure

There are three types of members: plenary (right to express opinion and right to vote – currently 16 local organizations); participating (right to express opinion –currently 9 government agencies) and invited (right to express opinion –currently 5 mining company and environmental agency). CMVFAH General Assembly is assisted by the Executive Board (president, vice president, secretary for institutional relations and organization, economy and finances secretary, and secretary for environmental issues) and the Secretary General (a four-person staff including a social communicator). The civil association is constituted by members representing multiple sectors, such as local, municipal and regional governments, ministries and other national government agencies (i.e., health, natural resources, environment) academic institutions (e.g., universities, technical institutes), fishermen associations, water users, neighbourhood and farmers' associations and other civil society organizations (e.g., Catholic Church, Red Cross), and the company.

Characteristics of Committee Members

CMVFAH members do not receive compensation for their work. They are selected by their institutions and approved by the assembly. Membership privileges are suspended is a member is absent from three consecutive meetings, commits a serious offence against CMVFAH or no longer represents the member institution.

Achievements

- ✓ One of the oldest participatory, multi-stakeholder monitoring programs.
- ✓ CMVFAH has established a efficient and fruitful working relationship with the company.
- ✓ It is considered as one of the best examples of multi-stakeholder processes for water monitoring.
- ✓ Participatory model has strengthened community capacity to understand monitoring processes, and benefit from experience to improve community environmental management.
- ✓ Government participation (all levels) has been maintained throughout the years bringing credibility to the monitoring process.

Challenges

- ✓ Intense monitoring activities demand time and resources as well as sustained commitment.
- ✓ Need to monitor other areas (community health, foul odours, etc.) require new skills and capacity.
- ✓ Continuous reliance on professionals' technical assistance for water sampling.

Training

Four modules widely available for the general public and committee members include: Module I – Environmental Management and Control (e.g., general concepts, global and local environmental problems, environmental pollution); Module II –CMVFAH; Module III –Environmental Monitoring Activities (Monitoring plan and protocol); and Module IV –Environmental Conflict Management and Resolution.

Monitoring Process

Among CMVFAH's functions one can mention: verification of submarine sediments and discharges, oversight of mineral shipping, measurement of underground water levels, health monitoring (blood sampling), water and air quality monitoring, and public presentations.

Dissemination of Results

CMVFAH has a program to exchange information and experiences with other participatory monitoring programs; has a well-developed website, a regular radio program; publishes a regular bulletin and a biannual report of activities. CMVFAH manages the Citizen Environmental Documentation Centre (CENDAC). Since 2003, it is member of the Regional Network of Local Environmental Oversight Organizations of Ancash (RROLVAA) and a founding member of the National Network of Participatory Environmental Monitoring and Oversight Committees in Mining Zones; its Secretary general is currently the President of the National Network.

PM&E Systems: SWOT Analysis

STRENGTHS

- Entry strategy is planned in advance with high degree of success.
- Empowerment of women (monitors) will have significant long-term impacts.
- Formulation of the ABC Code of Conduct for Company and Contractor to manage the PM&E system makes for efficient coordination.
- Use of pilot monitoring provides opportunity to test equipment and try out monitoring approach.
- Lessons learned from corporate management of social and environmental programs are of potentially great benefit for the PM&E process.
- Selection of monitors is truly participative and respectful of communal traditional decision-making bodies and customs.
- PM&E system shows flexibility to adapt to critical social situation by creating the Socio-Environmental Communal Oversight Programs.
- PM&E monitors, management and technical team develop a close working relationship with extractive company's Community Relations Manager and team.
- PM&E monitors, management and technical team develop a collaborative working relationship with extractive company's contractors and subcontractors.
- Exit strategy is planned in advance with high degree of success.

WEAKNESSES

- No company pre-entry strategy to inform about PM&E program to communities and stakeholders.
- Company communication depends on communities' needs and/or degree of influence on project.
- Company communication problems with monitors.
- Lack of formal communication /coordination mechanisms between company and PM&E contractor; between company and its contractor; and between PM&E contractor and company's contractor about goals of participatory program.
- Data collection is weak and incomplete – lack of clear objectives; criticisms of not being reliable.
- Questionnaires are complex, repetitive, and lack focus; social questionnaires are especially problematic.
- PM&E is company-centred, not monitor-centred.
- Training is too broad and too academic.
- Training is heavily biased to water samples (e.g., not enough attention to erosion, deforestation, social issues).
- Challenging logistics to move monitors and conduct monitoring activities.
- Monitoring for highly diverse regions follow a one-size-fits-all approach.
- Social regional tensions greatly affect PM&E from the outset.
- Monitors' recommendations are partially incorporated into the PM&E.

OPPORTUNITIES

- Collecting social data adds value to the PM&E system as well as to the long-term relationship of the company with the communities.
- Participatory monitoring programs are based on a certain compatibility of interests; this fact is highlighted and used to PM&E's advantage.
- Issues about lack of independence of PM&E are not framed in a negative way.
- PM&E can potentially become a network of community monitors that functions as an early warning system.
- PM&E as a conflict prevention, follow-up and relational mechanism for extractive company.
- Possibility of training more candidates than needed builds social capital and M&E skills in larger groups.
- Opportunity to integrate social programs with PM&E program to ensure sustainability of both.

RISKS

- PM&E is not intended to foster long-lasting relationships or partnerships.
- Contact is, unfortunately, understood as meaningful engagement/consultation.
- PM&E has not been internalized by the company and maybe not even the Community Relations team.
- Relations between PM&E staff and Community Relations staff are large perfunctory.
- Lack of institutionalization: actions and decisions are dependent on personalities.
- PM&E might have created a new form of dependency for communities: to conduct socio-environmental monitoring.
- Marked difference of visions among company, contractor and community as to what the PM&EP is and/or should be.

PART IV: CONCLUSIONS

Participatory resources monitoring is a completely new concept and practice. What most distinguishes PM&E from other more conventional approaches is its emphasis on the inclusion of a wider sphere of stakeholders in the M&E process.

Overcoming Barriers

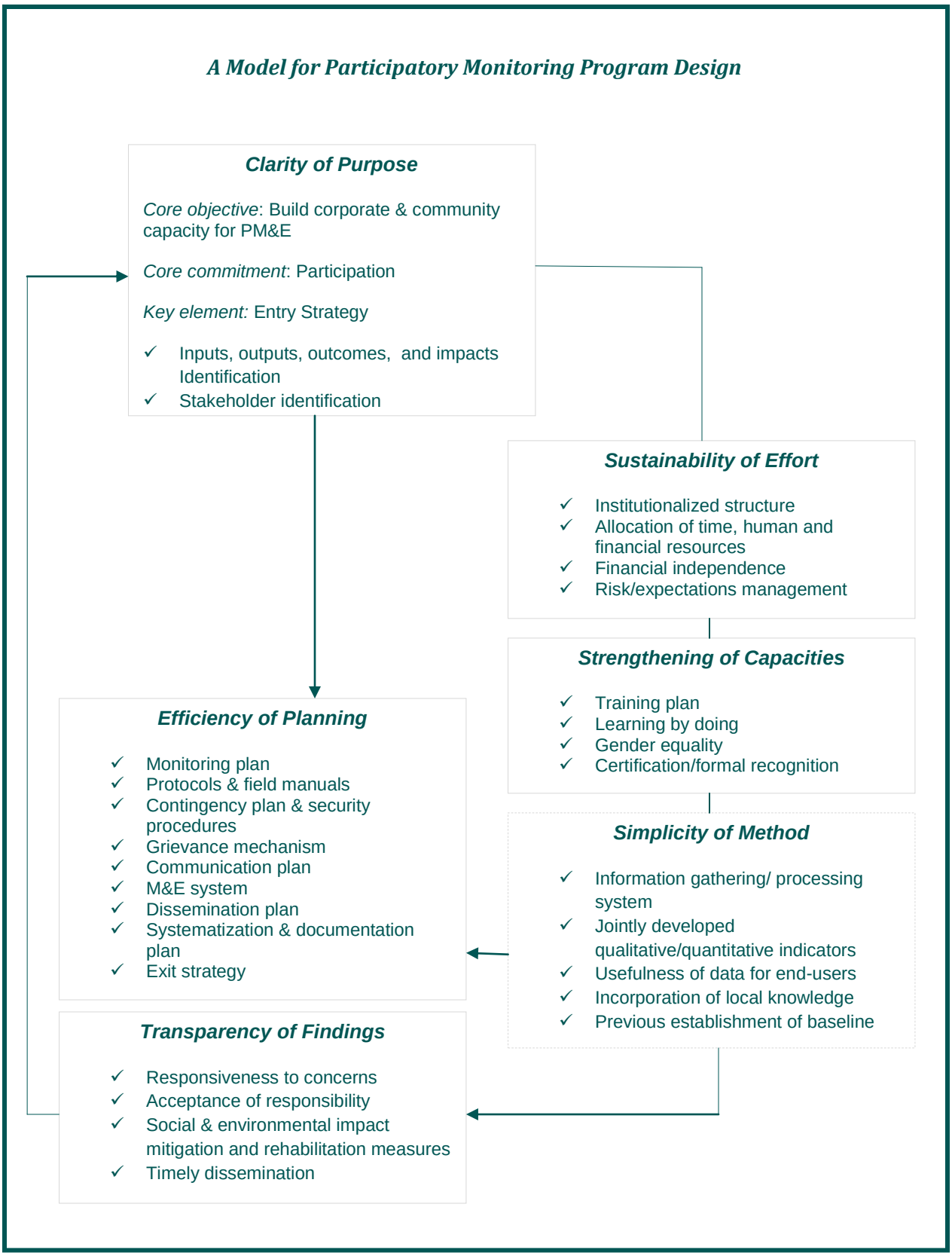
However, there still remains great ambiguity in defining who stakeholders are, who should be involved, and to what extent or depth they can or want to be involved. PM&E is often still considered to be mostly an issue of method and timing, as well as of information management and effective systems, but with the addition of involving beneficiaries in a consultative process. There is a need to identify the different contexts in which PM&E is applied and whether there are minimum conditions that need to exist before PM&E will be successful. Furthermore, there are still many barriers and challenges that can stand in the way of community involvement: lack of understanding of the PM&E process; lack of community resources; reliance on volunteers, with the consequent high turnover ratio; lack of access to information; absence of representation of certain community groups in the decision-making process; and time and extractive projects timeline restrictions.

Facing Challenges

In practice, there are no hard and fixed rules or steps on how ‘to do’ PM&E, because local circumstances or stakeholder needs change and thus alter how the PM&E process will proceed. The concerns about participatory processes in the case of extractive projects which had been raised previously demand a more systematic and disciplined approach during the design phase of PM&E. As the applications of 'participatory monitoring and evaluation' vary greatly depending on the context and the intended outcomes, capacity - building efforts for PM&E must focus on the stakeholders' access and abilities to participate in a PM&E process. Access and ability are seen as inherently linked. Having access to a PM&E process without having the abilities, in terms of the skills and resources needed to take advantage of that access, does not promote wider participation. This is also true if the abilities exist but the M&E process is not accessible.

Making a Difference

Recognizing this as well as the need to improve overall company-community relations, extractive companies and communities alike are becoming more proactive in their efforts to design more effective social and environmental participatory monitoring programs for addressing community long-term needs and promoting sustainable futures by ensuring sustainable resource management.


A Model for Participatory Monitoring Program Design
Clarity of Purpose
Core objective: Build corporate & community capacity for PM&E
Core commitment: Participation
Key element: Entry Strategy
✓ Inputs, outputs, outcomes, and impacts Identification
✓ Stakeholder identification
Sustainability of Effort
✓ Institutionalized structure
✓ Allocation of time, human and financial resources
✓ Financial independence
✓ Risk/expectations management
Strengthening of Capacities
✓ Training plan
✓ Learning by doing
✓ Gender equality
✓ Certification/formal recognition
Simplicity of Method
✓ Information gathering/ processing system
✓ Jointly developed qualitative/quantitative indicators
✓ Usefulness of data for end-users
✓ Incorporation of local knowledge
✓ Previous establishment of baseline
Efficiency of Planning
✓ Monitoring plan
✓ Protocols & field manuals
✓ Contingency plan & security procedures
✓ Grievance mechanism
✓ Communication plan
✓ M&E system
✓ Dissemination plan
✓ Systematization & documentation plan
✓ Exit strategy
Transparency of Findings
✓ Responsiveness to concerns
✓ Acceptance of responsibility
✓ Social & environmental impact mitigation and rehabilitation measures
✓ Timely dissemination

PART V: TOOLS AND TIPS

TOOL No. 1: Checklist

CHECKLIST TO STRENGTHEN PM&E PROCESSES	
✓	***Definition of Objectives:*** PM&E program must make explicit the level of participation of the stakeholders, in order to define objectives and outcomes and determine the degree of involvement in decision-making.
✓	***Adaptability and Flexibility:*** The participatory monitoring process must be sufficiently flexible to accommodate local needs, and be appropriate to local circumstances, while achieving corporate goals. Flexibility of the PM&E process to deal with diverse and changing information needs.
✓	***Balance and Transparency:*** Honesty and full disclosure must characterize the PM&E process. Negative issues must be presented along with the positive.
✓	***Participation:*** Participants may elect to discontinue their participation if the process is not perceived to be efficient. Participation must be according to ability and interest level.
✓	***Encouragement to Participate:*** The opportunity to become involved should preferably be announced several times during at least the first month or two of the process, and in different ways.
✓	***Cultural Differences:*** The PM&E must be respectful of cultural, gender and generational diversity.
✓	***Inclusion and Representation:*** The PM&E process must be inclusive and representative: all sectors, perspectives and interests of society must be included; due care must be taken that all sectors, perspectives and interests of society are represented in the process.
✓	***Information to Build Capacity:*** The PM&E program must operate under the assumption that sufficient and accessible information builds capacity to participate.
✓	***Feedback Mechanisms:*** The PM&E process should provide ample opportunity for comment in various ways: it is not acceptable sending a short-notice one-page fax to invite stakeholders to a meeting, not sending them information in advance and then saying that they have been consulted merely because they have attended a meeting.
✓	***Respect for Divergent Opinions:*** The PM&E process should provide the opportunity to expose viewpoints of different sectors to each other.
✓	***Willingness to Listen:*** Stakeholders should have their contributions reflected back to them after each milestone in the process. They need to feel heard; otherwise they either lose interest or will mistrust the PM&E process.

Tool No. 2: Sample Terms of Reference for Independent Contractor to Design and Implement a Participatory Monitoring Program

1. OBJECTIVES OF THE PARTICIPATORY MONITORING PROGRAM

The participatory social and environmental monitoring program will provide an opportunity for populations located in the direct area of influence of the (extractive project) to participate in the monitoring of (company's name) environmental and social performance during the construction phase of the project.

The participatory monitoring program will strengthen the monitoring and evaluation system of the project ensuring that the Environmental and Social Management Plan is adequately implemented and results are communicated effectively to the local populations.

The objectives of this program are to:

- Implement an independent mechanism for legitimate and transparent participation of communities in the monitoring process and transparent communications of the project's environmental and social performance.
- Provide the means for an early warning of any variation in environmental and social conditions that could result from the activities of the (extractive project), allowing (company's name) and the Contractor to implement any corrective action needed.
- Enhance the knowledge and skills of the local population and local community monitors.
- Identify areas that could be monitored by the community including issues and or concerns of the communities due to the project that should or could require their involvement in monitoring.
- Prepare periodic independent reports about the advancements and results of the monitoring activities, which will be distributed to stakeholders and local communities to reflect observations raised and solutions implemented.
- Incorporate participation and buy-in from the communities in the project development process.
- Provide (company's name) with an effective means of two-way communication between the Company and the local populations.
- Create a best practice third party monitoring system.

1.1 *Organization and Planning for the Participatory Environmental & Social Monitoring Program*

Create a Baseline: Characterization of Local and Regional Organizations

The Contractor shall carry out a complete investigation to determine the communities' structure. Information to be collected should include, but not be limited to: number of communities and annexes, population of each area, existing social and organizational

structures in the communities, logistics available in communities, level of education, environmental and social concerns.

The baseline for this program must focus specifically on learning about and describing:

- The political and social organization of the communities (legitimacy of the grassroots organizations, opinion leaders, alliances, etc.)
- The environmental perception of the communities (environmental indicators, evaluation of natural resources, negative perceptions of impacts to natural resources from development projects, etc.)
- Learning about the external actors (private, public and religious institutions) with influence or interest in the communities and in the social and environmental topics.
- Local perceptions of any environmental and social impacts and benefits to the communities.
- Identify effective communication mechanisms for providing results from the monitoring program back to the community

Evaluation and Organization of the Program/Formation of the Monitoring Committees and Selection of Monitors/Preparation of the Monitoring Plan

Based on the information gathered, the Contractor will facilitate the process with the communities to design the organizational structure of the monitoring committees.

Once the monitoring committees are formed, monitors will be selected in a transparent manner. Selection of monitors shall have the communities' approval, and shall follow an adequate policy that incorporates as many communities as possible and ensures that the community representatives have the commitment to communicate the concepts, besides other requirements to be determined by the Contractor with the communities. The community monitors must be willing and able to:

- Learn new monitoring techniques (via the selected organization hired).
- Record data in an accurate, timely manner.
- Act as honest brokers between the project and the local population, communicating information about on-going project activities and impacts to the local population.
- Articulate their observations and community concerns to the project (on a routine basis through the Contractor and as appropriate via the company's environmental inspectors and community relations officers).

Once the committees are structured and monitors selected, the selected Contractor shall define the work methodology, taking into consideration the means of communication to be used during the process. This must include a means of rapidly and accurately reporting between the community monitors and (company's name), so that changes in local environmental and social conditions can be dealt with in a timely manner.

The organization hired shall develop a Monitoring Plan through participatory mechanisms that are appropriate to the communities influenced by the project.

The Monitoring Plan should monitor the following environmental and social aspects:

- Generation and mitigation of impacts to water, soil and air.
- Dust control.
- Cattle migration monitoring (in specific communities).
- Waste management.
- Erosion control and Biorestoration.
- Impact or perceived impact on sacred areas.
- Altercations between community members and project workers.
- Unauthorized visits to communities by project workers.
- Any unauthorized extraction of natural resources by Contractors, Sub-contractors or project workers, including hunting, fishing, woodcutting, quarry areas, etc.
- Any disrespect of the local population by project workers
- Any consumption of alcohol in the community by non-local project workers.
- Any inappropriate relations between project workers and local women.
- Any violation of the Code of Conduct by project workers.
- Any other relevant aspects.

For each of the above aspects, the Plan must have an efficient, versatile, robust, user-friendly, monitoring method. The plan must also specify the:

- Monitoring frequency of each aspect.
- Procedures/records to be used.
- Communication processes during the monitoring.
- Roles and responsibilities of the community monitors.
- Roles of other relevant stakeholders involved (could include government agencies, NGOs, local universities, etc).

1.2 Implementation of the Training Program

The Contractor shall define, together with (company's name), a training program considering the following:

Training Program for the Communities

The training program shall be defined to ensure that communities develop an understanding of the tools and concepts of environmental and social monitoring.

Training program for the Community Monitors

Two training programs shall be addressed:

- To give them specific training to monitor the aspects listed above,

- To allow the monitors to participate actively in the monitoring activities program and to give suggestions to improve the environmental and social performance, as explained below.

1.3 Implementation of the Participatory Social and Environmental Monitoring Program

Implementation of monitoring activities

The schedule for the monitoring program should consider monitoring activities for the construction phase of the project (approximately X years).

Implementation of a monitoring database

A monitoring database should be implemented according to the following criteria:

- To be adequate to both the communities and the monitors, yet simple enough that community monitors can understand and participate. It must also be robust enough to provide accurate, timely information to the project.
- To establish responsibilities for updating and reviews from (company's name).

Implementation of Supervision Activities

During the monitoring program, the selected organization shall put the instruments in place to ensure that the Community Monitors are performing the required surveillance activities and to an acceptable standard.

Adequate means of communicating should exist in such a way that monitors keep accurate and timely records about surveillance activities.

Implementation of corrective actions

The Participatory Monitoring Program design shall include:

- A mechanism for documenting corrective actions arising from the monitoring activities.
- A grievance mechanism to resolve conflicts.

1.4 Implementation of a Communication Strategy for the Monitoring Results

Design of the Results-Communication Strategy

As indicated in Section 3.1 a survey should be done by the selected organization to determine how to effectively communicate the results from the monitoring program.

The strategy should consider several methods, such as: posters, brochures, internet, radio announcements, workshops, offices located in the area, etc. This should be determined on a community by community basis.

Implementation of the Result-Communication Strategy

Once the methodology is approved by PERU LNG, the organization shall start working on the Communication, ensuring that the information reaches all of the stakeholders involved.

2. ACTIVITIES AND DELIVERABLES

2.1 Organization and Planning for the Participatory Environmental & Social Monitoring Program (Local and Regional)

Activities:

- Review existing data and information such as ESIA, maps showing pipeline micro routing, environmental informational brochures, additional environmental surveys and studies carried at the site.
- Hold workshops, meetings, visits with the communities to identify community organizational structures.
- Develop social and organizational structures in the communities

Deliverables:

1. **Findings Report:** This report will present the findings of the baseline study diagnose the social and organizational structures of all the communities along the (extractive project) that will be participating in the monitoring program. The report shall include:

- The political and social organization of the communities (legitimacy of the grassroots organizations, opinion leaders, alliances, etc.).
- The environmental perception of the communities (environmental indicators, evaluation of natural resources, negative perceptions of impacts to natural resources from development projects, etc.).
- The social perceptions (displacement, livelihood changes, health concerns, anticipated benefits) of the communities.
- Learning about the external actors (private, public and religious institutions) with influence or interest in the communities and in the social and environmental topics.
- Local perception of any environmental and social impacts to be able to address these perceptions with the communities, before the local population becomes unduly alarmed about these perceived impacts.
- Identify effective communication mechanisms for providing results from the monitoring program back to the community.
- A summary of key aspects of the program and how major social and cultural challenges will be addressed.
- Detailed information and results of the workshops, meetings and visits carried out to identify/strengthen local structures. All meetings and workshops shall be documented with sign-in sheets, photographs, and video.
- Proposed Monitoring Committees with participants from the majority of communities and annexes.

- Proposed list of community monitors with documentation that these individuals have the support from their respective communities.
- Draft monitoring instruments and forms that have been presented and validated with the communities during the workshops.
- A defined communication methodology, between communities, committee, monitors and (company's name) representatives. The Contractor will discuss reporting methods with community members (written forms, diaries, verbal reports, cell phones, photography and others) to determine which methods are of interest to potential community monitors.

Phase 2 Preparation and Implementation of the Training Program and Preparation of the Monitoring Plan

Activities:

- Hold meetings, visits and workshops at the communities to reach a consensus in the Environmental and Social Training Plan and proposed Monitoring Plan.
- Coordinate with communities, governmental agencies, NGOs and (company's name) representatives to define both plans.
- Conduct the training in each community identified. The training should be practical and enjoyable using user-friendly methods. Monitors will be encouraged to comment on and improve the monitoring method.
- Issue of a certificate (diploma) to all monitors after successfully completing the training.

Deliverables:

1. **Training Work Plan:** This plan shall include a training program for the communities and one for the community monitors. The Training Plan shall be discussed with communities and relevant stakeholders to agree on the methodology and approach, schedule, topics to be taught, instruments, etc. The plan shall also include
   - Methodology for each course
   - Proposed instructors for each course
   - Syllabus for each course
   - Training course in Powerpoint
   - Tentative schedule for training in each community
   - Logistics needed
2. **Draft Environmental and Social Monitoring Plan:** Based on the information gathered during Phase 1 a draft monitoring plan shall be prepared for review by (company's name). The monitoring plan shall be reviewed by a Senior Environmental and Social Advisor appointed by the Contractor and approved by (company's name). This plan shall include:
   - The approach and methodology of the program.
   - Schedule of activities in relation to communities participating.

- How findings will be registered and communicated.
- How will corrective actions be documented.

3. **Training Plan Report:** Once training is carried out in each community identified a report needs to be prepared to describe and document community participation and findings. This document shall include:

- Documentation showing workshop execution. All meetings and workshops shall be documented with sign-in sheets, photographs, video
- Detailed information on the findings of the training workshops and the results.

Phase 3 Implementation of the Participatory Social and Environmental Monitoring Program

Activities:

- Finalize Monitoring Program Report and Field Manual for distribution to stakeholders (national and international) and community monitors
- Plan, coordinate and schedule participation of community monitors during the duration of the project. This includes all logistics/fees, etc.
- Create and manage the monitoring database to input findings from the monitoring activities and producing reports
- Manage and organize all information resulting from the program activities (both in the field and in the office) for presentation to (company's name).

Deliverables:

1. **Environmental and Social Monitoring Plan Report:** The monitoring report shall include sections on objectives, methodology, findings, and recommendations. The monitoring plan shall be reviewed by a Senior Environmental and Social Advisor appointed by the Contractor with prior approval by (company's name).

2. **Field Manual:** This booklet shall be used by all field monitors during their field activities. It shall be presented in an easy to read style and should be brief (10,000 words maximum). The manual shall be illustrated to make it more clear and attractive for the readers. The manual should be serious in tone, but clear and easy to read so that the monitors can look things up in it later, to remind them of correct procedures and interpretation of results. This manual shall be presented to (company's name) for review and approval.

3. **Monitoring Program Database;** The Contractor shall implement and manage a GIS database to enter and manage all information gathered as part of the monitoring program. This shall include entering data and producing reports.

Phase 4 Communication of the Results

Activities:

- Coordinate with communities, monitors and other stakeholders on the best way to communicate results.
- Validate any outreach media (bulletins, brochures etc.) with members of the target audience before releasing them. Do this by preparing the document, sharing it with community members to read. Discuss the document with them to gauge how they perceived it, if they understood the key points and the vocabulary.
- Meetings, radio announcements, bulletins, brochures or workshops (with type and frequency to be determined in the plan) to present findings of monitoring (including all the logistics for transportation of identified stakeholders, rental of venues for workshops etc. …. printing and distribution of workshop material, preparation of workshop's minutes.

Deliverables:

1. **Communication Strategy:** The communication strategy shall include sections on objectives, methodology, findings, and recommendations. The strategy shall be reviewed by a senior representative appointed by (company's name), prior to final approval.

3. METHODOLOGY

The community monitoring program must be flexible and user-friendly. The community monitors themselves must feel comfortable with this program and be confident in their ability to use the instruments to communicate accurate and timely information.

In addition, coordination throughout all the monitoring activities between the Contractor, (company's name) and the company in charge of construction of the pipeline is required.

Literature and other media intended for the social monitors must be clear and understandable.

4. SCHEDULE

The schedule shall be determined by the Contractor from a technical and scientific point of view and taking into consideration information reviewed.

5. COST ESTIMATE

The cost estimates shall be prepared by the Contractor from a practical point of view and past experience, taking into account (company's name) requirements and overall investment needs for the program.

TOOL No. 3: Environmental and Social Participatory Monitoring Questionnaires

Social and Environmental Questionnaires and Reports

SOCIAL QUESTIONNAIRES	*ENVIRONMENTAL QUESTIONNAIRES*
✓ Communication	✓ Right of Way
✓ Agreements	✓ Camps
✓ Grievances and claims	✓ Depots
✓ Local hiring	✓ Waterways
✓ Code of Conduct	✓ Irrigation channels
✓ Visits and other forms of engagement	✓ Decommission
✓ Archaeology	✓ Access roads

REPORTS	*FREQUENCY*
✓ Supervision Report	✓ Monthly
✓ Monitoring Report	✓ Monthly
✓ Evaluation Report	✓ Twice a year
✓ PM&E Program Report	✓ Twice a year
✓ Monitoring Work Plan (WMP)	✓ Bimonthly

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