

EMA encouraging Environmental Monitoring and Evaluation in implementation of programs and projects.

Definition of key terms in Monitoring and Evaluation

Monitoring is a continuous and periodic surveillance of the implementation of a project to ensure that input deliveries, work schedules, targeted outputs and other required actions are proceeding according to plan. In general, monitoring may be defined as the provision of information and the use of that information to enable management to assess the progress of implementation of policies, programmes and projects and to take timely decisions for ensuring that progress is maintained according to schedule. Monitoring refers to the process of routine periodic measurement of inputs, activities, outputs, outcomes and impact. It involves measuring, collecting, canalizing of data and reporting to produce information to management for decision making. Monitoring is based on targets set and activities planned during the planning phases of work. It helps to keep the work on track, and can let management know when things are going wrong. If done properly, it is an invaluable tool for good management, and it provides a useful base for evaluation. It enables project implementers to determine whether the resources available are sufficient and are being used for the intended purposes. In environmental monitoring the emphasis is on tracking environmental effects and impacts and the effectiveness of mitigation measures meant to redress the negative effects and impacts.

Environmental Monitoring involves the following:

- Establishing indicators of efficiency, effectiveness and impact;
- Setting up systems to collect information relating to these indicators;
- Collecting and recording the information;
- Analysing the information;
- Using the information to inform day-to-day management

Evaluation is a systematic process that attempts to assess as objectively as possible the relevance, effectiveness and impact of a project in the context of the project objectives. Evaluation refer to a process by which policies, programmes, activities, inputs and results are analysed and judged against explicitly stated norms. Evaluation focus on the comparison of actual policy/ programme/project impacts against the agreed strategic plans. It looks at what has been planned to be done, at

what have been accomplished, and how it was accomplished.

Evaluation involves:

- Looking at what the organisation intended to achieve– *what difference did it want to make? What impact did it want to make?*
- Assessing its progress towards what it wanted to achieve.
- Looking at the strategy of organisation. Did it have a strategy? Was it effective in following its strategy? Did the strategy work? If not, why ?
- Looking at how it worked. Was there an efficient use of resources? What were the Opportunity costs of the way it chose to work? How sustainable is the way in which the organisation works? What are the implications for the various stakeholders in the way the organisation works?

Evaluation provides an opportunity to assess whether to continue doing things the same way or adopting a new paradigm shift, with the aim of attaining the desired objectives.

On-going evaluation involves a continuous analysis and assessment of the inputs, outputs, effects, impact and relevance of a project.

Ex-post evaluation assesses the achievement of long-term project objectives and their impact on the intended beneficiaries and the project environment. It assesses the overall achievements of a project, in terms of its outputs, effects and impact, and provides lessons to assist the planning of future projects. Implementation and cost implications of the M&E system

Monitoring and Evaluation (M&E) is a valuable tool for better planning and implementation of projects and programs. The Environmental Management Agency (EMA) have embraced (M&E) and believes negative effects and impacts to the environment can be ameliorated if all users and consumers of environmental goods and services adopts M&E as part and parcel of their operating strategy. However, it has to be noted that a tool is only as good as its user. Thus, it is important for

organisations to be trained on the use of M&E as tool for project implementation and development. Monitoring of environmental changes is part of an environmental management system. The starting point is an understanding of the environmental or development policy that applies in any given area. Any project/program to be implemented should be in tandem with legal provisions that governs a country/region or area. Environmental compliance is an indispensable requirement in monitoring and evaluation. International best practises should also be a parameter used in environmental monitoring. Zimbabwe is a signatory to a number of international conventions and treaties likes RAMSAR, CITES, BAMAKO and UNCCD among others. It is therefore imperative for any environmental monitoring and evaluation to recognise and validates the provisions of these international obligations. Environmental monitoring focuses on the monitoring of states, threats, pressures and opportunities in environmental management.

Every policy or project should include a minimum of environmental monitoring:

- To take notice of relevant trends (*trend watching*) and threats (*early warning system*). This will enable the environmental system to be responsive to the realities that emerges during project implementation.
- To anticipate on environmental changes, threats and emerging opportunities and respond accordingly.
- To draw conclusions as regards the effectiveness of policies and/or projects and take the necessary corrective measures.
- On the basis of the above elements, to adjust policies, plans, strategies and projects to ensure not only project success but compliance with environmental legislation.

Environmental monitoring is often omitted in developmental management because of the following reasons:

- Environment is often not considered a priority in developmental projects and programs
- Shortage of data and relevant information on the importance of environmental decision making.
- Environmental impacts are long term with large variation in time and in place as such there is a tendency to then undermine their significance as a component in project implementation.
- General Low uptake of green concepts and products encourages people to undermine environmental issues.
- Weak institutionalisation and appreciation of environmental statutes and

legislation by most users of environmental goods and services.

Monitoring and Evaluation systems to gauge the progress and performance of policies, programmes and projects, the use indicators become important. Indicators can be defined as information or data that can be used to make decisions based on observed trends towards or away from specific goals. Indicators are deemed useful in simplifying, clarifying and monitoring the complex links between variables at stake. Therefore, indicators are variables used to measure what is being done and achieved. They are factors or tangible signs that something has been done or has been achieved. Indicators inform project implementers what should be measured. Indicators are the variables used to measure progress toward the goals and should be not confused with targets which are the quantified levels of indicators that a country or society wants to achieve at a given point in time.

It is important to recognize that an indicator may reflect an aggregation or summary of particular issues. Indicators focus and condense information about complex issues for decision-making, management, monitoring and reporting purposes. Indicators provide a signal to an issue of greater importance or make more evident a trend or phenomenon that is not immediately detectable. Decision makers require timely, precise and reliable information concerning the environment and sustainable development. Indicators provide that information and possess the potential to become important tools for communicating scientific and technical information. They can also facilitate the communication of such information to diverse user groups and society as a whole, helping to transform information into action.

In respect to environment; indicators are used to capture the sustainability of environmental trends in human vulnerability to environmental change. Principles for environmental monitoring are also applicable to monitoring of socio-economic, gender, institutional and political issues. Environmental indicators take as their starting point a certain environmental phenomenon, system or process, and are meant to measure the current quality and to assess changes by comparing qualities at different moments as the project/ program progresses.

Types of environmental indicators which can be used in Environmental Monitoring and Evaluation:

- State, pressure, and response indicators
- Simple, complex and index indicators
- Direct and indirect indicators
- Quantitative and qualitative indicators
- Descriptive and normative indicators.

By R. Mapako

Senior Environmental Education and Publicity Officer (rmapako@ema.co.zw)