# The Indicator Reporting Information System

UN environment programme

## Background and Objectives

The Indicator Reporting Information System (IRIS), a reporting system developed within the World Environment Situation Room Unit, situated in the Big Data Branch of UNEP's Science Division, provides efficiency and capacity building on the reporting process and needs for member countries in meeting their reporting obligations at the regional and global level, ensuring consistent, reliable, up-to-date information for guiding research, preparing assessments, SDG and thematic reporting and thus, support UNEP's goal of supporting member countries build capacity on environmental management issues.

With limited resources, many jurisdictions across the globe and at all levels of government struggle to produce consistent, objective, data-driven status and management reports about the environment and its cause-effect relationships with social or economic systems. This leads to policies and management interventions being made on the basis of incomplete information.

Whilst environmental reporting is essential for effective environmental management current reporting methods are often tedious, slow and labour intensive. Production of multiple reports at monthly, quarterly or even annual intervals can become a significant institutional burden and an ineffective use of scare, expensive subject matter expertise.

The Indicator Reporting Information System (IRIS) is a web-based application that aims to:

- Reduce the institutional burden of recurring reporting
- Make reports more timely by reducing their production time
- Enable reuse and aggregation of information on reports
- Enable institutional capacity development by sharing reporting knowledge and resources

Indicators are information that tell us in a simple manner about the status of often complex systems. Indicators are at the heart of IRIS and of objective decision making. By automating data processing IRIS will allow institutional staff to be deployed efficiently and focus exclusively on the critical activities that need human involvement such as enabling monitoring data supply channels and indicator assessment. Enabling efficient use of institutional resources will provide decision makers with higher quality, more complete and more timely data to guide their decision making.

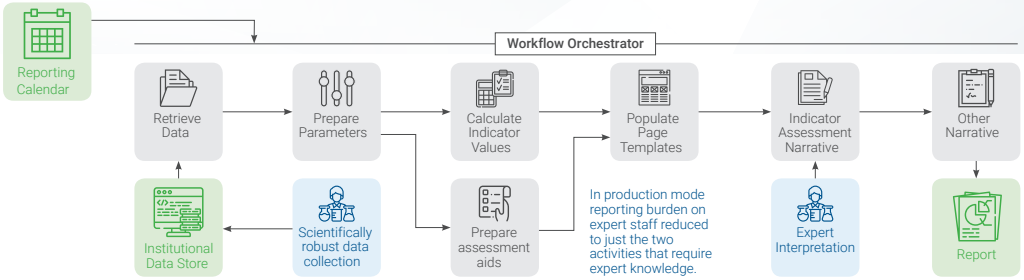


## Partners

The core IRIS code was conceptualized and developed by the Abu Dhabi Global Environmental Data Initiative (AGEDI) partnership between the Environment Agency - Abu Dhabi (EAD) and United Nations Environment programme. Over time, partnerships on user basis, have been established through IRIS deployments including: at the global level; SDG reporting on specific indicators by member countries, II) Regional level i.e. Shared Environmental information system, a collaboration with UN Economic commission for Europe member countries, III) National level; Through installations on government infrastructure for a number of member states, IV) Thematic issues such as the Monitoring Illegal Killing of Elephants with Cites.

## How IRIS works

Based on data from an organization's routine monitoring, IRIS will automatically calculate values for indicators. The calculated indicator value and supporting information are presented to a subject matter expert for assessment and narration, with the result forming part of a report. Several such sections will be brought together along with further over-arching narrative to form the report. Organisations supporting open data policies have the option for the source data used to be included with the report.

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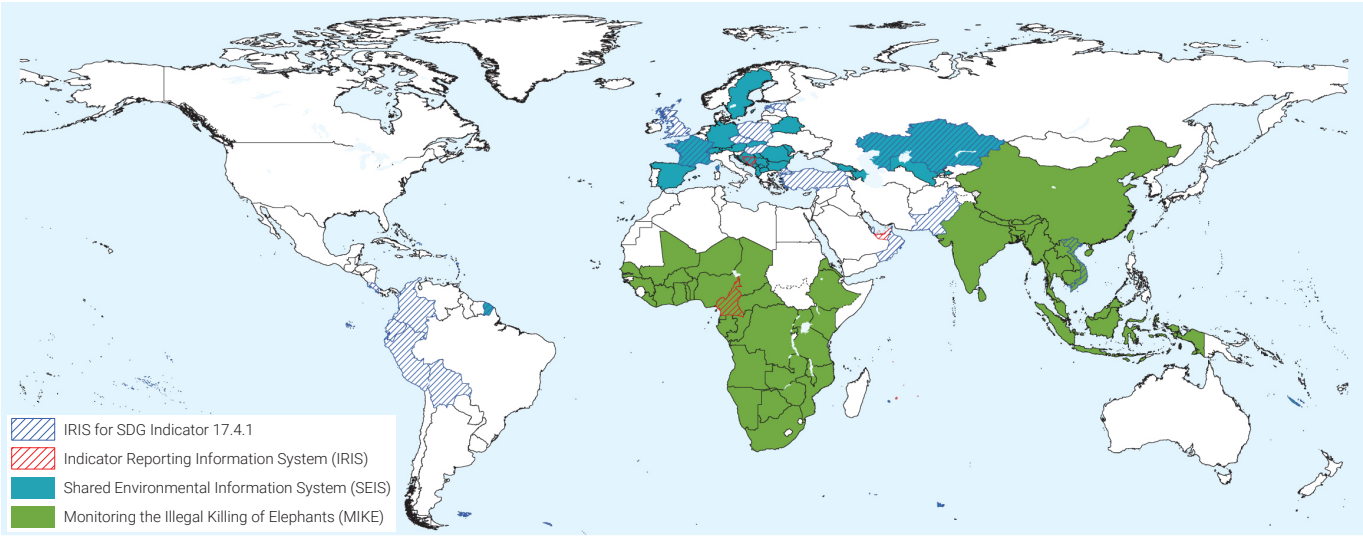
IRIS is designed to provide substantial business benefit to individual organisations at every level (local, national, regional and global) in the reporting hierarchy, but also to facilitate timely and actionable information exchange between organisations. The output of one IRIS can be used as input to another thus enabling data sharing through the formal reporting process. IRIS was designed not to be limited to any specific topic area or geography – thus ensuring its applicability and durability. Being indicator independent IRIS facilitates convergence of data streams from different sectors. This capability is essential for sustainable development, which demands an understanding of how decisions in one element of society – whether social, environmental or economic – affects and is impacted by others, looking at upstream causes and downstream consequences.

**Worldwide projects utilizing the Indicator Reporting Information System (IRIS)**



## Benefits

A concern in many organisations is the misinterpretation of observation data by individuals less familiar with the geographic context, and this has previously inhibited data sharing. IRIS will overcome this by keeping the indicator value, the underlying data and the local subject matter expert's narrative 'bound' together; thus IRIS supports data sharing, but does so within the context of a local subject matter expert's narrative.

IRIS includes a Shared Knowledgebase (SKB) that allows reporting organizations from across the world to share methods, tools, templates and experiences with other IRIS users across the globe. By design, IRIS will support any indicator that can be automatically computed from data. Given that the science behind indicators is in a state of constant improvement, the core IRIS engine and the SKB will allow the reporting community of practice to benefit from new indicators and methods as they evolve as well as monitor new issues as they arise.

## Key Output

The primary output of the IRIS project is the web-application. For organizations that prefer to keep their data in-house IRIS will be available as an intranet solution that runs on local servers. For organizations with more open data policies or those with limited information technology resources, it will be available as secure profile on a remotely hosted web server.

## Highlights

- A dozen online meetings and trainings conducted. Outreach ongoing.
- Four national IRIS workshops (São Tomé and Principe, Mauritius, Cameroon and Montenegro) and subsequent deployment in their government infrastructures.
- Supporting the global SDG reporting through aiding in the reporting of the 79 environmental indicators that UNEP reports on.
- Supporting the regions, as the case with UN Economic commission for Europe, in supporting environmental assessment in their member countries.
- Thematic deployment on Monitoring Illegal Killing of Elephants- IRIS use case deployed in the elephant range countries in Africa and Asia to support reporting on the PIKE indicator.
- IRIS at sub-national level in the Environment Agency - Abu Dhabi supporting development of the SoE report and other organisational reporting mandates.

**https://wesr.unep.org/myiris**

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Abu Dhabi Global Environmental Data Initiative

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IRIS
INDICATOR REPORTING INFORMATION SYSTEM