State of SEIS implementation in 2018
Country Factsheet
TAJIKISTAN

Tajikistan has been working on establishing SEIS through the implementation of the SEIS principles and three pillars (Content, Infrastructure and Cooperation), even though the progress is still slow. Tajikistan participates in the work of the United Nations Economic Commission for Europe (UNECE) Working Group on Environmental Monitoring and Assessment (WGEMA) and the UNECE Joint Task Force (JTF) on Environmental Statistics and Indicators, which support countries in Europe and Central Asia in establishing SEIS by 2021. The present document provides an overview of the state of SEIS implementation in Tajikistan and offers recommendations on how to successfully achieve the SEIS 2021 target.

KEY MESSAGES

Content
- Tajikistan has been working on making UNECE environmental indicators available and accessible
- 11 out of 49 (including 7 placeholders) UNECE environmental indicators are available in 2018

Infrastructure
- The majority of data is still only available in hard copy or is unavailable online
- Lists of environmental information and indicators are compiled by the Agency on Statistics and Committee on Environmental Protection (which correspond to the UNECE environmental indicators list), however time series are incomplete

Cooperation
- Cooperation and interaction on information engagement among data producers are weak and require development. There are no legal and administrative regulations on information production and exchange
- Tajikistan participates in the UNECE indicator-related processes and SEIS-related projects supported by the European Union (EU) and the European Environment Agency (EEA)
- The EU FLERMONECA project[1] on environmental monitoring in Central Asia was successfully implemented

THE SEVEN SEIS PRINCIPLES[2] AND STATE OF THEIR APPLICATION IN TAJIKISTAN[3]

According to the SEIS principles, information should be:

Managed as close as possible to its source ●

Collected once, and shared with others for many purposes ●

Readily available to easily fulfill reporting obligations ●

Easily accessible to all users ●

Accessible to enable comparisons at the appropriate geographical scale and citizen participation ●

Fully available to the general public at the national level in the relevant national language(s) ●

Supported through common free open software standards ●

● fully applied   ● partially applied   ● application is limited

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[1] EU-funded project "Forest and Biodiversity Governance Including Environmental Monitoring" (Flermoneca project)
[2] More information on SEIS principles is available at: https://www.eionet.europa.eu/seis/principles
[3] The Evaluation is based on experts' opinion, there are possible changes or clarifications after discussions with Tajikistan's counterparts.

MANAGEMENT OF ENVIRONMENTAL INFORMATION – OVERVIEW

Organizations responsible for collecting, producing, managing and sharing environmental data and information

The Committee on Environmental Protection (including Hydrometeorological Agency)

The Agency on Statistics

The Main Department of Geology

The Ministry of Agriculture and Committee on Land Management

The Ministry of Healthcare

The State Unitary Enterprise of Housing and Communal Services

Academy of Science

NGOs

Accessibility and availability of environmental information, data and indicators

WHERE?: On the Committee on Environmental Protection, Agency on Statistics, and Agency for Hydrometeorology websites, websites for the various Conventions

In SoER (Environmental Report 2018. Tajikistan), the Statistical dataset (Environment)

In national implementation reports to MEAs (UNFCCC, UNCCD, UNCBD, Stockholm, Minamata etc.)

IN WHAT FORMATS?: Reports (e.g. SoER), additional information provided (for some indicators), metadata provided (for some indicators)

IN WHICH LANGUAGES?: Tajik and Russian

Environmental indicators in use

UNECE environmental indicators (11 indicators)

SDGs (there is a potential to use)

OECD Green Growth indicators (there is a potential to use)

Reports to MEAs

air ● water 🌡 climate change ♻ waste 🍃 biodiversity land cover 🌱 soil env. statistics 💬 public relations information dissemination

CONTENT AND INFRASTRUCTURE   FROM INDICATOR PRODUCTION TO USE

STATE OF PRODUCTION AND SHARING OF ENVIRONMENTAL INDICATORS

UNECE environmental indicators are regularly calculated on the basis of relevant recommendations; the quality of indicators available online is assessed. A 2016 UNECE analysis assessed the following parameters of the indicators' quality: availability in the internet, updates, methodology used, provided analysis and indication of sources (the results are presented below in the table).

Indicators	I	U	M	A	S
A. Air pollution and ozone depletion					
A1: Emissions of pollutants into the atmospheric air					
A2: Ambient air quality in urban areas					
A3: Consumption of ozone-depleting substances					
B. Climate change					
B1: Air temperature					
B2: Atmospheric precipitation					
B3: Greenhouse gas emissions					
C. Water					
C1: Renewable freshwater resources					
C2: Freshwater abstraction					
C3: Total water use					
C5: Water supply industry and population connected					
C10: BOD and concentration of ammonium in rivers					
C11: Nutrients in freshwater					
C14: Population connected to wastewater treatment					
C15: Wastewater treatment facilities					
C16: Polluted (non-treated) wastewater					

	I	U	M	A	S
D. Biodiversity					
D1: Protected areas					
D3: Forests and other wooded land					
D4: Threatened and protected species					
E. Land and soil					
E1: Land uptake					
G. Energy					
G1: Final energy consumption					
G2: Total primary energy supply					
I. Waste					
I1: Waste generation					
I2: Management of hazardous waste					

less than 33%	33 to 67%	over 67% of the maximum possible number

Rating criteria:

I – *Availability of data sets on the internet*; **U** – *Time of update*; **M** - *Conformity with methodological standards*; **A** – *Analysis provided*; **S** – *Indication of the source of an indicator.*

QUALITY OF SEVEN DATA FLOWS BASED ON TAJIKISTAN'S SELF-ASSESSMENT (2018)

Tajikistan has conducted a self-assessment of 7 data flows underpinning 3 UNECE indicators, selected for the SEIS mid-term review. The mid-term review was based on the SEIS Assessment Framework and a questionnaire with 25 questions on quality, aligned with the quality criteria used by the UNECE Statistical Division and EEA, and corresponding to three SEIS pillars:

Relevance　Accuracy　Timeliness and punctuality　Accessibility　Clarity　Comparability　Institutional and organizational arrangements

Extract: Data Flow - SO$_2$ [a]

User feedback is collected passively and used for many purposes. Information was never improved for users' convenience

Use of the data produced by other producers. Data validation is occasionally in place. Revision of data is conducted (due to errors). There is no data from other sources for comparison.

Annual dissemination. Deviation: 8 weeks. Timeliness: less than 1 year. Data is on the national platform.

Additional information provided. Data is available at: http://www.gksintranet.tj/ecostat/vibros.html http://eims.biodiv.tj/ru/report/T_Y_A01_C

The procedures are not applied to the data quality management. Metadata is not available

Internationally agreed procedures are not applied. Time series are not complete

Law on the Environment Monitoring. There are no legal and administrative regulations on information production and exchange

[a] **Theme:** A. Air pollution and ozone depletion / **Indicator:** A2. Ambient air quality in urban areas / **Data flow:** Annual average concentration of sulphur dioxide

Atmospheric air: Data on SO$_2$ and NO$_2$ is available online, on the website of the Agency on Statistics for 2003, 2008-2013, as the absolute value, per capita, per GDP. Additionally, data is available on the website of the Committee on Environmental Protection. Metadata and additional information are provided. The information is published in Russian.
Areas to improve: There is no data on PM$_{10}$ concentration and ground-level ozone. Data quality is not validated and there are no procedures for quality control. There is no indication of the last update. No reference is made to measuring methods and their conformity with international standards. Data is not presented visually.

Water: According to the Tajik self-assessment, data indicates the annual averages of BOD$_5$. While the concentrations of NH$_4$ are available for users, such data is not available in the environmental statistics section of the Agency on Statistics and the Committee on Environmental Protection.
Areas to improve: The source, portal and date of last content update should be clarified. Data quality is not validated and no procedures for quality control are in place. Metadata and additional information are not provided. No reference is made to measuring methods and their conformity with international standards.

Biodiversity: Available data indicates the total territory of protected areas and the areas belonging to different national categories (biosphere reserves, national parks, the share of protected areas) for 1990-2013. Information is posted, in Russian, on the [website](#) of the Agency on Statistics. Data is visualised in map and graph formats.
Areas to improve: There is no indication of sources, contact information and last content update. Reference is made to measuring methods. It is not indicated whether the national categories of protected areas comply with the IUCN categories.
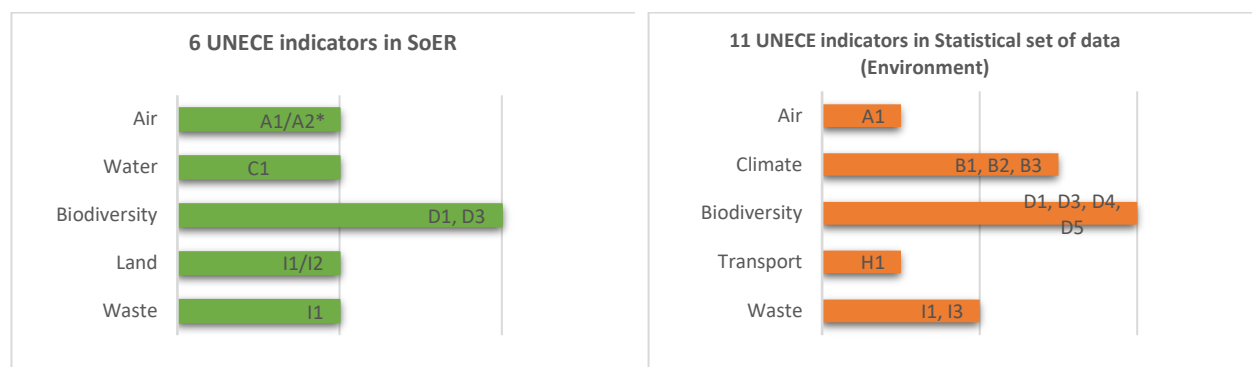
Summary of selected data flows quality
Regarding 7 data flows underpinning 3 UNECE indicators, Tajikistan has reported on a long-time series of continuous monitoring data since 1990, although not all series are available online and/or incomplete. No reference is made to the information source and the last content update. Information is available in Russian only. Selected indicators on water were not found. Some of the published data is illustrated (map, graph). No reference is made to measuring methods, their conformity with international standards and to whether national categories of protected areas comply with the IUCN categories.

USE OF ENVIRONMENTAL INDICATORS
Use of environmental indicators in environmental assessments, state of the environment reports and other thematic environmental reports or statistical bulletins
With the support of UN Environment, the Committee on Environmental Protection prepared the 2018 Environmental Report on Tajikistan (SoER[4]) for 2000-2015. UNECE environmental indicators are also used in visual materials (time-series graphics, tables) in some national documents, such as the Statistical dataset (environment)[5] and other publications. (Data in the SoER are illustrated with maps, thus do not provide precise values).

6 UNECE indicators in SoER

Air	A1/A2*
Water	C1
Biodiversity	D1, D3
Land	I1/I2
Waste	I1

11 UNECE indicators in Statistical set of data (Environment)

Air	A1
Climate	B1, B2, B3
Biodiversity	D1, D3, D4, D5
Transport	H1
Waste	I1, I3

* Abbreviations as used in the Guidelines for the Application of Environmental Indicators are accessible at https://www.unece.org/env/indicators.html.

Use of environmental indicators for reporting on international obligations under MEAs
One of the SEIS principles stipulates that environmental information and indicators should be readily available to easily fulfill reporting obligations, including under the MEAs. The UNECE environmental indicators are used for the national implementation reports under the UNFCCC[6], UNCBD[7], UNCCD[8], in different formats and to certain extents. The indicators could also be used for the Stockholm Convention[9] and the Minamata Convention.[10]

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[4]State-of-the-environment report ([Environmental Report 2018, Tajikistan](#)) (2018, in Russian and Tajik).
[5]Statistical set of data "The State of Environment in the Republic of Tajikistan" ([in Russian](#)) provides data that corresponds to UNECE environmental indicators.
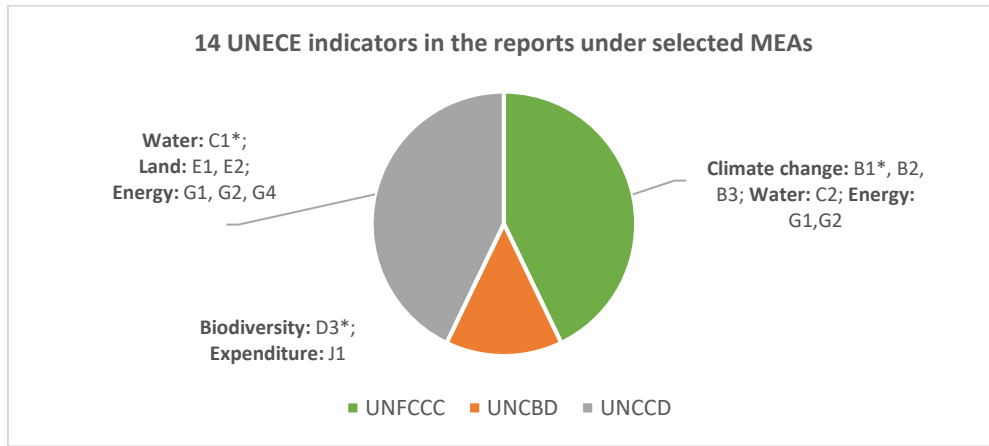[6][Third National Communication of the Republic of Tajikistan under the United Nations Framework Convention on Climate Change](#) (2014, in English).
[7][Fifth National Report of the Republic of Tajikistan to the Convention on Biological Diversity](#) (2014, in Russian).
[8][Third National Report on implementation of the United Nations Convention to Combat Desertification in the Republic of Tajikistan](#) (2006, in Russian and summary in English). Indicators are mainly linked to the Aichi biodiversity targets.
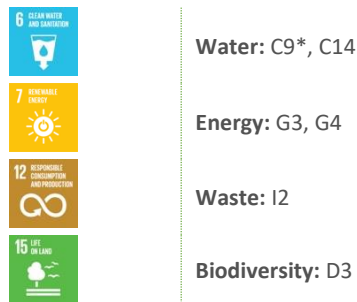[9]Tajikistan submitted on-line reporting [2010](#) under the Stockholm convention.
[10] International [projects](#) under the Minamata convention in Tajikistan.

14 UNECE indicators in the reports under selected MEAs

Water: C1*;
Land: E1, E2;
Energy: G1, G2, G4

Climate change: B1*, B2, B3; Water: C2; Energy: G1, G2

Biodiversity: D3*;
Expenditure: J1

■ UNFCCC ■ UNCBD ■ UNCCD

* Abbreviations as used in the Guidelines for the Application of Environmental Indicators are accessible at https://www.unece.org/env/indicators.html.

Use of environmental indicators for reporting on the Sustainable Development Goals (SDGs) and Green Growth
The Tajik potential and capacity to use the UNECE environmental indicators to monitor SDGs and Green Growth indicators is not explored enough. Below, an assessment is made on the potential to monitor SGDs. The potential of the OECD Green Growth indicators should be studied more thoroughly to be used for the green strategy preparation.
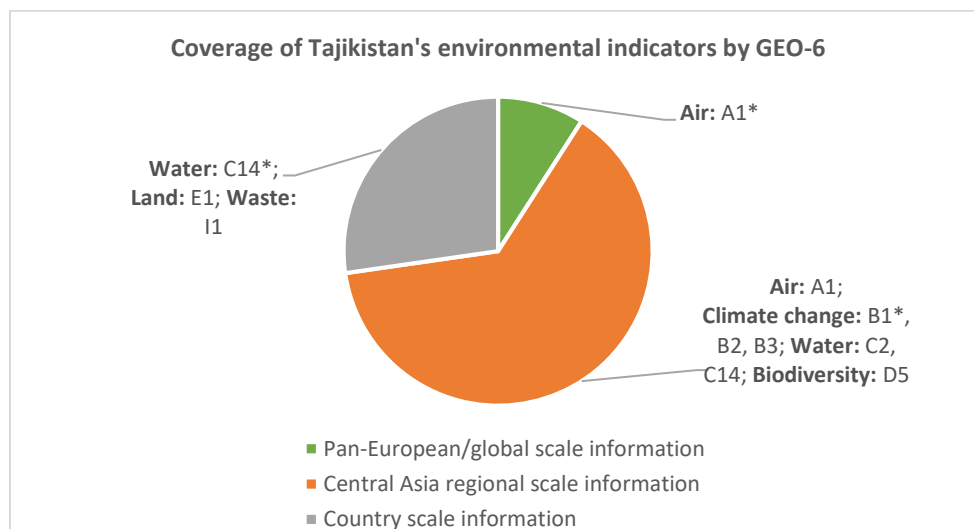
The potential use of UNECE indicators for SDGs monitoring in Tajikistan

6 CLEAN WATER AND SANITATION — **Water:** C9*, C14

7 RENEWABLE ENERGY — **Energy:** G3, G4

12 RESPONSIBLE CONSUMPTION AND PRODUCTION — **Waste:** I2

15 LIFE ON LAND — **Biodiversity:** D3

* Abbreviations as used in the Guidelines for the Application of Environmental Indicators are accessible at https://www.unece.org/env/indicators.html.

Use of indicators in the Pan-European volume of GEO-6[11]
The 6th Global Environmental Outlook (GEO-6), produced in 2016 by UNEP and UNECE, covers the Tajik use of environmental indicators in the regional context.

Coverage of Tajikistan's environmental indicators by GEO-6

Air: A1*

Water: C14*;
Land: E1; Waste: I1

Air: A1;
Climate change: B1*, B2, B3; Water: C2, C14; Biodiversity: D5

■ Pan-European/global scale information
■ Central Asia regional scale information
■ Country scale information

* Abbreviations as used in the Guidelines for the Application of Environmental Indicators are accessible at https://www.unece.org/env/indicators.html.

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[11]United Nations Environment Programme. Global Environment Outlook GEO-6. Assessment for the pan-European region. 2016.

COOPERATION NATIONAL AND INTERNATIONAL SUPPORT FOR THE DEVELOPMENT OF SEIS

Cooperation and interaction on information engagement among data producers are weak and require development. There are no legal and administrative regulations on information production and exchange. Tajikistan should develop an internal system of information exchange to make sure that data is produced, validated and published regularly.

Within the framework of activities of the Interstate Commission on Sustainable Development (ICSD) for Central Asia, SIC ICSD branch operates in Tajikistan and participates in regional assessment activities.

Tajikistan participates in the work of various Commonwealth of Independent States (CIS) bodies, including the CIS Statistical Committee and the CIS Interstate Council for Hydrometeorology, and in the corresponding exchange of data and information.

Tajikistan is a member of the Eurasian Economic Union, including the Customs Union and the Eurasian Economic Commission (although environmental information exchange is not a priority). Tajikistan engages in cooperation and the exchange of statistical and sectoral information within the framework of the Organization for Economic Cooperation (ECO) of Central Asia and the Middle East. Additionally, a cooperation with Afghanistan and China, including on information exchange, has been developing.

The EU-funded project "Forest and Biodiversity Governance Including Environmental Monitoring" (FLERMONECA project) was successfully implemented in five Central Asia countries, including Tajikistan. The project was implemented from 2013 to 2015 and was aimed at enhancing regional cooperation and partnerships with Europe in the fields of forest and biodiversity governance, including environmental monitoring through supporting the sustainable use and management of natural resources in Central Asia.

Environmental statistical reporting is overall weak in Tajikistan, as there are no requirements, regulations and financial basis for SoER production. The capacity of the monitoring system should be improved. The majority of data is still only available in hard copy, and there is no information concerning the oblast/local level. Data quality control and data validation should be in place. Cooperation among data holders should be improved. The efforts to make data available online and accessible to users should be continued.

✓Continue advancing the production and sharing of environmental data and indicators, including providing data in electronic formats vs. paper formats;

✓Extend the list of produced, collected and published data;

✓Make all produced data and indicators available and accessible online;

✓Promote the use of environmental information for the production of assessments;

✓Maintain and enhance cooperation and interaction among environmental information producers in the country to achieve full SEIS implementation.

Tajikistan is working on the accessibility of UNECE environmental indicators, which are being published on the websites of national environmental authorities, statistical agencies and open data portals in compliance with the UNECE requirements.

There is room for improvement to achieve the 2021 target on UNECE indicator availability as well as SEIS implementation.

✓Further advance the production and sharing of environmental indicators in compliance with recommendations of the UNECE WGEMA and the JTF on Environmental Statistics and Indicators;

✓Continue methodological work on existing and new environmental indicators in order for all UNECE environmental indicators to be produced, available and accessible by 2021;

✓Improve the quality and content of indicators according to the international standards.

Tajikistan should study its potential to use UNECE environment indicators to monitor the progress under SDGs and Green Growth Indicators.

✓Assess and/or promote the use of UNECE environmental indicators to monitor the SDGs and Green Growth progress;

✓Increase the use of indicators for different purposes towards making progress in achieving the SDGs and Green Economy

Tajikistan has produced environmental and statistical reports, mainly through international support. However, existing reports do not always provide sufficient environmental information and data. Some reports should be complemented with analysis, assessments and concrete recommendations, and include relevant material, case studies and visual representations.

✓Improve the quality of nationally produced reports and the capacity of national institutions to produce data and indicators;

✓Improve the analytical and recommendation sections of the SoER/thematic reports, by using indicators (including a shift from the simple provision of environmental information, to a detailed environmental assessment with linkages between economic processes and the use of natural resources, including visual explanations);

✓Prepare the indicator-based reports in a reader-friendly manner;

✓Improve the capacity of the organizations that work with environmental information.

One of the SEIS principles relates to the full availability of information to the public at the national level in the relevant national language(s). Tajikistan has almost no data in any language other than Russian. Tajikistan would benefit from having unified portal with all environmental indicators in Tajiki, Russian and English.

✓Make sure all produced environmental information is gathered in one place and/or made available in different places to a broader public in multiple languages.

The use of environmental indicators for different purposes, including reporting under the MEAs, should be promoted and strengthened. The produced reports are not always available on the website of the Committee. Some reports to the MEAs can be found on the Convention websites. Awareness of the assessment is not high.

✓Increase usage of the environmental indicators when preparing reports under the MEAs;

✓Improve the quality of the reports under the MEAs (analytical and visual parts);

✓Make sure all produced reports are available on nationally managed websites in the national language and well presented to a broader public;

✓Improve communication with the users of environmental data and indicators, including for collection of user feedback.

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About the activity:

Countries of Eastern Europe, the Caucasus and Central Asia have long traditions in the fields of environmental information, assessment and reporting. At the Seventh Environment for Europe Ministerial Conference (Astana, 2011) the participating ministers decided to establish a regular process of environmental assessment and to develop SEIS across the region to keep the Pan-European environment under review. The UNECE Working Group on Environmental Monitoring and Assessment and the Joint Task Force on Environmental Statistics and Indicators created a platform for the countries to gradually consolidate a shared vision on how to select, calculate, present and use environmental indicators to reflect factors and trends in the overall state of the environment. The European Environment Agency is supporting SEIS development in the EU Neighbourhood region.

This activity, funded by the Russian Federation, aims to support the activities under the Environmental Monitoring and Assessment (EMA) Programme. It also aims at strengthening national capacities in Central Asia, the Caucasus and Eastern Europe in environmental monitoring and assessment, and at enhancing the understanding by ECE member States of environmental data sharing and the SEIS reporting application.

Sources:

Reporting on Progress in Establishing SEIS in the Pan-European Region for the mid-term review and for piloting the SEIS Assessment Framework (Tajikistan self-assessment), February 2018; SEIS Central Asia scorecard. Tajikistan (draft, 2017); Tajikistan SDG datasheet (Statistical Yearbook for Asia and Pacific 2017); Committee on Environmental Protection of the Republic of Tajikistan, Agency for Statistics of the Republic of Tajikistan.