

Environmental Statistics in Georgia

Challenges and Expectation of Sector review



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General Overview



Organizations in charge of environmental monitoring and assessment system in Georgia:

- ❖ Ministry of Environmental Protection and Agriculture of Georgia - MEPA
- ❖ National Statistics Office of Georgia - GEOSTAT



Agencies involved in environmental data collection and processing:

- ✓ LEPL Agency of Protected Areas
- ✓ LEPL Forestry Agency of Adjara
- ✓ LEPL National Forestry Agency
- ✓ Department of Environmental Supervision
- ✓ National Environmental Agency
- ✓ Institute of Geography



Data Sources



Data Sources:

- Surveys – Geostat
- Administrative and Monitoring Data - Ministry of Environmental Protection and Agriculture (MEPA) and respective agencies

Geostat



MEPA



MINISTRY OF ENVIRONMENTAL PROTECTION
AND AGRICULTURE OF GEORGIA

Survey of Water Supply Enterprises (Data on water supply industry)

Data on GHG and Air Pollutant Emissions, Water Resources (Ministry of Environmental Protection and Agriculture)

Data from different sources - used for producing environmental indicators and Environmental Accounts

Data on Air, Water and Soil Quality (National Environmental Agency, National Food Agency)

- Agricultural Statistics (Agricultural and Environmental Statistics Department)
- Energy Balance and Transport Statistics (Business Statistics Department)
- Energy Sector Survey
- Final Consumption of Energy Resources Survey
- Import/Export Data (External Trade and Foreign Investments Statistics Department)
- Population (Population Census and Demography Department)
- GDP (National Accounts Department)

Data on Forest Resources and its Protection (National Forestry Agency, Forestry Agency of Adjara)

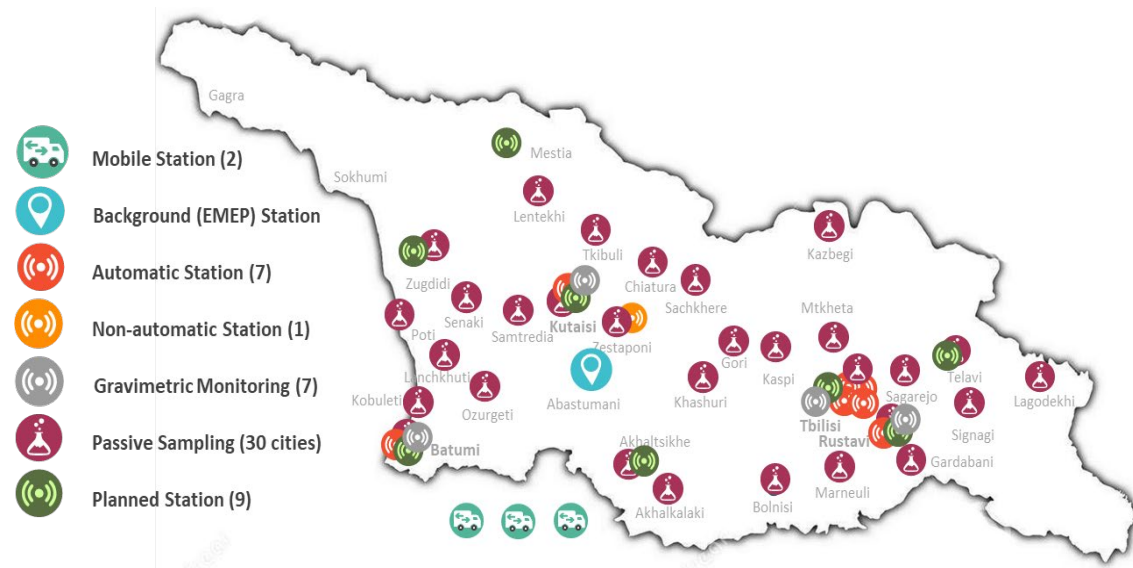
Data on Protected Areas (Agency of Protected Areas)

Data on Natural Hazards, Water Abstraction and Discharge (National Environmental Agency)

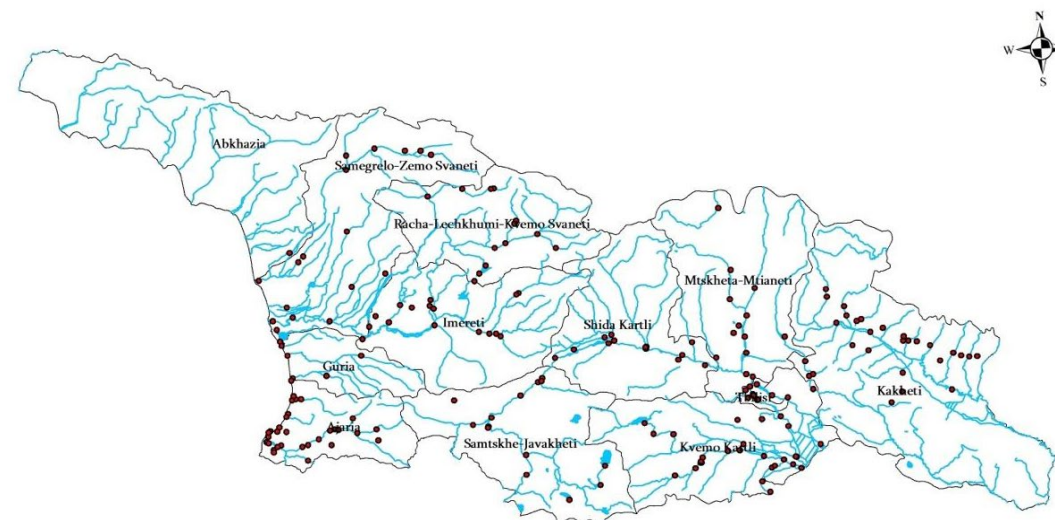
Data Collection Tools in MEPA



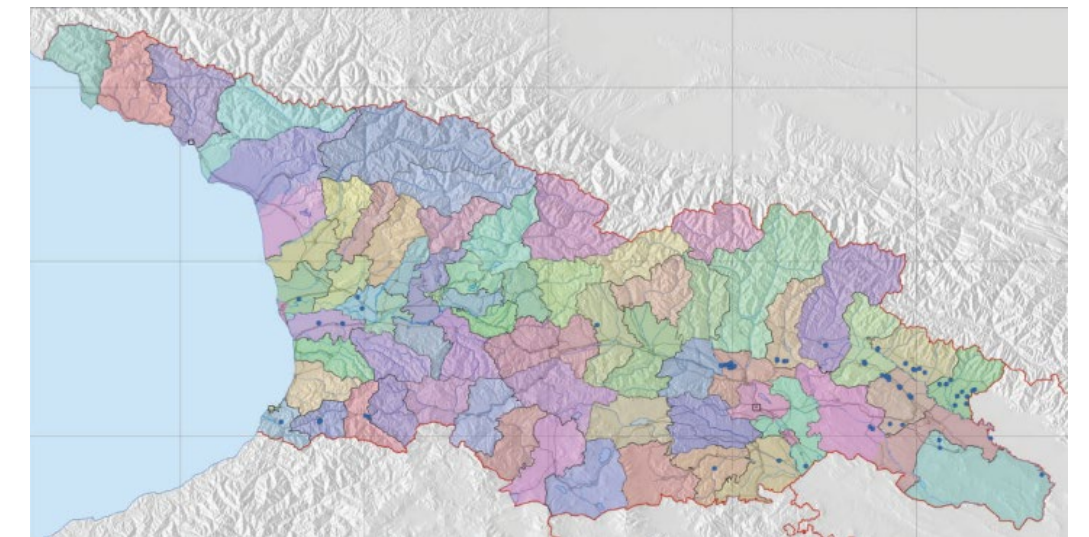
Ambient Air Quality Monitoring Network



Surface Water Quality Monitoring Points (231)

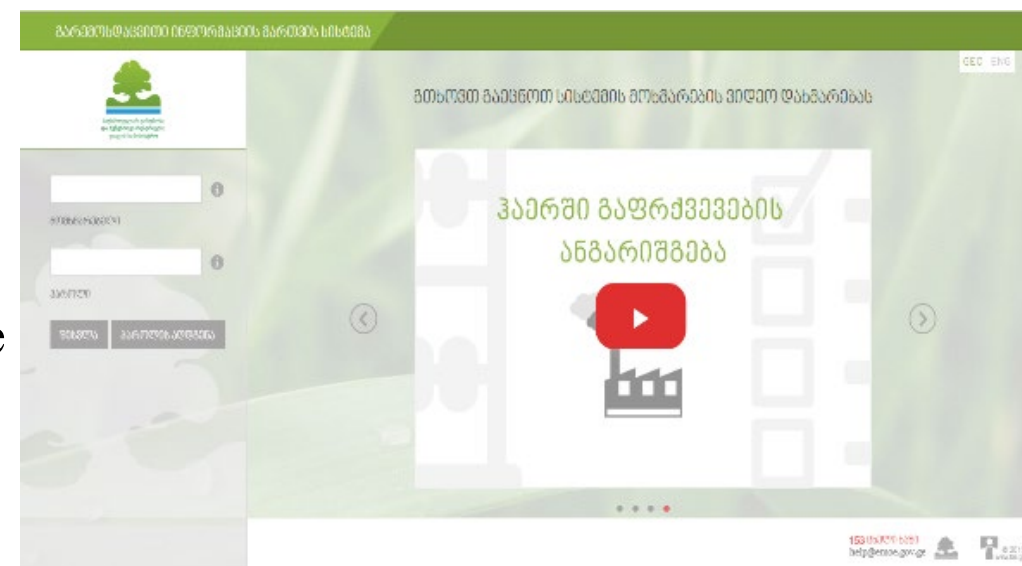


Groundwater Monitoring Points (68)



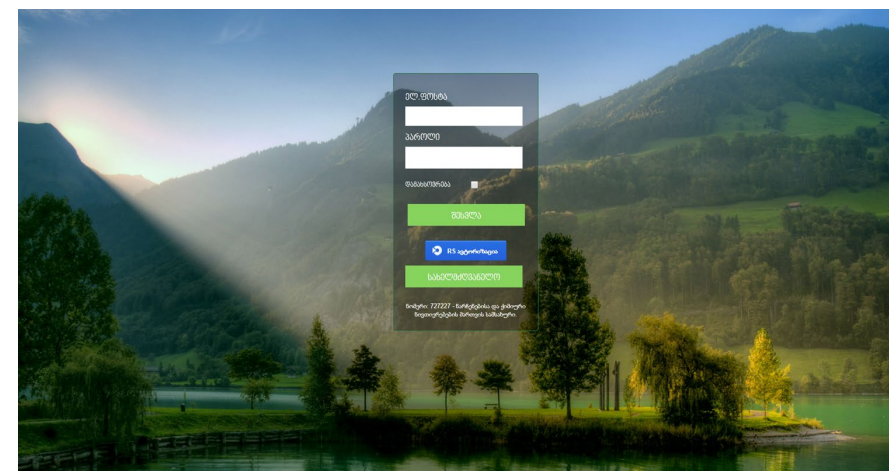
emoe.gov.ge

Electronic Air Pollution Reporting Module from Point sources



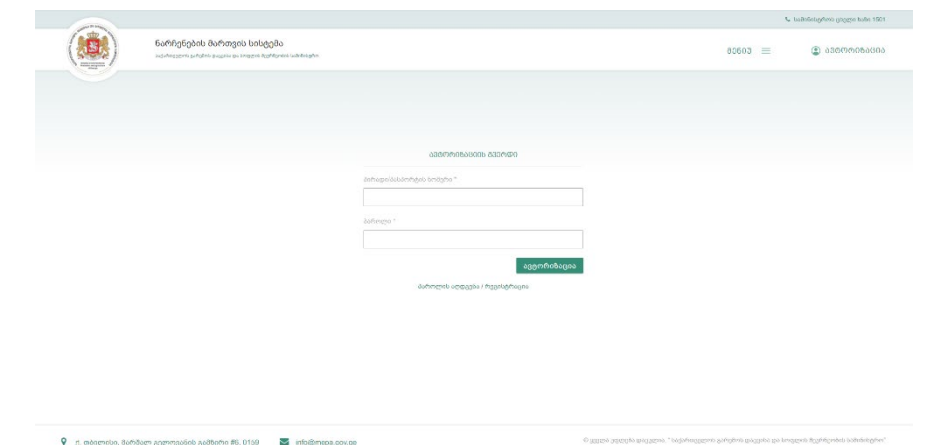
Waste Electronic Reporting System

wms.mepa.gov.ge



Waste Management System for EPR

waste.mepa.gov.ge



Water Use State Accounting Online Module

Sawmills Management Module

Environmental Statistics Disseminated by Geostat



Land resources

- Land cover
- Agricultural and non-agricultural land operated by agricultural holdings



Forest resources and their protection

- Forest area
- Forest fire and restoration
- Illegal and legal timber logging
- Export and import of non-processed timber



Protected areas

- Structure of protected areas
- Number of preserved animal and bird species
- Expenses on maintenance of protected areas and number of employees



Water Resources

- Main rivers, lakes and reservoirs
- Main indicators for water supply industry and wastewater collection
- Main indicators for protection and use of water resources



Ambient air protection

- Generated, decontaminated and emitted hazardous substances from stationary sources
- Exhaust emissions from road transport



Natural hazards

- Number of hydro meteorological events and geological phenomena



UNECE Environmental Indicators



A-1. Emissions of pollutants into the atmospheric air

A-2. Ambient air quality in urban areas

A-3. Consumption of ozone-depleting substances

B-3. Greenhouse gas emissions

C-4. Household water use per capita

C-5. Water supply industry and population connected to water supply industry

C-7. Water losses

C-14. Population connected to wastewater treatment

F-2. Fertilizer consumption

F-4. Pesticide consumption

G-1. Final energy consumption

G-2. Total primary energy supply

G-3. Energy intensity

G-4. Renewable energy supply

H-1. Passenger transport demand

H-2. Freight transport demand

H-3. Composition of road motor vehicle fleet by fuel type

H-4. Age of road motor vehicle fleet

Methodology – definitions and terms:

- UNECE environmental indicators
- UNSD/UNEP Questionnaire on Environment Statistics



Data Dissemination Formats in Geostat



✓ Annual statistical publication “Natural Resources of Georgia and Environmental Protection”

<https://www.geostat.ge/en/single-categories/109/environment>

✓ Statistical Yearbook of Georgia:
Section: Natural Resources and Environmental Protection
<https://www.geostat.ge/en/single-categories/95/statistical-yearbook>

✓ Environment section at Geostat website:
Charts and tables
<https://www.geostat.ge/en/modules/categories/73/environment-statistics>

✓ Regional statistical portal of Geostat
<https://www.geostat.ge/regions/#>

✓ Regional statistics section
<https://www.geostat.ge/en/modules/categories/93/regional-statistics>

✓ Separate section for UNECE environmental indicators at Geostat website:
<https://www.geostat.ge/en/modules/categories/565/environmental-indicators>

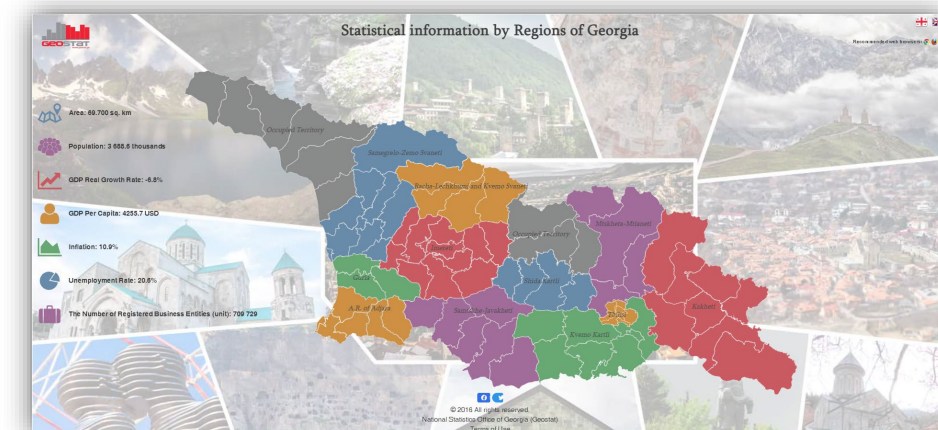
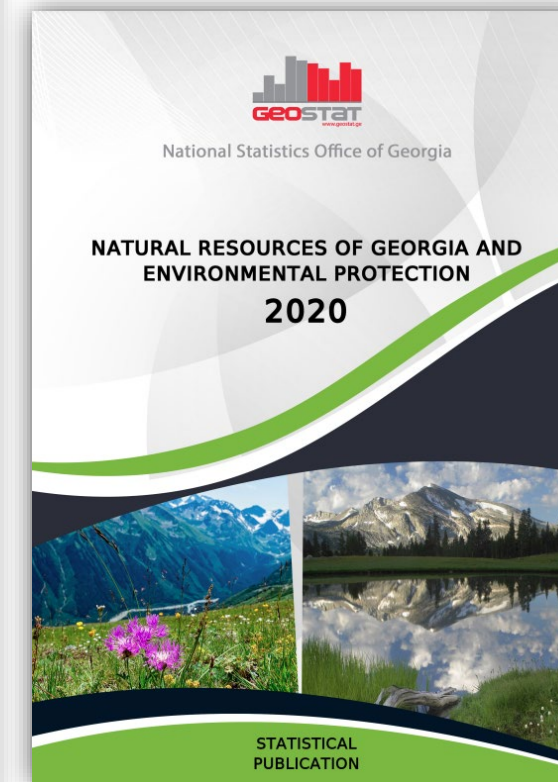
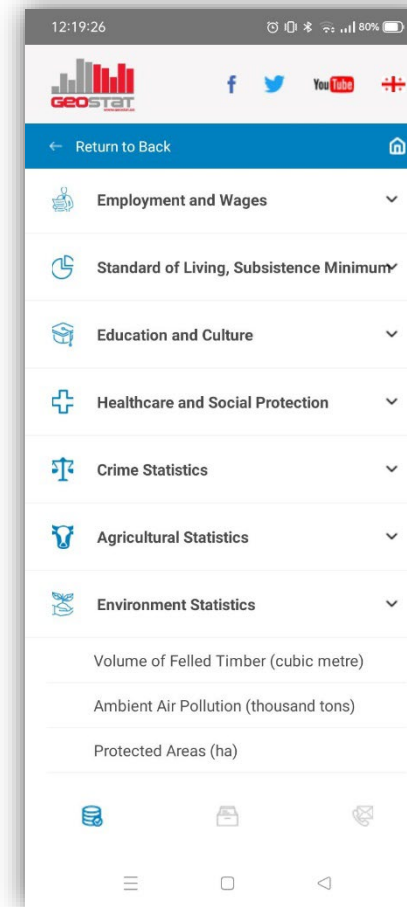
✓ Android and IOS applications
<https://play.google.com/store/apps/details?id=com.geostatappge>

✓ PC-AXIS Database
<http://pc-axis.geostat.ge/PXweb/pxweb/en/Database/?rxid=dfc9a49a-2741-4aac-b682-c73a856747ad>



PC-AXIS DATABASE

Database consists of about 12 bases



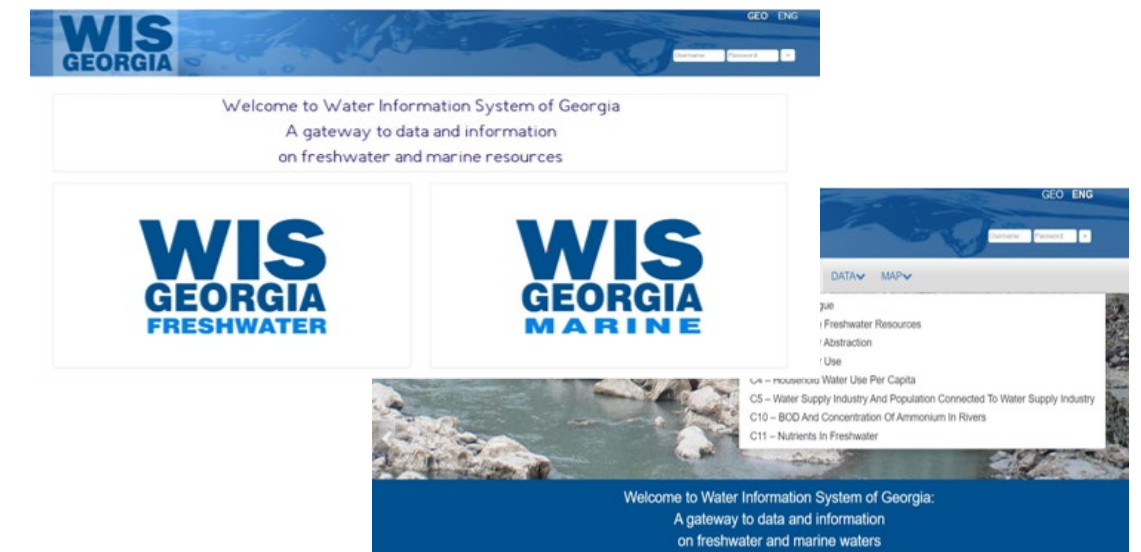
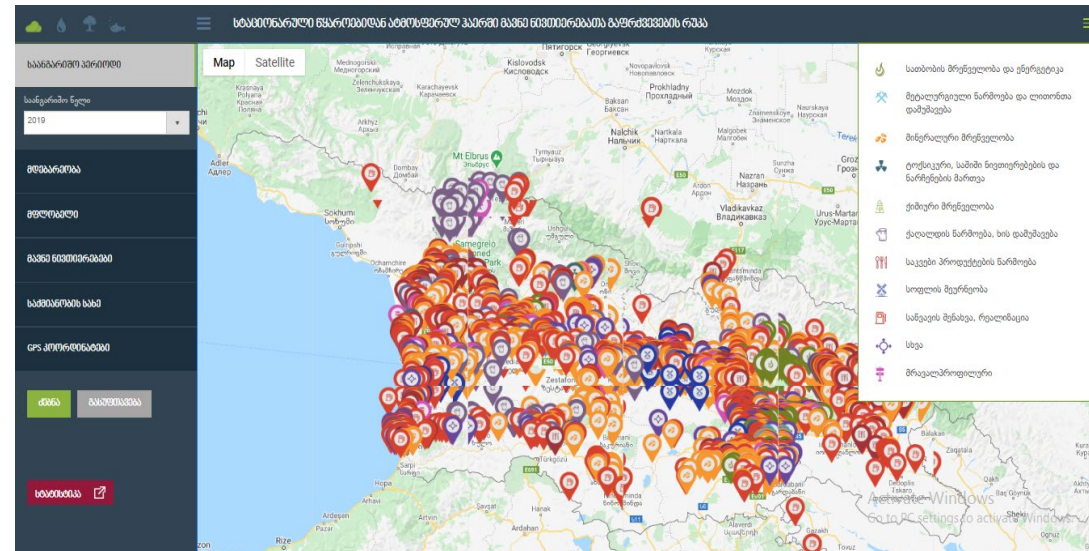
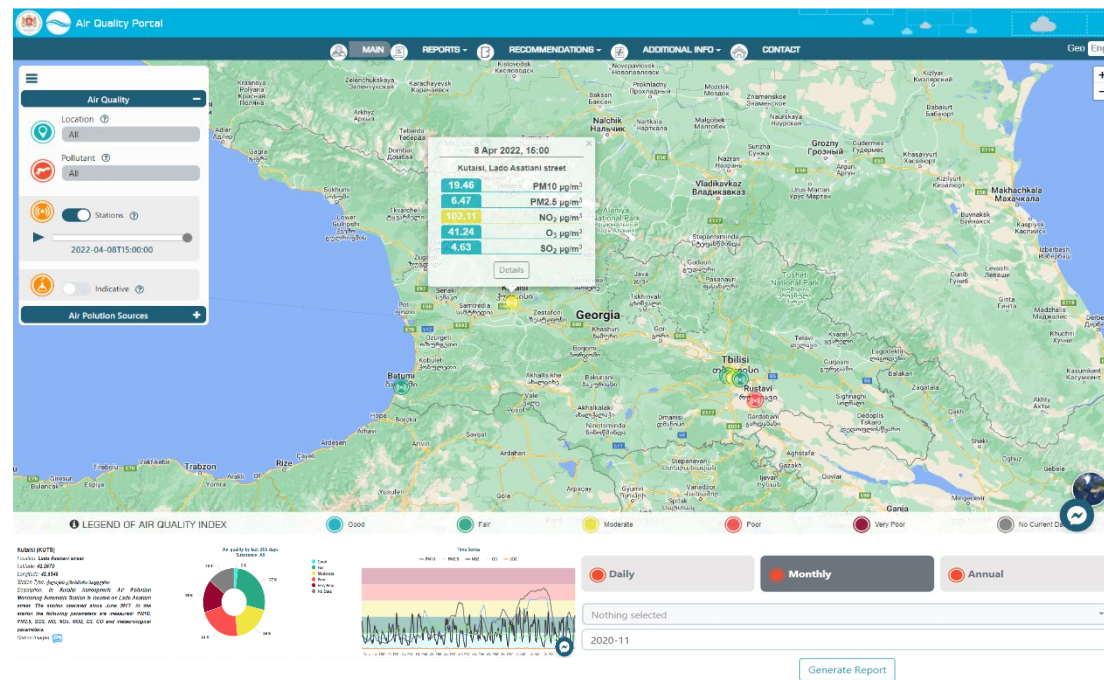
Data Dissemination Tools in MEPA



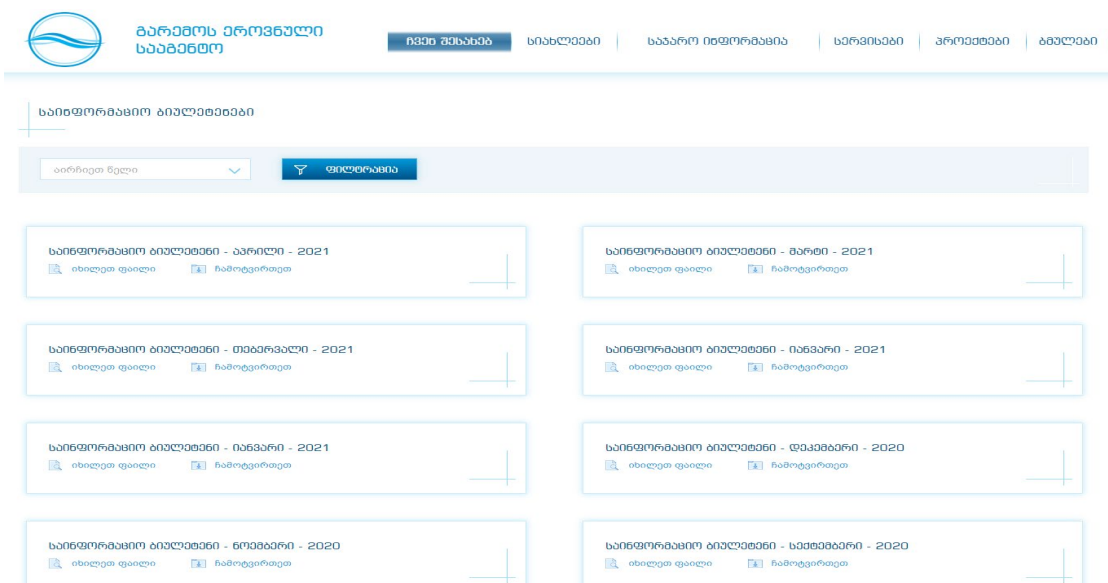
Ambient Air Quality Portal – air.gov.ge

Map of emissions of pollutants into the ambient air from stationary sources - Map.emoe.gov.ge

Water Information System of Georgia Wis.mepa.gov.ge



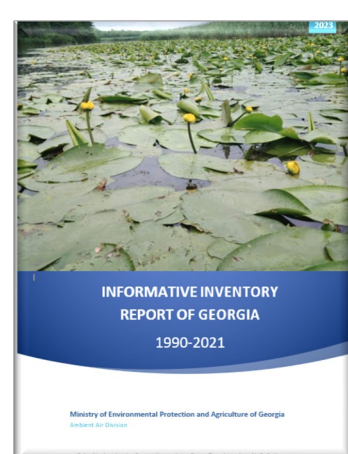
Monthly Bulletins and Yearbooks - Nea.gov.ge



State of Environment Report - mepa.gov.ge



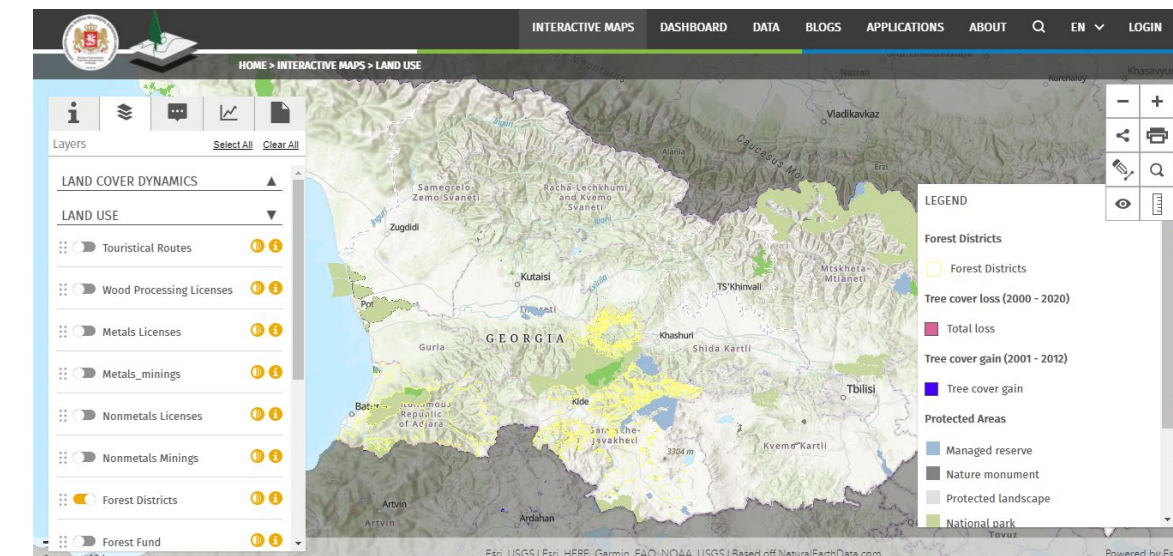
Informative Inventory Report at ceip.at



Information Hydrogeological Report



Forest and Land-Use Atlas of Georgia atlas.mepa.gov.ge



Gaps and Challenges



- **Data Collection and Availability**

- Geostat faced issues related to the availability and quality of environmental data. Some data are not be regularly collected or incompleted
- The main challenge is to establish comprehensive and accurate data collection mechanisms for various environmental parameters

- **Lack of disaggregated administrative and survey data**

- **Data Integration and Management**

- Environmental data is scattered across various agencies and institutions, the main challenge is to integrate data from different sources and ensure its consistency and reliability.

- **Capacity Building**

- A need for training and capacity building among Geostat, government agencies and institutions responsible for collecting and managing environmental data (including for the introduction of SEEA modules)
- The main challenge is to enhance the methodological knowledge of personnel involved in environmental statistics



Gaps and Challenges



- **Funding and Resources**

- Limited financial and human resources can interfere the development and maintenance of environmental statistics systems
- The main challenge is securing adequate funding and resources for environmental statistics initiatives

- **Data Quality and Validation**

- The challenge to ensure the accuracy and validity of environmental data

- **Data Dissemination and Accessibility**

- The main challenge is to enhance data dissemination and accessibility



Gaps and Challenges by Sector



Air

- Insufficient air quality monitoring stations; Absence of air quality modeling and forecasting system. Lack of established procedures for air quality data verification and validation; Lack of baseline data on stoves in households and burning agricultural residue and other waste; lack of baseline data on transport to use COPERT for the estimation of air emissions; Lack of aggregated data on construction sector;



Water

- The introduction of a water classification system in accordance with the EU Water Framework Directive is an upcoming challenge.

Soil

- Outdated quality standards for soil. Absence of modern methodology for soil pollution monitoring and assessment.



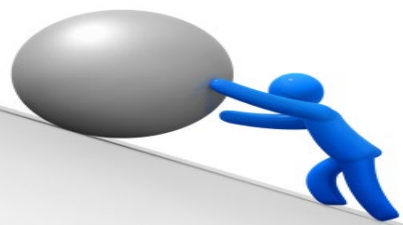
Biodiversity

- Absence of legal framework for biodiversity monitoring. Lack of human and financial resources to conduct monitoring.
- One of the challenges the Forest sector is facing is a lack of modern technologies and integrated electronic system for sustainable forest management



Waste

- Incomplete waste management electronic system that complicates aggregation of reported data on waste (including hazardous) generation, transportation, recycling, and disposal.



Support Needs from International Organizations



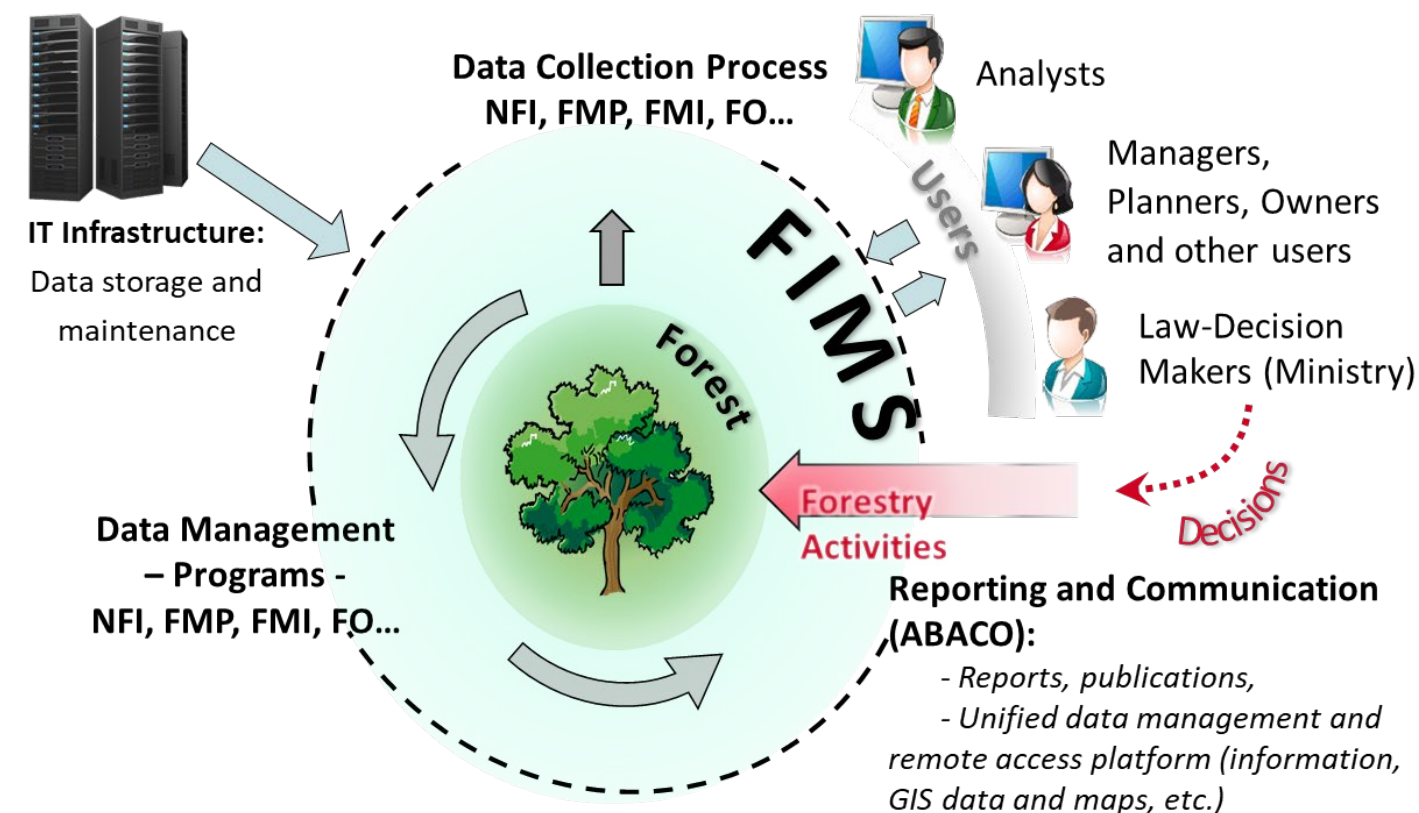
- Conduct **Sector review** in the field of environment statistics
- Financial support and TA to establish comprehensive data collection system
- Technical Assistance to develop additional waste, water, physical energy flow, and air emission statistics indicators
- Capacity building for the introduction of SEEA air emissions and energy accounts

Needs

Sector Review Expectations and Plans for Future Development



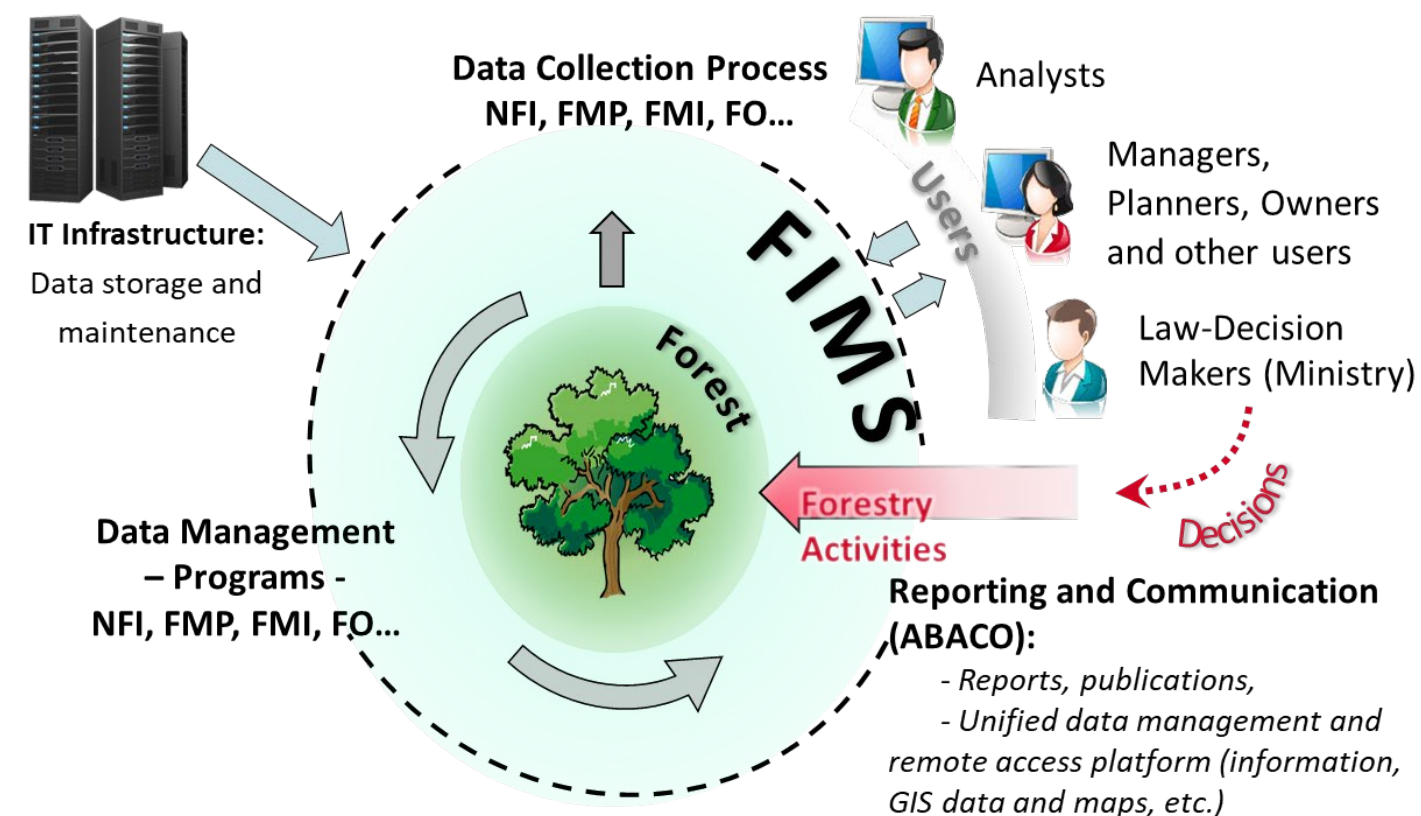
- ❑ Reviewing and discussing data gaps
- ❑ Prioritizing non-produced indicators
- ❑ Improved coverage, accuracy, and timeliness of environmental data collection. This includes establishing monitoring systems and data-sharing agreements
- ❑ Development of centralized databases and data management systems that facilitate easy access and sharing of environmental information
- ❑ Assessing and looking for new data sources



Sector Review Expectations and Plans for Future Development



- ❑ Implementation of training programs and the development of a skilled workforce capable of producing high-quality environmental statistics.
- ❑ Increased budget allocation for environmental data collection and analysis, as well as seeking external funding sources if necessary
- ❑ The implementation of rigorous data validation protocols and regular audits to improve data quality
- ❑ The development of user-friendly platforms (portals) and tools for accessing environmental statistics.





THANK YOU FOR YOUR ATTENTION!

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Reliable Data for Right Decisions!

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