



EU4Environment in Eastern Partner Countries:
Water Resources and Environmental Data (ENI/2021/425-550)

AGENDA

Output 2.2 Land Monitoring Meeting in Georgia

Date:

6 March 2023
7 March 2023

Venue:

Hotel Courtyard by Marriott
4, Freedom Sq. Tbilisi 0105, GEORGIA

Time:

14⁰⁰-18⁰⁰
09⁰⁰-17⁰⁰

Participants:

- *Ministry of Environmental Protection and Agriculture (MEPA), National Agency for Sustainable Land Management and Land Use Monitoring (Land Agency), Ministry of Regional Development and Infrastructure (MRDI), Ministry of Economy and Sustainable Development (MESD), Ministry of Education and Science, National Statistics Office (GeoStat), National Agency of Public Registry (NAPR)*
- *Academic Institutions, Universities, independent experts*
- *Representatives of the national expert team GisLab*
- *Relevant Project, USAID, WWF, GIZ representatives*
- *Barbara Kosztra, Head of Europe's Expert team for CLC 2024*
- *Isabella Greimeister-Pfeil, Remote Sensing expert*
- *Andreas Littkopf, European Topic Center manager, responsible for 2.2*

Venue: **Hotel Courtyard by Marriott, Tbilisi**

Implementing partners



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DAY 1: half day, 6 March 2023**Conference Room**

Time	Item	Speaker
13:30 -14:00	Registration, Coffee	
14:00 -14:10	Welcome and opening	<ul style="list-style-type: none"> - Nino Chikovani, Head of Land Management Division, Ministry of Environmental Protection and Agriculture of Georgia - MEPA - Giorgi Misheladze, Head of National Agency for Sustainable Land Management and Land Use Monitoring (Land Agency) - Andreas Littkopf, Environment Agency Austria - UBA
14:10 -14:20	Introduction and Tour de Table	- All
14:20 -14:35	The goal of WP 2.2 (15')	- Andreas Littkopf, Environment Agency Austria - UBA
14:35 -15:05	Set the scene CLC (15'+15')	<ul style="list-style-type: none"> - Barbara Kosztra, Lechnerkozpont - CLC 2024 Technical Team
15:05 -15:25	First ideas for implementation (10'+10')	- Giorgi Mikeladze, GisLab
15:25 -15:40	Reflections (15')	- Representatives from different ministries
15:40 -16:00	Coffee break	
16:00 -16:20	Copernicus Global Satellite Imagery and Value-added Products: An Overview	- Isabella Greimeister-Pfeil, Environment Agency Austria - UBA
16:20 -16:40	Land Cover/Land Use activities in Georgia: overview, or plans, or projects, or expectations	- Georgian MEPA representative, or Expert
16:40 -17:30	Discussion on what and how a use case could be structured and /or a data management system developed	- All
17:30	End of day 1	

DAY 2: full day, 7 March 2023

Group A (Expert group on Data): room for 20-30

Time	Item	Speaker
09:00 -09:30	Registration for Day-2, Coffee	
09:30 -10:00	Remote sensing activities in Georgia: Concept/strategy/activities or projects	- Georgian expert
10:00 -10:30	Copernicus high-resolution layers: An Overview (15'+ 15') (High resolution land cover layers, HR Vegetation and Phenology (HR-VPP) and HR Snow and Ice (HR-S&I))	- Isabella Greimeister-Pfeil, Environment Agency Austria - UBA
10:30 -10:50	Copernicus high-resolution layers: Proposal for a pilot case for the training workshop (30')	- Isabella Greimeister-Pfeil, Environment Agency Austria - UBA
10:50 -12:00	Moderated discussion	- All
12:00 -13:00	Fingerfood and coffee	

Group B (Expert group on CLC): room for 5-10

Time	Item	Speaker
09:00 -09:30	Registration for Day-2, Coffee	
09:30 -10:00	Introduction to CLC, main objectives, practice in Europe	- Barbara Kosztra, Lechnerkozpont
10:00 -10:30	CLC-change mapping: concept and examples	- Barbara Kosztra, Lechnerkozpont
10:30 -10:50	Practicalities of CLC project in Georgia: history, guidelines and tools	- Barbara Kosztra, Lechnerkozpont
10:50 -12:00	CLC project implementation in Georgia: available expertise and data, national specifics	- Barbara Kosztra, Lechnerkozpont - Giorgi Mikeladze, GisLab
12:00 -13:00	Fingerfood and coffee	

Panel Discussion

Time	Item	Speaker
13:00 -15:00	Exchange of the outcomes in splinter sessions A and B	- All
15:00 -15:20	Coffee break	
17:00	End of day 2	

About EU4Environment – Water Resources and Environmental Data

This programme aims at improving people’s wellbeing in EU’s Eastern Partner Countries and enabling their green transformation in line with the European Green Deal and the Sustainable Development Goals (SDGs). The programme’s activities are clustered around two specific objectives: 1) support a more sustainable use of water resources and 2) improve the use of sound environmental data and their availability for policy-makers and citizens. It ensures continuity of the Shared Environmental Information System Phase II and the EU Water Initiative Plus for Eastern Partnership programmes.

The Action is implemented by five Partner organisations: Environment Agency Austria (UBA), Austrian Development Agency (ADA), International Office for Water (OiEau) (France), Organisation for Economic Co-operation and Development (OECD), United Nations Economic Commission for Europe (UNECE). The action is co-funded by the European Union, the Austrian Development Cooperation and the French Artois-Picardie Water Agency based on a budget of EUR 12,75 million (EUR 12 million EU contribution). The implementation period is 2021-2024.

Background for WP 2.2

The standard European CORINE Land Cover (CLC) database will be implemented for selected area(s) of Georgia (15000 km² and when funding available full coverage of 69700 km²) based on computer assisted photointerpretation of satellite images and ancillary data. If the national team decides so some of the 44 thematic classes of the standard CLC nomenclature will be subdivided into thematically more detailed subclasses to represent national needs better.

Georgia has successfully completed a CLC Pilot study between 2017 and 2019 in the frames of ENI SEIS II East programme. CLC2018 and CLC-change layers (between 2001 and 2018) were derived by visual photointerpretation of satellite imagery (Sentinel-2, Landsat) and ancillary data according to “CLC2018 Technical Guidelines” (10/25/2017) and “Updated CLC illustrated nomenclature guidelines” (09/30/2017) to cover the surroundings of Tbilisi (capital) area. During the CLC pilot project computer assisted photointerpretation based on the standard European CLC nomenclature (3-digit code) has been used. The European CLC nomenclature was easily applicable for Georgia. However, some classes like industrial and commercial units (class 121) and pasture (231) classes need more thematic details (level-4, i.e. 4-digit code) for national applications.

Considering technical skills, the Georgian technical team is well prepared to start the implementation. Some external assistance is needed in documentation of results with standard metadata. The Georgian technical team is interested in using the dedicated CLC photointerpretation software.

Georgia has a legal “land monitoring” requirement by 2024, which fits very well the timelines of the planned actions in EU4ENV.

Within the European Copernicus Program several services are made available for the member states. The WS will give an overview on Copernicus land monitoring products and their usage, shall bring an overview of the application of national geospatial data in Georgia and will stimulate the discussion between Georgian and European experts on further use of satellite imagery on the example of High Resolution Vegetation Phenology and Productivity (HR VPP) product in high spatial and temporal resolution. This (HR-VPP) product is based on satellite measurements acquired by Sentinel-2 and represents Vegetation phenology over the growing season for 4 years from 2017 until 2020.

Workshop objectives, expected outputs and outcomes

The meeting focusses on three aspects

- National implementation of the CLC-Pilot project,
 - The 17,000km² (Kvemo Kartli and Kakheti provinces of the country), ~ 20% of country



Region	Centre	Area (km ²)	Population ²⁰¹⁴	Density
Kakheti	Telavi	11,311	318,683	28.16
Kvemo Kartli	Rustavi	6,072	423,986	69.82

- Joint assessment of available Global and National land monitoring data
- Preparation and decision on a use case in a collaboration project on the usage of High resolution data (HRVPP) for national assessments in a pilot area (covered by Europe`s Copernicus HRVPP service)



HRVPP area (covered by service) for Georgia, the available area for a pilot.