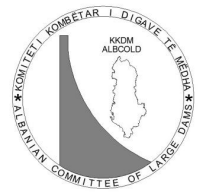


Albanian National Committee of Large dams (ALBCOLD)

NEWS AND HIGHLIGHTS, ALBANIA

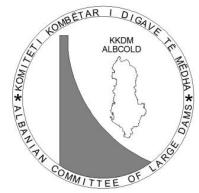




Albanian National Committee of Large dams (ALBCOLD)

Content

- ▶ Assessment of Dam safety sector in Albania, Needs and opportunities
- ▶ Main Activities of ALBCOLD during 2023-2024
- ▶ DARE Project for dam assessment that are out of function
- ▶ Research and Developments



Albanian National Committee of Large dams (ALBCOLD)

1- Assessment of Dam safety sector in Albania, Needs and Opportunities

1.1- Assessment and Finding

Dam Safety Legislation in Albania reflects the internationally recognized dam safety principles.

The organisational structure accompanying the legislation does not correspond to reality.

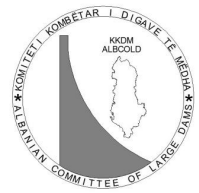
Technical guidance documents are missing and no sustainable.

Engineering academic education focuses on design and construction, with little to no topics related to surveillance during operation and to emergency planning.

In particular, assignment of roles and responsibilities does not fit today's institutional structure.

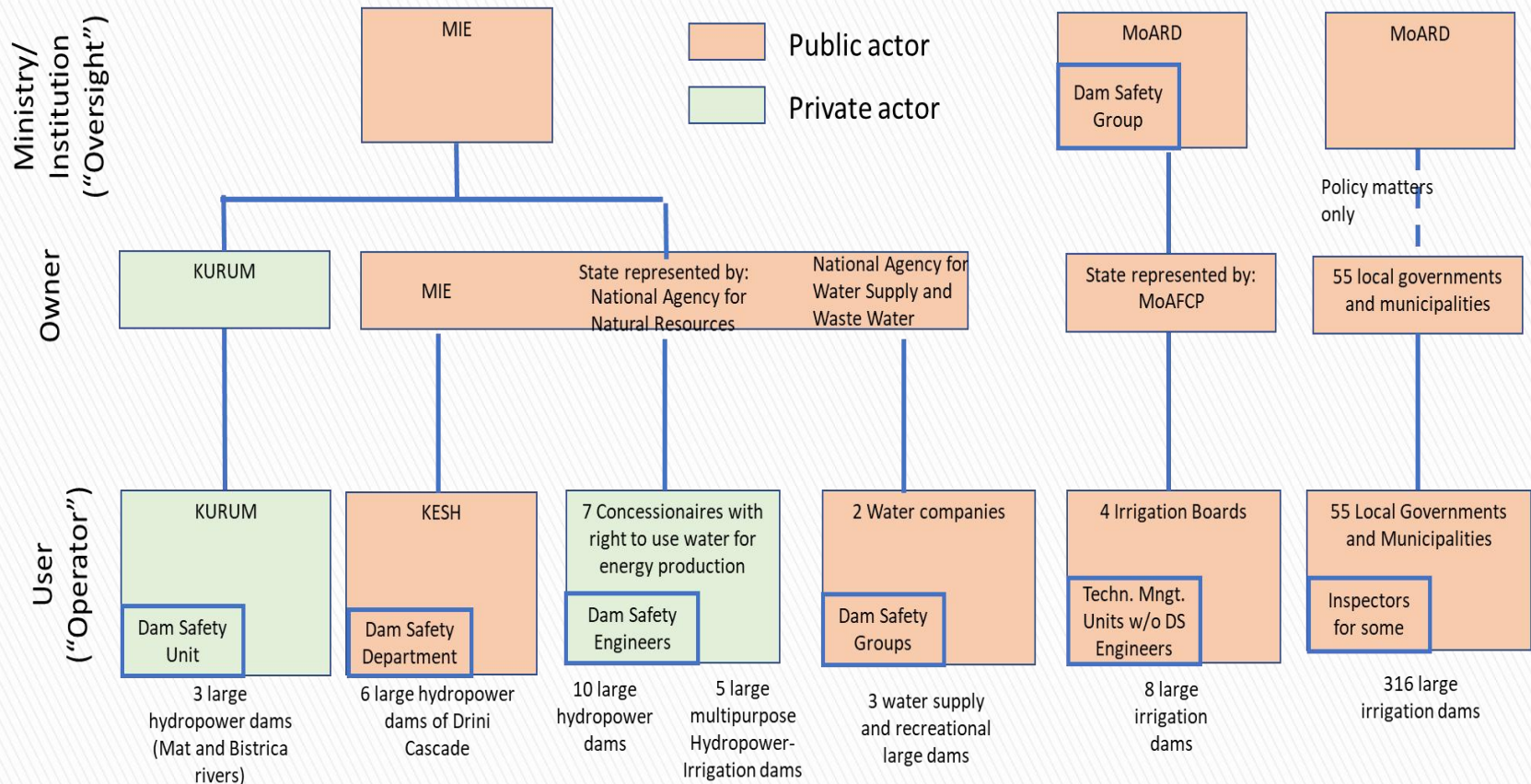
Monitoring with instruments is inexistent at all agricultural dams where surveillance is based mostly on visual inspections.

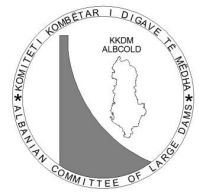
Dam safety in Albania is, for all practical purposes, of a self-regulating type. While hydropower operators do have dam safety programs in place, this is not the case for the local governments and municipalities owning the vast majority of the large dams in Albania.



Albanian National Committee of Large dams (ALBCOLD)

Structure of Organization of Sam sector in Albania, 2023



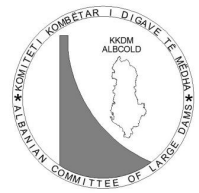


Albanian National Committee of Large dams (ALBCOLD)

1.2- Recommendations

Recommendations requiring adaptation of legal and institutional framework:

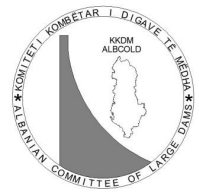
- ▶ Create an Albanian Dam Association. Extract the representation of Albania in the International Commission on Large Dams ICOLD from the current ALBCOLD and transfer it to this newly created association;
- ▶ Merge the Albania Committee on Large Dams and the Technical Inspectorate of Dams in a single State Dam Safety Agency, preferably under the Council of Ministers;
- ▶ Align institutional dam safety structure with international practice under due consideration of local reality, by reinforcing the duties of the Operator as responsible entity for compliance with all safety requirements;
- ▶ Revise the Law No. 8681 and the Decision of Council of Ministers No. 147. Clarify roles, duties and rights of all stakeholders with clear requirements regarding safety during operation;
- ▶ Provide dam safety technical training and resources to the municipalities and local governments owning and operating dams.



Albanian National Committee of Large dams (ALBCOLD)

- Recommendations requiring no adaptation of legal or institutional framework:

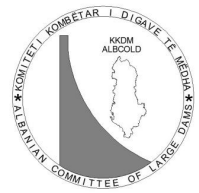
1. Draft a set of comprehensive guidelines to provide guidance to all stakeholders, more efficiently by referring to a set of existing national guidelines and adapting them to the Albanian situation and needs;
3. Prepare flood maps for dam breach as well as Emergency Action Plans for all dams, processing sequentially and starting with those posing the greatest threats to population in case of dam breach;
4. Establish a full course on Dam Safety and Surveillance at the Faculty of Civil Engineering of Polytechnic University of Tirana. Ensure availability of demonstration monitoring instruments;
5. Ensure dedicated education and training opportunities on monitoring equipment, analysis of measurement data and report preparation for staff of the very large dams in the country.



Albanian National Committee of Large dams (ALBCOLD)

2- Main Activities of ALBCOLD during 2023-2024

- 12 monthly meetings
- 45 decisions of ALBCOLD
- Approval of 10 Details design for rehabilitation of large dams and 1 detail design for PV Plant
- Approval of the Rules on the operation and Monitoring of some large dams
- Symposium on the Design Codes of Dams and Their Seismic safety (Science Academy)
- Control of Dam safety and monitoring of two Hydroenergy large dams (Banja and Ura e Fanit)
- Workshop on the monitoring of Earth dams (Polis University)
- International Symposium with CFBR on the Challenge and Innovations for better dams

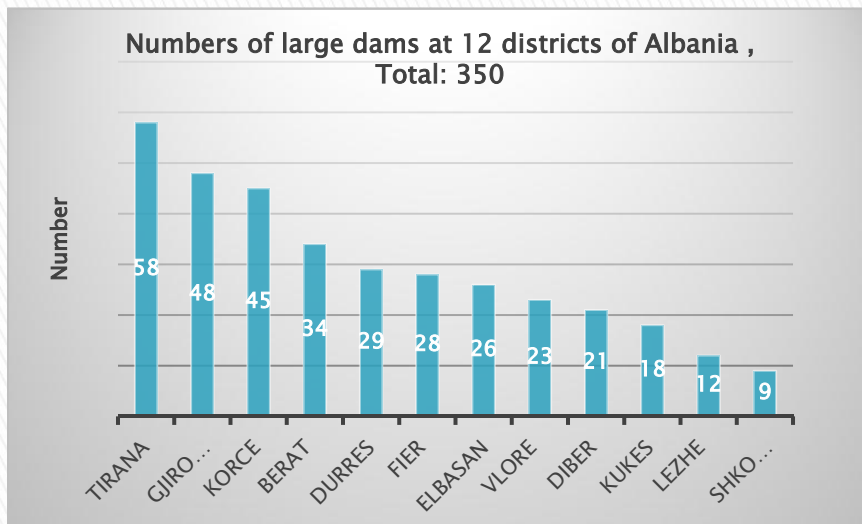


Albanian National Committee of Large dams (ALBCOLD)

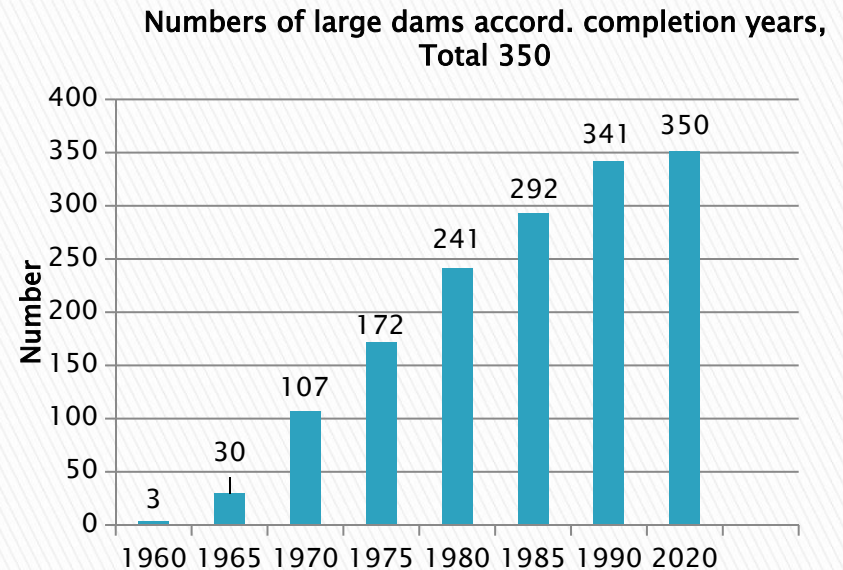
3- Dam Assessment that are out of functions

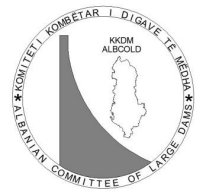
Main Data for the dams in Albania

- 650 dams (350 large dams and 300 small dams) are built for different purposes as:
 - ✓ Irrigation (626 dams, + Tourism, fishing, Recreation, flood Mitigation)
 - ✓ Hydroenergy (24 dams, + Transport, Fishing Tourism)
 - ✓ Water supply (2 dams)



Round Table of European Dam safety Authorities, June 2024



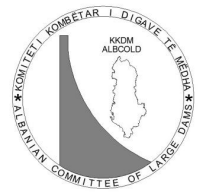


Albanian National Committee of Large dams (ALBCOLD)

DARE Project on dam assessment that are out of functionig

Introduction

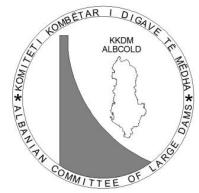
- The project “DARE” was done in the cooperation with H2H.
- The purpose of this project was identification of dams that are out of function and measures in the future for them
- There was organised 11 meetings in 11 districts of Albania. In the meetings was participated:
 - ✓ 190 participant as representatives of
 - ❖ 50 local government
 - ❖ 16 regional districts
 - ❖ 3 Governments Institutions
 - ❖ 8 NGO



Albanian National Committee of Large dams (ALBCOLD)

Findings and Results

- The legal frameworks for dam decommissioning is okay but there must prepare the guideline and technical standards for decommissioning process. According to the Law and Decision of Council of Ministers No.147, date 18.03.2004, the dams will be decommissioned in the moment that they have lost main functions and reservoirs are filled with sediments
- No decommissioning of dams has occurred in Albania
- A lot of dams are very old (> 50 years old) and a lot of reservoirs are filled with sediments, posing risks to communities in the downstream of dams

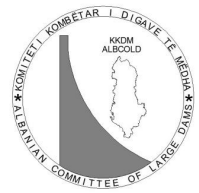


Albanian National Committee of Large dams (ALBCOLD)

Finding and Results

- 136 dams are nonfunctional according to their main purposes of their original project
- ✓ 35 large dams
- ✓ 101 small dams

- 9 small dams do not exist structurally
- 17 small dams have been accessed by the municipalities for decommissioning
- 46 small dams lack coordinates
- 8 Reservoirs have been turned into agricultural land



Albanian National Committee of Large dams (ALBCOLD)

4- Design, Research and Development

4.1 Rehabilitation of the existing large dams:

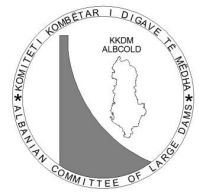
Will prepare 14 details design for the rehabilitatin of existing large dams and installation of monitoring systems.

4.2 Installation of Solar panels on the dams and Reservoir

- It is approved a Solar plant with capacity 8.14 MW on Zadeja dam
- There has started a detail design of a solar plant with capacity 12 MW on Reservoir of HPP Vau i Dejes

4.3 Pumping Storage (Feasibility studies)

- Pumping storage on Reservoir of Moglica with capacity more than 800 MW and $H > 600$ m
- Pumping Storage between Reservoir of HPP Koman and Fierza Dam with capacity more than 300 MW and $H > 200$ m



Albanian National Committee of Large dams (ALBCOLD)

4- Design, Research and Development

4.4 Conference and Workshops

- International Symposium “Design Code of Dams and Their Seismic safety”
- Workshop “Monitoring of Earth fill Dams”
- International Symposium “ Challenge and Innovations for Better Dams”

INVITATION

We are planning to organize a International Symposium, which will be held on **December 15, 2023** at Academy of Sciences in Tirana.

We are pleased to invite you to participate in our symposium.

Design Codes of Dams and their Seismic Safety

If you accept our invitation, please confirm it at your earliest convenience.
Looking forward for your positive and quick response.

Best Regards,
ORGANIZING COMMITTEE

FIERZA DAM, 1978 - 2023, 45 years in Operation



POLIS SIGGED KKDM ALBCOLD

THE DEPARTMENT OF CIVIL ENGINEERING
AT POLIS UNIVERSITY ORGANIZES THE

MONITORING OF EARTH FILL DAMS WORKSHOP

📅 26.03.2024 ⌚ 09:00 📍 A3 | U_POLIS

DANIEL NATEROP
"MONITORING OF EARTH FILL DAMS AND OTHER GEOTECHNICAL STRUCTURES"

ARJAN JOVANI
"LARGE DAMS AND RESERVOIRS IN ALBANIA"

Gfbr centre français de barrages & réservoirs

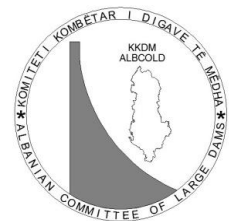
SIMPOZIUM NDËRKOMBËTAR
SYMPOSIUM INTERNATIONAL

SFIDA DHE INOVACIONE PËR DIGA TË SIGURTA
DÉFIS ET INNOVATIONS POUR DES BARRAGES SÛRS

16 - 17 MAJ 2024
16 - 17 MAI 2024

Tirana International Hotel
TIRANA, ALBANIA

ALBCOLD - 60 vjet, Anëtar i ICOLD
ALBCOLD - 60 ans, Membre de la CIGB



Albanian National Committee of Large Dams (ALBCOLD)



Faleminderit

www.albcold.gov.al