



**Bosnia and Herzegovina
Federation of Bosnia and Herzegovina
Hydrometeorological Institute of Federation of
Bosnia and Herzegovina**

Informal Conference of South-East European Directors of NMHSs

ICSEED-19

Hydrometeorological Institute of Federation of Bosnia and Herzegovina

Director:

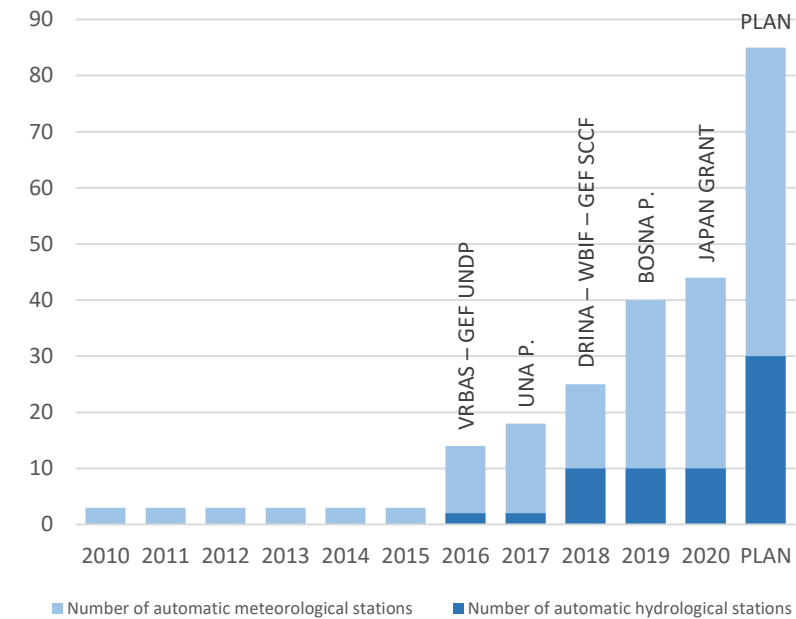
Almir Bijedić

4 – 5 November 2021.

Implemented projects

- **METCAP PLUS - Turkish Cooperation and Coordination Agency - TİKA;** Improving the technical capacity of the meteorological service (2015)
- **Grant assistance from the Government of Japan;** Activities on installation of 4 automatic agrometeorological stations in Butmir, Čapljina, Odžak and Kalesija, started activities on site selection for the fifth agrometeorological station from the project of the Government of Japan (Cazin municipality).
- **Finnish Foreign Aid Programme of the Ministry for Foreign Affairs of Finland and Finnish Meteorological Institute;** Rehabilitation and Modernization of the Hydrological and Meteorological Observing Network and Data Exchange Procedures in Serbia and Bosnia and Herzegovina (2019 – 2020).
- **UNDP/GEF** - Integrating climate change and reducing the risk of flooding in the **Vrba** River basin (2015 – 2021).
- **WBIF/Sava Commission** - Improvement of Joint Flood Management Actions in the Sava River Basin (2016 – 2018).
- **WBIF/GEF/SCCF** projects on the Drina River Basin: Implementer World Bank
- **IPA II** - Support to Flood Protection and Water Management; Component 1- Hydrological forecasting system for Sava River Basin in Bosnia and Herzegovina - Phase 1. **Bosna** River (2016 – 2021)
- **Advance the National Adaptation Plan (NAP) process for medium-term investment planning in climate sensitive sectors in Bosnia-Herzegovina (2021);** It is implemented by UNDP in cooperation with the **Ministry of Spatial Planning, Construction and Ecology** of the Republika Srpska, as a UNFCCC contact institution for Bosnia and Herzegovina and the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina. One of the very important aspects in fulfilling the international obligations of Bosnia and Herzegovina in the field of adaptation to climate change.
- **European Snow Network Action ES1404 – (2014-2018);** This COST Action on SNOW aims at building a better connection between snow measurements and models, between snow observers, researchers and forecasters, for the benefit of various stakeholders and the entire society. To enhance the capability of the research community and operational services to provide and exploit quality-assured and comparable regional and global observation-based data on the variability of the state and extent of snow.

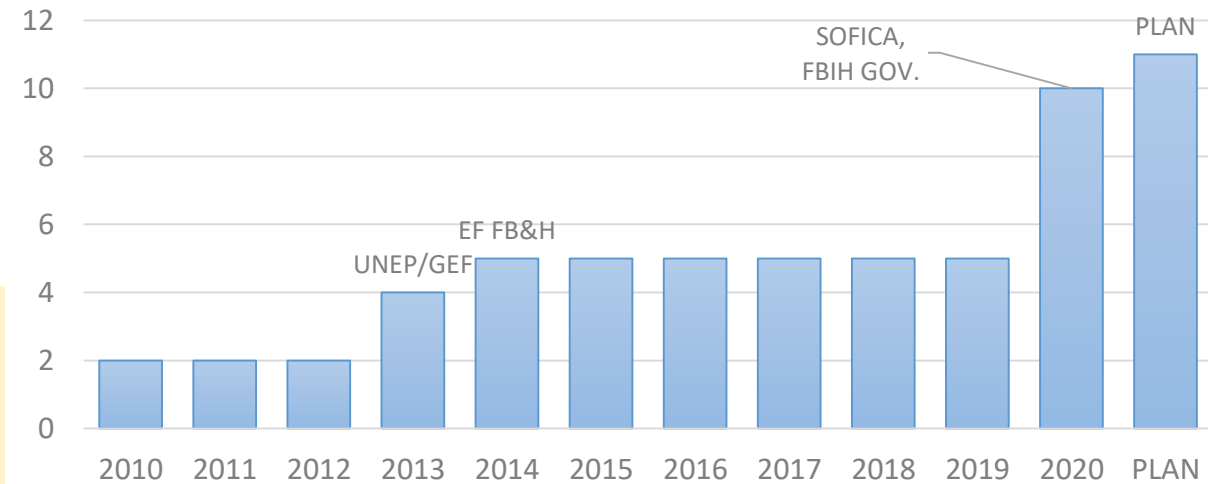
Number of automatic meteorological and hydrological stations



Implemented projects

- **Capacity Development for the Integration of Global Environmental Commitments into National Policies and Development Decision Making – UNEP and GEF Trust Fund (2013-2015);**
 - To enhance capacities of institutions for environmental management in Bosnia and Herzegovina by institutionalizing identified tools and practices for environmental information and knowledge management
- **The Implementation of the plan for the development of air quality monitoring network in FBiH – Environmental Fund of the Federation of Bosnia and Herzegovina;**
 - Phase 1 – 2014 – 2015; Procurement and service of pollutant analyzers at Bjelave, Jajce and Zenica. Procurement of equipment and consumables for the needs of FHMI laboratories.
 - Phase 2 – 2015 – 2016; Procurement and service of particle samplers (Bjelave, Ivan Sedlo).
 - Phase 3 – 2018; FHMZ laboratories (construction works) air conditioning of laboratory space, procurement of new laboratory furniture .
- **Capacity development for the integration of global environmental commitments into national policies and development decision making in BiH – UNEP and CESER (2016-2017);**
 - Provision of air conditioning, entrance and fire alarm of the FHMZ Archive.
- **Sarajevo Canton Winter Field Campaign 2018 (SAFICA) - University of Rijeka, Faculty of Science and Faculty of Mechanical Engineering - Univesity in Sarajevo, Public Health Department of Sarajevo Canton (2017 – 2019);**
 - SAFICA took place from Dec 04, 2017 to Mar 15, 2018 with online aerosol measurements and collection of daily, continuous filter PM10 samples for offline laboratory analyses. SAFICA aimed to give the first detailed characterization of the Western Balkans aerosol composition including organic aerosol (OA) to elucidate aerosol emission sources and atmospheric processing and to estimate the adverse health effects.

Number of automatic air quality stations



Projects in progress

- **South-East European Multi-Hazard Early Warning Advisory System (SEE-MHEWS-A)**; we have completed all our obligations including the problem of data exchange in near real time. We expect benefits in the next 2 to 3 years.
- **POLLEN PALS - Biotic and abiotic effects on pollen production and allergenicity of birch and related health impacts** - Catholic University Eichstatt-Ingolstadt
 - A greater knowledge gained by our study allows the prediction of future alterations under climate change conditions in more detail. An interdisciplinary collaboration between scientists of landscape ecology, phytomedicine and environmental medicine shall answer how biotic and abiotic factors impact pollen production and allergenicity and finally the allergic reactions in patients.
- **HISTALP - Historical Instrumental Climatological Surface Time Series Of The Greater Alpine Region;** Zentralanstalt für Meteorologie und Geodynamik (ZAMG)
 - The research project HISTALP served to record a homogenized database of the climate in monthly resolution for the Alpine region and the surrounding area in Central Europe. The HISTALP lowland data set (HISTALP AT Lowland) of the Austrian weather service ZAMG begins with the year 1767, and is one of the longest and highest quality data series in the world. FHMI provide data sets for 9 stations and finally get homogenized data set for all parameter from the beginning of measurement until 2017. But work on this is constant and we will participated in future.



IMPAQ - Support to Bosnia and Herzegovina in improving air quality and air quality management – SEPA (2019 – 2021)

Bosnia and Herzegovina is facing a wide range of challenges regarding air quality. The country's residents are exposed to some of the highest levels of air pollution in Europe, which are caused by a range of different emission sources and geographic circumstances. The Swedish Environmental Protection Agency (SEPA) received funding from the Swedish International Development Cooperation Agency (Sida) for carrying out an inception phase to develop a long-term programme to provide assistance to Bosnia and Herzegovina for improving air quality assessment and management.

By the decision of the Government of the Federation of Bosnia and Herzegovina, 2 measuring stations for air quality, also calibration kit, 2 analizators are procured.

The Implementation of the plan for the development of air quality monitoring network in FBiH – Environmental Fund of the Federation of Bosnia and Herzegovina

Phase 4 – 2020 – 2021; Procurement of new nitrogen oxide and ozone analyzers for the Ivan Sedlo station.

Phase 5 – 2021 – 2022; Procurement of PM2.5 / PM10 particulate analyzers and repair of existing PM10 analyzers in Jajce and Zenica.



Thank you for your attention