Building Resilience to Disasters in Western Balkans and Turkey

IPA PROJECT

BUILDING RESILIENCE TO DISASTERS IN WESTERN BALKANS AND TURKEY

Summary of activities implemented by WMO

Dimitar Ivanov and Sari Lappi, WMO

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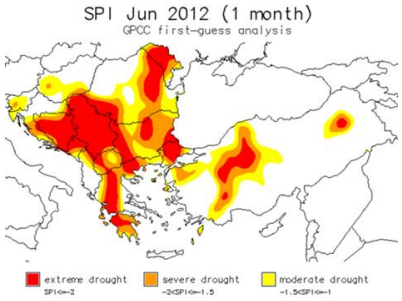
Final Steering Committee Meeting



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Project Highlights

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The United Nations Office for Disaster Risk Reduction

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Building Resilience to Disasters in Western Balkans and Turkey

- **Overall Objective:** To reduce vulnerability of IPA Beneficiaries to natural disasters, in line with the Hyogo Framework for Action (HFA), and increase their resilience to climate change.
- **Project purpose:** To enhance the capacity of IPA Beneficiaries to address disaster risk reduction in both today's and the future predicted climate.
- **Beneficiaries:** Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia, Kosovo*, the former Yugoslav Republic of Macedonia, and Turkey.
- **Implementing agencies:** UNISDR (4 tasks), WMO (4 tasks).
- **Funding:** EC DG Enlargement, Instrument for Pre-accession Assistance (IPA) multi-beneficiary project.
- **Implementation period:** 24 + 5 months, May 2012 – October 2014

*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Specific objectives for WMO tasks

- Continue capacity building efforts based on the IPA 2009 project (Phase 1)
- Assist the NMHSs of the IPA beneficiary countries to enhance their services in support of DRR in the following areas:
  - Hazard monitoring and analysis
  - Extreme weather forecasting
  - Develop capacity for climate-related services
  - Cross-border data exchange to support EWS
  - Design of EWS, regional harmonization and interoperability
  - Further integration in the European Meteorological Infrastructure

Work Packages (WMO)

Data for risk analysis

- Hazard analysis and mapping
- Cross-border Exchange
- CDMS
- Pilot project – Sava River Basin (with ISRC)

Improved Products in support of DRR

- Forecasts
- Warnings
- “Nowcasting”
- Floods and drought products

Climate change

- Long-range forecasts
- Seasonal climate outlooks
- New services (e.g., insurance)

Institutional DRR issues

- EWS Design
- Quality Management
- Regional Harmonization
- Infrastructure

Report on Activities

WP 3 - Enhance the regional risk assessment and mapping capacities through improved capacity of beneficiaries in hazard analysis and mapping

- Act 3.1: Historical meteorological and climate data rescue (DARE) and enhancement of Climate Data Management Systems (CDMS)
  - T3.1.1: Analyze beneficiaries' needs for DARE and CDMS
  - T3.1.2: Assist NMHSs in digitizing meteorological variables available on paper and archiving on electronic media per standards aligned with WMO and EU requirements
- Act 3.2: Enhancing hydro-meteorological data quality, homogenization and standardization.
  - T3.2.1: Regional workshop on historic hydrometeorological data management with specific modules on hydrometeorological data quality assurance, homogenization and standardization
- Act 3.3: Drought hazard analysis and mapping
  - T3.3.1: Training on Drought Hazard Analysis and Mapping
- Act 3.4: Sava River pilot project on flood hazard.
  - T3.4.1: Enhancing hydrological data management and exchange procedures
  - T3.4.2: Flood losses assessment tool.

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TASK 3

- Assessment of needs for data rescue and climate data management systems
- Procurement/ upgrading the climate data management systems – CLIDATA and MCH
- Training on historical hydrometeorological data management

- Training on Drought Hazard Analysis and Mapping
- Sava River pilot project on flood hazards - Policy on the Exchange of Hydrological and Meteorological Data and Information in the Sava River Basin
- Flood loss assessment training

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WP 4 - Enhance IPA Beneficiaries' capacity to forecast hazardous meteorological and hydrological phenomena and deliver timely warnings to support DRR

- Act 4.1: Enhancement of severe weather forecasting capabilities of IPA beneficiaries in support of EWS
  - T4.1.1: On-the-job training at suitable operational centre (Romania) for forecasters from IPA beneficiaries.
  - T4.1.2: Participation of experts from IPA beneficiaries in the European severe weather forecasting test-bed in collaboration with the European Severe Storm Laboratory (ESSL)
  - T4.1.3: Upgrade of the EUMETCast stations at ALB, BIH, MKD, MNE and Kosovo (DAWBEE stations) and training of NMHSs staff in using the advanced tools for severe weather forecasting
- Act 4.2: Advanced training for hydrological forecasters
  - T4.2.1: Regional training workshop on integrated flood management and flood forecasting
- Act 4.3: Enhancement of the cross-border exchange of data and information in support of EWS
  - T4.3.1: Continuation of integration of IPA countries to Meteoalarm
- Act 4.4: Building capacity for quality assurance of products and services provided in support of DRR, including QMS
  - T4.4.1: Regional training in Quality Management Systems (QMS) and their application in activities related to DRR
- Act 4.5: Resolving deficiencies related to quality of observational data (calibration and maintenance of instruments)
  - T4.5.1: Assistance to countries not having adequate resources for calibration and maintenance of hydro-meteorological instruments (in cooperation with RIC Ljubljana)

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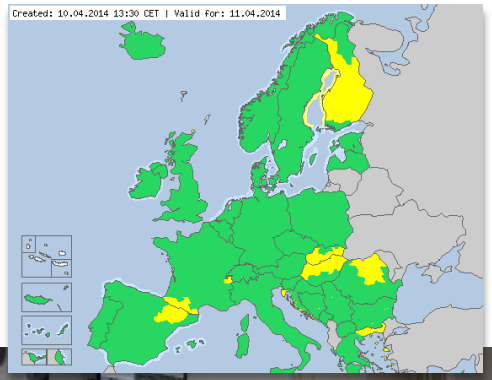
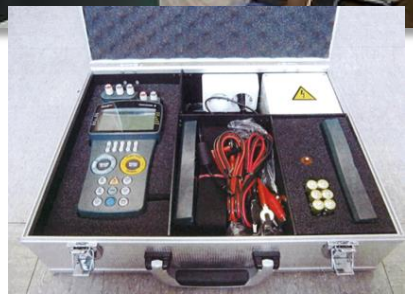
TASK 4

- Severe weather forecasting and warnings training
- Integration to Meteoalarm - Bosnia and Herzegovina
- Upgrade of EUMETCast stations and DAWBEE Satellite Nowcasting Applications training with EUMETSAT





- Training on integrated flood management, flood forecasting and early warnings
- Quality Management Systems training
- Improving hydro-meteorological data quality – procurement of calibration kits and training

WP 5 - Improved capacity of the NMHSs in the provision of information to support climate change adaptation and climate risk management

- Act 5.1: Enhancing capacity in drought risk management
  - T5.1.1: Strengthening the role and operation of the Drought Management Centre for South-East Europe (DMC/SEE Ljubljana, Slovenia), through secondment of staff from IPA Beneficiaries and provision of on-the-job training on specialized drought-management tools.
- Act 5.2: Strengthening capacity of IPA beneficiaries in providing long-range forecasts and related climate services.
  - T5.2.1: Organisation of regular sessions of the South-East Europe Climate Outlook Forum (SEECOF).
  - T5.2.2: Regional training workshop in the use and interpretation of long-range forecasts
  - T5.2.3: Short-term secondments to SEEVCCC
- Act 5.3: Developing capacity in services for the insurance sector
  - T5.3.1: Regional training on the role of NMHSs in support of activities in the field of insurance

TASK 5

- South-East Europe Climate Outlook Forums (SEECOF)
- Training on long-range forecasts, climate watch related aspects and climate scenarios

- Enhancing the capacities in drought risk management – secondment of experts to DMCSEE
- Support to SEEVCCCC
- Training on the role of the NMHSs in support of activities in the field of insurance

WP 6 - Design a regional Multi-Hazard Early Warning System composed of harmonized national Early Warning Systems within a regional cooperation framework

- Act 6.1: Assessment and gap analysis of the existing national Early Warning Systems
  - T6.1.1: Gap analysis by a consultant
- Act 6.2: Preparation of a technical design document describing a seamless regional MHEWS, encompassing optimized monitoring networks, forecasting facilities, telecommunications, institutional and procedural aspects, human resources
  - T6.2.1: Establishment of Design Team - consultant, designated experts from meteorological and hydrological services (three meetings of the DT envisaged)
  - T6.2.2: Regional meeting on institutional collaboration in MHEWS
  - T6.2.3: Regional forum to present the design document and promote it for adoption at national and regional level.
  - T6.2.4: Assistance to the Informal Conference of South-east European Directors (ICSEED) of NMHSs.

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TASK 6

- Design of regional Multi-Hazard Early Warning System (MHEWS)
- Gap analysis with respect to the four components of effective early warning systems to support preparation of a concept document identifying the technological and institutional needs for building the business case for a regional MHEWS

- Establishment of the Design Team
- Regional partners meeting
- Regional forum to present and promote the design of the regional MHEWS for adoption in national and regional level and for potential donors
- Support to ICSEED

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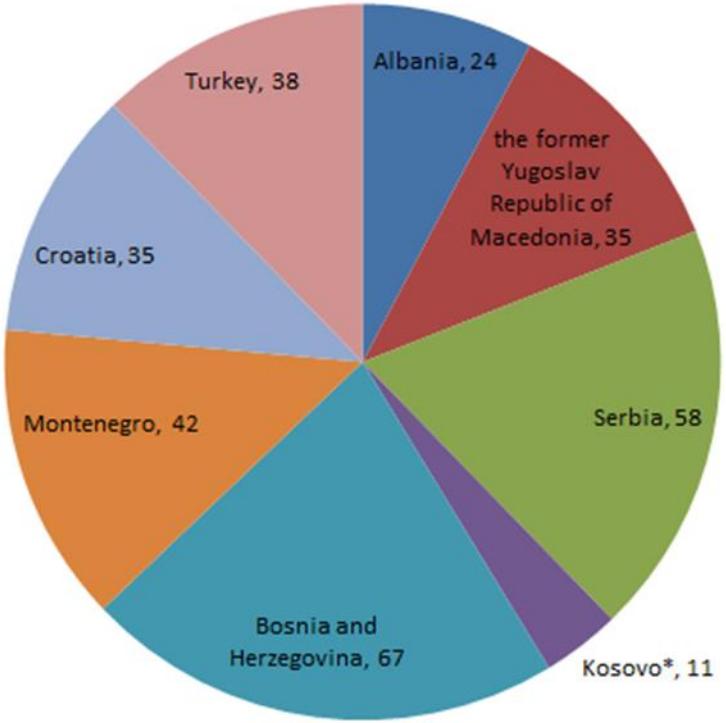
Summary

- 18 training events with over 250 participants from the beneficiaries
- 3 Steering Committee meetings
- 2 design team meetings for MHEWS, 8 country missions, MHEWS beneficiary reports and concept of regional MHEWS
- Equipment and software
- Policy documents
- Integration to European Meteorological Infrastructure (Meteoalarm, ESSL testbed and DAWBEE project)
- Support to SEECOF sessions and ICSEED



Participants in meetings/workshops from beneficiaries

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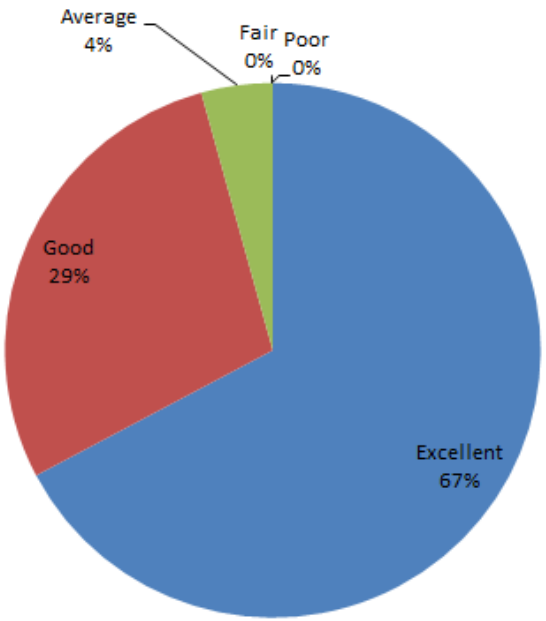
Evaluation of training activities



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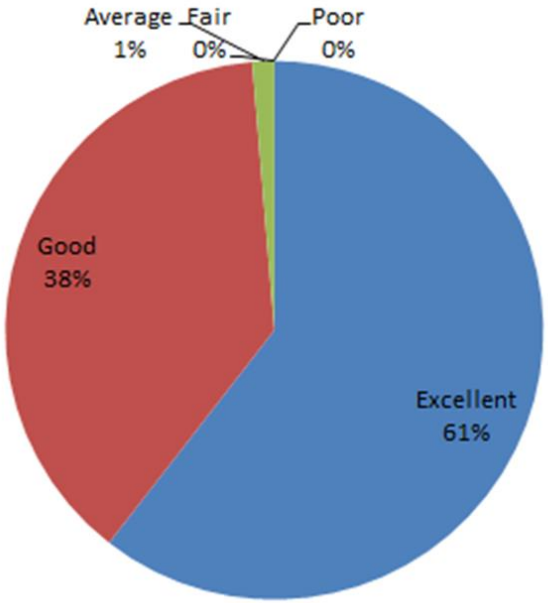

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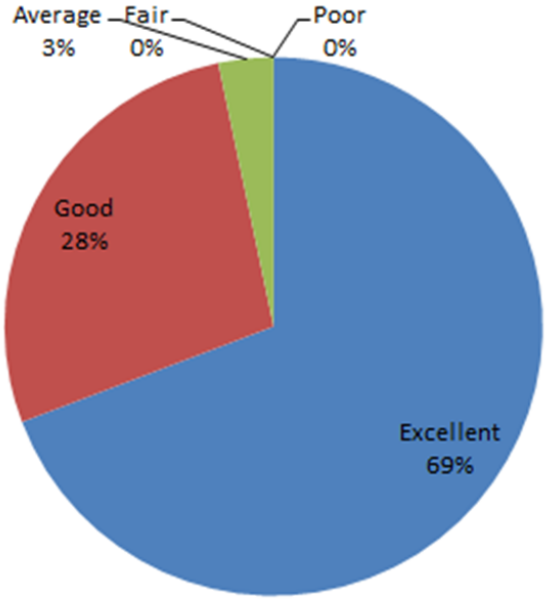

TASK 5

Feedback from participants

- Activities should not stop with the end of this project. Small cross border projects are recommended, based on a memorandum of understanding between countries, establishing a system of exchange of information, warnings and consultation in real time
- Intensive regional cooperation is essential
- Future training, with tailored practical examples from the region in drought monitoring and management, flood management and forecasting, severe weather forecasting, calibration of instruments, QMS
- There is a strong need to harmonize measurement networks and to establish protocols for exchange of data
- Focus on warning dissemination and social awareness of natural threats
- Implementation of international standards, WMO and ISO standard related to hydro-meteorological data, is deemed necessary for the countries in this region.

Key Achievements

Some key achievements:

- Core NMHS's business – forecasting of extremes
- Risk assessment – important steps to improve NMHS's capabilities in hazard data handling; harmonization of data management systems
- Data policy – the new agreement for data sharing between the Sava River Commission countries
- EWS planning and design – regional approach

Some key achievements:

- New concepts – Quality Management, services for insurance sector
- Networking:
  - Building a strong regional hydrometeorological community
  - Building strong relationships with civil protection stakeholders
  - Engagement of partners
- Better integration in the European Meteorological Infrastructure

Way Ahead

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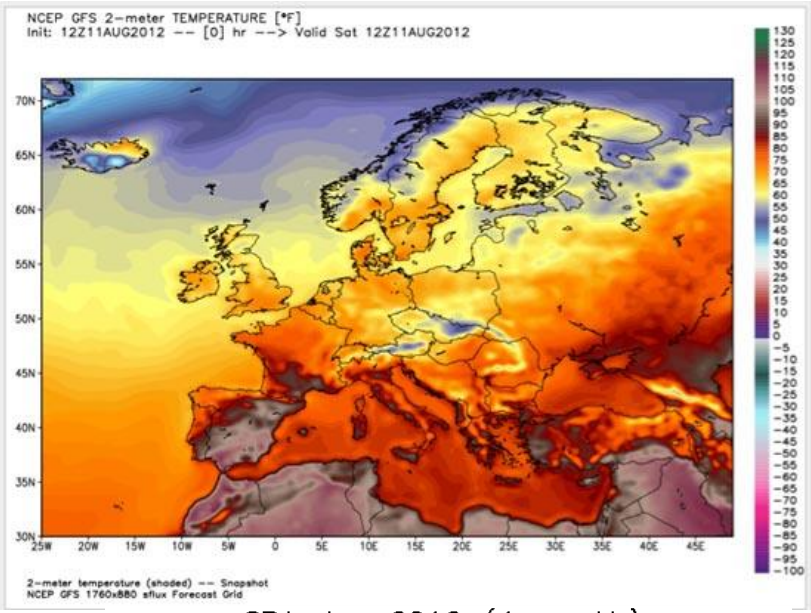

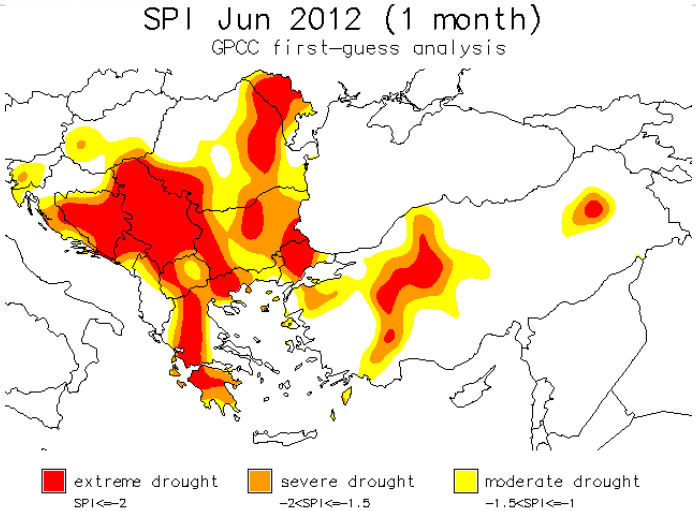

Way ahead

- Sustain and continue, keep momentum and build on achievements
- Keep focus on major hazards
- Streamline and leverage development actions to ensure interoperability and seamlessness; WMO role as international organization
- Address the technological gaps of the hydrometeorological systems at national and regional level (data, data, data ...) – focused projects
- Future projects to be scalable and innovative – introduce new concepts and services, e.g., impact-oriented service

Way ahead

- Continue working on institutional arrangements – the role of the NMHSs as a **key enabler** for successful DRR
- Address further procedural aspects, data policy, quality management
- Maintain and enhance the relations with the DRR stakeholders – develop the concept of **Collaborative Decision Making**
- Utilize the potential of the European Meteorological Infrastructure
- Build a strategy for resolving the NMHS's resources deficits – financial, **human!!**

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Project contacts:

WMO/FMI Project Office, Skopje

Sari Lappi

sari.lappi@fmi.fi

WMO Regional Office for Europe

Milan Dacic

mdacic@wmo.int

Natalia Berghi

nberghi@wmo.int

THANK YOU!