



ClimEmpower: User Driven Climate Applications Empowering Regional Resilience – One Year in



Lucija PETRICIOLI, Predrag PALE, Vesna KEZDORF, Marija VURNEK

University of Zagreb Faculty of Electrical Engineering and Computing, Unska 3, 10000 Zagreb, CROATIA
(e-mail: lucija.petricioli@fer.unizg.hr)

Summary

ClimEmpower is a Horizon Europe funded by the European Union seeking to empower regional resilience to climate change in at-risk EU regions. It will do so by filling in data gaps, gathering regional stakeholders, identifying regional needs, providing newly developed on-line climate services, and curating and developing relevant, up-to-date educational materials for all those involved.

Regions and stakeholders

The ClimEmpower consortium is comprised of EU members' vulnerable regions and technical partners (called Case Study Facilitators) from the regions' countries. The participating countries are Croatia, Cyprus, Greece, Italy, and Spain, all lead by Austria-based Austrian Institute of Technology (AIT). The following are our regions-at-risk:

- Andalusia (Spain),
- Central Greece (Greece),
- Osijek-Baranja County (Croatia),
- Sicily (Italy),
- Troodos Mountain Range (Cyprus).



Source: AdobeStock

Table 1: Aggregated data gathered from the 1st CoP meetings

Hazards	Threats	Vulnerable sectors	Expectations (of ClimEmpower)
Droughts Fires <ul style="list-style-type: none"> • Wildfires • Forest fires Floods <ul style="list-style-type: none"> • Pluvial floods • Coastal floods • Urban floods Heatwaves	To agriculture <ul style="list-style-type: none"> • Desiccation of farming land • Hail To health <ul style="list-style-type: none"> • Water contamination • Saharan dust To habitat (human or otherwise) <ul style="list-style-type: none"> • Desertification • Disappearance and reduction of protected areas • Ground water salinization • Biodiversity loss 	Agriculture <ul style="list-style-type: none"> • Farming • Forestry Environment and natural areas <ul style="list-style-type: none"> • Biodiversity Tourism <ul style="list-style-type: none"> • Seasonal exponential population growth Health Inhabited areas <ul style="list-style-type: none"> • Urban drainage systems 	Training <ul style="list-style-type: none"> • In general • Training tools • Training materials Educational initiatives <ul style="list-style-type: none"> • Raising public awareness (Project) management support <ul style="list-style-type: none"> • Strategy implementation • Plan implementation • Policy decision making support • Policy planning

Communities of Practice (CoPs)

ClimEmpower has identified relevant stakeholders in the participating regions and established diverse CoPs to gather the needs and wants of each particular region.

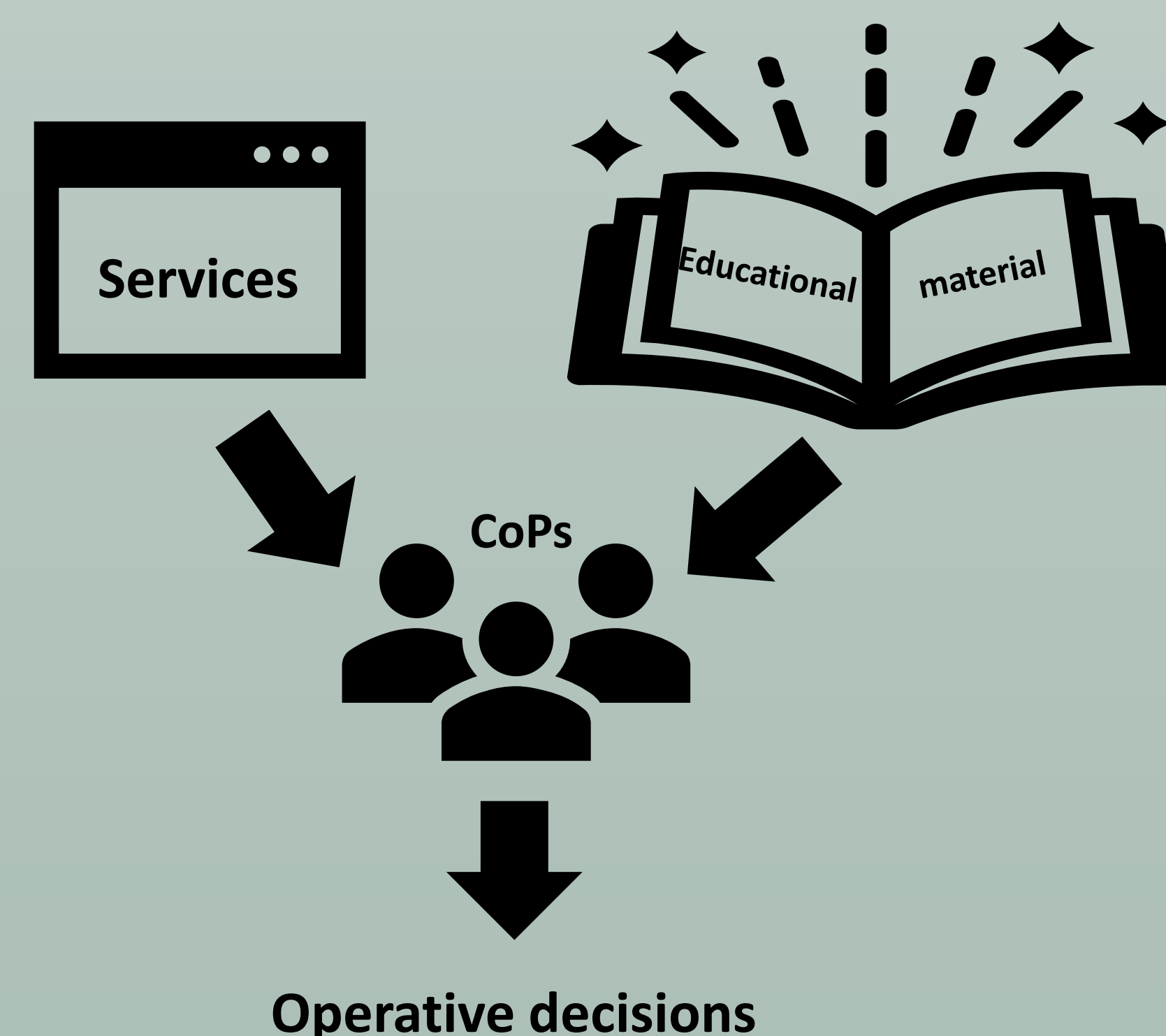
Table 1 shows which hazards, threats, and vulnerable sectors were identified, as well as which expectations the regions voiced. Items indicated in **red** were mentioned by all the regions, whereas items in **blue** pertain to specific regions.

Next steps

ClimEmpower is currently working on gathering quality educational materials that can be used in the next CoP meeting (planned for November) to both educate and spark discussion among present stakeholders.

Furthermore, regional data are being gathered – both existing data that the regions have been using, and new data collected as part of the project. The data will be used to home in on regional climate change resilience indicators, as well as to feed ClimEmpower developed services.

Climate services are also being developed. Copernicus data are being leveraged to create more finely grained services that could provide participating regions with a clearer picture of what is going on in the region, and therefore empower them to take further steps that would result in a greater resilience to climate change.



Acknowledgement(s)

The work was supported by funding from the European Union's Research and Innovation actions in support of the implementation of the Adaptation to Climate Change Mission (HORIZON-MISS-2022-CLIMA-01), as part of the project 'ClimEmpower: User driven climate applications empowering regional resilience', grant agreement No. 101112728 (<https://climempower.eu/>). This output reflects only the authors' views, and the EU cannot be held responsible for any use that may be made of the information contained therein.



This project has received funding under the EU's Research and Innovation actions in support of the implementation of the Adaptation to Climate Change Mission (HORIZON-MISS-2022-CLIMA-01), grant agreement No. 101112728 ClimEmpower (<https://climempower.eu/>, duration: 01.09.2023 - 31.08.2026).