



*“ Earth Observation for Social & Environmental Impact ”*

# Planning for Extremes

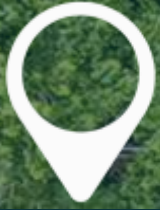
*A remote sensing-based risk tool for Land mine  
Clearance planning*



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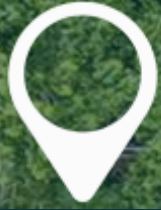


# Why this matters

## Multi-hazard zoning, not single hazard maps

- Climate risk + short term risk
  - Risk is more than isolated hazards
- Systems are interconnected
- Planning demands dynamic overlays combining long and short term



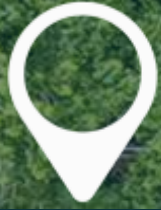


# CLEAR Ukraine

## Mine action risk platform

- To assess where explosive remnants of war overlap with environmental and climate risk
- The exposed assets were operational teams, bridges, access routes, and nearby villages.
- In urban terms, these map neatly to infrastructure networks, public services, and vulnerable neighbourhoods.
- Unaccounted risks can have large impacts
  - Staff health and safety
  - Mine displacement
  - Explosions



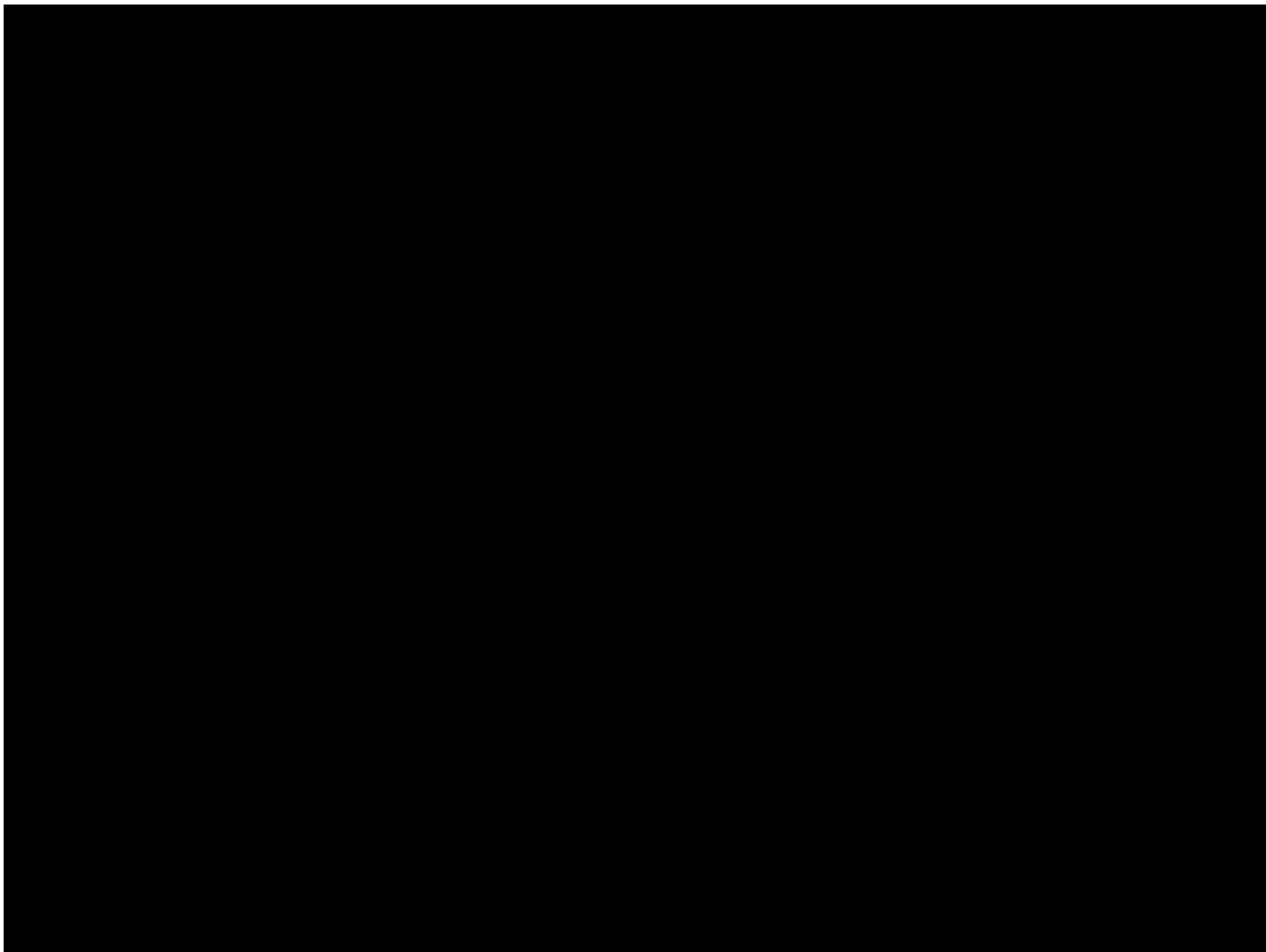


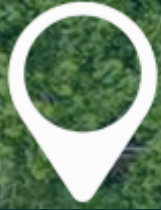
# On the map

From raw data to risk layers, From hazards to risk zoning

- Snow cover
- Land use change
- Flood hazards, and precipitation extremes
- Temperature hazards
  
- Adjustable thresholds
- Selectable hazards
- Direct high risk indication







# Key takaways

Mines are bad...

A single layer doesn't tell a story

A combination of layers is not a story

In high risk cases, dynamic risk setting supports the user to make data driven decisions, rather than trying to let the data decide





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# Thank you

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