



Main challenges for flash flood affected towns and municipalities

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Development needs

- **Where land resources are sparse, flood-prone land as development asset for residential, industrial, infrastructure and agricultural uses**
- **Economic benefits of development in those areas vs. potential flood losses**
- **Flash floods in CEE are localized phenomena → development needs dominate risk debate**



Local priorities

- **Local economic growth and investment**
 - **Employment generation**
 - **Infrastructure development**
 - **Social and cultural thrive**
 - **Public services including education, hospitals, utilities, **public safety****
- **Investment climate and quality of life provides local competitive advantage**



Local priorities (cont.)

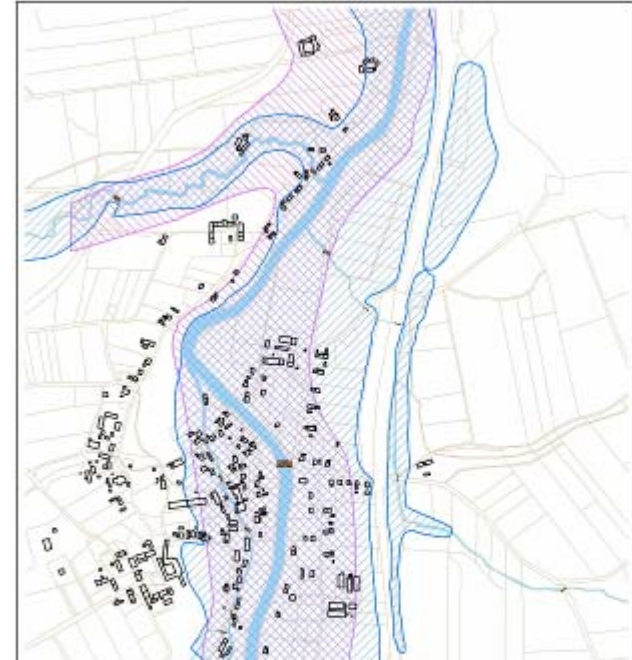
Safety from natural hazards is usually **not the first priority, especially in areas where no recent flood events have occurred**

- Need for knowledge transfer between communities that have been affected in the past and those at risk
- Various prevailing natural hazards need to be integrated into local preparedness and response strategies



Uncertainty about flood hazard

- **Flood hazard maps usually not available or not adequately taking into account flash floods (basis for land use planning)**
- **Taking account of flood hazard in design of local drainage system and cross drainage works (culverts, bridges etc.)**





Uncertainty in forecasting and warning

- **Interpreting meteorological and hydrological forecasts to the local condition with very short lead times**
- **Translating this information into decisions on public warnings and emergency response → e.g. evacuation orders**
- **Little knowledge about the real situation in the field particularly during flash floods! (losses, safe transport routes, functioning of hydraulic infrastructure)**



Public awareness

- **Raising and maintaining public awareness about**
 - the nature of flash floods and assoc. risks
 - warning information sources
 - mitigation measures and adequate response





Public trust

- **Maintaining or strengthening public trust into capacities of the (local) authorities:**
 - Adequate warning
 - Coordinated emergency response
 - Safety during evacuation and of left behind property



Regulation

- **Ambivalence of land use or building regulations**
- **Lack of risk-adapted planning**
- **Lacking of enforcement capacity on the local level**





Local resources and technical capacity

- **Local public funding not sufficient for many structural flood management options**
- **Technical assistance required for**
 - Hazard and risk mapping
 - Setup and operation of local flood warning systems
 - Preparation of flood preparedness and response plans
 - Public awareness raising





Questions or Comments?



Thank you!