

Spatial Aspects of the Flood Risk Management in Urban Areas: Case Study from Ukraine

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River floods are ones of the most widespread and dangerous natural phenomena in the Ukrainian urban areas. Taking into account the fact that river floods affect large urban areas with the intense economical development and high density of population, the development of flood risk management is one of the most urgent task of the Ukrainian water-related policy. The present state, problems and new challenges in the development of flood risk management on national, local and international levels are considered in the paper. Thus, the following issues are considered in details:

- particularities of flood runoff formation in urban areas located in different natural zones, including, the impact of present and expected climate changes on the frequency and intensity of floods;
- the assessment of socio-economic vulnerability (hazard to human life and health; a loss of city's lands; a shortage of water supply for city's needs; a destruction of city's infrastructure) in urban areas located in different natural zones to flood hazards;
- the institutional background of flood risk management, including, the distribution of responsibility between central and local authorities in this issue;
- the international cooperation of Ukraine in the area of flood risk management on transboundary rivers;
- the experience in designing and operating the Early Warning and Decision Support System (EWDSS) as the informational basis of the National Policy of the Flood Risk Management on local, national and international levels;
- new needs in the flood risk management in the context of introducing in Ukraine the European water-related legislation;
- activities undertaken by the central and local authorities, the scientific community, non-governmental organizations to meet new challenges.

The special attention is given to the consideration of accounting spatial particularities of the flood risk assessment and management in EWDSS.