



Council of Europe
Development Bank (CEB)

**City Resilience to
Water Risk**

CEB's Areas of Action

Building City Resilience to Water Risk – a Priority Area of Action for the CEB

Cities are CEB's strategic partners

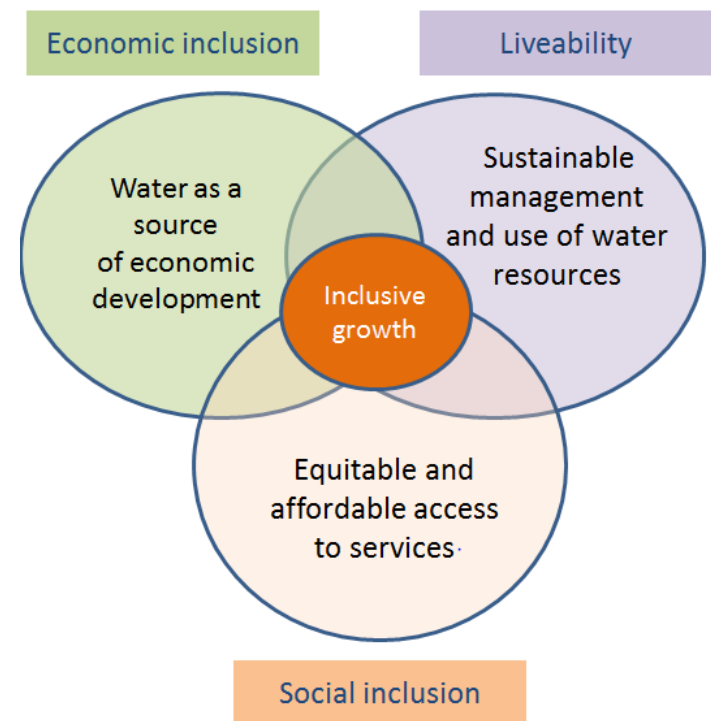
CEB supports inclusive growth in cities through financing, advisory services and partnerships

Addressing water risk is a growing challenge for inclusive growth in cities

Water-related shocks and stresses are among the most prevalent in cities

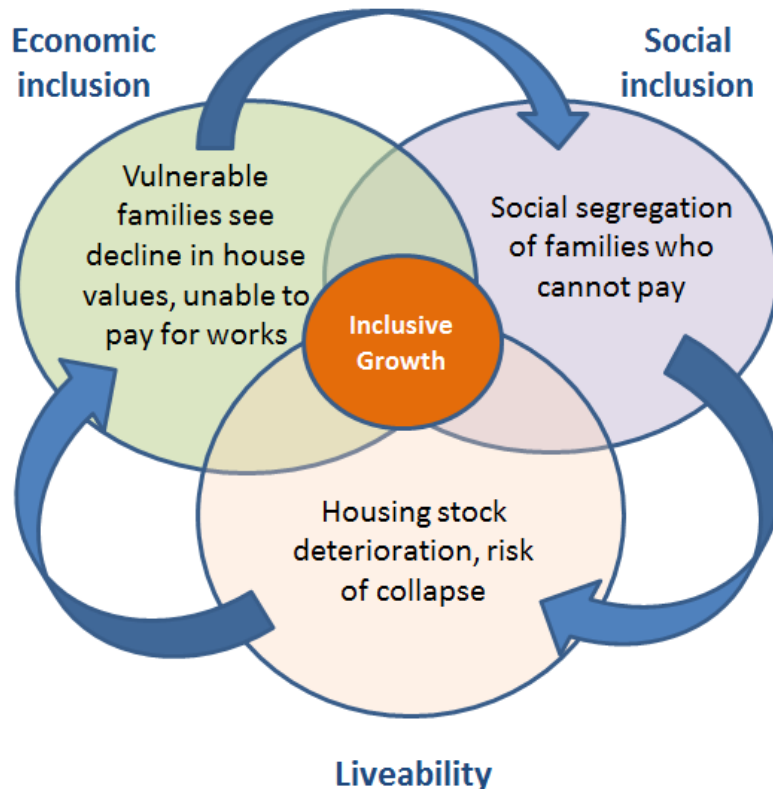
... and can become an opportunity to enable inclusive growth

Water resilience enables inclusive growth in cities



How water risk impacts inclusive growth in cities: Damage to wooden foundations in Dutch buildings

The Challenge: increased fluctuations in groundwater level caused damages to wooden piles foundations in buildings (costs above € 5bn)



The Solution: *The Fund for Sustainable Foundation Rehabilitation (FDF)*

- Objective is to break the negative cycle by providing 2 000 loans to affected home-owners with no access to market
- € 40m CEB loan to special-purpose fund (€ 100m)
- Multi-stakeholder approach



CEB' Lending Portfolio: Developing Resilience Solutions to Water Risk in Cities

Water risks

Water scarcity

Slovak Republic,
BiH, Croatia

Flooding

Poland, Croatia,
Romania, Hungary

Water pollution

Cyprus, Spain,
Slovak Republic

Areas of Resilience

- **Infrastructure & environment**
 - Resilience to climate change, nature-based solutions
- **Planning & institutions**
 - Inter-municipal cooperation, river basin management
- **Operational resilience**
 - Leakage reduction, energy efficiency
- **Economic resilience**
 - Sustainable water-based economy (e.g. tourism)
- **Financial resilience**
 - Cost-recovery; affordability for vulnerable groups

Poland: Odra and Odra-Vistula River Basin Flood Management Projects (CEB, IBRD, EU)

Building resilience to floods at river basin level

Regional flood management projects covering both the Odra and the Vistula basins, across eight Voivodships, and benefiting over 5 million population

Water risk: Vulnerability to extreme flood events

Objective: Reduce risk of loss of life, damage to properties and loss of economic activity caused by extreme flood events; strengthen institutional capacity to mitigate floods impact



Focus areas:

- **Regional flood protection infrastructure**— river-basin infrastructure to reduce extreme flood peaks (dry polders) and increase flood carrying capacity (e.g. embankments)
- **City level flood protection and regeneration**— flood infrastructure in Wrocław , Krakow and Szczecin; modernization of Wrocław floodway system and boulevards
- **Institutional coordination at river basin level**— strengthened coordination between regional water management agencies
- **Flood management capacity** – enhanced flood forecasting, integrated flood risk management plans, flood operations centers.

BiH: Plava Voda Regional Water Supply (CEB, EBRD, SIDA)

Territorial approach to building resilience to water scarcity

Regional water project involving cooperation of 2 cantons and 4 municipalities, and benefiting 250 000 population

Water risk: water scarcity (water shortage in summer, poor water quality)

Objective: Provide continuous supply of safe drinking water and ensure long-term sustainability of water resources in 4 municipalities through the creation of a regional water supply system

Focus areas:

- **Regional infrastructure**– water intake facility, transmission line, connection to municipal networks
- **Inter-municipal cooperation**– regionalization of water utility (SPV Plava Voda)
- **Efficiency improvements and cost-recovery** – reduction in non-revenue-water, operational and financial performance improvement plan (SIDA)
- **Resource conservation**– environmental protection of water source
- **Sustainable economic development** – preserving cultural value and tourism attraction of Plava Voda water source

Slovak Republic: Brastilava Water Supply Project

Building resilience of regional water utility

First direct CEB loan to a public water utility company – Brastilava Water Company serving a population of 700 000 across three Slovak regions

Water risks: water scarcity (hotspots) and pollution

Objective: Improve living conditions and enhance resilience to climate change by

- Increasing coverage, quality and availability of water supply
- Strengthen performance of water utility

Focus areas:

- **Resilient infrastructure** – system expansion and integration;
- **Environment**– pollution reduction through expansion of wastewater treatment network
- **Efficiency improvements**– leakage reduction, from 26 to 22% by 2020, and energy efficiency improvements (30% cost reduction)
- **Financial sustainability**– financial model, technical support to move toward cost-recovery

CEB Approach: Turning Water Risk into an Opportunity for Inclusive Growth in Cities

- **Embedding resilience into projects.** Translating resilience thinking into viable water projects with clearly defined benefits.
- **Beyond infrastructure resilience.** Focus on building resilience of water utilities through efficiency improvements and institutional strengthening.
- **City-wide approach.** Supporting cities integrate water resilience into a city-wide strategy for inclusive growth.

CEB-100 Resilience Cities (100RC) Partnership

Partnership Pillars

- Financial support
- Technical assistance
- Knowledge sharing

Focus cities

- 100RC cities
- CEB partner cities