

INTEGRATED LAND USE PLANNING

OBJECTIVE

Promote a use of soils that favors their resilience to climate change, limiting the negative impacts due to drought and floods.

DESCRIPTION

Climate impacts can be prevented when changing land use in a way that it positively affects the regional water balance, which influences the evapotranspiration process through infiltration, the soil water redistribution process, and surface roughness, which controls overland flow velocity and floodplain flow rates. Afforestation, forest transformation, sustaining wetlands, avoiding bare soil during precipitation season, modified vegetation cover, and introducing drought-/flood-tolerant crops can also reduce flood and drought risk. Measures to avoid exposure of valuable elements to risks generally involve zoning, building codes, such as minimum floor heights and water proofing, as well as land use permits.

EXPECTED RESULTS

Reduce the damage costs by excluding some activities from the risk areas and by providing compulsory conditions for development at locations with a given flood risk.

RESULT INDICATORS

Area of protected land [m²]

INVOLVED ACTORS

Large range of actors and sectors such as housing, transportation, energy , environmental sectors; cooperation between national, regional and local levels of government.

EXPECTED TIMELINE FOR ACTION

- Medium term (5-10 years)

BEST PRACTICES

- Netherlands
- Austria
- Germany
- Switzerland
- Apulia Region - Italy

CRITICALITIES

Policy support is needed in order to implement solutions, even if these may not be in line with existing policies. In addition, to be successful it is important that land use planning is adapted to the local situation

and inserted within the functioning of environmental systems.

SCOPE OF THE ACTION

- Adaptation
- Mitigation

TYPE OF PROPOSED ACTIONS

- Soft

SECTOR OF ACTION

- Agriculture / Forests / Land use
- Urban settlement
- Water resource management

CLIMATE IMPACTS

- Other

IMPLEMENTATION SCALE

- Municipality
- Province

SOURCE

<https://climate-adapt.eea.europa.eu/metadata/adaptation-options/adaptation-of-integrated-land-use-planning>