ADAPT RAINWATER INFRASTRUCTURE

OBJECTIVE

To reduce indoor temperature in summer and to recover water.

DESCRIPTION

The system includes small ditches following the pedestrian paths, collecting the rainwater from the roofs of private buildings and the paths. The ditches converge in a large main ditch that also collects the rainwater coming from the roads. The large ditch has storage and regulation functions and is planted in order to create a green core for the district (with the additional effect of cooling the air) and to purify the waters before the release in a river.

EXPECTED RESULTS

Water retention, water drainage. The aim is adapting new districts in order to reduce the stress on the existing rainwater network and increase water permeable surfaces compared to traditional solutions.

RESULT INDICATORS

Volume of rainwater stored [m^3]

INVOLVED ACTORS

Citizens, technicians, builder, investor, natural resource manager, sewer manager.

EXPECTED TIMELINE FOR ACTION

- Short term (1-4 years)

BEST PRACTICES

- Rouen – France
- Tamil Nadu – India
- UK
- Veneto Region – Italy
- Apulia Region – Italy

CRITICALITIES

Ditches require different maintenance than pipes.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Grey
- Green

SECTOR OF ACTION

- Biodiversity / Conservation of ecosystems
- Public health
- Water resource management

CLIMATE IMPACTS

- Change or loss of biodiversity
- Extreme temperatures

IMPLEMENTATION SCALE

- Municipality

SOURCE

http://www.future-cities.eu/fileadmin/user_upload/pdf/FC_AdaptationCompass_Supplement_web.pdf
https://www.venetoadapt.it/wp-content/uploads/2020/03/Del%20A2%20-%20VenetoADAPT%20Adaptation%20State%20of%20the%20art%20assessment.pdf