State of play of local adaptation planning in the Mediterranean Europe

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ABSTRACT

European cities across the Mediterranean region face common climatic threats. Urbanised areas are highly vulnerable to the adverse effects of climate change, including climate variability and climate extremes. Cities concentrate population and assets, and losses and damages as a result of climate change impacts such as heat waves, droughts, wildfires, landslides, coastal hazards are likely. So far, however, there is no systematic understanding how cities in the Mediterranean Europe are preparing to adapt to these impacts, nor of how they aim to increase their resilience and adaptive capacity. Understanding how cities plan to manage climatic risks will help to identify action gaps, allocate resources and provides better-informed climate policy, at local, regional national and international scale. This research gathered and analysed adaptation planning documents in a representative sample of 73 cities across 9 Mediterranean European countries (France, Italy, Spain, Greece, Portugal, Croatia, Slovenia, Cyprus and Malta) in the context of their national policies. The results and this paper shed important light on the progress of adaptation planning, by focusing on identified impacts and proposed adaptation measures.

KEYWORDS

Climate change adaptation planning; Mediterranean Europe; urban climate policy; cities, climate impacts.

INTRODUCTION

The Mediterranean region is one of the most climatically vulnerable areas in the world [1]. Precipitation and temperature historical climate trends and future projections show that in regions across the Mediterranean the climate is changing faster than global trends [2,3]. Particularly, projections forecast higher average temperatures, lower precipitation rates and more frequent and intense severe droughts [4].

The high rate of urbanisation of Mediterranean Europe (over 70% of the population lives in cities) [5] makes cities and towns highly vulnerable to climatic threats, such as heat waves, droughts, flash floods, etc.. Urban centres in the Mediterranean countries are increasingly exposed to frequent extreme climate-related weather conditions, with devastating consequences for people and infrastructure. Cities, therefore, are critical actors in climate politics, also because functions carried out at the local level are central to climate adaptation, such as land use regulation or emergency planning [6].

The recently adopted European strategy on adaptation to climate change [7] underlines the need to rapidly advance local adaptation actions. Urban areas need to plan to prepare for the unavoidable impacts of climate change, by evaluating climate vulnerabilities and implementing adaptation measures [8]. Adaptation actions need to maximising resilience of urban areas and