

FUTURE RE-EMERGENCE OF INFECTIOUS DISEASE DISTRIBUTION IN THE MEDITERRANEAN AREA: HOW LIKELY THEY ARE?

Xavier Rodó, ICREA -*Institut Català de Ciències del Clima (IC3) Barcelona, Spain*

Menno J. Bouma, *Institut Català de Ciències del Clima (IC3) Barcelona, Spain - London School of Hygiene and Tropical Medicine, London, UK*

There is currently a long list of climate-sensitive diseases potentially capable of re-emerging in the Mediterranean areas under ongoing and future global warming. But, how likely those scenarios and projections are? Answering such an important question for our people and societies in the region, requires of an integrated approach to this complex issue, far from the simple risk assessment exercises that have recently steered reasonable public debates on their degree of validity.

Directions of projected changes for the Mediterranean region are quite clear, at least for the next decades and despite reasonable associated uncertainties. What it is not so clear is how, the facilitating effect of climate can play a role in approaching the sylvatic cycles of some of those highly relevant diseases, to the human cycles in a sense that the spill out or leakage of the former can represent a serious threat to the amplification of disease incidence in humans. The role of climate in all this interplay, will be weighed against other sources of changes, perhaps more important than climate itself, such as land-use and land-cover changes, population changes and policies developed by country stakeholders.

Understanding the underlying mechanisms mediating those associations reveals key to derive sound and useful results that may be used as tools for developing early-warning systems for some of the most relevant diseases in the region. An example for cutaneous leishmaniasis will be used to highlight important aspects of this controversial topic, that might be of use also for a whole range of other serious diseases which may be imported to the region.