https://doi.org/10.22319/rmcp.v11s2.5643

Editorial

Climate change is a global phenomenon, but it exerts regional effects due to the synergism that results from the interaction between the causes of climate change (increased concentrations of greenhouse gases) and the causes of regional climate change (changes in the use of soil). Thus, the levels of alteration of the climatic patterns present a spatial variation.

Mexico is a territorially vast country, where the interaction of several factors provides a rich climate diversity under which it is possible to develop a great variety of productive activities, agriculture and livestock among them. However, the agroclimate in which these activities take place has been changing noticeably since the second half of the 1980s.

The last decade of the 20th century and the first two decades of the 21st century have been the hottest in all the history of instrumental temperature records. These changes in temperature are not alone, the regional patterns of precipitation and evapotranspiration, among others, have also changed in recent decades.

Therefore, several studies have focused on evaluating the effect of climate change on the primary sector. However, most of these investigations have centered on the agricultural sector, and the investigations directed to the livestock sector are few. This situation motivated the present Supplement, which is dedicated to the subject of climate change and the livestock sector.

This Second Supplement includes seven scientific articles and two bibliographic reviews that intend to provide a quantitative idea about the effects of climate change in the diverse aspects of livestock activity. The topics addressed in this Supplement include the effect of climate change on forage availability, the impact of climate change on the distribution of potential forage resources, the interaction between pluvial change and water erosion in rangelands, the effect of increasing temperature on the pollutant dynamics of animal organic residue wetlands, climate change and enteric methane production, climate change and nutrient transport in farming soils, mitigation and adaptation to climate change through the use of livestock waste, and a recapitulative analysis of the effect of climate change on livestock production and animal health.

The participants of this Second Supplement intend that their research, presented throughout these manuscripts, be useful to specialists and the general public involved with the subject of climate change and the livestock sector.

Dr. José Ariel Ruiz Corral
Universidad de Guadalajara, Department of Environmental Sciences.