

## **The drought in Andalusia: Analysis of the economic impact and evaluation of the SOS Plan**

Topic: Regional Input-Output Economics - IV

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Droughts is currently a topic of special relevance and interest worldwide. According to the Environmental Portal of Andalusia, droughts are a major risk in the region. This natural phenomenon can be direct and/or indirect. Direct effects are those specific to a sector, with changes in production, added value or employment focused on activities that use water as a critical or important part of the production process, such as the public water supply, agriculture or electricity. Indirect effects are derived from the former, that is, a reduction in supply can affect the productivity of a company and, therefore, the flow of goods and services through sectoral interconnections and supply chains. Both factors motivate this research, as severe droughts affect the demand for goods and impact the main economic aggregates.

The objective of this study is to estimate the impact of the drought in which the region finds itself and the SOS Plan launched by the Junta de Andalucía to address the water shortage on the Andalusian economy. For this, we use input-output methodology and the Social Accounting Matrix of Andalusia database. We carry out two simulations: the first takes into account only the effect of the drought, and the second further includes the injection of money from the public administration.

The results obtained reveal notable consequences of the drought on the economy (-6.2% in terms of income and -7.4% in terms of GDP) that could be reduced in the event of good execution of the aforementioned plan (-3.2% in terms of income and -3.9% in terms of GDP). In addition to economic problems, other issues such as social or political concerns may arise. Due to the essentiality of water itself, there is a serious problem to tackle in the coming years with some possible solutions such as technological changes or restructuring production structure.

Keywords: Social accounting matrix, drought, Andalusia

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