Water Management Policies and its Impacts on Irrigated Crop Production in the Murray-Darling Basin, Australia

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Abstract

The economic impact analysis contained in this book shows how irrigation farming is particularly susceptible when applying certain water management policies in the Australian Murray-Darling Basin, one of the world largest river basins and Australia's most fertile region. By comparing different pricing and non-pricing water management policies with the help of the Water Integrated Market Model, it is found that the impact of water demand reducing policies is most severe on crops that need to be intensively irrigated and are at the same time less water productive.

A combination of increasingly frequent and severe droughts and the application of policies that decrease agricultural water demand, in the same region, will create a situation in which the highly water dependent crops rice and cotton cannot be cultivated at all.