

INTER-REGIONAL INPUT-OUTPUT MODEL FOR THE ECONOMIC EVALUATION OF CLIMATIC PHENOMENA IN CEREAL SUPPLY

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The occurrence of climatic phenomena is becoming a cause of concern for cereal agriculture worldwide. In Brazil, the Rio Grande do Sul state is highly representative in the production of cereals, with a participation of around 60% in the national production. In this sense, the objective of the paper is to analyze the economic impacts of the climatic anomalies of El Niño and La Niña on cereal supply in the state of Rio Grande do Sul (RS) and in the rest of Brazil (RB) between 2008 and 2015. The data base used was from the Interregional Input-Output RS-RB Matrix estimated by the Nucleus of Regional Studies (NEREUS), the results come from a supply-side model (I-O) with the breakdown of the Cereals agriculture sector. The greatest positive impacts occurred in the years 2010 and 2013, while the periods with the greatest negative effects were observed in the years of 2012 and 2015. The sectors most impacted were: food, beverages and tobacco; livestock and fisheries, and housing and food services, which are the largest buyers of Cereals. In general terms, in the period the accumulated losses in RS alone were R\$ 112 million in production, R\$ 24 million in exports and 705 direct and indirect jobs.