

New Agents Fostering Agricultural Production in Latin America: The Use of The Internet in Farming and The Environmental Preservation Agenda

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Abstract

The current acceleration of global processes of production, circulation and consumption in agriculture, along with the growing division of labor, require large investments to meet the demands of an expanding market and of a growing world population. In addition, agricultural production must follow international standards for environmental preservation in order to export products. To face these challenges, using information and communication Technologies such as the Internet of Things (IoT) and improving digital infrastructure in the field are essential, along with strategic planning by public and private organizations. In Latin America, this scenario involves new agents: besides small, medium and large producers, States and transnational food producers, an important role is played by national and international research institutions, multilateral institutions, non-governmental organizations, social movements, and universities that promote agricultural activities. These agents are important for countries to respond to the strict international requirements related to alleged environmental preservation, such as not importing produce farmed in deforestation zones, carbon taxation, greater strictness for genetically modified foods and for foods grown with pesticides, and production tracking to the final consumer. There are, however, significant disparities in infrastructure and in the use of digital technology in the field in Latin American countries, as well as between large and small producers. The latter, also characterized as family farming, faces difficulties in adapting to the requirements of domestic and foreign markets. Thus, it is necessary to foster investment for small producers, aiming at economic and social development, encouraging cooperatives and agroecology at different scales.

Keywords: climate issues, family farming, food producers, international trade, IoT