IRSA - CONGRESSO MUNDIAL DE SOCIOLOGIA RURAL (01/10/2025 A 20/01/2026) - IRSA 10 - WHOSE KNOWLEDGE SHAPES RURAL WORLDS? SOUTHERN AND INDIGENOUS PERSPECTIVES ON INNOVATIONS AND TECHNOLOGIES

DIVERSITY OF INNOVATION ECOSYSTEMS FOR DIGITAL TRANSFORMATION OF AGRICULTURE IN BRAZIL

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Digital transformation is undergoing at an accelerated pace in Brazilian agriculture and food systems since Covid pandemic. This multifaceted digital transformation relies on mobilization of digital technologies (products and services) by farmers and their organizations for various stage and activities within food systems. While the role of innovation ecosystems is emphasizing in the promotion of this digital transformation, literature tend to focus attention on innovation ecosystems oriented toward open innovation and promotion start up Agtech, and overlook the diversity of digital innovations processes and their contrasted implication in term of power dynamics and distributional effect. Assuming that digital transformation is mutifaceted (diversity of digital product and services) issued by a diversity of innovation ecosystems, we tend to characterize the diversity of innovation ecosystem involved in digital

transformation of agriculture in Brazil. Mobilizing innovation process and ecosystems literature and applying it to a set of digital innovation product and services, we underwent a literature and document review, combined with interviews of actors of innovation ecosystems. We evidence 6 main types contrasted co-existing innovation ecosystems and process according to their leading actors (big tech firms, traditional commercial agricultural supply and equipment firms, Ag-Tech startups, university and research institutions, public administrations and, farmers organizations and representatives), driving principles (offer / demand driven) and values (market / environmental mission oriented). We discuss the interactions between these ecosystems, and their respective implication in term of nature knowledge mobilized and generated, power asymmetry, potential effects on agricultural dynamics, ecological transition, and equity among rural area and actors. The identification of the diversity of on-going innovation process and ecosystems enable to refined policy issues and pave the way for policy design oriented toward a more equitable, sustainable digital transformation in agriculture.

Palavras-chave: innovation ecosystem; digital transformation; agroecology; agro 40; values; equity; sustainability; agricultural models.