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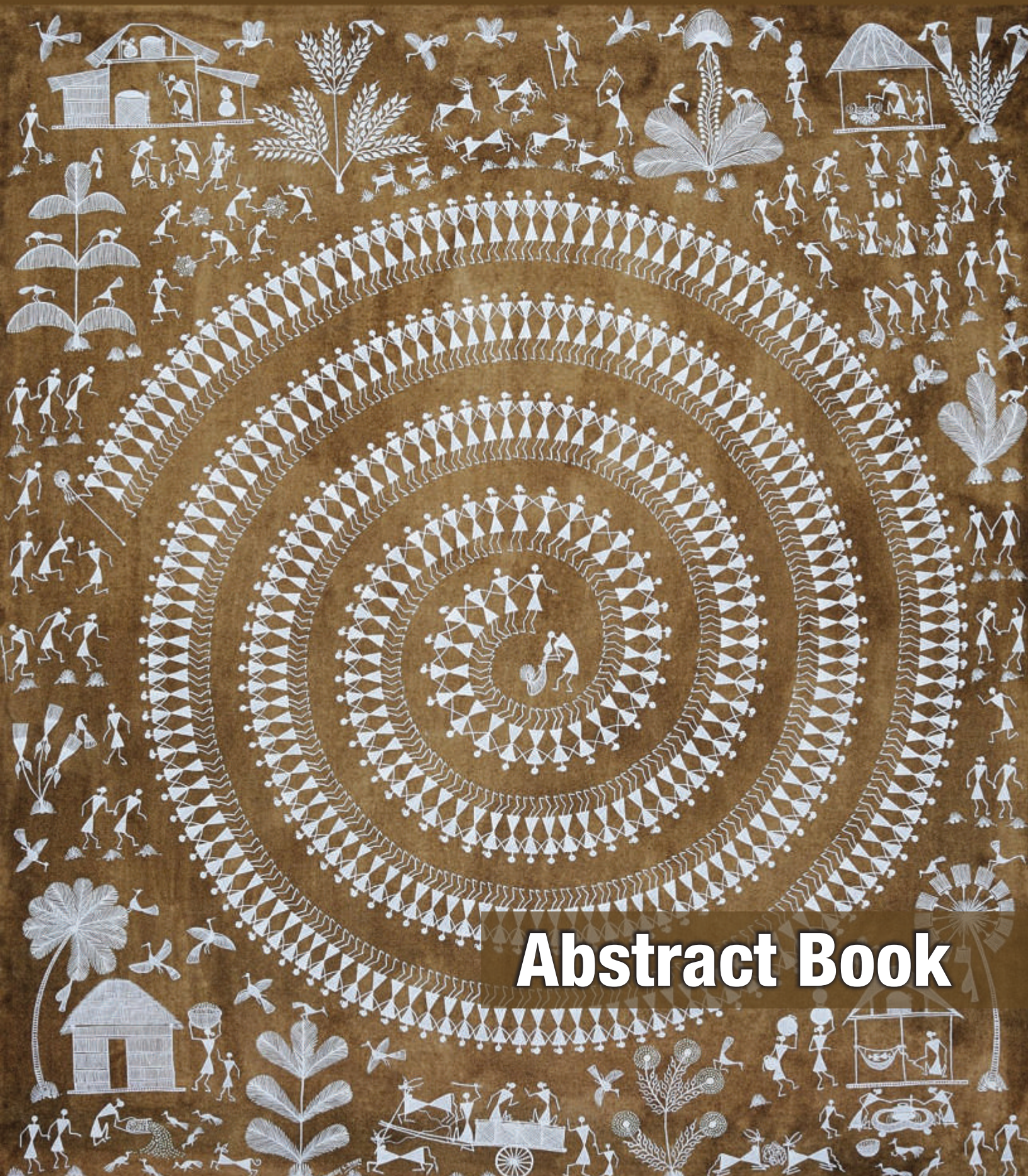

Abstract Book

1434 (O-25)

Increasing Resilience to Climate Change in Rural Livelihoods: to Diversify or Not?

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Climate change causes unpredictable weather patterns in tropical rural landscapes that may lead to harvest failure which can threaten food security, farmers' income loss, and livelihood vulnerability. High agrobiodiversity in agroforestry (FA) systems provides functional diversity (product variety) that may increase the resilience of farmers. FAsystem practices also help conserving land sustainability and maintaining diverse habitat to counter climate change. This study aims to determine whether farmers' decision over land allocations are made to maximize their resilience to climate change. We conducted household interviews with 30 random households in Bantaeng, South Sulawesi. nOthe 133 land parcels owned by those households, we used nested plot method for vegetation analysis with every woody and other utilized species enumerated, and the origins of every individual documented. We grouped the land use management into: (1) complex AF; (2) simple AF; and (3) annual cropland. Household plant functional diversity index are also calculated. The study shows that 67 (50%) land parcels are complex AF, 51 (41%) are simple AF, and 15 (9%) are annual cropland. 63% of species in annual cropland are commodities, while in simple AF and complex AF commodities represent 54% and 50%, respectively. In annual cropland systems, 13% of species are used as wood, while in simple AF and complex AF 17% and 19%, respectively. Other plants are grouped as staple food, medicinal, fodder, and fibre. Although farmers' decisions over land allocations vary, most of them practice the system which maximizes resilience to climate change. oRcy guide approaches can be used to enhance integration between agrobiodiversity, resilience, and economy.

Keywords: Resilience, Agroforestry, Agrobiodiversity, Functional Diversity