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"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

Towards sustainable land management and agricultural practices in Central Vietnam: challenges and opportunities

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Abstract

Agriculture is a key development sector in Vietnam, in which significant sustainability gains could arise from its nexus with growing cities and other development sectors, such as emerging rural tourism. To address the sustainability of agricultural practices, a survey of 30 smallholder farmers of Cu De River Valley in the Da Nang region was conducted following a standard methodology based on the Original Agroecology Survey and Indicator System (OASIS). Fruits and vegetables were mostly produced through agroecological practices while rice, sugar cane and corn were mainly cultivated in a conventional way. The higher workload needed to apply organic fertilisers was the main barrier in the transition to organic fertilisation management. The soil was left uncovered, which reduced the water absorption capacity of the land, and the residues were burned, which polluted air and water streams and affected rural communities and farmers in the surrounding area. Conventionally produced commodities were the main sources of income and they were sold mostly through intermediaries that bought most of the production, leading to a double dependency of one main product and one main client. Those products were also more affected by the increasing costs of mineral fertilisers that tripled in the past two years, leading to a reduction in profits. Furthermore, soil degradation was reducing productivity and the farmers were looking for alternatives such as diversifying their production from sugar cane and rice to a mixed system of fruticulture with livestock. The participants also suggested several strategies to enhance sustainability, such as direct selling of products which could increase the selling price by up to 87.5 %. For instance, in the case of peanut oil production, postharvest processing, such as drying, pressing, and packaging, led to a 30% increase in profits. During the survey, the potential benefits of integrating agriculture and forestry with tourism, as a means of promoting sustainable agricultural practices, were also noted.

Keywords: Agroecosystem, cooperative, environmentally friendly

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