Assessment of Agricultural Land Conversion in Vegetable Pocket Areas of Dhading District, Nepal

Anupam Uprety¹, Hari Krishna Panta¹, Thaneshwar Bhandari¹, and Krishna Timsina²

¹Tribhuvan University ²Nepal Agricultural Research Council

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Abstract

The increasing trend of transformation of land at the expense of fertile agricultural land is becoming troublesome and threatens food security worldwide. The scenario is more severe at the rural-urban interface and the agrarian land on the outskirt of larger cities is at greater risk, however, the extensive literature is not readily available in the Nepalese context. This study focuses on the land use patterns and variables shaping farmers' choices for the future use of land in Dhading, Nepal. The analysis of land use patterns showed that, between 2013 and 2022, productive agricultural land decreased by 60.28% while non-farm use of land increased by 93.14% in the study area of Dhunibeshi Municipality, Dhading. The cross-sectional survey data among vegetable farming households showed that 36% of the household were eager to switch from farming to non-farm use of their land in the near future. Based on binary logistic regression, land ownership, the share of family income from vegetable production, the proposal received for land conversion, and proximity variables like distance between farmland to the closest non-farm firm, were found to be statistically significant in shaping the farmers' decisions on agricultural land conversion. The land ownership and lower family income from agriculture activities were identified as major push factors, while the proximity of the farm to non-farm firms, and proposals for urban use of land were identified as major pull factors for land conversion. The widespread adoption of low-cost production strategies in agriculture, and effective implementation of a land-use policy could contribute towards sustainable agricultural land management in the future.

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