

Factors influencing adoption of major orchard management practices of Mandarin orange in Gorkha, Nepal

Ashutosh Poudel^{1*}, Rishi Ram Kattel², Gaurav Adhikari¹

¹*Agriculture and Forestry University, Rampur, Chitwan, Nepal*

²*Department of Agricultural Economics and Agribusiness Management, Agriculture and Forestry University, Rampur, Chitwan, Nepal*

*Corresponding authors' email: poudel.ashutosh2020@gmail.com

*ORCID ID: <https://orcid.org/0000-0001-5722-7167>

Abstract

Gorkha is one of the districts with immense potential for Mandarin orange production, and although the area under the mandarin cultivation shows an increasing trend, the productivity is declining over the years. Thus, a research survey was carried out to assess the prevalence of citrus decline associated with production decline and identify factors affecting the adoption of major orchard management practices among Mandarin growers in Gorkha, Nepal. Altogether, 93 respondents from Gandaki Rural Municipality, Sahid Laxhan Rural Municipality, and Gorkha Municipality were chosen for the study with simple random sampling. Data were collected with a semi-structured interview which was analyzed using SPSS and Stata software. A SUR logit model was used for triangulating the effect of different variables on the adoption of major orchard management practices. The findings revealed that nearly two-thirds of the respondents reported having citrus decline in their orchard with the production per fruiting tree significantly decreased from 36.08kg per tree in 2015 to 16.55kg per tree in 2020 ($p < 0.01$). Further, the adoption of major orchard management practices was mostly found driven by regular access to extension agents and the income generated from agriculture. Nevertheless, the adoption was plagued by the prevalence of citrus decline in the orchard. In light of these findings, participatory training programs related to the rejuvenation of declining orchard and regular advisory and extension services are suggested to increase the adoption of major orchard management practices among mandarin farmers.

Keywords: Citrus, SUR logit, Orchard management practices