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Understanding the Preferences for Green Tires: A Choice Experiment Approach**Anjalika, E.A.K.^{1*}, Jayasekara, K.D.De S.¹, Sivashankar. S.², Gunawardena, U.A.D.P.¹**¹*Resource Economics Unit, Department of Forestry and Environmental Science, Faculty of Applied Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka*²*Department of Agricultural Economics, Faculty of Agriculture, University of Jaffna, Jaffna, Sri Lanka***anjalikae0@gmail.com***Abstract**

Increasing environmental impacts associated with end-of-life tires have intensified interest in green tire technologies. Empirical evidence on willingness to pay (WTP) a price premium for such products remains limited in the developing country contexts. This study investigates the preference of individuals to pay a price premium for green tires and their WTP for these eco-friendly products using the choice experiment method. Tire lifespan, biodegradability and the price premium were the three attributes considered in this study. Data were collected from 256 randomly selected respondents in the Gampaha District of Sri Lanka. Random Parameter Logit (RPL) model was employed and the data were analyzed using NLOGIT and STATA software packages. The results show that higher levels of biodegradability significantly and positively affect utility, and the individuals also value enhanced tire lifespan. Considering the marginal WTP, consumers are willing to pay price premiums of 85.30%, 79.17% and 77.49% for 50%, 75% and 95% of biodegradability, respectively. Marginal WTP for a tire with a 50% higher lifespan than a traditional tire is 46.15%. Meanwhile, consumers are willing to pay 60.28% more when the tire lifespan is 80% longer than that of a traditional tire. In addition, there is no evidence of unobserved preference heterogeneity for these attributes in this study. Based on these findings, manufacturers and policymakers should prioritize the development of green tires that combine biodegradability with enhanced tire lifespan, as consumers show a clear willingness to pay price premiums for both attributes. Moreover, uniform pricing and product strategies may be effective across consumer segments.

Keywords: *Green tires, Biodegradability, Durability, Choice experiment approach, Marginal willingness to pay*