

Analysis of Consumer Preference of Agricultural Products in e-Commerce Website

Pagidela Siva Krishna Chaitanya Reddy, Prahadeeswaran M.* , Pragathish V.

Department of Agricultural Economics, Tamil Nadu Agricultural University, Coimbatore, India

*Corresponding author: mprahadeeswaran@gmail.com

ABSTRACT

Through data analysis and statistical methods, we will identify key insights to aid agricultural businesses in making informed decisions about product development, marketing strategies, and customer targeting. By leveraging web scraping techniques, this study offers a cost-effective and efficient means of acquiring a large volume of real-time data from e-commerce platforms, providing valuable knowledge for the agriculture industry to stay competitive in a dynamic market. As the agriculture industry continues to evolve, understanding consumer preferences is crucial for agricultural businesses to tailor their offerings and enhance customer satisfaction. In this research study, we explore the significance of web scraping as a powerful tool for analyzing consumer preferences in the agriculture sector by collecting data from various e-commerce websites. The study of this research is to gain insights into the factors that influence consumer preferences for agricultural products and to identify potential trends and patterns. Web scraping techniques are utilized to extract relevant data, such as product attributes, prices, customer reviews, and ratings, from leading e-commerce platforms that offer agricultural goods. The study involves building custom web scrapers using Python programming language and popular libraries. BeautifulSoup, a Python library for parsing HTML and XML documents is great for web scraping. Requests, Scrapy, Selenium, Playwright, Lxml, Urllib3 and Mechanical Soup are adopted for web scraping tasks. For cooking oil, the preferred packing quantity is 5 liters, while less preferred options include 3L, 6L, and 15L. The unit price ranges from Rs 350 to Rs 450. Notably, consumers favor packaging materials in the form of 5-liter cans for cooking oil. In the case of Basmati Rice, the standard packing quantity is 5kg, with unit prices ranging between Rs 80 and Rs 120. All the available units are packaged in 5kg portions. Honey is offered in either 1 liter or 500ml quantities. The less preferred options include 300ml, 450ml, and 900ml, with varying price ranges between Rs 200 and Rs 400, as well as Rs 600 to Rs 700. Particularly popular among consumers are the 500ml and 1000ml options for honey.

Keywords: Consumer Preference, e-Commerce Preference, Web Scrapping

