Chapter 16
Factors Affecting the Demand of Lab-Grown Diamonds: A Case of India

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ABSTRACT

The global demand for lab-grown diamonds, including in India, is rising, yet the factors driving this surge are not fully understood. The Union Budget 2023-2024 allocated 242.96 crores over five years to promote lab-grown diamond production at an Indian Institute of Technology (IIT), reflecting a shift towards consumer demand. This study investigates the factors shaping lab-grown diamond demand in India, gathering primary data from 364 respondents through stratified sampling. Statistical analyses using SPSS identify financial considerations, marketing efforts, and consumer behavior as key drivers. Social status, ethical concerns, and rarity perception also influence demand, highlighting diverse consumer decision-making in the market.

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INTRODUCTION

For thousands of years, diamonds have been a significant symbol of wealth, status, and everlasting attraction in human culture. Their exceptional genius and the recognition of their scarcity have made them among the most desired and precious assets globally. Natural diamonds, created deep in the Earth's mantle over billions of years, have been highly respected not just for their beauty but also for the amazing process of their formation. This extensive history has established diamonds as the top luxury product, representing both physical and figurative everlastingness. In 2022, the worldwide diamond sector, an essential part of the high-end market, was estimated to be worth around $130 billion, highlighting the lasting popularity of these valuable jewels (Fayiah, 2020). Nevertheless, the sector, previously deemed unbeatable in its conventional structure, is now undergoing a significant change. Technological advancements, changing consumer preferences, and increasing worries about the environmental and ethical impacts of diamond mining are all contributing to this change.

The emergence of lab-grown diamonds (LGDs) has become the most important advancement in the diamond industry in recent years, offering a growingly popular alternative to natural diamonds. Lab-created diamonds, also known as synthetic diamonds, are made in controlled lab settings with advanced technologies that mimic the natural conditions in which diamonds are created. Methods like High-Pressure High-Temperature (HPHT) and Chemical Vapor Deposition (CVD) have enabled the production of diamonds that closely resemble natural ones in their physical, chemical, and optical characteristics (Fayiah, 2020). Even though they are created by humans, Lab-Grown Diamonds still have the same shine, brilliance, and beauty that make natural diamonds highly desired. This wonder of technology has created fresh opportunities in the diamond industry, disrupting the traditional reign of natural diamonds and providing customers with an attractive choice.

The increase in LGDs is not happening alone but is part of a larger changing trend in the economic structure of the diamond industry. Multiple interconnected factors are contributing to this transformation. Initially, the mining of natural diamonds has become more expensive and environmentally damaging. Due to the depletion of easily accessible diamond deposits, mining companies must search for diamonds in deeper and more remote areas, resulting in increased expenses. Moreover, the growing concern around diamond mining is the environmental impact it has. Mining activities can result in substantial harm to the environment, such as deforestation, soil erosion, and water pollution, prompting a reassessment of the actual price of natural diamonds.