Agro-food industries are crucial for transforming agricultural products into consumable food, contributing to food security and nutritional balance by providing diverse processed foods. These industries offer a range of products, including processed grains, dairy, oils, meats, canned goods, and ready-to-eat options, ensuring nutritional adequacy for the population. However, the sector faces challenges such as climate change impacting agricultural production, water scarcity, food safety concerns, economic fluctuations, and the need for technological innovation. Despite these challenges, agro-food industries are vital for economic and social development and require continuous advancement for sustainable .production and distribution