

PROSPECTS AND CHALLENGES IN DEVELOPING THE SEAWEED INDUSTRY IN SRI LANKA; A SWOT-PESTEL ANALYSIS

Y.M.J.D. Dissanayake*# and W.N. De Silva

Faculty of Agriculture, University of Ruhuna, Kamburupitiya, Sri Lanka

**Correspondence E-mail: jeewanthidissanayake95gmail.com, Phone: +9477 2710679*

#Presenting Author

Abstract: The seaweed industry in Sri Lanka is an emerging sector that can significantly impact the country's economy. This study attempts to find the prospects and challenges of developing the seaweed industry in Sri Lanka. Primary data were collected from 50 randomly selected seaweed farmers in the Valaipadu area (Kilinochchi district) and key informants from public and private companies by using semi-structured questionnaires, focus group discussions, and interviews. Strengths, Weaknesses, Opportunities, and Threats (SWOT) and Political, Economic, Social, Technological, Economic, and Legal (PESTEL) analyses were conducted. TOWS matrix was developed to formulate strategies to improve industry performance. The results found that abundant natural seaweed growing areas with commercially important seaweed species is the most prominent strength for developing the industry. Scarcity of good quality parental plant materials and pollution in production areas are the industry's greatest weakness. PESTEL analysis indicate positive political support with beneficial government policies, though regulatory challenges emerge during shifts in governance. Economic potential is identified in rising demand and export prices, yet concerns arise from market fluctuations and increased transportation costs. Socially, the coastal community displays positive interest, but challenges include resource exploitation and mismanagement of government funds. Technology-wise, government support exists, yet issues include underutilized research and development findings and concerns about equipment durability. Climatic conditions favour cultivation in the North, while challenges in the South involve high mitigation costs and pest threats. Legal requirements for industry entry are recognized, but issues include the absence of quality standards, insurance, and safety precautions. This study suggests developing value-added products to meet emerging demand, implementing the research findings effectively, and collaborating with private and public organizations for the development of the industry.

Keywords: PESTEL analysis; Seaweed industry; SWOT analysis; TOWS matrix