

Best Practices (ESG) for the Comprehensive OEM Business of Dietary Supplements, Health, and Beauty: SCG Grand Co., Ltd. and Its Affiliates

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Abstract

This study aims to: (1) examine the current state and desired practices of Environmental, Social, and Governance (ESG) principles in the manufacturing business of dietary supplements, health, and beauty products within SCG Grand Co., Ltd. and its subsidiaries; (2) analyze the necessity for ESG adoption in this industry to facilitate the development of effective and sustainable strategies; and (3) identify best practices in ESG implementation within SCG Grand Co., Ltd. and its subsidiaries.

This research employs a mixed-methods approach, integrating both qualitative and quantitative methodologies. The qualitative component utilizes questionnaires and interviews as data collection tools, while the quantitative analysis is based on responses from executives and employees in the dietary supplement, health, and beauty product manufacturing sector located in Mueang District, Samut Sakhon, under SCG Grand Co., Ltd. and its subsidiaries. The sample size was determined using a 95% confidence level with a 5% margin of error, resulting in a total of 400 participants. Purposive sampling was employed, and data were analyzed using frequency distribution, percentage calculations, and a five-point Likert scale. Additionally, the Modified Priority Needs Index (PNI Modified) was applied for data interpretation.

The findings indicate that the current ESG performance of SCG Grand Co., Ltd. and its subsidiaries is at a moderate level across all three dimensions—Environmental, Social, and Governance. These results underscore the necessity for enhancing ESG practices to strengthen sustainability and improve organizational performance in alignment with future expectations. Furthermore, this study provides insights into ESG best practices that can foster long-term growth, social responsibility, and sustainable business operations within the dietary supplement, health, and beauty product manufacturing sector.

Keywords: Interdisciplinary Humanities, OEM Business, Good Practices (ESG) , SCG Grand Co., Ltd. and its subsidiaries

1. Introduction

The comprehensive Original Equipment Manufacturing (OEM) industry for dietary supplements, health, and beauty products plays a pivotal role in driving the modern economy, exhibiting an average annual growth. The growing popularity of health and beauty products reflects evolving consumer demands in contemporary society (Issa & Hanaysha, 2023). However, the industry faces significant challenges in achieving sustainable business operations, particularly in adhering to Environmental, Social, and Governance (ESG) principles. These principles not only mitigate environmental impacts but also strengthen social relationships and enhance organizational governance credibility (Jaouhari et al., 2023; Lee & Kwon, 2022).

Research in the field of ESG highlights its multidimensional benefits. For instance, Worapongpat (2024) found that businesses implementing ESG practices could increase consumer trust by up to 30%. Similarly, Worapongpat, Yodkham, Limlertrrit, & Srichan, (2024) demonstrated that strict adherence to ESG guidelines reduces reputational risks and enhances brand value. In the context of the comprehensive OEM business for dietary supplements, health, and beauty products, especially in Thailand, studies on ESG remain limited. Most existing research focuses on other industrial sectors, such as energy and agriculture, leaving a "knowledge gap" regarding the application of ESG principles in this specific industry (Michalski, 2024).

This study addresses the knowledge gap by exploring appropriate ESG practices in the OEM dietary supplement, health, and beauty industries, aiming to foster sustainable operations and societal benefits (Spitzer & Kreca, 2022).

The comprehensive OEM industry for dietary supplements, health, and beauty products in Thailand has grown rapidly due to rising consumer emphasis on health and beauty, particularly post-COVID-19. This expansion has brought challenges in management and adapting to increased competition, such as improving production efficiency, ensuring timely delivery, and enhancing customer satisfaction (Worapongpat, Udomphothiwi, & Kraisorn, 2024).

The target group for this research includes factories producing dietary supplements and beauty products aiming to develop ESG-based management systems for competitive advantage. Worapongpat and Promkham (2024) analyzed the importance of production timelines, delivery schedules, and competitive pricing in consumer decision-making. Additionally, studies on consumer behavior have highlighted that users of dietary supplement manufacturing services primarily focus on beauty-related products, with satisfaction influenced by personnel, service processes, and product quality (Selim, 2020).

Moreover, digital and direct marketing have played significant roles in establishing distribution channels and increasing consumer reach (Tiscini, Martiniello, & Lombardi, 2022). Despite existing research on consumer behavior and the management of dietary supplement manufacturing facilities, studies on the application of ESG principles within this industry remain limited, particularly in Thailand. This research aims to expand knowledge and establish best practices in the ESG context, addressing the needs of the target group while filling the identified gap (Worapongpat, 2021).

The primary objective of this research is to examine best practices (ESG) in the OEM dietary supplement, health, and beauty industries through a case study of SCG Grand Co., Ltd., located in Mueang District, Samut Sakhon Province. The study aims to provide in-depth insights into improving eco-friendly production processes, waste management, and community value creation while maintaining product quality to meet the demands of a highly competitive market. (Worapongpat, 2020).

This research will be conducted in 2024 using a mixed-methods approach, including in-depth interviews with executives, observations of production processes, and analysis of secondary data such as ESG reports and past performance metrics. The study will focus on identifying gaps in resource and environmental management and developing sustainable strategic planning (Worapongpat & Jirojantrakit, 2024).

Organizational leaders must embody the qualities of a good mentor, demonstrating kindness and attentiveness toward employees. Effective support includes providing actionable guidance, fostering efficient workflows, and encouraging the professional growth of personnel to help them achieve their full potential (Worapongpat, 2023). The OEM dietary supplement, health, and beauty industries must comply with relevant standards and regulations, such as GMP, HACCP, and ISO, to ensure consumer safety and reinforce sustainability within the industry (Lexé & Lago, 2023). This study aims to develop ESG practices aligned with these requirements while adapting to the specific context of businesses in Thailand (Worapongpat, 2023).

The impetus for this research arises from a growing trend among consumers who prioritize sustainability and transparency in production processes (Peiró-Signes & Segarra-Oña, 2013). This shift has increased pressure on companies in the dietary supplement industry to align with ESG principles (Galland, 2012). Concurrently, heightened market competition poses challenges in maintaining a competitive edge. ESG has emerged as a critical factor influencing consumer trust, investor confidence, and business partnerships. Companies that can operate sustainably while demonstrating social and environmental responsibility are positioned to achieve competitive advantages (Worapongpat, 2023).

In the context of SCG Grand Co., Ltd., located in Mueang District, Samut Sakhon, the integration of ESG principles has been implemented to enhance business credibility and sustainability. By adopting ESG practices, the company aims to address environmental concerns, meet consumer expectations, and maintain its standing as a responsible market player.

2. Objective

2.1 To explore the current state and needs of ESG practices in the OEM dietary supplement, health, and beauty business of SCG Grand Co., Ltd., and its affiliates.

2.2 To analyze the specific requirements for ESG practices in SCG Grand Co., Ltd., and its affiliates, identifying actionable strategies that could lead to the development of effective and sustainable activities in the future.

2.3 To propose best practices for ESG implementation in the OEM dietary supplement, health, and beauty business of SCG Grand Co., Ltd., and its affiliates.

3. Literature Review

This section explores key studies related to Environmental, Social, and Governance (ESG) best practices in the comprehensive OEM business of dietary supplements, health, and beauty products. It evaluates prior research, their relevance to this study, and how this research differs from existing literature.

3.1 Worapongpat (2023) – ESG and Consumer Behavior in the Health Industry Summary: This study examined how ESG factors influence consumer decisions in the health and wellness sector. The findings revealed that consumers prefer brands that demonstrate sustainability, ethical sourcing, and transparency in product safety.

3.2 Worapongpat (2023) – ESG and Employee Engagement Summary: This study found that leaders who support employee development and well-being reduce turnover rates and strengthen organizational commitment. The research emphasized the role of social responsibility in retaining talent and boosting productivity.

3.3 Worapongpat (2023) – ESG and Corporate Governance Summary: The study demonstrated that companies with transparent governance structures and strict regulatory compliance enhance investor confidence and minimize risks.

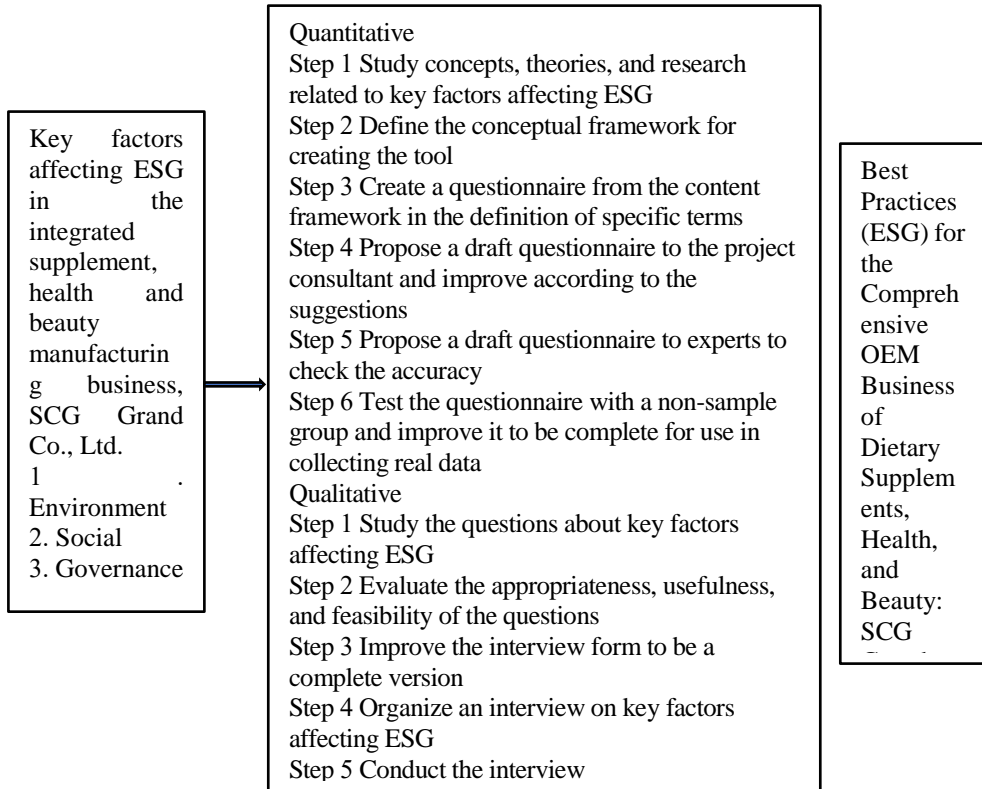
How This Research Differs from Prior Studies

Aspect	Previous Studies (Worapongpat, 2023)	This Study
Focus Area	ESG impact on consumer behavior, employee engagement, and governance transparency	ESG best practices in the OEM dietary supplements, health, and beauty industry
Scope	Examined specific corporate behaviors (e.g., leadership, transparency)	Investigates ESG implementation across supply chains, waste management, and sustainable sourcing
Industry Context	General health industry	Specific to OEM dietary supplements and beauty product manufacturing (SCG Grand Co., Ltd.)
Research Outcome	Provided insights into individual ESG elements (e.g., leadership, governance)	Develops a comprehensive ESG framework for SCG Grand Co., Ltd.

While prior research has explored ESG in **consumer preferences, employee engagement, and governance**, this study **fills a gap** by analyzing **best ESG practices specific to OEM health, beauty, and dietary supplement manufacturing**. It builds upon existing theories and empirical findings to develop a **comprehensive ESG model** for SCG Grand Co., Ltd. and its affiliates.

4. Research Framework

The study aims to explore and analyze how SCG Grand Co., Ltd. integrates and influences the three ESG pillars (Environment, Social, Governance) in its supplement, health, and beauty product business. Through both quantitative (questionnaire) and qualitative (interviews) methods, the study will develop insights to improve the company's practices according to ESG standards.



Source: Ntapat Worapogpat

Figure 1. Research Framework

5. Data and Methodology

This study employs a mixed-methods approach, integrating qualitative and quantitative research methods, with the following procedures:

5.1 Population and sample

5.1.1 Population: The population includes executives and employees of SCG Grand Co., Ltd. and its affiliates, which specialize in the comprehensive manufacturing of health and beauty supplements located in Mueang District, Samut Sakhon.

5.1.2 Sample: The sample for this study consists of executives and employees from SCG Grand Co., Ltd. and its affiliates. As the exact population size is unknown, Cochran's formula for sample size determination in cases of an unknown population (Cochran, 1977) was applied. The formula uses a confidence level of 95%, an allowable margin of error of 5%, and an assumed proportion of 0.5. Based on this calculation, a sample size of at least 385 was required. To account for potential errors during data collection, a total of 400 participants were selected. Purposive sampling was employed, with data collected over a 5-month period from August 1, 2023, to November 30, 2024.

5.1.3 Target Group: The target group includes five experts in organizational and personnel management, comprising the Managing Director, Production Manager, HR Manager, General Administration Manager, and HR Supervisor from SCG Grand Co., Ltd. and its affiliates.

5.2 Research Instruments

The instruments used in the study include:

Questionnaires, comprising:

Part 1: Factors influencing ESG in health and beauty supplement manufacturing businesses, categorized into three dimensions: Environmental (Environment) Social (Social) Governance (Governance)

Part 2: Open-ended questions for opinions and suggestions.

To ensure the quality of the questionnaire, the following steps were undertaken: Consultation with advisors for revisions.

Review by three experts to assess content validity using the Index of Item-Objective Congruence (IOC) with IOC values ranging from 0.80 to 1.00.

A pilot test was conducted with 30 respondents outside the sample group, yielding discrimination values between 0.25 and 0.75. Cronbach's Alpha reliability coefficient (Cronbach, 1951, p. 274; cited in Boonchom Srisaard, 2015) was calculated, resulting in a reliability value of 0.95.

6. Data Collection

Primary Data:

- In-depth interviews with the target group
- Questionnaire responses

Secondary Data:

- Document research from sources such as books, academic papers, research studies, and related electronic media.

Priority Needs Index (PNI Modified) Formula:

The formula for calculating the Priority Needs Index (PNI Modified) is:

$$\text{PNI Modified} = D(I-D)$$

Where:

- I = Importance score (based on responses)
- D = Desired score (based on responses)

Key Improvements:

- Clear and concise formatting using bullet points.
- Standard mathematical notation using LaTeX for the formula.
- Clear definitions of the variables within the formula.
- Improved readability.

Explanation of Symbols:

- PNI Modified: Priority Needs Index – a value that indicates the priority of addressing a gap between the current state and desired state for ESG factors.
- III: The importance score assigned by respondents, reflecting how important they believe a particular ESG factor is.
- DDD: The desired score assigned by respondents, reflecting how they perceive the ideal or expected condition of an ESG factor.

The PNI Modified formula compares the importance of an ESG factor with its current state, helping to prioritize areas that need attention based on the gap between what is considered important and what is currently achieved.

7. Statistical Methods

Descriptive statistical methods were used, including:

- Percentage: To determine the proportion of responses or occurrences in each category.
- Mean: To calculate the average value of responses or scores for each variable.
- Standard Deviation: To measure the dispersion or variability of responses around the mean.

These statistical methods were processed through statistical software, ensuring an accurate and reliable analysis.

8. Results

Objective 1. To investigate the current conditions and desired conditions of best practices (ESG) in the comprehensive health, beauty, and dietary supplement manufacturing business at SCG Grand Company Limited and its affiliates.

Table 1 Mean and Standard Deviation of Current and Desired Conditions for Factors Affecting ESG in the Comprehensive Health, Beauty, and Dietary Supplement Manufacturing Business, SCG Grand Company Limited and its Affiliates (Environmental Dimension).

Aspect	ESG Dimension Company Affiliates	Environmental of SCG Grand Current and Conditions	Desired Conditions
		Mean	S.D.
1. Waste Management: Production processes for dietary supplements and beauty products	3.74	.31	Moderate
2. Sustainable Resource Utilization: Selection of raw materials from sustainable sources	3.52	.39	Moderate
3. Greenhouse Gas Emission Reduction: Use of alternative energy sources	3.49	.36	Moderate
Overall		3.58	.35

Note: Table 1 presents This 1 table demonstrates that the current condition of the environmental factors affecting ESG practices at SCG Grand Company Limited and its affiliates is at a moderate level (mean = 3.58, S.D. = 0.35). However, the desired condition is at a high level (mean = 4.29, S.D. = 0.23), indicating that improvements are highly needed, particularly in the areas of greenhouse gas emission reduction (mean = 4.42, S.D. = 0.19) and sustainable resource utilization (mean = 4.33, S.D. = 0.22).

Table 2 Mean and Standard Deviation of Current and Desired Conditions for Factors Affecting ESG in the Comprehensive Health, Beauty, and Dietary Supplement Manufacturing Business, SCG Grand Company Limited and Its Affiliates (Social Dimension)

Aspect	ESG Social Dimension of SCG Grand Company Limited and Affiliates	Current Conditions	Desired Conditions
		Mean	S.D.
1. Responsibility to the Community: Employment and skill development of the local community	3.23	.21	Moderate
2. Development of Safe and Effective Products: Providing accurate and transparent information	3.27	.29	Moderate
3. Employee Welfare: Emphasis on health and well-being	3.42	.26	Moderate
Overall	3.30	.25	Moderate

Note: Table 2 presents the current condition of the social factors affecting ESG practices at SCG Grand Company Limited and its affiliates is at a moderate level (mean = 3.30, S.D. = 0.25). The desired condition also remains at a moderate level (mean = 3.39, S.D. = 0.23). Although all aspects are moderate, there is a slight increase in the desired conditions, particularly in the development of safe and effective products (mean = 3.43, S.D. = 0.22) and employee welfare (mean = 3.52, S.D. = 0.19), suggesting the need for further focus on these areas.

Table 3 Mean and Standard Deviation of Current and Desired Conditions for Factors Affecting ESG in the Comprehensive Health, Beauty, and Dietary Supplement Manufacturing Business, SCG Grand Company Limited and Its Affiliates (Governance Dimension)

Aspect	ESG Governance Dimension of SCG Grand Company Limited and Affiliates	Current Conditions	Desired Conditions
		Mean	S.D.
1. Transparency in Operations: Reporting on ESG-related activities and open communication with stakeholders	3.33	.31	Moderate
2. Business Ethics: Ethical practices, such as anti-corruption and fraud prevention	3.37	.29	Moderate
3. Supply Chain Management: Collaboration with business partners who adhere to ESG standards	3.62	.36	Moderate
Overall	3.44	.32	Moderate

Note: Table 3 presents the current condition of governance-related ESG factors in SCG Grand Company Limited and its affiliates is generally moderate (mean = 3.44, S.D. = 0.32).

However, the desired condition shows a marked improvement towards high performance, particularly in the areas of transparency in operations (mean = 4.03, S.D. = 0.28) and business ethics (mean = 4.03, S.D. = 0.22), both of which have a significant gap in desired conditions compared to the current state. Overall, governance-related practices show a clear intention for improvement, moving from a moderate to a high desired level (mean = 4.02, S.D. = 0.23).

Objective 2: To analyze the demand for best practices (ESG) in the comprehensive health, beauty, and dietary supplement manufacturing business of SCG Grand Company Limited and its affiliates, aiming to develop effective and sustainable activities in the future.

Table 4 Analysis of the Necessary Demand for ESG Factors in the Comprehensive Health, Beauty, and Dietary Supplement Manufacturing Business of SCG Grand Company Limited and Its Affiliates

Aspect	ESG Dimension of SCG Grand Company Limited and Affiliates	Current Condition	Desired Condition	PNI Modified	Rank
1.	Environment	3.58	.35	Moderate	4.29
2.	Social	3.33	.25	Moderate	4.29
3.	Governance	3.44	.32	Moderate	4.02
Overall		3.45	.30	Moderate	4.44

Note: Table 4 presents analysis of the demand for best practices (ESG) in SCG Grand Company Limited and its affiliates. The current conditions are rated as moderate across all three ESG dimensions, with environmental factors showing the highest current rating (mean = 3.58, S.D. = 0.35). The desired conditions show a shift toward a high level of performance, particularly in the environmental (mean = 4.29, S.D. = 0.23) and social dimensions (mean = 4.29, S.D. = 0.23), with governance slightly lower (mean = 4.02, S.D. = 0.23). The PNI modified (Priority Need Index) values indicate a strong priority for improvement in all ESG dimensions, with governance ranking highest (PNI = 0.461), followed by environmental (PNI = 0.451) and social (PNI = 0.398). Overall, there is a consistent trend toward enhancing the ESG practices, moving from moderate to high in future expectations.

Objective 3: Best Practices in ESG Implementation within the Comprehensive Health, Beauty, and Dietary Supplement Manufacturing Business of SCG Grand Company Limited and Its Affiliates

This objective aims to explore and analyze best practices related to Environmental, Social, and Governance (ESG) principles within the comprehensive health, beauty, and dietary supplement manufacturing sector of SCG Grand Company Limited and its affiliates. The study focuses on identifying effective ESG strategies and frameworks that can be systematically integrated to enhance corporate sustainability, social responsibility, and ethical governance. These best practices play a critical role in ensuring long-term business growth, regulatory compliance, and the overall well-being of all stakeholders, including employees, consumers, investors, and the broader community.

9. Discussion

This research highlights key Environmental, Social, and Governance (ESG) factors critical to SCG Grand Co., Ltd.'s sustainable practices in the health and beauty manufacturing sector. These practices are essential for reducing environmental impact, promoting social responsibility, and ensuring good governance.

Environmental Sustainability

Waste Management: Effective waste management practices help minimize the company's environmental footprint. Further analysis could explore the specific technologies used and how SCG Grand compares to industry standards.

Sustainable Resource Use: The company's use of sustainably sourced materials, such as organic ingredients, helps conserve resources. Examining sourcing challenges and solutions could provide a deeper understanding of their long-term sustainability.

Greenhouse Gas Reduction: SCG Grand reduces emissions through alternative energy and efficient production processes. Future studies could assess the measurable impact of these efforts on the company's carbon footprint and how they align with global climate goals.

Social Responsibility

Community Engagement: The company creates job opportunities and offers skill development programs. A deeper analysis could explore the long-term impact of these initiatives on local communities.

Health and Consumer Safety: The company ensures product safety through rigorous testing. Further discussion could address how SCG Grand responds to emerging health concerns and regulatory changes.

Employee Welfare: Employee health, safety, and benefits contribute to a supportive work environment. More detailed analysis could explore the long-term effects on employee retention and productivity.

Governance and Ethics

Operational Transparency: SCG Grand ensures transparency by reporting ESG activities clearly. Exploring the mechanisms used to engage stakeholders and maintain transparency would provide deeper insight.

Business Ethics: Adhering to ethical standards is crucial for long-term success. Further analysis could address how SCG Grand manages ethical dilemmas and ensures compliance throughout the organization.

Supply Chain Management: The company collaborates with suppliers to meet ESG standards. A deeper critique could explore the risks of non-compliance and strategies for continuous improvement.

The research provides clear statistical results and best practices but could benefit from deeper analysis of the challenges and outcomes of SCG Grand's ESG strategies. A more detailed discussion would provide actionable insights for further refinement of the company's sustainability efforts, strengthening its position as a leader in the health and beauty manufacturing industry.

10. Conclusion

The estimation of the optimal public debt level and debt limit follows the methodology of Ostry et al. (2010) and Zandi et al. (2011). Firstly, the fiscal reaction function curve (S shaped line) is estimated to establish the relationship between the primary balance and economic variables. The economic variables consists of the lagged public debt to GDP ratio, output gap, government expenditure gap, inflation (CCPI), and openness. Secondly, the growth-adjusted interest payments curve (straight line) is estimated. The third intersection between the primary balance reaction function (S shaped line) and the growth-adjusted interest payments (straight line) is estimated. The last step is to compare the calculated optimal debt with fiscal

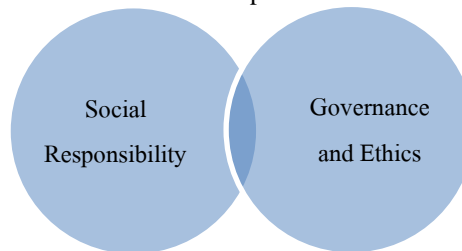
sustainability. If it is below the limit from the policy it is not suitable. Afterwards, it will have a policy to control about it.

The results indicate that the relationship between the primary balance to GDP ratio and lagged debt to GDP ratio represents a cubic function. The optimal public debt to GDP ratio is 42% and the debt limit is 44%. The fiscal space of Thailand is 2.92% (44% – 41.08%). The result suggests that the optimal public debt level and debt limit under the fiscal sustainability framework is suitable for Thailand. The government solvency means that Thailand has the capability to service its public debt because the majority of it is domestic. The result of a change in the cost of loan (r) shows that if r increases, the optimal public debt level and debt limit decrease. If r decreases, the optimal public debt level and debt limit increase.

The government should manage public debt to GDP ratio at 42% and not exceed 44%. If the public debt to GDP ratio exceeds this point, it will affect the control of the rollover of the principle loan and interest payments. The results for the change in the cost of loan suggest that the government should manage the public debt more appropriately. If the public debt to GDP ratio increases, the primary surplus will not be sufficient to control the rollover of the principle loan and interest payments. The government must stabilize economic growth by increasing the principal repayment to reduce the outstanding debt and keep the public debt to GDP at an appropriate level

Originality and body of knowledge

This research expands knowledge in several key areas: Environmental Sustainability: The study deepens understanding of waste management and sustainable resource use, demonstrating how these practices can reduce environmental impact and enhance business efficiency.



Social Responsibility: By focusing on community engagement, employee welfare, and consumer safety, the research emphasizes the role of businesses in societal well-being and building consumer trust.

Governance and Ethics: The research highlights the importance of operational transparency, ethical standards, and anti-corruption measures in fostering long-term sustainability and stakeholder trust.

Suggestions

Based on the findings of this study, the researcher provides the following recommendations:

1. Suggestions for the Application of Research Findings

1.1 Enhancing Environmental Performance

The results from Objective 1 indicate that effective waste management, resource sustainability, and greenhouse gas emission reduction are crucial for improving the business's environmental performance. To achieve these goals, relevant stakeholders, such as management and the environmental department, should implement the following strategies: Adopt renewable energy sources: Invest in solar and wind energy to reduce reliance on fossil fuels.

Improve waste recycling processes: Establish an advanced waste sorting and recycling system within the production facilities.

Ensure sustainable sourcing: Develop a supplier certification program to guarantee that raw materials are sustainably sourced and meet environmental standards.

Implement measurable KPIs: Set clear environmental performance indicators, such as carbon footprint reduction targets and recycling rate improvements, to track progress.

1.2 Strengthening Social Responsibility and Employee Welfare

Findings from Objective 2 highlight the importance of social responsibility, consumer safety, employee welfare, and community engagement in achieving positive ESG outcomes. To enhance the company's social impact, the human resources and corporate social responsibility departments should:

Develop community employment initiatives: Partner with local vocational institutions to provide training and job opportunities for underprivileged groups.

Ensure product safety and transparency: Implement blockchain-based tracking systems to enhance supply chain transparency and guarantee product authenticity.

Enhance workplace health and safety: Regularly conduct occupational health and safety audits and introduce wellness programs for employees.

Increase stakeholder engagement: Organize annual forums where employees, consumers, and community representatives can provide feedback on the company's ESG practices.

1.3 Improving Corporate Governance and Ethical Business Practices

The results from Objective 3 demonstrate that strong corporate governance, transparency, and ethical business practices are essential for achieving long-term ESG goals. To enhance governance, the legal and compliance departments should:

Develop and enforce ethical business guidelines: Create an ESG compliance handbook that outlines ethical business conduct, supplier requirements, and anti-corruption policies.

Improve ESG reporting and transparency: Adopt international ESG reporting frameworks such as the Global Reporting Initiative (GRI) or Sustainability Accounting Standards Board (SASB) to enhance credibility.

Strengthen supply chain governance: Establish a due diligence process to ensure that all suppliers and business partners adhere to ESG standards.

Integrate ESG into executive performance evaluations: Link executive compensation and bonuses to measurable ESG performance indicators, such as carbon reduction targets and social impact metrics.

2. Suggestions for Future Research

This study provides valuable insights into the key factors influencing ESG practices within the dietary supplements and beauty products sector. Future research should explore: Technological innovations for ESG enhancement: Investigate the role of emerging technologies such as blockchain for supply chain traceability and artificial intelligence (AI) for ESG risk assessment.

ESG implementation in different cultural contexts: Examine how cultural variations impact ESG adoption in multinational corporations and propose tailored frameworks for different regions.

The correlation between ESG factors and business performance: Conduct empirical studies using diverse case studies and advanced quantitative methods to measure the long-term financial and operational benefits of ESG adoption.

Development of industry-specific ESG frameworks: Create sector-specific ESG guidelines tailored to dietary supplements, health, and beauty product manufacturers to provide more actionable strategies for companies in this field.

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