

# SYSTEMATIC REVIEW ON BUSINESS PRACTICES AND CHALLENGES AMONG SOUTHEAST ASEAN COUNTRIES TO ADOPT BUSINESS SUSTAINABILITY

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**Abstract.** *This study aims to analyse the practices of sustainability that has been adopted in Southeast Asean. This study also understands the challenges faced by the countries when adopting sustainability practices. This literature review is important as it provides a path for organizations to choose the most suitable business sustainable practices for their business. It also provides a recommendation that can be taken when facing challenges in adopting business sustainability and precautions so that organizations can avoid those challenges. Researchers have found that there were limited resources on the existing studies that point to the same themes as this study. This literature review gathers information from various articles regarding practices and challenges of business sustainability in Southeast Asean in real-life situations and current issues. The key research is to find the practices of business sustainability adopted by Southeast Asean and the challenges faced in adopting the practices. The objective of this study is to provide a clear vision of the practices and challenges of business sustainability in Southeast Asean.*

**Keywords:** *Sustainability, Sustainable business practices, Sustainability challenges, Sustainable business practices in Southeast Asean.*

## 1. INTRODUCTION

This study aims to review and analyse the practices of sustainability and challenges in implementing the business sustainability faced in the Southeast Asean. The second aim of this study is to understand the challenges faced by industries when adopting sustainable practices in Southeast Asean. A systematic review has been conducted to understand the theme and sub-theme based on the stated industries in each article. The major themes of this paper are the analysis of the practices and challenges of business sustainability in Southeast Asean by highlighting real situations occurring in demanded industries. The existing studies have shown the different adoption of sustainable practices in Southeast Asean in different industries (Joshi & Visvanathan, 2019). Key sectors such as agriculture, energy conservation and supply chain are the least researched in Southeast Asean. Other than that, according to Liu, Lee, and Lee (2020), the challenges that organization has faced when implementing the business sustainability are not discussed in detailed. To achieve the objective of this study and answer the key questions, the systematic literature review method has been selected. Systematic literature review analysed and evaluated the chosen articles theoretically and methodologically to understand the themes in various areas.

The key research questions highlighted in this paper were mainly (a) what are the sustainability practices that have been adopted in Southeast Asean and (b) what are the

challenges faced when implementing the business sustainability practices. This systematic literature review helps answer key research questions by reducing bias in selecting articles, further providing an obsolete objective. As a highly populated continent, Southeast Asean faces over-consumed resources. Realizing these challenges, the high demand industries start to invest in various business sustainability practices. Industries like agriculture, aquaculture, energy and technology, and supply chain have been chosen after considering the importance of business development and growth and economic sustainability in respective regions.

## **2. METHODOLOGY**

This part discusses the five sub-sections used in the current study, namely ROSES, resources, systematic review procedure, flow diagram, and data analysis strategy.

### **2.1 Publication Standard Used – ROSES**

The Reporting Standards for Systematic Evidence Syntheses, or ROSES, is used as a set of guidelines for this systematic review as ROSES will give accurate information. ROSES was designed to accommodate a variety of methods used on a variety of review subjects. In this paper, the researchers start their systematic literature review by creating the research questions. The researchers also use three main processes to explain the systematic review strategy, mainly identification, screening, and eligibility. The researchers then move on to a quality assessment of the selected papers, in which they describe the technique used to assure the quality of the articles to be assessed. Finally, the researchers describe how the data for the review were abstracted, as well as how the abstracted data were analysed and verified (Shaffril Samah, Samsuddin, & Ali, 2020).

### **2.2 Resources**

To process this systematic review paper, the researchers used Scopus as the database to search for the sources. Researchers focused on Scopus more because Scopus is the world's biggest abstract and citation database for journals, books, and articles. Scopus also provides a comprehensive overview of research output worldwide in the domains of science, technology, health, social sciences, and arts and humanities, as well as advanced methods for tracking, analysing, and visualising research (Shaffril et al., 2019). The researchers also did manual searches from different mediums to increase the number of relevant articles. Other than Scopus, researchers also use Google Scholar to look for relevant articles. Google Scholar is much easier as the results displayed are English-language documents that had been published. Furthermore, Google Scholar is essentially a superset of Scopus since it can search more than 80% of Scopus citations.

### **2.3 Systematic Literature Review Processes**

Three primary steps comprised the systematic review approach for identifying a number of relevant publications for the ongoing study. The initial step is to identify keywords, which is followed by a search for related and comparable phrases using the thesaurus, dictionaries, encyclopaedias, and previous research. The main keywords in this study are business sustainability, ASEAN countries, business sustainability practices and many more. As a result, after determining all relevant terms, search strings on the Scopus database were created (see Table 1). Due to a variety of advantages, including strong searching capabilities, extensive indexing, article quality control, and a multidisciplinary orientation, Scopus databases have the potential to be the leading database in a systematic literature review. Researchers selected Google Scholar as an additional database. By using the search command, researchers used keywords such as “Challenges on Business Sustainability and Practices”, “Business Sustainability on Southeast Asean Countries”, “Sustainability Practices” and “Effect of Covid-19 on Sustainability Practices”. From both Scopus and Google Scholar databases, this study retrieved about 300 articles.

The second stage after Identification is the Screening stage. During the

screening stage, all 280 articles were automatically filtered by selecting the criteria for article selection using the database's sorting feature. The publications were vetted using a set of criteria that included inclusion and exclusion criteria. The first criteria were the type of literature, whereby the researchers chose to focus solely on journal articles (research papers) because these are the prime sources of empirical data. Consequently, the current study eliminated all systematic reviews, reviews, meta-analyses, meta syntheses, books, book chapters and conference proceedings. Above all, the journal articles must be in English, and the timeline for the article journal must be from 2010 to 2021 only. Aside from that, only research done in the Asian region were chosen in relevance to the review's goal. In order to optimise the odds of discovering relevant articles, papers from the fields of social science, environmental science, agricultural science, and biology have been chosen. A total of 50 items have been preserved for the next step after this phase (see table 2).

The third step is Eligibility. During this step, the researchers must control the articles obtained in the eligibility phase manually to ensure that all surviving articles after the screening procedure comply with and are suitable for use in the present study to achieve the research objectives. This was accomplished by reading the paper titles and abstracts. As a result, 70 articles were eliminated because they were not empirically supported and did not focus on corporate sustainability practices and difficulties in Asian nations and territories. Finally, there are 20 items left to examine.

#### 2.4 Data Analytic Strategy

This study led to an integrative review by using one of the examination techniques, in which a wide variety of research concepts were carried out. Qualitative, quantitative, and mixed methods are analysed, synthesised and resolved by transforming one type of data into otherwise quantitative data. This research chose to qualify all of the data. On the basis of thematic analysis, the procedures of establishing relevant topics and sub-themes were carried out. The data collection phase was the initial step in the theme development process. A collection of 27 articles has been thoroughly analysed by the writers for statements or for obtaining data about study subjects. The second stage is to transform raw data into useful data and to code meaningful categories based on their nature. The researchers employed a coding technique.

During this process, the researchers came out with two main themes, which are "Challenges to adopting sustainability in business among southeast Asean countries" and "Sustainability Practices among Southeast Asean countries". The researchers then resumed the procedure in each of the topics created, further developing any topics, concepts or ideas that relate to one another in the subject. This resulted in six sub-themes. Researchers develop themes based on the findings, and all outcomes are recorded throughout the data analysis process to document any analysis related to the data interpretation. The researchers also compared the results to resolve any discrepancies in the theme formation process. If any contradictions on the themes appeared, the writers would address the issues with one another. Finally, the produced themes and sub-themes were adjusted to ensure that they were all consistent.

### 3. RESULTS AND DISCUSSION

Background of the selected articles. The review process resulted in the researchers obtaining 20 final selected articles. The researchers developed two themes by using the thematic analysis. The first theme is "The challenges to adopt sustainability among the Southeast Asean countries", and the second theme is "Sustainability practices among the Southeast Asean countries". From these two themes, researchers came out with another three sub-themes for each main theme.

From 20 articles, seven articles were from Thailand, five in India, one in China and the others are generally in southeast Asian countries. Three out of 20 articles were published in 2010, three in 2012, two in 2013, three in 2014, one in 2015, two in 2019

and one in 2020.

### 3.1 Sustainable Business Practices

#### 3.1.1 Energy conservation

Among developing countries, China is the largest country that provides resources for research in business sustainability practices. As the most populated country, reducing carbon emission is China's primary concern in sustaining its economy. According to Liang, Ma, Chong, Li, and Ni (2019), China focuses on the establishment of Smart Energy Cities by implementing renewable energies in their cities. In China, the most commonly used energy conservation is energy grid technology as it is able to deliver sustainable energy across the cities (Yu, Lobaccaro, Carlucci, Ruzhu, Li, Finocchiaro, Yanjun, Eikevik, & Wyckmans, 2016; Mah, Wu, & Hills, 2017). Singapore and Thailand managed to create balance for their society's sustainability. Thailand's agroforestry uses agriculture-based liquid for its transportation fuels. Based on the article by Daniel, Lebel, and Gheewala (2010), these agriculture-based fuels have promoted sustainable and renewable energy sources which can replace the fossil-based fuels that have been imported from outside countries. This also has been pointed out in the article by Mukherjee and Sovacool (2014). Malaysia, Singapore and Thailand have used palm oil biodiesel to reduce carbon dioxide emissions that have impacted climate change. Reducing emissions of greenhouse gases can have a good impact on forestry, biodiversity, soil, and water quality that are the key environmental sustainability issues (Mukherjee, & Sovacool, 2014). Other than that, land ownership pattern and cultivation in Thailand has met social and environmental sustainability (Mukherjee, & Sovacool, 2014). Carbon dioxide, monoxide and emission are reduced by consuming agrofuel. Thailand also has produced biogas from wastes. According to Ali, Nitivattananon, Abbas, and Sabir (2012), this energy conservation happened due to excessive solid waste in Thailand, leading to the conducive adoption of biogas to replace greenhouse gases.

India has promoted numerous hydropower as they believe it is essential in energy renewable sources (Khan, 2014). Joshi and Visvanathan (2019) stated that India has converted excessive food waste into biogas to replace usual gas stoves that caused many diseases to the consumer. The high demand for fundamental energy sources has led India to use biomass, hydropower, wind and solar energy to meet the needs of the users. Through this converted energy, it has contributed to the availability of electricity in India. The improvement in the power plan has led to the reduction of omission (Bhattacharyya, 2010). This shows a successfulness in sustainable practices.

#### 3.1.2 Supply Chain Management

Based on the article written by Zhu, Tian, and Sarkis (2012), the implemented Green Supply Chain Management (GSCM) in China includes internal and external management such as the green purchasing that implemented environmental requirements, eco-design practices and investment recovery. Eco-design and investment recovery have significant influences on GSCM (Zhu et al., 2012). Thailand has imposed strict regulations when adopting GSCM and create public awareness on sustainability and the environment (Tippayawong, Tiwaratreewit, & Sopadang., 2015). Jermsittiparsert, Namdej, and Sudawan Somjai (2019) stated that GSCM is the most common in the electronics industry. Due to high awareness in Thailand, many companies have started implementing the GSCM.

India has faced pressing environmental risks caused by the manufacturing industries. These have caused them to implement GSCM in the automobile and mining industry. The implementation of GSCM is still growing while the manufacturing industries are aware that the implementation of GSCM has led to better performance in business operations and competitiveness (Mani, Agrawal & Sharma., 2016).

#### 3.1.3 Agriculture

Thailand has structured various programs in agriculture after realizing the importance of sustainability of agriculture, mainly the supports, training and technologies, and involvement of Non-Government Organization (NGO) and private sectors (Lebel,

Mungkung, Gheewala, & Lebel., 2010; Lebel, Whangchai, Chitmanat, Promya, Chaibu, Sriyasak, & Lebel, 2013). Seafood processing and aquaculture are famous in Thailand (Lebel et al., 2010; Lebel et al., 2013). Hence, it is principal to focus on water management policies and implementation to boost agriculture production.

According to Dwivedi, Dev, Kumar, Yadav, Yadav, Gupta, Singh, & Tomar. (2015), India has introduced sustainable agriculture in fulfilling the need of food sources in the fast-growing population, mainly organic farming and intercropping. Recent years in India have seen NGOs, small farmers and privates involving in agriculture development. (Ferroni, & Zhou, 2012).

### 3.2 Challenges to Adopt Sustainability

At both the local and global levels, the relevance of the notion of sustainability is growing. As a result, it raises concerns about how to integrate sustainability into corporate operations and strategy. Adopting sustainability in a business is not an easy job to do for one's business. There will be challenges that the organizations need to face to have a sustainable business operation. Researchers further break down challenges into economic, environmental and social aspects.

#### 3.2.1 Economic Challenges

Economic growth is the most crucial for businesses or organizations to make decisions on investment and operation as it will influence all business activities in a country. Good economic growth will lead to good business operation.

##### *High and increasing cost*

To adopt sustainable business requires a high cost. For example, Thailand's attempt to promote renewable energy or agrofuels not only caused an increase in local oil cost, but it also caused an influence in Malaysia and Indonesia, all because of existing economic competitiveness (Daniel et al., 2010). Economic challenges are not only dealt with by a country or group but also by affected individuals who work as their own. In Thailand, even though cage-based aquaculture projects in rivers were started to ensure sustainability in the fishery industry, most of the fish farmers earned less than they could imagine. This situation further promotes actions taken by fish farmers in making loans and agreements with selected banks (P. Lebel et al., 2013).

Moving from the existing way in daily operations to more sustainable operations require a lot of costs. Operations that involve chemical and hazardous wastes will incur higher costs to properly dispose of waste. Bulk switch of current packaging to economical-friendly packaging also incur higher costs (Zaabi et al., 2013). Tippayawong (2015) mentioned in his study that Green and sustainable practices are difficult to reconcile with financial performance. Hence, private industries that prioritize profits would ignore the sustainable operation project experiment because profits are still earned even if the sustainable business were not implemented (Mah et al., 2017). The high cost of implementing sustainable business also led to the delay of innovations infrastructure in technological areas in countries from South Asia such as Singapore, Malaysia and Thailand (Chakraborty & Mandal, 2014). Every organization that decided to switch operational procedures to sustainable operations will also hope to get higher returns in profit. Nonetheless, some efforts. such as Sustainable Small Hydropower do not promise profit as most global companies are not interested in small projects compared to large hydropower projects (Khan, 2015).

##### *Covid-19 and Impact towards economic*

The outbreak of the coronavirus (Covid-19) impacted countries in Asia and also countries worldwide. The disease outbreak without any warnings has severed businesses and operational industries for a few months until the government of each country make new decisions. During the earlier phase of the disease outbreak, all operating industries such as factories are forced to close for at least three months for the government to take precautional methods and contaminate the spread of the virus. As a result, national manufacturing closures have a tremendous impact on global commerce

and production by disrupting global supply networks (Liu et al., 2020). According to Liu, besides factory industries being closed, the pandemic's worst consequences are also felt in aviation, travel, and tourism.

#### *Developed Economy led to rapid urbanization*

The rapid growth of urbanization that came from technological improvements led to the "smart energy city" development, which further encouraged China to build the "smart energy town" in certain areas in the country. To develop an entire town by using smart energy will incur a high cost. Some local governments have yet to provide further recommendations in actions for the smart energy project, as well as applicable financial subsidies and support programmes, as the smart city requires full ICT development to ensure the efficiency of the overall energy system (Liang et al., 2020).

### 3.2.2 Environment Challenge

Switching from an existing operational procedure to a sustainable operation procedure requires a high impact on the economy and the world environment.

#### *Chemical and non-recyclable wastes*

Developing Asian nations are today confronted with issues of rising urbanisation and the need for more food and housing in order to maintain a quality of living. Food makes up the majority of organic waste (Joshi & Visvanathan, 2019). These issues are notable in Asian megacities like Tokyo, Beijing, Bangkok, Seoul, Karachi, Mumbai, and Colombo (Ali et al., 2012).

There are raising concerns on environmental viability regarding the mass-production that involves mother nature, mainly the oceans, forests and lands. Water utilisation, energy consumption, land usage, and organic and nutrient loading were the environmental footprint indicators concerned. Excessive nutrition contamination and possible side effects from chemical and pharmaceutical use might emerge from high cage density in limited areas (Lebel et al., 2013). For instance, in Thailand, according to Lebel (2010), black shrimp wastewater emissions are 3 to 6 times greater than white shrimp wastewater emissions. With this knowledge, shrimp farmers switch from black shrimp to white shrimp when the white shrimp niche was that it would be more sustainable than the prevalent black shrimp farming method. To implement sustainable business practices, some countries in Asia decided to start using agrofuels. This practice might have negative consequences for the environment because harmful pollution of soil and water can occur. The use of chemical pesticides and fertilisers farm employees in the plantation can also contribute to toxic pollutions (Daniel et al., 2010).

Other than that, inorganic fertilisers have a lot of adverse effects on the environment, such as nitrate contamination (Sardar et al., 2015). Another environmental issue regarding the growth of palm oil biodiesel in Southeast Asia is the conversion of rain forests into plantations and the effects on existing ecosystems. On the grounds of this, some bioenergy scholars and institutions recognise the environmental challenges that large-scale palm oil production can pose. Activities like encroaching on protected areas, disrupting water systems, displacing food production, and harbouring unsustainable land-use practices can negate GHG emission benefits for decades and cause widespread ecological damage (Mukherjee & Sovacool, 2014).

Electricity and technologies also have their own waste where electrical is the one area where distortion has been a long-standing issue, causing considerable financial hardship for state-owned electricity distribution corporations. Price manipulation encourages wasteful consumption, which worsens the environmental implications (Bhattacharyya, 2010). The computer and home electronic equipment business have experienced issues in waste reduction, which is linked to the performance of Thailand's electronic supply chain (Jermsittiparsert et al., 2019) and the development of smart energy town in China that requires more energy and electrical consumptions for internet and other smart projects (Khan, 2015; Liang et al., 2020; Mah et al., 2017; Yu et al., 2017).

### *Natural Disaster Threats*

Nothing could be done when natural disasters came in season. Moreover, countries that are always expecting natural disaster have to face constant challenges in remedying the damage. Examples of natural disasters are floods in Thailand, volcano explosions in Indonesia and many more. Thailand's vulnerability to natural disasters has a severe impact on its economy and is one of its biggest competitive disadvantages. Floodwaters ravaged 61 of Thailand's 77 provinces, wreaking havoc on countless manufacturing enterprises. These facilities, which are located in flooded industrial parks, had to be shut down. In the month of May 2013, the supply chain suffered severe damage (Chakraborty & Mandal, 2014).

### 3.2.3 Social and Awareness Challenge

To implement sustainable practices in every business, people that involve in all activities need to have first knowledge about what is sustainable. Without adequate knowledge and information about the advantages and impotence of sustainability, the implementation effort would be a waste because people involved in this activity will not know what they are doing. Bhattacharyya (2010) agreed that there is still limited awareness regarding sustainable effort in business operations. Not only that, in most cities, the waste management problem has become so serious that local governments alone are unable to meet the needs and requests for garbage collection and disposal. Institutional shortcomings, inadequate resources, a lack of adequate collection methods, a lack of environmental knowledge, and a public unwilling to engage and collaborate in solid waste management are some of the most typical waste management issues in developing nations (Ali et al., 2012; Khan, 2015). The absence of awareness or concern, acceptance of food waste as a corporate standard, bad scheduling, personal preferences for certain meals, improper and systemic storage practises and over-preparation of food are all social reasons for the development of food waste (Joshi & Visvanathan, 2019).

It goes the same for the implementation of sustainable agriculture on addressing inadequacies in the agricultural sector, with reasons such as the low consumption of high-quality inputs, a lack of automation, a lack of farm finance, so on. There is a lack of understanding about scientific farming procedures (Ferroni & Zhou, 2012). This demonstrates that senior management is less aware of environmental activities and has paid far less attention to implement environmental policies. Lack of managerial commitment has been identified as a frequent hurdle in a variety of businesses by several academics (Zaabi et al., 2013). Countries such as Malaysia lack the awareness and knowledge on obtaining funds from financial institutions to help businesses implement sustainable business practices (Chakraborty & Mandal, 2014). Employees in the supply chain suffer a slew of social sustainability challenges. According to a 2014 World Bank report manufacturing industry's supply chain in developing nations, developing awareness of social concerns in stakeholders, combined with pressure from nongovernmental organisations (NGOs), has been essential in pressuring firms to operate in a socially responsible manner (Mani et al., 2016).

## **4. DISCUSSION**

In this section, the researcher will discuss the practices and challenges in adapting business sustainability among Southeast Asean countries separately.

The main aim of this study is to analyse the sustainable practices in Southeast Asean countries and understand the challenges faced by them in implementing the sustainable practices. The researcher has narrowed the topic to several industries and regions in Southeast Asean. Southeast Asean has been selected because this continent has shown significant growth in economy when compared to the other continents. The sub-theme of energy conservation, agriculture, supply chain management, economic, environment and social awareness were selected in this study after reviewing the development in sustainability and considering the effects on sustainability resources.

In answering the first key research question, Southeast Asean started implementing sustainable practices after realizing the importance. Positive initiatives

such as Thailand's agrofuel production, India's hydropower, and China's proposal of Smart Energy Cities, has been identified on the sustainable practices in energy resources. GSCM in supply chain management has been implemented in all selected countries as it is seen as a widely accepted practice. Southeast Asean countries mainly focus on implementing strict rules and regulations of supply chain management and creating awareness to the consumers on green purchasing. The lower economical contribution has slowed the development of sustainable practices even though the workforce is high in the agriculture sector. However, adopting different sustainable practices in farming, food production, and processing has been the common alternative in Southeast Asean.

Southeast Asean countries adopted many alternatives in energy conservation to adapt to business and social sustainability. The using of biogas and biofuel from waste to replace the traditional petroleum fuel are the efforts taken. This initiative is better as petroleum fuel cost much higher than the bio-based fuel that the countries has created. Other than that, this energy conservation practice also reduced carbon omission and harmful gas released from petroleum. Bio-based fuel and gas help the sustainability of the environment and business at the same time. It is significant to take care of the planet first before commencing any business. Business operations also can take this advantage to reduce their cost in everyday operations. As Southeast Asean counties are surrounded by waters, it is also important for them to have water management systems. Thailand has taken a big step in shifting the aquaculture of pacific white shrimp from black tiger shrimp due to the extinction caused by climate change. Thailand also insists on the importance of having a cage culture in rivers and ponds to adapt to the current crisis of climate change. Agriculture is as much important too as India has improved their soil fertility to minimize the disturbance of pests and disease. The contribution of NGOs, the private sector, and small farmers also helps in the development of agriculture.

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The economic challenges give high impact as to make business go green with sustainability, in which the organization requires high expenses and sacrifices profits. To start a sustainability effort, organizations must begin with changing daily operations that are environmental-friendly and more sustainable such as changing the way to dispose of waste and switch to eco-friendly packaging. Chemical and hazardous waste operations will endure higher costs in the proper waste disposal and transition from present packaging to more cost-effective packaging in bulk. With the current Covid-19 pandemic, the economic disturbance will not only be affected by the world's health but also the world's economy. National industrial shutdowns have a huge influence on global trade and output by interrupting global supply chains. All these caused economic activities to go slower than it is before the pandemic happened. Last but not least, the rapid growth of the economy that led to rapid urbanization in certain areas in China also became a challenge towards sustainability implementation. Urbanization will lead to more ongoing projects that require a lot of costs. The need for developers and construction to include hydrogen production with hydroelectric power in projects to build energy towns in China will consume high cost.

To avoid following the developed world's growth track, when high human development is coupled by increased carbon emissions, Southeast Asean would require both technology and human capability. Natural resources abound in the Southeast Asean area are essential for the countries in specific regions, world biodiversity and climate change. Nonetheless, population and economic expansion continue to put strains on the



Southeast Asean environment. Other than that, natural disasters that happened periodically in certain countries in Southeast Asean will impact the businesses. For example, crop failures have occurred across the country due to extreme weather conditions brought on by climate change, including extended droughts and severe floods. Examples of these are the floods in Indonesia and volcano eruptions in Thailand. Aside from that, a population that is mainly illiterate, unskilled, and resource-poor is more vulnerable to climate change consequences due to a lack of information and awareness. Asian fishermen, on the whole, recognise and depend on their rich experiences in building adaptation strategies. They develop adaptation strategies through the supply of indigenous forecasting abilities and monitoring of local environmental changes.

## **5. RECOMMENDATIONS**

The current global economic landscape has been transformed by growing environmental concerns, stringent legislation and public awareness. By creating and implementing appropriate strategies and functions such as green processes, product creation and energy conservation companies may play a major role in achieving sustainable development. To proactively respond to challenges of energy and climate, companies must employ energy-saving measures. In addition, companies are keen to implement public agreements that benefit society and the environment. A growing number of businesses have discovered that executing long-term business strategies yields better outcomes and opens new possibilities. Compliance with environmental regulations is the first step toward sustainability for every firm. The company's environmental performance increases through adhering to national and international environmental standards. Besides following the rules, some businesses go above and beyond by implementing comprehensive sustainable development plans. Environmental risk management is the next stage in a company's quest for long-term viability. Industries must take proactive steps to implement methods that will aid in the resolution of environmental issues. To avoid environmental dangers, businesses use a risk management strategy. This technique lowers the costs incurred by the firm as a result of environmental harm. For example, if not adequately handled, air pollutants released by textile processes and wastewaters from these textile activities are dangerous to the environment. Furthermore, the firm saves money on operational costs by reducing waste, avoiding pollution, and eliminating health and safety hazards. Some companies perform environmental evaluations, establish environmental management systems and adopt environmental policies.

## **6. LIMITATION AND RECOMMENDATIONS FOR FUTURE STUDIES**

This research made numerous recommendations for future researchers to consider. In today's world, when collaborative consumption and sharing economy enterprises are becoming more popular in developing and emerging nations, there is a pressing need to comprehend their societal consequences. There are likely to be consequences for service employees and incumbent businesses as the number of app-based services grows. With the advent of sharing economy firms in developing nations, there are concerns about income distribution, especially if such businesses are headquartered abroad. If these firms continue to grow in developing and emerging countries, it will be critical to understand how they might serve lower-income populations and how earnings and jobs may be distributed locally. The systematic review procedure showed that future research should take more sustainable studies of the population in the tiny south-east of Asia such as in Malaysia, Indonesia and Thailand, concentrating on their sustainable business practises throughout the Asia Pacific area.

## **CONCLUSION**

There are two components of the examination of sustainable business practises in the nations of Southeast Asean. The first is to expand sustainability action plans in nations with environmental concerns. The second is implementing sustainable practices, which under this study, they are classified as headings hindered by numerous obstacles. A greater understanding of society may assist the successful implementation of sustainable business practices and correct policy framework. More empirical research can offer an overview of the challenges and solutions in this field. Asia must pioneer

*The 2<sup>nd</sup> International Conference on Innovations  
in Social Sciences Education and Engineering (ICoISSEE )  
August 07<sup>th</sup>, 2021*

sustainable business practice as the most populous continent with broad geographical features. Since Southeast Asean nations have already begun to strive towards sustainable development, the age of entirely sustainable activities and living is not that far off. The message of sustainable development may be conveyed throughout the globe in Southeast Asean's momentum.

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### Example of Table and Figure

#### Database Search String

Database Search String	
Scopus	TITLE-ABS-KEY ( "ASEAN and Covid-19" OR "Importance of CSR" OR "CSR and Sustainability" OR "Sustainability" OR "Social Responsibility" OR "Business strategy" OR "Southeast Asian Country" OR "ASEAN" OR "Corporate Social Responsibility" OR "business sustainability" OR "Sustainability practices" OR "Challenges on sustainability" OR "Covid-19 and sustainability" OR "CSR" OR "Business practices" ) )
Google Scholar	Keyword: CSR and Sustainability in Asian, Covid-19 Impact on Sustainability in Asia, Southeast Asian Country Sustainability, Business Sustainability in ASEAN, Business Practices in Asia, Importance of CSR, CSR in Business, Importance of Sustainability, Social Responsibility

Table 1: The search string

#### Inclusion and Exclusion Criteria

Criteria	Eligibility	Exclusion
Literature type	Journal (research articles)	Journals (review), book series, book, chapter in book, conference proceeding
Language	English and Bahasa Malaysia	Non-English except Bahasa Malaysia
Timeline	Between 2010 and 2021	Before 2010
Countries	Asian countries	Non-Asian countries

Subject Area	Social Science, Economics, and Business, Management and Accountancy.	Other than, Social Science, Economics, and Business, Management and Accountancy.
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Table 2: The inclusion and exclusion criteria

**Flow Diagram Systematic Literature Review Processes**

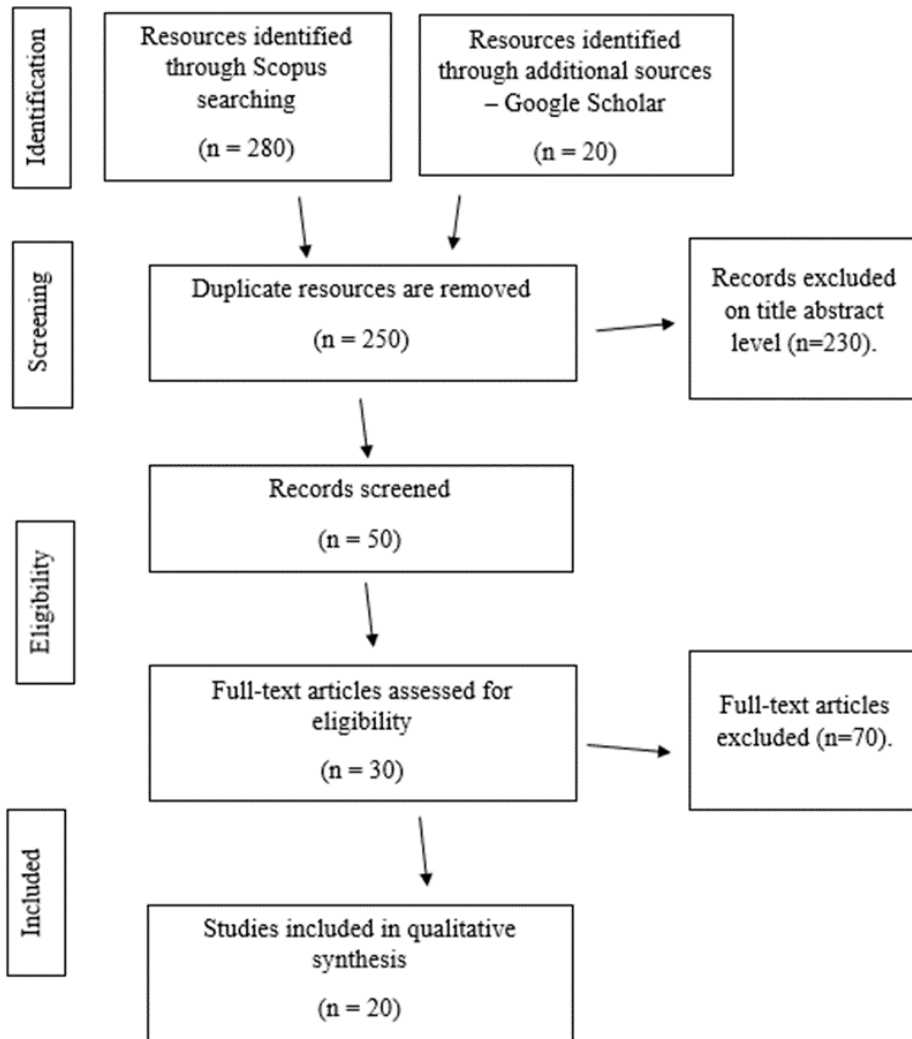


Figure 1: Flow Diagram

**Group Of Challenges And Practices Of Business Sustainability In Southeast Asean**

Authors	Challenges to adopt sustainability among southeast Asian countries			Sustainability Practices among SEA countries		
	Economics	Environment	Social /Awareness	Energy Conservation	Sustainable Change Management	Argriculture/ Forestry
Louis et. al (2010) (Thailand)		/				/
Daniel et. al (2010) (Thailand)	/	/		/		
Bhattacharyya (2010) (India)	/	/	/	/		
Ali et. al (2012) (Thailand)		/	/	/		
Ferroni and Zhou (2012) (India)			/			/
Zhu et. al (2012) (China)	/				/	
Lebel et. al (2013) (Thailand)	/	/	/			/
Zaabi et. al (2013) (India)	/		/			
Chakraborty and Manda (2014) (Asia)	/	/	/			
Khan (2014) (India)	/	/	/	/		

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Mukherjee and Sovacool (2014)(Southeast Asia)		/		/		
Dwivedi et. al (2015) (India)		/				/
Tippayawong (2015)(Thailand)	/				/	
Mani et. al (2016)(India)	/		/		/	
Yu et. al (2016)(China)		/		/		
Mah et. al (2017)(China)		/		/		
Liang et. al (2019)(China)	/	/		/		
Joshi and Visvanathan (2019) (Asia)		/	/	/		
Jermstittiparser et. al (2019) (Thailand)		/			/	
Liu et. al (2020)(Asia-Covid-19)	/					

Table 3: Group of Challenges and Practices of Business Sustainability in Southeast Asean

### **Business Sustainability and Challenges in articles selected**

Articles selected in formulating the basis of adaption strategies and challenges faced in business sustainability.

Title of Article	Authors	Challenges and Practices
Innovation cycles, niches and sustainability in the shrimp aquaculture industry in Thailand	Louis Lebel, Rattanawan Mungkung, Shabbir H. Gheewala, and Phimpakan Lebel (2010)	A move from black shrimp tiger culture to white Pacific shrimp.
Agrofuels in Thailand: Policies, Practices and Prospects	Rajesh Daniel, Louis Lebel, and Shabbir H. Gheewala (2010)	Agricultural liquids transport fuels, which may lessen reliance on fossil-fuel imports, have been strongly advocated as renewable, sustainable, energy source. Stress certain sector management problems in India for a sustainable energy future.
Shaping a sustainability energy future for India: Management challenges	Subhes C. Bhattacharyya (2010)	The conversion of green waste to renewable energy is not only ecologically advantageous but also cost-effective.
Green waste to biogas: Renewable energy possibilities for Thailand's green market	Ghaffar Ali, Vilas Nitivattananon, Sawaid Abbas, and Muazzam Sabir (2012)	Discussion on the management of knowledge, convergence of extension systems, role of the information and communication technologies and mass media, private sector efforts and agricultural extension systems and market-led systems, including public/private partnerships.
Achievements and Challenges in Agricultural Extension in India	Marco Ferroni, and Yuan Zhou (2012)	Evaluation of the relative importance of the drivers of innovation and imitation to spread these GSCM techniques across Chinese companies.
Diffusion of selected Green Supply Chain Management Practices: An assessment of Chinese enterprises	Qinghua Zhu, Yihui Tian, and Joseph Sarkis (2012)	Discussion of aquaculture in water pools and cage culture in rivers vital for water management in changing situations.
River- based cage Aquaculture of Tilapia in Northern Thailand: Sustainability of Rearing and Business Practices	Phimpakan Lebel, Niwooti Whangchai, Chanagun Chitmanat, Jongkon Promya, Prachaub Chaibu, Patcharawalai Sriyasak, and Louis Lebel (2013)	The obstacles to sustainable management of the supply chain in India. Environmental management and operations range from local environmental optimization to consideration of the entire delivery chain including production, consumption, customer service and disposal.
Analysis of interaction between the barriers for the implementation of sustainable supply chain management	Shaikha Al Zaabi, Noura Al Dhaheri, and Ali Diabat (2013)	Obey the problems in implementing the sustainable system of change management in different countries such as Malaysia, India, Indonesia and Thailand.
Understanding challenges of supply chain sustainability in Asia	Ayon Chakraborty and Purnendu Mandal (2014)	



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Palm oil-based biofuels and sustainability in southeast Asia: A review of Indonesia, Malaysia and Thailand	Ishani Mukherjee, and Benjamin K. Sovacool (2014)	Observing the fact that palm oil biodiesel's capacity to reduce carbon dioxide emissions, its carbon debt and its impact on forestry, biodiversity and soil and water quality are key environmental sustainability issues, palm oil biodiesel's impacts on the food safety of South-East Asia include issues related to socio-economic sustainability. In addition to the consequences of the cultivation of palm oil on rural subsistence and land use and the motivations and technology surrounding the development of palm oil biodiesel in the region. Extend awareness and understanding among citizens about the importance of sustainability. Make the technology transfer to international companies to learn about hydroelectricity.
Small Hydro Power in India: Is it a sustainable business?	Rakhshanda Khan (2014)	i) Proven advantage both in soil fertility and crop output, especially for cereal crops, a staple food crop for smallholder agriculturists, with their other soil conservation advantage, limiting the occurrence of plagues and diseases, as well as crop failure insurance. ii) Show the environmental difficulties in the absence of participatory methods and land fragmentation under farmers' conditions, particularly the involvement of resourceless farmers, might not allow these smallholders to be easily accepted.
Potential Role of Maize-Legume Intercropping Systems to Improve Soil Fertility Status under Smallholder Farming Systems for Sustainable Agriculture in India	Ashish Dwivedi, Ista Dev, Vineet Kumar, Rajveer Singh Yadav, Mohit Yadav, Dileep Gupta, Adesh Singh, and S. S. Tomar (2015)	Implementing the technique of green supply chain management ensures improved financial performance and long-term business value.
Positive Influence of Green Supply Chain Operations on Thai Electronic Firms' Financial Performance	K. Y. Tippayawong, T. Tiwaratreewit, and A. Sopadang (2015)	The social sustainability of Indian Manufacturing Supply Chain suppliers and other stakeholders by applying socially sustainable practises generates a positive effect and competitive advantage for the firm.
Socially sustainable business practices in Indian manufacturing industries: a study of two companies	Ventakesh Mani, Rajat Agrawal and Vinay Sharma (2016)	Integrated urban energy design may enhance energy efficiency, utilisation of renewable energy resources and bioclimatic techniques and reduce the impact of energy at the building, municipal and urban levels.
Sustainable energy in cities: methodology and results of a summer course providing smart solutions for a new district in Shanghai	Wang Yu, Gabriele Lobaccaro, Salvatore Carlucci, Wang Ruzhu, Yong Li, Luca Finocchiaro, Dai Yanjun, Trygve Magne Eikevik, and Annemie Wyckmans (2016)	

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<p>Explaining the role of incumbent utilities in sustainable energy transitions: A case study of the smart grid development in China</p>	<p>Daphne Ngar-yin Mah, Yun-Ying Wu, and Peter Ronald Hills (2017)</p>	<p>Examines the role of existing companies in sustainable energy transitions by building a model under the guidance of the incumbents utilising Smart Grid (SG) advancements in China. Major-state owners function as SG deployment facilitators.</p>
<p>Development of smart energy towns in China: Concept and practices</p>	<p>Xuesheng Liang, Linwei Ma, Chinhao Chong, Zheng Li, and Weidou Ni (2019)</p>	<p>Analysis of Chinese Smart Energy Towns' idea and practise stresses the significance of growing urbanisation in today's cities and even rural regions.</p>
<p>Green Supply Chain Practices and Sustainable Performance: Moderating Role of Total Quality Management Practices in Electronic Industry of Thailand</p>	<p>Kittisak Jermsittiparsert, Puttisat Namdej, and Sudawan Somjai (2019)</p>	<p>Spread awareness of TQM in industry and inform them about the link TQM and the green project to the environment.</p>
<p>Sustainable management practices of food waste in Asia: Technological and policy drivers</p>	<p>Prabhat Joshi, and Chettiyappan Visvanathan (2019)</p>	<p>Food waste management in Asia is not just a matter of technological solutions, but also initiatives to increase public engagement. Therefore, it is important to employ local human resources for operation and maintenance and encourage public–private cooperation to reward waste management and resource recovery.</p>
<p>The challenges and opportunities of a global health crisis: the management and business implications of COVID-19 from an Asian perspective</p>	<p>Yipeng Liu, Jong Min Lee, and Celia Lee (2020)</p>	<p>To see if the government's economic policies encouraged the production, transport, service and retail businesses of antiviruses in major part.</p>

Table 4: Summary of Article