

# **Sustainable Entrepreneur in Patchouli Cultivation: A Conceptual Framework**

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## **ABSTRACT**

The world's demand of essential oil has been increased and could contribute to increase the benefits for several countries. Indonesia has potential for patchouli farm and is one of largest exporter countries. Patchouli is one of the sources of essential oil has contributed to fill the high demand. Farmers has the key role in patchouli cultivation must sustain their production without harm the ecosystem. This study aims to identify the theory, experience and perspective of sustainable entrepreneurship in the agribusiness sector, namely patchouli cultivation. This study reviewed previous research on several data bases, including: Google Scholar and Researchgate. Several articles related to research topics from reputable journals were collected. The results of this study were carried out succeeded in formulating a research model on the influence of sustainable attitudes, sustainable norms, sustainable behavior, achievement of opportunities, three points of sustainability, on sustainable entrepreneurship. The research model that was formed is recommended for further research. This conceptual paper formulates a model and requires empirical research to generalize the existence of the theory in the future. The research model formulated in this study is still relatively new in the field of sustainable entrepreneurship in patchouli cultivation.

**Keywords:** *Sustainable, Entrepreneurship, Patchouli, Conceptual Framework.*

## **1. INTRODUCTION**

The current world demand for patchouli oil is quite high and is predicted to continue to increase in the future. Essential oil as a plantation commodity has contributed to increasing foreign exchange for Indonesia. Most of the world's patchouli oil market share and succeeded in placing its position as a major producing country. Patchouli oil, which is also one of the essential oils, is exported to several countries with a volume of 1,200-1,500 tons/year or around 85% of Indonesia's essential oil exports [1]. The end points of export include Singapore, the United States, Spain, France, Switzerland, England, and other countries. Patchouli oil is a binder in the perfume, pharmaceutical, and aromatherapy industries, so far it cannot be replaced by other ingredients [2]. Patchouli oil is often used as a binder or fixative agent and pharmaceutical[3]. Several areas on the Sulawesi island which become the center of patchouli oil production in Indonesia are South Sulawesi, Southeast Sulawesi and

Gorontalo [6]. However, another area that is experiencing growth in the number of patchouli plants is Central Sulawesi.

High productivity and profit are the two most important performance indicators in farming analysis. So far, efforts to improve farming performance have mostly been carried out through a cultivation technique approach [4]. Through this approach, farmers are motivated, guided, mobilized, and even directed by the rules to follow all government advice [5]. On the other hand, the role of farmers as the main actors has less than the maximum ability, creativity and creativity [1].

Hisrich [7] states that entrepreneurship is a dynamic process that is always influenced by environmental factors. Based on this, entrepreneurship is the internal potential of farmers and is used as an alternative approach to improve agricultural performance. According to Rougoor et al. [8] four external environmental factors that play a

role in determining farmer entrepreneurship include the physical, social, economic and institutional environment. In addition, other performance indicators are also important to analyze, including output prices, technical efficiency, and competitiveness. Therefore, farming businesses need to improve their performance on an ongoing basis.

Based on the previous findings, there are few researches elaborate the sustainable entrepreneurship in patchouli farmers. Most of the research in patchouli described technical issues. In other words, less of the previous research studied the relationship between sustainable entrepreneurship in patchouli farm.

Therefore, it is important to create an understanding among the parties in developing sustainable entrepreneurship in patchouli farming. Failure to address this will lead to future environmental and social problems. Thus, the aim of this paper is to investigate the relationship between the antecedents of farmer entrepreneurship and sustainability. Then, the bottom line of this paper is to provide a conceptual framework for further research.

## 2. LITERATURE REVIEW

### 2.1. Sustainable Entrepreneurship in the Agribusiness Sector

The definition of sustainability is a general agreement to maintain a balance between economic, environmental, and social factors on an equal and harmonious basis to meet the needs of the present without affecting the needs of future generations [9]. Entrepreneurs have been making innovations to reduce the impact of business operations on the environment. Increasing environmental degradation is a signal for future entrepreneurial creativity. Further studies were conducted [10], which showed that maintaining future sustainability requires creativity, commitment to nature conservation, and socio-economic culture or awareness. current local in environmental dynamics. In addition, entrepreneurship is increasing and developing gradually towards sustainable entrepreneurial development.

### 2.2. Sustainability

The existing literature confirms that a sustainability attitude is needed to envision sustainable entrepreneurial intentions. This study adopted the typical attitudes and factors of TPB. According to Spagnoli and colleagues [11], sustainability attitudes are personal values and beliefs that influence one's entrepreneurial intentions. Similarly, it includes a file of abilities to influence entrepreneurial intentions, as they can be considered as important factors influencing

individual environmental contemplation [10] and implementation in sustainability [11]. According to Ajzen [12], attitude is a determinant of behavioral intention, and has a positive influence on individuals' perspectives on entrepreneurial intentions [13]. In addition, it was also found to be an influential factor of intention to pro-environmental behavior and play an important role in motivating sustainable entrepreneurship [14]. People engage in sustainable practices are influenced by their positive or negative attitudes as this is a motivating factor for entrepreneurs to improve sustainable practices [15]. Therefore, it can be considered in investigating entrepreneurial intentions that belief in learning affects their attitude of sustainability in the development of sustainable business models based on the above mechanisms.

## 3. METHODOLOGY

This paper was prepared using a conceptual research method by relying on a literature review to identify sustainable entrepreneurship in agro-industry. This method includes several steps: collection of related works, analysis of concepts and aspects adopted from existing studies, identification knowledge gaps, and identify inconsistencies in the literature for concept development in new research areas.

The literature search was carried out with the keyword "sustainable entrepreneurship model framework" because it was related to underexplored topics. Several scientific databases, including Science Direct, Scopus, and Google Scholar, are used to find relevant studies with a limited range of custom searches from 2000 to 2020. A literature search found many publications in this field of study that have been published in various journals.

The results obtained are then analyzed to find concepts and aspects considered in previous research. This process aims to identify gaps and new features that need to be discovered in future sustainable business models. These features and some other new features then integrated into a sustainable entrepreneurship framework.

## 4. DISCUSSION

Understanding sustainable entrepreneurship can be defined as individual recognition, development, and exploitation of opportunities to provide economic, social, and ecological benefits for future goods and services [21]. Meanwhile, sustainable development can be interpreted as meeting future needs that should be seized to produce future generation needs, combining sustainable development plans with business models, and developing into sustainable entrepreneurial synergies.

The concept of sustainable development of Triple Bottom Line (TBL) has been widely used by several researchers. Soto-Acosta et al. [25] not only to enlighten or point to sustainable development but also to serve as an effective instrument for popular businesses to do so and play an important role in demonstrating promise towards agricultural sustainability[26]. However, the model has been adopted by scholars while conducting relevant research on sustainable entrepreneurship[26]. Sustainable entrepreneur must generate social cohesion that meets the needs of individuals and communities that include economy, society, and ecology[27].

According to Nauta et al. [16], subjective norms that influence one's academic and professional decisions in life are a factor influencing the direction of a student's business. According to Bandura's theory of social learning, the existence of norms has three advantages, namely providing learning, inspiration, and motivation to help individuals determine their intentions and attitudes[16]. In previous research social norms are a part of the process of starting a business, while students need subjective role models such as parents, friends, experts, and community leaders who can be a source of inspiration for new entrepreneurs[17]. What drives the positive relationship between sustainability norms and sustainable practices is further confirmed by Sullivan & Meek[18]. Pressure or inspiration from the community encourages entrepreneurs to stimulate sustainable agricultural business models.

Everyone in developing intentions relies on individual control behavior and self-efficacy[19]. Individual behavior is influenced by extrinsic and intrinsic factors along with prosocial motivation [20]. In addition, individuals are also encouraged to take deliberate and practical actions to conserve natural and social resources. For example, individuals tend to behave pro-ecologically, frugally, altruistically, and fairly in terms of positive psychological consequences. Aspects that include positive psychology include satisfaction, self-efficacy, psychological well-being and recovery, happiness, and even pleasure. This allows the preservation of the natural environment and the protection and integrity of society [18]. An entrepreneur can be influenced by social values that stimulate the sustainable behavior of an entrepreneur. Therefore, investigations into the determination to encourage the development of sustainable business models are driven by sustainable entrepreneurial intentions towards the agricultural sector.

Sustainable development can refer to "development" as a shift in the current unfavorable conditions in society ensuring that future generations can meet their own needs by creating opportunism in the form of motivation and prior knowledge that

emphasizes individual attention to the recognition of sustainable development opportunities that may sustain agriculture, nature, and the environment community and provide development for others[28], [29]. Sustainable entrepreneurship is the discovery, creation and exploitation of opportunities to create future goods and services that are likely to sustain agricultural, natural and communal environments and provide benefits to others.

The success of the reality concerning farming production and income is not only determined by the activities of cultivation techniques but is also determined solely by the ability of farmers both from the attitude, knowledge and good life skills of farmers carried out in preparation to farming operations. from planting to marketing the products produced [6].

Sustainable entrepreneurship is a business model that integrates the three domains of sustainable development[20],[22]. The business position was first taken by double bottom line stages and developed into triple bottom lines[10]. Sustainable entrepreneurship creates a profitable business and achieve certain goals of environmental and social objectives[23]. As a result, the creation of an amalgamation of technical learning areas of the value of sustainability for entrepreneurs[23]. In that spirit, sustainable entrepreneurs' function as economic agents to initiate, adapt and integrate processes and activities that lead to the development of sustainable and profitable economic opportunities[24]. The proposed research framework can be seen in Figure 1.

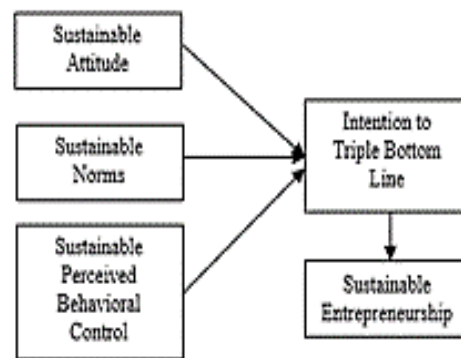


Figure 1. Conceptual Framework

## 5. CONCLUSION

Sustainable entrepreneurship is not only limited to the creation of products and services, but also includes environmental commitment and equity. This means that the sustainability of a business cannot be separated from support from outside the company. Therefore, the mindset of entrepreneurship is not limited to only how to create new products or services but must also think about environmental and

social impacts. The future study of sustainable entrepreneurship will be analyzed on patchouli farmers. The selection of this type of farming is based on a high level of risk and commercial level. Patchouli agricultural commodities are categorized as high risk and require intensive care. The selection of this patchouli commodity is also based on its potential. The area of land that has been developed is very large and has been proven to be able to provide a very large foreign exchange contribution for the nation.

## AUTHORS' CONTRIBUTIONS

HF conceived of the study and coordinated research activities. SH participated in the sequence alignment and drafted the manuscript. FZ participated in design the manuscript. IA participated in collecting and reviewed articles. ER participated in reviewed articles. RI participated in delivered questionnaires. All authors read and approved the final manuscript.

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