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អត្ថបទស្រាវជ្រាវ

ការវិភាគប្រែប្រួលសហគ្រិនភាព និងតាមដានអ្នកដឹកនាំបៃតងនៅក្នុងការអប់រំខ្ពស់សិក្សាអាស៊ាន

Gap analysis on green entrepreneurship and leadership in ASEAN Higher Education

ANGEL<sup>១</sup> ម៉ាន សុធី<sup>២</sup> ជីវ ស្មី<sup>២</sup> និង យ៉ឹម ចាន់វិសាល<sup>២\*</sup>

ANGEL<sup>1</sup>, Sothy Mean<sup>2</sup>, Reaksmey Jiv<sup>2</sup>, and Chanvisal Yim<sup>2\*</sup>

<sup>១</sup> ASEAN Network for Green Entrepreneurship and Leadership (ANGEL), Erasmus+ Capacity Building project, Europe

<sup>២</sup> នាយកដ្ឋានស្រាវជ្រាវ នៃសាកលវិទ្យាល័យ សៅស៊ីអិសឌីអេសសេរៀ ព្រះរាជាណាចក្រកម្ពុជា

<sup>2</sup> Rearch Department, University of South-East Asia, Kingdom of Cambodia

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មូលដ្ឋានសង្ខេប

ការសិក្សានេះមានគោលបំណងបង្ហាញពីស្ថានភាពនៃសាកលវិទ្យាល័យដែលគាំទ្រដល់ការអនុវត្តនាពេលបច្ចុប្បន្នរបស់ពួកគេលើភាពជាសហគ្រិន និងភាពជាអ្នកដឹកនាំបៃតង។ ជាពិសេស របាយការណ៍បានទាញចេញពីក្របខណ្ឌភាគីពាក់ព័ន្ធដើម្បីទទួលស្គាល់ថាសាកលវិទ្យាល័យស្ថិតនៅក្នុងបណ្តាញទំនាក់ទំនងជាមួយសហគមន៍របស់ខ្លួនដែល “អាចជះឥទ្ធិពល ឬរងឥទ្ធិពលពីការសម្រេចចិត្ត និងការសម្រេចវត្ថុបំណងរបស់ក្រុមហ៊ុន”។ ផ្អែកលើទស្សនៈនេះ របាយការណ៍ស្វែងយល់ពីគម្លាតនៃការខិតខំប្រឹងប្រែងរបស់សាកលវិទ្យាល័យដែលគួរឱ្យយកចិត្តទុកដាក់ និងកម្រិតនៃការចូលរួមក្នុងការអនុវត្តនិរន្តរភាពជាមួយភាគីពាក់ព័ន្ធចំនួនបី៖ (១) សមាជិកសាកលវិទ្យាល័យ និងមហាវិទ្យាល័យ (២) និស្សិត និង (៣) សហគមន៍។ វិធីសាស្ត្រប្រមូលទិន្នន័យសម្រាប់ការវិភាគគម្លាតគឺផ្អែកលើឧបករណ៍ពីរ៖ ការស្ទង់មតិ និងការពិភាក្សាក្រុមផ្ដោត។ វិធីសាស្ត្រស្ទង់មតិវាស់វែងទំនោរសរុបនៃស្ថាប័នដែលគួរទាក់ទងនឹងសំណុំនៃខ្លឹមសារ និងលក្ខណៈវិនិច្ឆ័យសម្រាប់សហគ្រិនភាព និងភាពជាអ្នកដឹកនាំបៃតង។ ពិន្ទុនៃកត្តានីមួយៗត្រូវបានទទួលដោយការគណនាមធ្យមភាគនៃធាតុ។ ដោយសារគោលបំណងនៃការស្ទង់មតិដើម្បីប្រៀបធៀបភាពខុសគ្នានៃគំរូនៃការឆ្លើយតបក្នុងចំណោមក្រុមផ្សេងៗគ្នា ផែនការប្រអប់ត្រូវបានគេចាត់ទុកថាសមស្របដើម្បីគិតដល់លទ្ធផល។ ម៉្យាងវិញទៀតការពិភាក្សាក្រុមផ្ដោត ស្វែងយល់ឱ្យកាន់តែស៊ីជម្រៅទៅលើបញ្ហាប្រឈម និងភាពស្មុគស្មាញនៃស្ថាប័នដែលគួរឱ្យយកចិត្តទុកដាក់។ ការវិភាគគម្លាតនៃសាកលវិទ្យាល័យដែលគាំទ្រដល់សហគ្រិនភាព និងភាពជាអ្នកដឹកនាំបៃតងបង្ហាញថា សាកលវិទ្យាល័យបានចូលរួមក្នុងទម្រង់មួយចំនួននៃភាពជា សហគ្រិន និងភាពជាអ្នកដឹកនាំបៃតង។ មានរចនាសម្ព័ន្ធ និងគោលនយោបាយគាំទ្រនៅកម្រិតសាកលវិទ្យាល័យម ប៉ុន្តែមិនបានប្រែក្លាយវាឱ្យទៅជាការផ្ដោតការយកចិត្តទុកដាក់ខ្លាំងនៅកម្រិតមហាវិទ្យាល័យនោះទេ។ និស្សិតបានបង្ហាញនូវចេតនាខ្ពស់ក្នុងការចូលរួមក្នុងការបណ្តាក់ទុនបៃតង ទោះបីជាពួកគេនៅខ្វះចំណេះដឹង និងបទពិសោធន៍ក្នុងភាពជាសហគ្រិនបៃតងក៏ដោយ។ និស្សិតដឹងពីតម្រូវការនៃភាពជាអ្នកដឹកនាំដែលផ្ដោតលើការផ្លាស់ប្តូរដើម្បីធ្វើឱ្យការផ្លាស់ប្តូរកើតឡើង។ ពីការស្ទង់មតិ យើងក៏បានរកឃើញថានិស្សិត និងសហគមន៍ភាគច្រើនត្រូវការការណែនាំ/ការបង្កើតដើម្បីគាំទ្រដល់ការបណ្តាក់ទុនរបស់ពួកគេ ហើយរចនាសម្ព័ន្ធគាំទ្រសាកលវិទ្យាល័យស្ថិតក្នុងចំណោមប្រភពគាំទ្រច្រើនបំផុត។ បេក្ខភាពទាំងនេះ ទាមទារឱ្យមានការបង្កើតការកសាងសមត្ថភាពជាក់លាក់សម្រាប់សាកលវិទ្យាល័យដែលគាំទ្រដល់សហគ្រិនភាពនៅក្នុងការរួមបញ្ចូលការតម្រង់ទិសបរិស្ថានជាមួយគោលដៅសង្គម និងហិរញ្ញវត្ថុ។

\*អ៊ីម៉ែលអ្នកនិពន្ធទទួលបន្ទុកឆ្លើយឆ្លង៖ [yimchanvisal@usea.edu.kh](mailto:yimchanvisal@usea.edu.kh)



សរុបសេចក្តីមក ការវិភាគគម្លាតបង្ហាញថា ការកសាង និងការពង្រឹងសមត្ថភាព និងរចនាសម្ព័ន្ធគាំទ្រសហគ្រិនភាព និងភាពជាអ្នកដឹកនាំបែតងរបស់សាកលវិទ្យាល័យដែលនីមួយៗគឺត្រូវការជាចាំបាច់។

**ពាក្យគន្លឹះ៖** បែតង សហគ្រិនភាព ភាពជាអ្នកដឹកនាំ

## Abstract

This study aims to identify the conditions of ASEAN partner universities regarding their current practices on green entrepreneurship and leadership. In particular, the report draws from the stakeholder framework to acknowledge that universities are situated in a web of relationships with their surroundings, which “can affect or be affected by the decisions and the achievement of the firm’s objectives.” Based on this perspective, the report explores the gap between each partner university’s efforts and level of engagement in sustainability with three stakeholders: (1) university and faculty members, (2) students, and (3) communities. The data collection methods for the gap analysis are based on two tools: survey and focus group discussion. The survey method measures the aggregate tendencies of partner institutions concerning a set of themes and criteria for green entrepreneurship and leadership. The score of each dimension was obtained by calculating the means of the items. Given the survey’s aim to compare the variety of response patterns among different groups, box plots were deemed appropriate to visualize the findings. The focus group discussion, on the other hand, seeks to delve deeper into the challenges and complexity of each partner institution. The gap analysis of ASEAN partner universities shows that universities have engaged in some forms of green entrepreneurship and leadership. While support structures and policies at the university level exist, these are not well translated into a strong focus at the faculty level. Students showed a high level of intention to engage in green ventures, although they still lack the knowledge and experience in green entrepreneurship. Students are aware of the need for transformational leadership to make changes happen. From the survey, we also found that students and the community mostly need mentoring/coaching to support their venture, and the university support structure is among the most sought-after sources of support. These findings necessitate establishing specific capacity building for the ASEAN partner universities in integrating the environmental orientation with the social and financial goals. In conclusion, the gap analysis suggests that building and enhancing each partner university’s competence and support structure on green entrepreneurship and leadership is required.

**Keywords:** green, entrepreneurship, leadership

## Introduction

ASEAN has become one of the attractive locations for private sector and multinational growth, and more opportunities for quality jobs could arise. Nonetheless, such global firms and local conglomerates highlighted their concerns about the lack of leadership talents and competencies among fresh graduates and first- and middle-level executives (Rattanjee and Pyrka, 2015; Brata and Pemayun, 2018). These conditions cause firms to have challenges in finding leadership successors in the pipeline. Both issues of low-quality jobs and lack of leadership competencies would cause further chasm among ASEAN’s millennial generations, particularly when the region is already slumped with issues of refugees from conflict areas such as Myanmar

and Syria, inequality among different demographic groups, and potential extreme radicalization that may influence safety and security. The current initiative separates the essences of entrepreneurship and leadership. This can prolong unethical practices such as cronyism and corruption and further divide between successful business makers and the disadvantaged pocket population. In this manner, ANGEL's consortium members believe that developing green entrepreneurship spin-offs and nurturing green transformational leaders through cooperation between higher education institutions and other relevant stakeholders could make a difference by providing a systemic impact.

Furthermore, Southeast Asia is one of the key regions contributing to—and impacted by—the heightened business, social, and environmental challenges. From human rights violations to deforestation, ASEAN countries face increasing pressures for businesses to comply with new regulatory standards and changes in consumer behavior that demand conscious practices towards the environment, society, and governance (ESG). Against this backdrop, the ASEAN Network for Green Entrepreneurship and Leadership (ANGEL) seeks to boost the region's adoption of the Agenda 2030, focusing on Sustainable Development Goals (SDGs). ANGEL also strives to build the capacity of a strong community that disseminates knowledge of environmental norms, social values based on inclusiveness, and rules of conduct based on good governance.

## Methodology

The data collection methods for the gap analysis are based on two tools: survey and focus group discussion. The survey method measures the aggregate tendencies of partner institutions concerning a set of themes and criteria for green entrepreneurship and leadership. The score of each dimension was obtained by calculating the means of the items. Given the survey's aim to compare the variety of response patterns among different groups, box plots were deemed appropriate to visualize the findings. The focus group discussion, on the other hand, seeks to delve deeper into the challenges and complexity of each partner institution. Each of these methods is discussed below.

### Survey

Three sets of surveys are prepared for the three stakeholders: one for university and faculty members, one for students, and one for the community. The first stakeholder to be assessed is "University and Faculty" as the capacity builder in the ecosystem. In this survey, they are represented by the management at the university level, the faculty level, and faculty members involved at the study program level. To measure partner institutions' perceived level of engagement in green entrepreneurship and leadership, we devise three dimensions of assessment: (1) university-level support structure, (2) faculty-level focus, and (3) pedagogy. Each dimension is assessed using a 7 Likert-like scale (1 = none at all, 7 = extremely intensive).

The second stakeholder to be assessed is "Students" as the direct beneficiaries of the capacity-building ecosystem. We divide this part into three dimensions: (1) exposure, (2) intention and action, and (3) obstacles, support, and challenges. These dimensions are chosen to identify the extent to which the students have been exposed, intended, and acted toward green entrepreneurship and leadership, along with their challenges.

The third stakeholder in our gap analysis is the “Community” as a representation of an external beneficiary of the university. For this part, we identify two dimensions: ( 1 ) Engagement and Needs and ( 2 ) Expectation and Challenges.

### ***Focus Group Discussions (FGDs)***

In conjunction with distributing the questionnaire, partner universities arranged FGD meetings with the three stakeholders: university lecturers and professors, students ( undergraduate and post-graduate ), and the community ( business practitioners, NGO leaders, etc. ). Building on the questionnaire, the FGDs aim to explore the nuances and add more depth by examining the ‘what’ and ‘how’ of a set of themes. Given the open-ended nature of qualitative research and the incorporation of contextual differences among partners, these questions are indicative, and partner universities may adjust the questions to suit the dynamics of the FGDs.

## **Survey Results**

### ***University and Faculty***

In summary, the respondents from 11 ASEAN universities are 130 faculty members/lecturers, with an average age of 42 and an average tenure of 15.5 years. Gender-wise, the respondents comprise 83 males and 46 females, and one prefers not to disclose their gender. The graphical presentation of respondents’ age, tenure, and gender are shown respectively in Figure 1, Figure 2, and Figure 3 below.

Figure 1

*Distribution of respondents’ age*

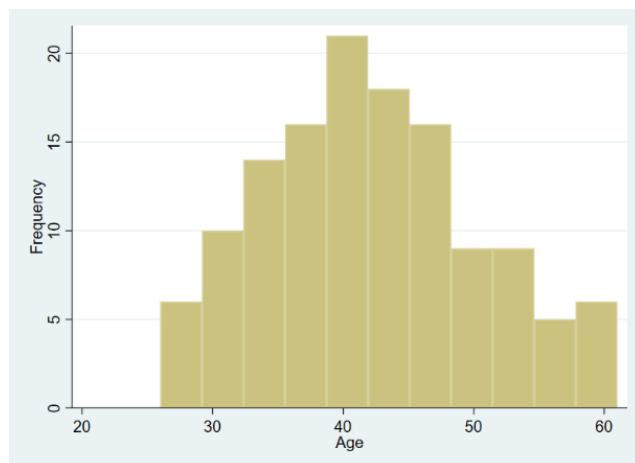


Figure 2

*Distribution of respondents’ tenure*

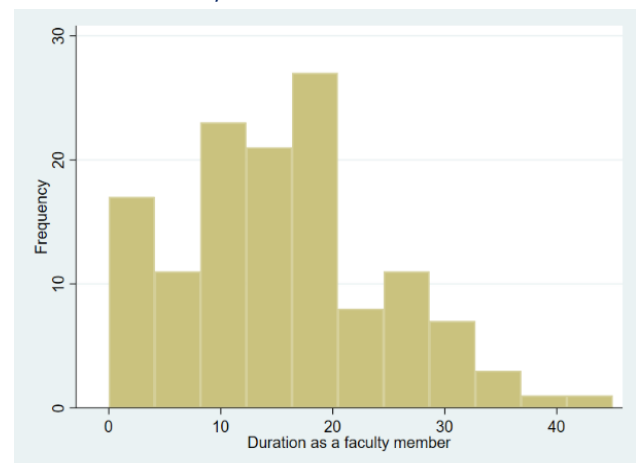


Figure 3

*Distribution of respondents' gender*

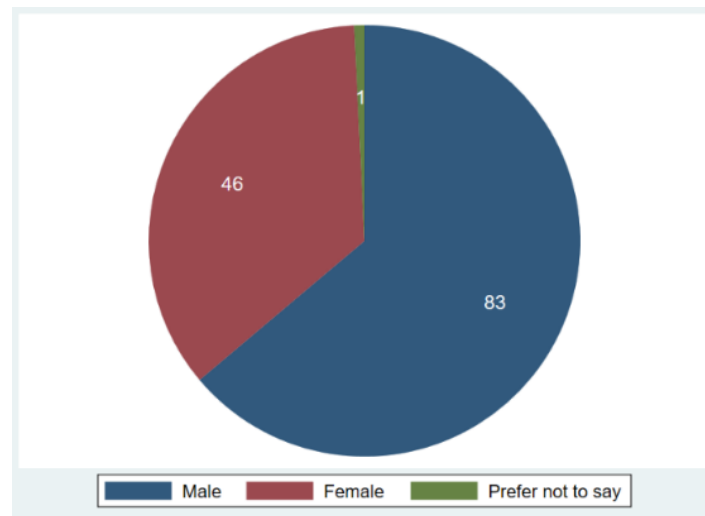
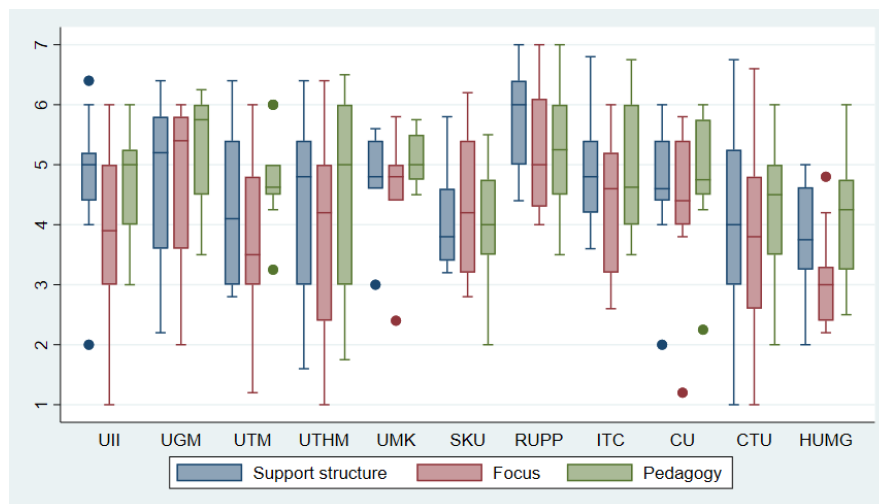


Figure 4

*Perceived level of the support structure, focus, and pedagogy*



As an overview, Figure 4 depicts the box plot of the three dimensions. The result shows various levels of engagement by the university and faculty among partner institutions. While a consistent pattern across all dimensions is not readily apparent, there is a general tendency for the Focus dimension to score lower than the Support Structure. The pedagogy dimension, however, seems to score at a higher level than the other dimensions, although, for some universities, the pedagogy level is equal to the different dimensions. Based on the result, we derive the following inferences:

- Partner institutions perceive a Support Structure towards green entrepreneurship and leadership at the university and faculty level.
- Most partner institutions perceive that the Focus on green entrepreneurship and leadership is relatively lower than the Support Structure.
- Partner institutions have adopted various pedagogical approaches, including case-based learning, problem-based learning, and project-based learning.
- There is ample room to enhance the intensity of Focus on green entrepreneurship and leadership across all institutions.

Figure 5

*Challenges at the university level*



Figure 6

*Challenges at the faculty level*



Further to the above results, Figure 5 shows the word cloud for the challenges at the university level. Among the most relevant challenges are (1) lack of awareness, (2) funding, (3) government policy, and (4) human resources. Correspondingly, Figure 6 presents the word cloud for the challenges at the faculty level. Among the most relevant challenges are (1) funding, (2) human resources, (3) lack of commitment, (4) (lack of) specific programs, (5) lack of expertise, and (6) (lack of) specific policy.

### ***Students***

In summary, we obtained a total number of 486 students as respondents to the survey, with an average age of 22 and an average length of study of 3 years. Of all respondents, 395 enrolled in the bachelor's degree, 81 enrolled in the master's degree, and ten enrolled in the doctoral degree. Gender-wise, our respondents are 282 females, 203 males, and one who prefers not to disclose their gender. Some of the descriptive statistics are illustrated in Figure 7, Figure 8, and Figure 9. A detailed description of each dimension is provided in the following sections.

Figure 7

*Distribution of students' age*

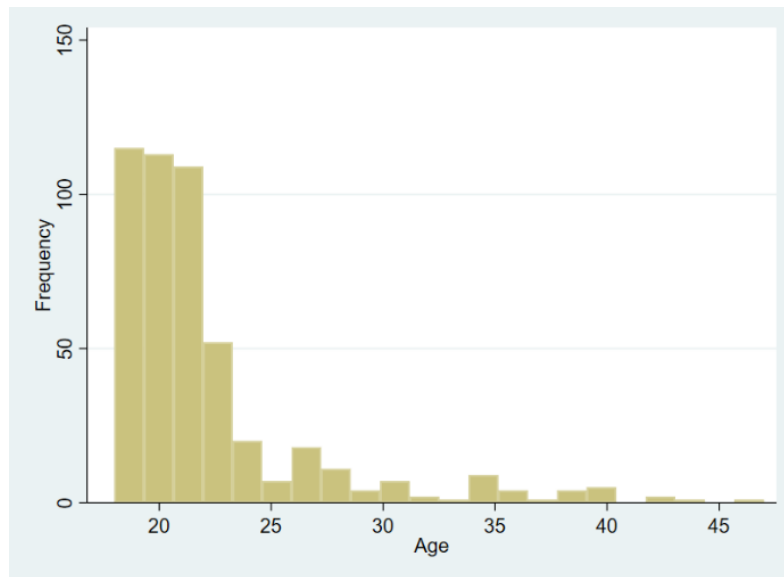


Figure 8

*Distribution of students' program enrolment*

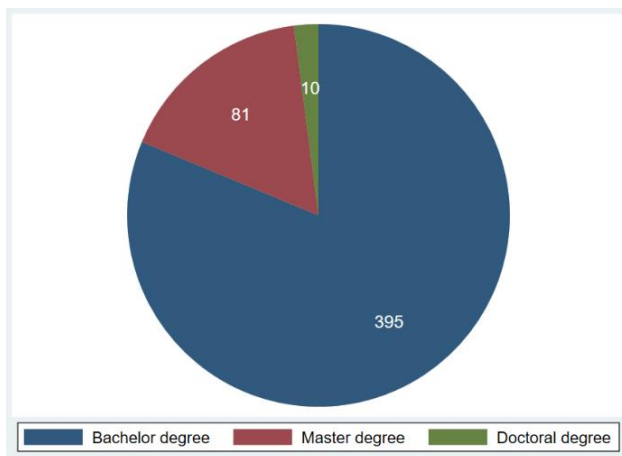
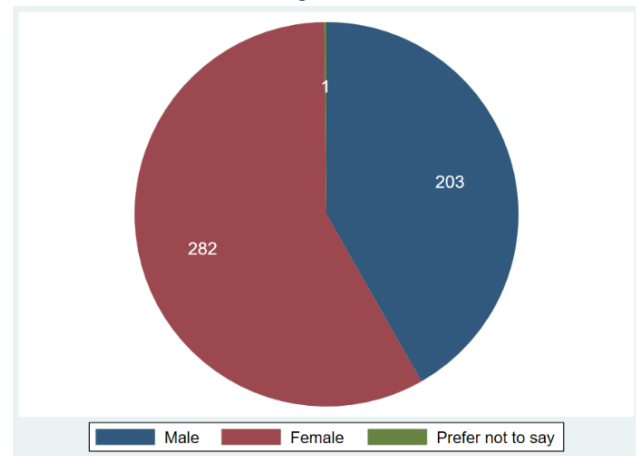


Figure 9

*Distribution of students' gender*



The findings reveal the following inferences:

- < UNK> Many students from partner institutions have not been adequately exposed to the notion of green entrepreneurship and leadership. At this stage, there is an opportunity for the program to build awareness.
- Most students have a high level of intention to start a new venture that addresses societal and environmental issues, and they are also willing to participate in a program to develop capabilities in this area.
- Despite the high intention level, students face barriers to entering the green ecosystem primarily due to the lack of knowledge.

Further to the above, the word cloud in Figure 10 summarizes specific challenges the students face in engaging in green entrepreneurship and leadership. Here, we identify that the results correspond with the challenges faced by the faculty members. These are ( 1 ) lack of knowledge, ( 2 ) lack of experience, and ( 3 ) lack of skills.

Figure 10

*Challenges faced by the students*

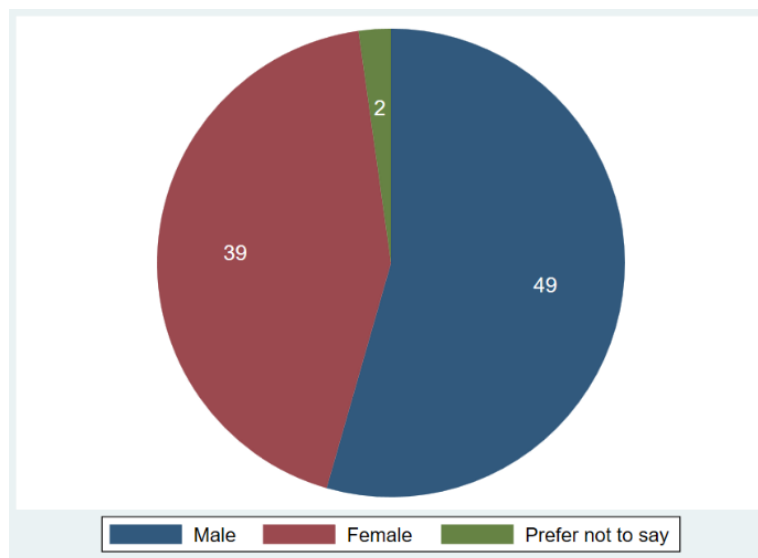


### *Community*

We received 90 respondents, with an average age of 33.7 and an interaction span with the respective university of 5.8 years. Regarding gender ( see Figure 11 ), our data comprises 49 males, 39 females, and two who decided not to disclose their identities. Further details regarding each dimension are provided in the following sections.

Figure 11.

*Distribution of respondents' gender*



In addition, Figure 12 below summarizes the various challenges the community faces in their engagement with green entrepreneurship and leadership. There, we can infer some common themes such as ( 1 ) human resources, ( 2 ) lack of knowledge, ( 3 ) market expansion, ( 4 ) local government, and ( 5 ) connection of members ( social capital ).



Figure 12

*Challenges at the community level*



### ***Focus Group Discussions (FGDs) Results***

The main findings from data generated by the focus group discussions are summarized below. First, the enhanced definition of green entrepreneurship and leadership is deliberated. Second, the factors that support and encourage the development of green entrepreneurship and leadership development are presented. Finally, the discussion also brought valuable information in terms of the inspiration and hope of the participants regarding green entrepreneurship and leadership initiatives.

Green entrepreneurship and leadership are behaviors and capabilities that motivate and inspire others to achieve societal and environmental impacts. The main concern regarding this definition is entrepreneurship's missing behavior or role in creating environmentally friendly practices. The environment is the ultimate goal of green initiatives. The leadership elements bring the urgency to create an ecosystem and invite all the relevant parties to join and contribute to the same mission while creating economic value. Green leadership is closely related to mindset, especially entrepreneurial mindset, in building a solution. As the leader also plays a significant role in ensuring community engagement and stakeholders, resilience value is also essential.

Support from the university plays a significant role in terms of factors that support and encourage the development of green entrepreneurship and leadership. Many initiatives have been implemented to support and promote the development of green entrepreneurship and leadership at the university level. Various well-equipped centers and labs have been developed, and programs have been introduced to ensure that the whole communities understand the concept of green entrepreneurship and leadership. The university also ensured integration between academia, industry, government, and communities in project initiatives.

Good governance gave room for collaborations between various parties, locally and globally. Good governance ensures faculties can work together harmoniously at the university level despite their different skills, expertise, and specialties. Engagement and involvement from various parties, including students and academia, are also critical factors. Task forces and committees were developed to ensure they committed and fulfilled the responsibilities towards a particular task or project. It was also identified that many of the activities and projects held in the universities get full support from related private and public agencies. These agencies took the initiative to tie and link their corporate social responsibility projects.

Currently, there are several different programs and initiatives in green entrepreneurship. In addition, a strong curriculum structure matters where relevant skills incorporated in the curriculum significantly enhance the students' green entrepreneurship and leadership mindset. The Malaysian qualifications framework strategically embedded the graduates' personal, interpersonal, leadership, and other relevant skills. The curriculum has embedded various teaching pedagogies, from work-based, project-based, and problem-based learning, preparing students with appropriate skills and knowledge and developing their competency. A solid ecosystem that supports the whole initiative plays a part, especially in monitoring, supporting, and mentoring.

The main concern raised regarding the challenges in implementing green entrepreneurship and leadership is funding. The available funding and research opportunities are pretty limited for all researchers, especially when the projects are high-scale and involve many parties. Therefore, a specific grant and budget must be allocated to fund the activities.

Moving forward, the green entrepreneurship and leadership mindset can be further strengthened. A robust green entrepreneurship mindset helps to achieve the right goals. Creating awareness is essential as some people understand green entrepreneurship and leadership concepts and practices differently. Digital sharing is also encouraged; it is time to archive projects and activities. Further, to reach the industry—we need to bring them inside. Some participants of the focus groups point out that the open campus initiative is a good start. Another point to note is that the implementation of projects can be aligned with the key performance indicators or the agencies' blueprint. This could maximize all parties' efforts while contributing to the communities. Impact monitoring is also needed to verify whether the change happens and whether the activities contribute as planned.

## Conclusion

The gap analysis of ASEAN partner universities shows that universities have engaged in some forms of green entrepreneurship and leadership. While support structures and policies at the university level exist, these are not well translated into a strong focus at the faculty level. Students showed a high level of intention to engage in green ventures, although they still lack the knowledge and experience in green entrepreneurship. Students are aware of the need for transformational leadership to make changes happen. From the survey, we also found that students and the community mostly need mentoring/coaching to support their venture, and the university support structure is among the most sought-after sources of support. These findings necessitate establishing specific capacity building for the ASEAN partner universities in integrating the environmental orientation with the social and financial goals. In conclusion, the gap analysis suggests that building and enhancing each partner university's competence and support structure on green entrepreneurship and leadership is required.

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