



UNIVERSITI
TEKNOLOGI
MARA

ICEBIV

3rd International Competition of Entrepreneurship Business Innovation

**“ Promoting Innovative Entrepreneurship for a Sustainable Economy:
Pioneering Tomorrow’s Business Models”**



EXTENDED ABSTRACT

UiTM *di hatiku*

اوسها تقوى موليا



EXTENDED ABSTRACT



"Promoting Innovative Entrepreneurship for a Sustainable Economy: Pioneering Tomorrow's Business Models"

5th September 2024

In the joint collaboration involving:

Faculty of Business and Management,
Universiti Teknologi MARA Kedah Branch,

Faculty of Economics and Business,
Universitas Islam Bandung, and

Malaysian Academy of SME &
Entrepreneurship Development (MASMED)



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Assalammu'alaikum Warahmatullahi
Wabarakatuh.. Salam UiTM Dihatiku..

It is with immense pride and enthusiasm that I welcome you to the 3rd International Competition of Entrepreneurship Business Innovation (iCEBIV) 2024, hosted by the Faculty of Business and Management, UiTM Kedah Branch. This prestigious event is organized in collaboration with the Malaysian Academy of SME & Entrepreneurship Development (MASMED) and the Faculty of Economic and Business, Universitas Islam Bandung (UNISBA), Indonesia. This competition exemplifies our deep commitment to advancing creativity, entrepreneurship, and a spirit of innovation among our students and the wider community.

In today's rapidly evolving world, the ability to innovate has become a fundamental necessity rather than a mere option. Our institution understands the critical importance of innovative thinking in propelling economic growth, addressing urgent societal challenges, and paving the way for a sustainable future. This competition is designed to encourage participants to think critically, challenge conventional ideas, and develop groundbreaking solutions that can leave a meaningful impact in various areas.

This competition is not merely a challenge; it is a valuable platform for learning, collaborating and exchanging ideas. It brings together talented individuals from diverse disciplines, fostering an innovative culture that extends beyond academic boundaries. We encourage our students to apply their knowledge, channel their creativity, and turn their ideas into actionable business solutions.

As the Rector of UiTM Kedah Branch, I am deeply committed to supporting initiatives that help students reach their full potential. This competition provides them with a unique opportunity to showcase their abilities, gain critical experience, and establish networking that will be instrumental in their future careers. I am confident that the skills and insights gained from this experience will empower them to excel in an increasingly competitive and dynamic global landscape.

I would like to extend my heartfelt thanks to everyone who has contributed to the success of this event, including our dedicated faculty and staff, esteemed judges, sponsors, and partners. Your unwavering support and commitment have been integral to the successful realization of this initiative.

To all participants, I urge you to approach this competition with passion, creativity, and determination. This is your moment to shine, to challenge the limits of what is possible, and to create a lasting impact. Regardless of the outcome, your participation itself is a significant achievement, demonstrating your commitment to innovation and excellence.

Let us come together to make this competition a celebration of ideas, creativity, and the entrepreneurial spirit that embodies UiTM and UNISBA. I wish you all the best in your endeavours.

With warmest regards,

Profesor Dr Roshima Haji Said

Rector
Universiti Teknologi MARA (UiTM) Kedah Branch

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Bismillaahirrahmaanirrahiim

Assalamu'alaikum Warahmatullahi
Wabarakatuh

Every participant in the third International Competition of Entrepreneurship Business Innovation (ICEBIV) 2024 deserve my heartfelt congratulations and warmest regards. I extend these to the organizing committee and every one of them. This initiative is a demonstration of the productive collaboration that exists between universities in the ASEAN region. Maintaining a positive relationship between the two institutions, UNISBA and UiTM, will result in the production of academic programs and community service works that are both productive and innovative. In future collaboration, the implementation of this program is something that Universitas Islam Bandung (UNISBA) is strongly advocating for.

Universitas Islam Bandung (UNISBA) has reaffirmed its commitment to the internationalization program and has stated that it will continue offering assistance for various initiatives. It has been beneficial for the university to gain experience by participating in this program. The big ideas instilled in ICEBIV 2024 are thriving.

They will be ensured by the presence of entrepreneurs who have a global perspective and positively impact the surrounding community. Being an Islamic university, UNISBA, is obligated to establish a halal business ecosystem on a global scale by addressing contemporary issues such as the idea of innovation for sustainable business. This obligation is a requirement of the university. In light of this, the electronic proceedings that have been presented will prove to be advantageous for the development of scientific research and technological innovation. For their insightful and enthusiastic efforts in the successful implementation of the Memorandum of Agreement (MoA) between the two institutions, we would like to express our deepest gratitude to the Faculty of Economics and Business at UNISBA, the Malaysian Academy of Small and Medium Enterprise and Entrepreneurship Development (MASMED), and the Faculty of Business and Management at Universiti Teknologi Mara (UiTM) Kedah Branch. To be more specific, this partnership will result in many innovations, particularly in entrepreneurship, which is becoming an increasingly desirable occupation for the younger generation. When it comes to better understanding the global needs and challenges of today, international cooperation is evolving into an increasingly necessary requirement. Allah blesses the constructive actions that are being taken to generate benefits for society and universities. May Allah continue to bless these actions and our international collaboration for giving beneficial for our society and for the future.

Wassalamu'alaikum Warahmatullahi Wabarakatuh.

Warmest regard,

Prof. Dr. H. Edi Setiadi, S.H., M.H.
Rector Universitas Islam Bandung



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Assalamu'alaikum Warahmatullahi
Wabarakatuh

Alhamdulillah, under the grace and mercy of Allah Subhanahu Wata'ala, for this extraordinary occasion of the 3rd International Competition of Entrepreneurship Business Innovation (ICEBIV) 2024. This event is a testament to the strong bond between two great institutions which are Universiti Teknologi MARA (UiTM) and Universitas Islam Bandung (UNISBA). I am proud that our Faculty of Business and Management and MASMED have played a crucial role in bringing this collaboration to life.

I would like to express my heartfelt appreciation to everyone involved in making this event a reality. The 3rd ICEBIV 2024 is more than just a competition. It's a unique platform where we come together to celebrate creativity, unleash potential, and explore business ideas that have the power to impact our communities positively. It's inspiring to see so many bright minds gathered here today and ready to make a difference.

This year's competition offers three key categories namely Business Model Canvas Battle, Business Idea Battle, and Business Plan Battle. Each of these categories will serve as an invaluable platform for participants to validate their business ideas before turning them into successful ventures in the future.

These battles are not just about competition but about providing you with the feedback, guidance, and confidence to take your innovative ideas to the next level.

The theme of this year's competition, "Promoting Innovative Entrepreneurship for a Sustainable Economy: Pioneering Tomorrow's Business Model," resonates deeply with our mission. We live in a time where innovation and entrepreneurship are key to building a resilient and sustainable future. This competition is our way of nurturing that entrepreneurial spirit, encouraging you to think creatively and develop solutions that are not just innovative but also relevant to the challenges we face today.

To all the participants, I wish you a truly rewarding experience. Remember, every great idea starts with the courage to think differently and the willingness to take risks. Don't be afraid to dream big and this competition is your opportunity to do that. I hope you leave here with not just memories but valuable lessons that will guide you in your future endeavors.

As we look forward to the future, I sincerely hope that this won't be our last gathering. I'm already excited about the possibility of organizing the 4th ICEBIV next year. Let's keep this momentum going and continue to strengthen our collaboration in promoting entrepreneurship on a global scale.

Wassalamu'alaikum Warahmatullahi Wabarakatuh.

With Warmest Regard

Dr. Junaidah Ismail

Deputy Rector of Academic Affairs
UiTM Kedah Branch

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Assalamu'alaikum Warahmatullahi
Wabarakatuh,

Dear respected Rector of Universitas Islam Bandung (UNISBA),
esteemed Rector of Universiti Teknologi MARA (UiTM),
distinguished lecturers, talented competition participants,
and ladies and gentlemen.

First, let us thank Allah Subhanahu Wata'ala, because by His grace
and mercy, we can all gather in this prestigious event, the
3rd International Competition of Entrepreneurship Business
Innovation (ICEBIV) 2024. This event is one of the collaborations
between two educational institutions strongly committed
to building an innovative and globally competitive young
generation, the Faculty of Economics and Business of Universitas
Islam Bandung and Universiti Teknologi Mara (UiTM).

On this occasion, I express my highest appreciation to all the
committees and parties involved in organizing this event. The 3rd
ICEBIV 2024 is not just a competition but also an extraordinary
platform to develop potential, explore creativity, and explore
business ideas that can positively impact society, especially
students and professionals.

We are all aware that innovation and entrepreneurship are crucial to building a resilient and sustainable economy
in this era of globalization. Therefore, this competition has a crucial role in fostering the spirit of entrepreneurship
among students and professionals while encouraging the creation of business solutions that are creative,
innovative, and relevant to the needs of the times.

To the participants, I wish you enjoy and happiness by participating in this competition. Do not be afraid to
dream big and take risks when developing your ideas. Remember that every great innovation always starts with
the courage to think outside the box and take the first step. Hopefully, through the 3rd ICEBIV 2024 competition, all
of you can gain valuable experience that will help you in your future career journey.

Finally, I hope the 3rd ICEBIV 2024 can run successfully and benefit all participants and institutions involved. Let us
make this event a momentum to strengthen the cooperation between FEB Unisba and UiTM and advance the
world of entrepreneurship internationally.

Allow me to provide a "pantun" to encourage the organizers and participants of the 3rd ICEBIV 2024, which
characterizes literature and culture in Indonesia.

Jalan jalan ke Semanggi
Jangan lupa membeli batik bermotif
Ayo mahasiswa ramaikan ICEBIV bergengsi
Dikancah internasional dengan penuh ide inovatif

Wassalamu'alaikum Warahmatullahi Wabarakatuh

Sincerely,

Prof. Dr. Nunung Nurhayati, SE., M.Si., Ak., CA.
Dean Faculty of Economic and Business
Bandung Islamic University, Indonesia



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BEE-ING SUCCESSFUL: GENERATING SUSTAINABLE INCOME THROUGH MELIPONINI EDU PARK

Grace Flavyeliz Sinong^{1*}, Nur Aziemah Jasni², Rozliana Fitri Said³, Mohd Hafezan Sisa⁴, and Dayang Shurtinie Dato Shuaib⁵

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Abstract

This business proposal outlines the establishment of Meliponini Edu Park for the Meliponini Club, Faculty of Plantation and Agrotechnology (FPA), Universiti Teknologi MARA Sabah Branch (UiTMCSH). The Meliponini Club, comprised of FPA students, will manage the project, focusing on generating income through stingless bee farming. The project focuses on promoting education on stingless bees among students and communities and encouraging students with agropreneurship skills to create sustainable revenue. The fundraising projects offer premium quality stingless bee products, promoting stingless bee education and sustainable practices. It offers unique selling propositions such as sustainable stingless bee farms, the production of stingless bee-based products, and diverse educational opportunities. The target customers of this project include students and staff of UiTMCSH, communities, and visitors. The project fosters a self-sustaining model that benefits the students and faculty.

Keywords: *stingless bee, agropreneurship, fundraising, sustainable agriculture*

1. INTRODUCTION

The Meliponini Edu Park emphasizes stingless bee farming, encouraging sustainability and biodiversity conservation. The primary objective of this project is to empower agropreneurship and practical skills through stingless bee farming among students of the Faculty of Plantation and Agrotechnology (FPA), Universiti Teknologi MARA Sabah Branch (UiTMCSH), and disseminate knowledge to the local community. Through this project, we aim to make a substantial contribution to the stingless bee farming industry, developing sustainable income-generating activity among students preparing for their future careers and a broader growth of the agricultural sector in Malaysia

2. BACKGROUND AND MARKET OVERVIEW

Stingless bee farming plays a major role in socio-economic development given its versatile nature and diversified demand for downstream products. It serves as a sustainable platform for income generation activity that can be categorized under various sectors, including as a food source, raw materials for various industries, and medicine. According to Baswari et al. (2017), stingless bee farming is considered one of the potentially high-impact agricultural projects in Malaysia. Stingless beekeepers could generate an average of RM5,000 per month with zero tax (Ismail and Ismail, 2018). A study conducted by Mustafa et al. (2018) emphasized that about 36% and 29% of stingless beekeepers generate an additional income of RM 833 and RM1,666, respectively, benefiting from stingless bee cultivation. Stingless bee products and by-products are emerging and gaining interest among consumers due to their medicinal properties and

superfood characteristics. The project also fosters SDG8 by creating job opportunities for students through stingless bee farming, promoting sustainable economic growth through revenue generation of bee products, and providing practical training in agriculture and entrepreneurship. Thus, this project could position the stingless beekeeping industry to empower students with entrepreneurial opportunities to generate sustainable income and have better socioeconomic impacts.

2.1 Location

The property is located at the Farm Unit, UiTMCSH with an area of 15 acres. There are two species of stingless bee known as *Heterotrigona itama* and *Tetragonula laeviceps* reared in this project.

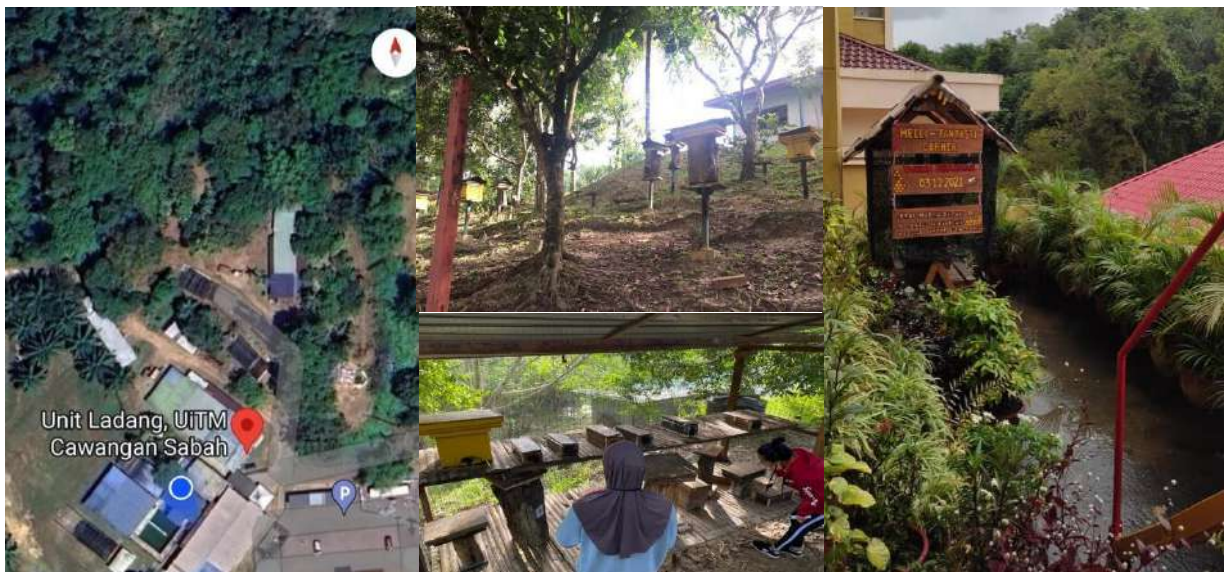


Figure 1: Meliponini Edu Park located at Farm Unit, UiTMCSH

2.2 Existing brands

There are several existing companies involved in stingless bee farms in Sabah, Malaysia.

- i. Kelulut Hj Awang: It is located in Sipitang, Sabah, and emphasizes stingless bee cultivation. The farm provides training to community and industrial training students from various institutes.
- ii. Borneo Honey Bee Centre: The business is located at Sikuati, Kudat, Sabah, and is under the Koperasi Pembangunan Desa (KPD). The center is involved in bee cultivation and is equipped with a honey processing factory, bee gallery, honeybee park, and trigona park for the visitors to learn.
- iii. Gombizau Honey Bee Farm: It is located in Matunggong, Kudat, Sabah. The farm focuses on bee cultivation and provides educational visits to visitors.

2.3 Stingless bee log and hive setup, maintenance, harvesting, and processing

The stingless bee log and hive box are set up in the Farm Unit area at a distance of 2 meters from each log and should be equipped with suitable shading. The *Antigonon leptopus* plant is planted as the food source for the stingless bee, and regular inspection and maintenance of the stingless bee hives and area, including changing the plastic cover and pest monitoring, are done, ensuring the hive's health and maintaining optimal conditions. The harvesting of stingless bee honey is carried out every 30 – 45 days intervals, depending on the bee species, and is followed by processing and packaging. Students involved in the farming activities of stingless bees, enhancing their knowledge and practical skills.



Figure 2: The activities involved in stingless bee farming at the Meliponini Edu Park.

3. KEY FEATURES OF THE PROJECT

Our project is founded on the principles of sustainability and educational enrichment, integrating stingless bee cultivation and agropreneurship to create a multifaceted project that benefits the university, community, and environment. The key features of our project are:

- 3.1 Sustainable sourcing:** Ensuring all the inputs and materials for the stingless bee cultivation are sustainably sourced to reduce environmental impact. Employing sustainable farm management and integration with agroforestry system to promote ecological balance and sustainability
- 3.2 Educational opportunities:** Serve as a platform for students from various disciplines, such as plantation, agribusiness, agronomist, and food technologist, to gain knowledge,

practical, and research experience in stingless bee farming, from bee rearing to product processing, development, marketing, and social outreach programs.

- 3.3 **Research engagement:** The Meliponini Edu Park serves as a research hub for FPA UiTMCSH to conduct research and case studies on stingless bee behavior, pollination efficiency, biodiversity conservation, and sustainable practices, focusing on the enhancement of stingless bee cultivation
- 3.4 **Creative and innovative enhancement:** Creation and pitch-up of product innovation through the Competition and Exhibition of Creative Innovation Idea (CECII) instill creative and innovative thinking skills among students to enhance innovation in stingless bee cultivation, value-added product development, and high-quality packaging materials.
- 3.5 **Agropreneur empowerment:** Students from the Meliponini Club, FPA UiTMCSH will be involved in the management of various aspects, including production, development of value-added products, marketing, and sales, instilling them with real-world business experience and fostering a self-sustaining financial model.
- 3.6 **Community engagement and outreach:** Expanding knowledge on stingless bee and their contribution to the ecosystem engages educational, social, and economic empowerment within local communities. This involves study tours, seminars, and workshops to promote self-sufficiency and local economic growth.
- 3.7 **Graduate empowerment:** To equip students with agropreneur skills for their potential career development as agropreneurs, creating a sustainable farming business and contributing to the growth of the agricultural sector.

4. PRODUCT RANGE

Our Meliponini Edu Park offers a diverse range of high-quality products and services, including:

- 4.1. **Kelulut Gold Honey:** Harvested from the pristine Farm Unit, UiTM Sabah Branch offers a rich, tangy flavor and a treasure trove of antioxidants. This pure, unprocessed honey is the essence of nature's bounty, perfect for those seeking a natural health boost.
- 4.2. **BeeVital Pollen:** It is a powerhouse of nutrients stingless bees collect. Packed with proteins, vitamins, and minerals, this superfood is your daily dose of natural vitality.
- 4.3. **PropolisGuard Elixir:** Harnesses the protective properties of stingless bee propolis, known for its antimicrobial and healing benefits. Ideal for boosting immunity and supporting skin health.
- 4.4. **HoneyBurst Sticks:** Convenient and delicious, HoneyBurst Sticks are your perfect on-the-go sweetener. Made with 100% pure Kelulut honey, these easy-to-use sticks make it simple to enjoy the taste and benefits of honey anywhere, anytime.

- 4.5. **BeeGlow Soap:** Indulge in the nourishing touch of BeeGlow Soap, crafted with natural honey and propolis for a moisturizing and antibacterial cleanse, leaving your skin soft and radiant.
- 4.6. **BeeSmooth Lip Balm:** Keep your lips hydrated and protected with BeeSmooth Lip Balm, infused with the healing power of honey and beeswax for soft, kissable lips.
- 4.7. **HoneyChill Ice Cream:** Experience the creamy delight of HoneyChill Ice Cream, where the sweetness of Kelulut honey meets a smooth, velvety texture, creating a refreshing treat that's as healthy as it is indulgent.
- 4.8. **Stingless Bee Hivebox Experience:** Join our Hivebox Experience, where you'll learn the art of hivebox preparation and witness the fascinating process of harvesting and processing honey, pollen, and propolis. Perfect for aspiring beekeepers or anyone curious about sustainable honey production

5. MARKETING AND PROMOTION

Marketing and promotion activities for this project encompass:

5.1 Direct sales through farmers markets

- Selling products directly to consumers at local markets.

5.2 Planters' Market – Tamu (UiTMCSH)

- Selling the products to the locals on the location site.



Figure 3.0: Planters Market platform for promoting and marketing of the Meliponini Edu Park's products.

5.3 MyETR Park (Edu-Tourism Park) Visiting guest

- Selling as one of the products to the visitor.

5.4 Online platforms:

- E-commerce websites (Shopee) and social media (FPA, UiTMCSH) to reach a broader audience.

5.5 Wholesalers

- Selling in bulk to businesses that distribute the products further.

5.6 Campus and Community Engagement

- Campus Events: Host *Hari Terbuka Ladang* and Agriculture exhibitions at the university to showcase stingless bee projects and agropreneur projects.
- Community Outreach: Engage with the local community through public demonstrations, the *Jom Masuk U*, *Misi Akademik*, and *Selangkah ke UiTM* programs to foster interest and support.

6. SWOT ANALYSIS

SWOT Analysis for integrating Meliponini Edu Park and agropreneurship at UiTMCSH:

6.1 Strengths:

- **Unique Educational Park:** The park provides specialized education on stingless bees, which can attract nature enthusiasts, students, and researchers interested in apiculture and biodiversity.
- **Convenient and farm-friendly:** The Meliponini Edu Park is near the classroom and student center, and it is accessible to the university community.
- **Entrepreneurial Skills Development:** Students on the campus can develop their creative thinking and practical business skills.
- **Interactive Learning:** Hands-on experiences and interactive exhibits can enhance learning and engagement for visitors. Experiences the fresh stingless bee honey harvesting.
- **Conservation Efforts:** Promotes the conservation of stingless bee species, which are important pollinators and contribute to biodiversity.

6.2 Weaknesses:

- **Funding Challenges:** Relying on niche funding sources, grants, or donations can be challenging and may require additional effort to secure financial support.
- **Operational Costs:** Maintaining the park, including managing bee colonies and educational facilities, can be expensive.
- **Pest attack:** The campus is surrounded by jungle and pests, such as monkeys and lizards, and they might attack the farm.

6.3 Opportunities:

- **Collaboration and Partnership:** Partnering with local stingless bee farmers and other universities for events and promotional activity as it can enhance visibility. It can also build up the networking within the scope.

- **Research Grant and Funding Program:** Collaborate with the Department of Industrial Development and Research (DIDR), MARDI, SME Corp Malaysia, to get a research grant or fund.
- **Product Development and Market Expansion:** Explore opportunities to produce and sell stingless bee-related products, such as honey, honey, bee pollen products, and propolis, to generate additional revenue.
- **Eco-Tourism Growth:** Leverage the growing interest in eco-tourism through Edu-tourism Park (MyETR) and sustainable practices to attract visitors interested in unique and educational experiences.
- **Digital Outreach:** Utilize online platforms and social media to increase visibility, offer virtual or physical tours, and engage with a broader audience.

6.4 Threats:

- **Climate Change:** Environmental changes and climate changes can impact the health and survival of stingless bee populations, affecting the park's core activities.
- **Regulatory Issues:** Changes in regulations or policies related to agricultural practices and university regulation could affect operations and funding.
- **Economic Downturns:** Economic fluctuations can affect visitor numbers and funding opportunities, impacting the park's financial stability.
-

7. FINANCIAL ANALYSIS

7.1 Payback period

Initial investment: RM40,000 (including stingless bee log (RM100/log x 100 logs, food source, hive box setup)

Operating Costs (per year)

Input supplies: RM2,000

Salaries: RM420/month (RM5,040)

Other overhead cost: RM7,460

Annual Revenue:

Average revenue per 1 kg honey: RM250

Average revenue of honey per hive per month (1 kg/hive x 100 hives): RM25,000

Annual revenue: RM25,000 x 12 months = RM300,000

Calculation:

Annual profit: 20% of RM300,000 = RM 60,000

Payback period = initial investment/annual profit

Payback period = RM40,000/60,000 = **0.666 years**

In this example, the payback period for Meliponini Edu Park is approximately 0.666 years, which is equivalent to around 8.0 months. This means the business owner may expect to recoup the initial investment in about 8 months of the operation, considering the assumption and figures provided.

7.2 Benefit-Cost Ratio

Annual profit: RM 300,000
Initial investment: RM 40,000
BCR = Annual profit / initial investment
BCR = RM 300,000/RM 40,000
BCR = **1.5**

The benefit-to-cost ratio (BCR) for the project is approximately 1.5, this means for every RM1 invested in the Meliponini Edu Park, the business generates RM1.50.

7.3 Net present value

Net Present Value (NPV) and Internal Rate of Return (IRR)

Year 1: RM300,000
Year 2: RM300,000
Year 3: RM300,000
Year 4: RM300,000
Year 5: RM300,000

Discount Rate (r): 10%

PV (Year 1) = $RM300,000 / (1+0.01)^1 = RM54,545$
PV (Year 2) = $RM300,000 / (1+0.01)^2 = RM49,587$
PV (Year 3) = $RM300,000 / (1+0.01)^3 = RM45,113$
PV (Year 4) = $RM300,000 / (1+0.01)^4 = RM41,096$
PV (Year 5) = $RM300,000 / (1+0.01)^5 = RM37,267$

Calculation of NPV:

NPV = PV (Y1) + PV (Y2) + PV (Y3) + PV (Y4) + PV (Y5) – Initial Investment NPV
NPV = $RM54,545 + RM49,587 + RM45,113 + RM41,096 + RM37,267 - RM40,000$
NPV = **RM187,608**

The Net Present Value (NPV) for the project is approximately RM187,608. A positive NPV suggests that the Meliponini Edu Park's potential profitability, discounted to the present value, exceeds the initial investment. This implies that the investment in the project is expected to generate a positive return, considering the 10% discount rate.

8. CONCLUSION

The Meliponini Edu Park presents a unique opportunity to nurture sustainable income generation among students through farming and commercializing stingless bee products. With the integrations of practical education, agropreneurial development, and eco-tourism, the project empowers students with valuable skills and real-world business experience. The project not only supports economic expansion but also fosters SDG8 by promoting decent work, inclusive economic growth, and sustainable practices. The Meliponini Edu Park stands as a model of how education and sustainability may lead to impactful contributions to global development goals.

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