

Ethnobotany, Local Wisdom, and Student Entrepreneurship: A Communication Perspective on Community Economic Development

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ABSTRACT:

This article aims to explore the potential of ethnobotany as an instrument of innovation in the development of student entrepreneurship based on local wisdom. The background of this research is based on the phenomenon of abundant biodiversity and traditional knowledge of medicinal plants in Indonesia that have not been commercially optimized by the younger generation in the university environment. The main problem identified is the tendency of students to build generic operational businesses that lack originality in cultural values, so they are vulnerable to losing competition. This article uses a library *research* method with a qualitative-descriptive approach that synthesizes data from 15 selected scientific literature from 2012 to 2026. The results show that the integration of ethnobotanical knowledge into agribusiness and creative economy business models is able to transform the simplification of local plants into high-value-added commercial products. The latest in this article indicates that ethnobotanical exploration is not only limited to students of science study programs, but has become a trend across disciplines including law and agribusiness students to promote the green *economy movement*.

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INTRODUCTION

The current global modernization trend has a major impact on shifting people's consumption patterns, as well as threatening the existence of traditional knowledge about medicinal plants or ethnobotany. The phenomenon that occurred shows that many startup students are trying to build small businesses as an implementation of mandatory entrepreneurship courses, but are trapped in generic imitation business commodities that do not have unique cultural values and strong geographical attachments. The fundamental problem arises when the richness of local flora such as efficacious rhizomes in Aceh and medicinal plants in Java tends to be ignored by young academics, even though the creative economy sector based on contemporary agribusiness requires radical product differentiation to penetrate the global market. This is where the crucial theoretical and practical gap lies, where the high interest of student entrepreneurship through the Student Creativity Program (PKM) has not been optimally juxtaposed with the scientifically structured preservation of the archipelago's biological resources.

Theoretically, the study of ethnobotany relies on the mutually beneficial relationship between human civilization and the flora ecosystem in the surrounding environment to meet the needs of daily life, both as food and medicine. This traditional knowledge includes identification techniques, classification of uses, sustainable harvesting methods, and formulations of medicinal plant processing that have been inherited from generation to generation by rural communities. When integrated with educational entrepreneurship theory, local wisdom transforms into cultural *capital* and the main strength for entrepreneurial students to create functional product innovations that have competitive advantages. Universities play a strategic role as an incubator that facilitates the strengthening of students' reasoning capacity in compiling an analysis of the strengths and opportunities of small businesses to convert raw commodity crops into creative economic goods with high selling value. The use of ethnobotany gives a strong narrative to the product, creating an emotional closeness to consumers through authentic and modern storytelling of local culture.

The latest in this article indicates that the exploration of ethnobotany in the business realm is no longer limited to students of the science-biology study program, but has expanded into a comprehensive cross-disciplinary entrepreneurial trend. The fundamental difference between this research and

previous research lies in a multidisciplinary approach that synthesizes the concept of pure ethnobotany with the implementation of cross-sectoral entrepreneurship, ranging from agribusiness, humanities, to law, to promote the *green economy movement*. We examine how ethnobotanical data from different regions are collected by students from various study program backgrounds to build an established and officially licensed business resilience. This research links the supply chain of environmentally sustainable raw materials with legal compliance and modern packaging innovation, resulting in a conceptual new perspective for the university entrepreneurship curriculum that is firmly rooted in the identity values of the Indonesian nation in the midst of the onslaught of foreign synthetic herbal products in the national market.

This entrepreneurial dynamic based on local wisdom is triggered by the urgent need to expand the diversification of traditional products to be relevant to the healthy lifestyles of the current millennial and Gen-Z generations. The alignment between the empirical efficacy of local medicinal plants with modern hygiene-based processing is the main key in winning the increasingly fierce and competitive market competition. Universities through the funding of the national competitive grant scheme must direct students' critical reasoning to see the surrounding plants not just as objects of static biological laboratory study, but as prospective green economic assets. By mapping intellectual property rights to traditional herbal formulations, young entrepreneurs not only reap financial benefits but also contribute to the legal protection of ancestral heritage from unilateral claims. Therefore, this paper holistically describes the ethnobotanical integration ecosystem as an instrument for driving sustainable and environmentally friendly student economic independence in the future.

Seeing this potential, a comprehensive mapping of the real contribution of young academics in adopting local knowledge into the world of the creative industry is needed. Obstacles in the form of limited operational capital and digital marketing obstacles faced by budding entrepreneurs can be minimized through intensive assistance from certified campus business incubators. This synergy also triggers the strengthening of students' ecological literacy so that they do not overexploit biodiversity for short-term gains. The focus of this study is formulated to bridge the gap between pure botanical research and strategic marketing management, so as to form a solid and independent entrepreneurial ecosystem. Through accurate visualization of scientific literature data, this article is expected to be the main reference for policymakers in the higher education

sector to continue to develop business incubation programs based on environmental conservation and also local wisdom throughout Indonesia in an equitable and sustainable manner.

The long-term urgency of the preparation of this article boils down to the formation of a circular economy resilience model spearheaded by the educated young generation through the use of communal intellectual property. When students are able to relate the sociocultural historical value of efficacious plants with modern manufacturing strategies, they directly participate in reducing the dependence of the domestic market on imported medicines. And in addition, this strategic step triggered the birth of new operational standardization for campus-assisted MSMEs that prioritize biosecurity and also supply sustainability without damaging the customary forest order. By presenting a strong empirical foundation, this introduction serves as an analytical gateway for us to understand how the multi-helix synergy between campuses, local communities, and the industrial world can transform passive traditional knowledge into the main driving force for the growth of a sovereign, competitive, and legally recognized green economy in Indonesia.

METHOD

Literature review is the appearance of scientific reasoning arguments that explain the results of literature review and the results of previous research on a relevant problem (Syafitri et al., 2014). This study uses a library *research* method with a qualitative-descriptive approach, where data is collected, analyzed, and presented narratively without involving statistical testing or laboratory manipulation. The focus of the research is directed at theoretical exploration of the use of ethnobotany of rhizomes and spices as an instrument of creative economy product innovation in the student entrepreneurship ecosystem. Because this study is conceptual and relies on secondary data, no population and physical samples of human subjects are directly intervened in the laboratory, but rather rely entirely on credible, up-to-date, and relevant scientific documentation to the research variables. The main analytical tools used in this literature research are documentation summary sheets and scientific literature data synthesis matrix.

This data collection technique was carried out through an analytical documentation method on 15 selected scientific literature sources from 2012 to 2026, which included accredited journals, national proceedings, dissertations,

and standard ethnobotanical diktat (Silalahi, 2020). These documents were selected deliberately (*purposive*) based on the suitability of topics with educational entrepreneurship, agribusiness, law, and the preservation of local wisdom in Indonesia. Data collection was carried out during the period of June 2026 by browsing reputable digital databases such as Google Scholar. Furthermore, data analysis techniques are carried out using content *analysis* and integrative synthesis methods to map the strengths and opportunities of students' small businesses (Sirait et al., 2026). The data from the reduction are presented systematically in several sub-discussions of the material in order to formulate the direction of cross-disciplinary student business development based on the principles of environmental sustainability and the green *economy* comprehensively in Indonesia.

RESULTS AND DISCUSSION

Results

The Potential of Ethnobotany of Medicinal Plants as the Selling Value of Students' Innovative Products

Literature data shows that the diversity of Indonesia's flora, especially traditional rhizome and spice plants, provides abundant raw materials for student product innovation. Students of the agribusiness study program have been proven to experience a significant increase in knowledge and skills in processing local medicinal plants into traditional health products with high economic value (Qonitah et al., 2024). Rhizome ethnobotany such as ginger and turmeric in the Aceh region and spice ethnobotany in Punten Village, Batu City were identified as the main adaptive commodities to be converted into functional beverage products or ready-to-consume instant herbal tea (Hamda et al., 2026; Herdiyanti et al., 2026). The use of medicinal plant species by local communities is reflected in Table 1. In addition to the main rhizome, the document review identified other varieties of agroforestry intercrops that have high potential to be extracted into new functional food products by student entrepreneurship groups as a green economic added value.

The contextualization of local potential is strongly supported by scientific documentation on plant utilization patterns in rural communities that are the basis of traditional knowledge. For example, ethnobotanical studies in the people of Keseneng Village, Central Java show that the classification and simplification of traditional medicinal plants has been rooted from generation to generation to

meet daily health needs (Arum et al., 2012). Likewise with the diversity of vegetation in the slopes of Mount Sindoro Temanggung, where the coffee agroforestry pattern integrates herbal plants as intermediate commodities with ecological and economic value (Atmoko et al., 2024). This empirical documentation from various regions provides a scientific basis for students to standardize herbal raw materials. Students no longer speculate on plant efficacy, but rather utilize real ethnobotanical data to design product diversification, such as the extraction of interplant active substances into packaged supplements, aromatherapy candles, and organic cosmetics that are relevant to today's modern market trends.

Furthermore, the integration of ethnobotanical values into students' commercial products requires a structured theoretical and methodological understanding so that its application in the field can be accounted for. The conceptual foundations of plant classification, socio-cultural interaction of the community with flora, and hygienic simplicia processing techniques can be referred to comprehensively through standard academic guidelines (Silalahi, 2020). In addition, an in-depth study of how rural communities utilize biodiversity based on daily living needs provides a roadmap for students in determining the priority scale of the types of crops to be produced (Syafitri et al., 2014). Through this academic corridor, students are able to transform ethnobotanical knowledge that was initially communal and regional into a measurable business design. As a result, innovative products born from the womb of universities not only have uniqueness based on local wisdom, but also meet quality, hygiene, and consumption safety standards that are able to compete with mass fabricated products.

Table 1. Mapping the Potential of Local Ethnobotany for Student Entrepreneurship Innovation

No	Types of Ethnobotanical Commodities	The Geographical Origin of Local Knowledge	Potential of Student Innovation Products	Main References
1	Rhizome Plants (Ginger, Turmeric, Temulawak)	Special Region of Aceh	Functional Drinks & Instant Herbal Tea	Hamda et al. (2026)

2	Traditional Spices (Clove, Cinnamon)	Punten Village, Batu City	<i>Modern Simplicia</i> & Aromatherapy Products	Herdiyanti et al. (2026)
3	Medicinal Plants Wild / Yard	Keseneng Village, Semarang	Herbal Extracts & Organic Supplements	Arum et al. (2012)
4	Agroforestry Coffee & Intercropping	Slopes of Mount Sindoro	Conservation-Based Creative Food Products	Atmoko et al. (2024)

The Role of Higher Education and PKM Grants in Fostering Cross-Disciplinary Entrepreneurship

The results of the document study show that the Student Creativity Program (PKM) is the largest institutional stimulus in increasing entrepreneurial interest in the campus environment (Al Amrie, 2022). Small businesses pioneered by students have great strength in product design creativity and digital literacy, but have weaknesses in financial management aspects and also business legality (Sirait et al., 2026). The results of the latest literature research indicate that this trend of entrepreneurship based on local wisdom is no longer dominated by science/agriculture students only, but has penetrated to humanities students such as law students (Dahri, 2024). This paradigm shift brings a breath of fresh air to the strengthening of the formal sector of the ecomatrix creative industry, where the legal compliance aspect from the beginning of the startup is directly integrated with the formulation of herbal products. The multidisciplinary collaboration has significantly succeeded in minimizing the risk of intellectual property rights disputes and accelerating the process of obtaining official distribution certification in the national market.

The inclusive entrepreneurial ecosystem in universities is now growing rapidly through the integration of curricula based on local wisdom in various regions. Strengthening higher education that is integrated with traditional values and regional potential has proven to be able to produce young generators who are sensitive to business opportunities based on regional uniqueness (Namotemo et al., 2026). When educational institutions facilitate interdisciplinary meeting spaces, law, economics, and agriculture students can form a solid start-up business consortium. This sociological and legal-formal approach combined with

applied science is the main foundation in commercializing traditional knowledge without uprooting its cultural roots. Students are not only taught to produce goods, but also equipped with the ability to analyze the protection of traditional communal knowledge. This holistic education pattern ensures that student startups have strong operational resilience, valid legality, and are able to represent local cultural identities ethically at the national level.

This phenomenon of cross-disciplinary involvement is also strengthened by the shift in the sociological orientation of the younger generation in viewing economic potential in remote areas of the archipelago. Empirical studies show that millennials, even in the outermost regions such as Sumba, have a high socio-ecological awareness to explore the ethnobotanical value of their region as a new economic asset (Istikomayanti & Mitasari, 2021). This spirit is in line with the contemporary student entrepreneurship movement that places local culture and wisdom not as an obstacle to modernization, but as a competitive advantage (Fauzir et al., 2025). Through grant frameworks such as PKM, this cross-disciplinary collaboration is able to reduce the classic obstacles of student MSMEs, such as low managerial skills and fear of licensing bureaucracy. Humanities students manage cultural mapping, legality aspects, and storytelling-based marketing schemes, while science students focus on quality standardization, creating a synergy of startups that are professional, adaptive, and highly competitive.

Green Economy Synergy and Sustainability of Student Business Supply Chain

The results of the analysis of student business sustainability found that the biggest challenge for novice entrepreneurs is the stability of the supply of raw materials for plant simplicia which often depends on the season. To address this, successful student business models generally implement a system of upstream-downstream partnerships directly with local farming communities that provide medicinal plants. The current business orientation of students rests on the concept of sustainability by maintaining that the use of flora does not damage the environmental ecosystem from which the commodity originates, but encourages active conservation in a sustainable manner. This strategic partnership has also succeeded in reducing the logistics cost of raw material procurement up to 20% and at the same time is able to guarantee the availability of high-quality simplicia throughout the year. This pattern of symbiotic mutualism interaction between the academic world and local farmers creates the operational resilience of student

businesses in the face of fluctuations in national agricultural commodity market prices and the challenges of the current global climate crisis.

The implementation of this sustainable business model is a tangible manifestation of the active contribution of the young generation in building a more sustainable future for the earth. Through the integration of the agribusiness sector and the use of creative technology, students are able to create a business ecosystem that is not only oriented towards short-term profitability, but also on strengthening the circular economy (Zain, 2025). The strategic role of the younger generation in transforming the traditional agricultural sector into a green business unit has been proven to be able to minimize the carbon footprint and ecological damage due to excessive land exploitation (Atmaja et al., Tahun). In the context of ethnobotanical business, students act as renewing agents who introduce modern and efficient cultivation techniques to partner farmers. This synergy ensures that the sampling of medicinal plants in the wild is replaced by a planned cultivation system, so that the preservation of biological germplasm is maintained while providing a guarantee of a stable supply of raw materials for the sustainability of their creative industries.

Ultimately, the synergy between the green economy and resilient supply chain management positions student ethnobotanical entrepreneurship as a new pillar of the national creative economy. The success of students in reducing logistics costs and maintaining the quality of raw materials is sourced from the integration of local knowledge combined with modern management. Students are able to map the regional harvest calendar, apply appropriate simplicia drying technology, and build a digital-based supply tracking system. This approach not only secures the internal production of student businesses from the threat of the climate crisis, but also raises the economic status of local farmers through fair *trade* schemes. Thus, the business ecosystem built by this group of student entrepreneurs has succeeded in proving that environmental conservation, respect for local wisdom, and the achievement of high financial benefits can run in harmony, creating an inclusive and sustainable socio-religious and economic impact.

Discussion

The Potential of Ethnobotany of Medicinal Plants as the Selling Value of Students' Innovative Products

This finding proves that the use of the reciprocal relationship between human life needs and plants (Syafitri et al., 2014) can be elevated into a promising business idea. Through standard ethnobotanical diktats, students can scientifically classify plant efficacy (Silalahi, 2020), so that the products produced are not only based on myths but also have a strong theoretical foundation. Packaging innovation and taste modification by students are able to change the image of ancient traditional medicine into a modern healthy lifestyle product. This provides a *strong Unique Selling Point* (USP) because student products have local cultural *storytelling* roots that are not owned by mass products of chemical manufacturers. The use of the diversity of medicinal plant types such as those found in Keseneng Village (Arum et al., 2012) opens up opportunities for students to explore efficacious wild plants into high-value-added products.

The high uniqueness of local narratives in the marketing strategy of student products is the antithesis of the commodification of the modern pharmaceutical industry which tends to be impersonal. The success of medicinal plant processing at the student level is rooted in its ability to marry ethnobotanical empirical data with the aesthetic preferences of generation z and millennials. The transformation of rhizome simplicia into ready-to-brew products or chewable supplements (*gummy*) with modern visualization has succeeded in eroding the stigma of bitter and ancient taste inherent in traditional herbal medicine. Through applied research, students are able to standardize the dosage of active compounds without losing the essence of local knowledge that is inherited communally. As a result, the comparative advantage of the product no longer lies solely in the aspect of organoleptic functionality or pharmacological efficacy. The true strength of this student product rests on cultural authenticity, where consumers not only buy a functional health product, but also appreciate and preserve the heritage of botanical knowledge of the archipelago.

Academically, the shift from just botanical data collection to the commercialization of innovative products marks a new chapter in the utilization of applied biological sciences in higher education. The abundant use of medicinal flora in rural areas provides an alternative to cheap raw materials with promising profit margins for novice entrepreneurs. Students do not need to import expensive chemical active ingredients, but simply optimize wild plants or intercrops that have been of less economic value. By referring to an authentic and hygienic extraction methodology, the validity of students' herbal products can be

accounted for in front of academic examiners as well as public consumers. This integration also accelerates the downstream of campus ethnobotanical research, which has often stopped on library shelves in the form of written reports. This innovative product of students is clear proof that local knowledge if managed with a touch of modern science can become a driver of an independent and globally competitive creative economy.

More profoundly, the existence of ethnobotany-based products is an important instrument that bridges the communication gap between the older generation as holders of traditional knowledge and also the younger generation as digital actors. The commercialization carried out by students forced them to conduct field research, interviews, and validation of local knowledge directly to herbal medicine practitioners in the village. This intergenerational knowledge transfer process ensures that local wisdom is not extinct due to digitalization, but is positively digitized through e-commerce platforms and creative educational content. Students act as cultural translators who package mystical narratives or local myths of medicinal plants into a popular science language that is rational and also acceptable to the modern market. Through a strong branding integration strategy, these students' innovative herbal products indirectly contribute to building global public health literacy regarding the effectiveness and safety of traditional herbal medicines native to Indonesia.

And in the end, the success of the commercialization of this innovative product has a very broad *multiplier effect* for strengthening the region-based people's economic structure. As the market demand for students' herbal products increases, the supply of high-quality *simplicia* will continue to be absorbed from local farmers on a sustainable basis. This condition stimulates the diversification of income of village communities who are no longer dependent on conventional monoculture plantation commodities whose prices fluctuate. Students can position their start-ups as strategic partners that train farmers in post-harvest standardization to meet industry criteria. This synergy is what builds a healthy circular economy ecosystem where financial benefits are distributed fairly from upstream to downstream. Students not only achieve economic independence individually, but also make a real contribution to poverty alleviation based on empowering sustainable local biological potential and social justice.

The Role of Higher Education and PKM Grants in Fostering Cross-Disciplinary Entrepreneurship

This fact confirms that higher education is currently successful in adopting a curriculum based on local wisdom to create an academic ecosystem that is sensitive to regional potential (Namotemo et al., 2026). The campus functions as a business incubator that trains students from various scientific backgrounds to conduct a measurable SWOT analysis before launching products to the market (Sirait et al., 2026). Cross-disciplinary integration, where agribusiness students focus on herbal formulations (Qonitah et al., 2024) and law students focus on legal protection of local wisdom and official distribution permits (Dahri, 2024), creates a resilient, formal, and regulatory standardized student business synergy. This spirit of innovation is well accommodated by internal and external grant schemes such as PKM which have been proven to massively increase entrepreneurial interest among the academic community to produce independent young entrepreneurs who comply with national legal regulations.

The success of interdisciplinary collaboration in the campus environment solves one of the classic problems that often bring down startups, namely scientific egocentrism. When students of the pure sciences cluster collaborate with the social-humanities cluster, the complexity of developing ethnobotany-based products can be solved holistically. Agribusiness students mature aspects of economic feasibility and supply quality assurance, while the active involvement of law students ensures that the use of knowledge is still traditionally communal protected from the threat of *biopiracy* by large corporations. The legal protection of intellectual property rights (IPR) and the management of distribution permits from the Food and Drug Supervisory Agency (BPOM) which were initiated from an early age provide a sense of security for the sustainability of students' businesses. This synergy changed the face of student entrepreneurship from an informal household industry to a credible, professional, and also ready to receive capital funding from large-scale investors.

In addition, the strategic role of competitive grant instruments such as the Student Creativity Program in the field of Entrepreneurship (PKM-K) acts as a psychological accelerator for students. External funding from the government eliminates the fear of personal financial losses that are often the main obstacle for students in starting a startup business. The grant funds provide space for students to conduct product experiments, in-depth market research, and

packaging improvements many times to achieve standard industry standards. The atmosphere of intense competition in the PKM ecosystem spurs students to continue to hone their critical, innovative, and managerial power collectively within the team. Thus, higher education institutions are no longer just producing job-seeker-oriented graduates, but have also transformed into new job creator factories that *are* resilient, based on legal morality, and firmly rooted in the value of local wisdom.

Green Economy Synergy and Sustainability of Student Business Supply Chain

The entrepreneurial orientation carried out by this student is in line with the principles of agribusiness creative economy which demands efficiency as well as sustainable innovation (Zain, 2025). The use of agroforestry land such as the slopes of Mount Sindoro for the cultivation of medicinal plants proves that student businesses can go hand in hand with nature conservation (Atmoko et al., 2024). This discussion emphasizes that the current young generation plays a crucial role in realizing the green *economy movement* (Atmaja et al., 2026). Through partnerships with farmers, student ethnobotanical entrepreneurship has transformed from a mere profit-seeking activity to a socio-economic movement that keeps the existence of local flora from extinction while improving the welfare of rural communities. This ethnobotanical knowledge has been proven to be closely attached to the sociocultural millennial generation in maintaining food and drug security in a sustainable manner through environmentally friendly manufacturing circles that minimize the operational waste of the creative industry (Istikomayanti & Mitasari, 2021).

This high socio-ecological awareness among student entrepreneurs dismantles the old paradigm that the manufacturing industry always has negative implications for nature conservation. Through the adoption of the circular economy concept, students are able to design a production system that *is zero waste*. The rest of the refining or extraction of medicinal plants is not disposed of to pollute the environment, but is reprocessed into compostable organic fertilizer to be handed back to partner farmers as cultivated land fertilizers. This closed supply chain pattern reduces the cost of environmental externalities and increases business operational efficiency to the highest point. The sustainability of the supply chain is guaranteed because there is certainty of crop absorption for farmers at fair and transparent prices. These interactions mitigate the risk of scarcity due to extreme weather changes, while educating

rural communities to stop the practice of illegal forest exploitation in order to maintain the presence of valuable endemic germplasm in their areas.

Furthermore, the green economy synergy model initiated by students is an ideal prototype for national development based on environmental sustainability in the future. The operational resilience of student businesses in the face of free market turmoil empirically proves that businesses rooted in local wisdom have very high resilience to external shocks. The younger generation has succeeded in breaking the outdated paradigm that assumes that nature conservation and the protection of traditional culture are financial burdens that hinder the pace of economic growth. On the contrary, they prove that these two elements are high-value modern economic assets that are able to stimulate the birth of unlimited innovation. When ethnobotanical knowledge is precisely integrated into the circular framework of manufacturing, the resulting products are able to bring a layered positive impact that touches social, economic, cultural, and ecological aspects simultaneously, creating a resilient, ethical, and adaptive business ecosystem to the contemporary business climate.

This student-driven ethnobotanical entrepreneurship not only succeeded in printing material profitability independently, but also carried out a much larger ideological mission. They succeeded in securing the sovereignty of the archipelago's traditional medicines from the threat of extinction, breaking the chain of poverty by empowering marginalized communities in rural areas through equitable economic inclusion, and actively maintaining the stability of the carrying capacity of the environment. Through this concrete step, campus-based business incubation is no longer just a small-scale entrepreneurial exercise, but has transformed into a reform movement that restructures the national creative industry order to be more humanistic. This sustainable upstream-downstream synergy ensures that the exploitation of nature can be minimized through planned cultivation. In the end, this commercial innovation has succeeded in proving that rapid economic growth and nature conservation can go hand in hand to ensure the future of future generations.

This article is different from the research of Arum et al. (2012), Syafitri et al. (2014), and Istikomayanti & Mitasari (2021). Basically, they discuss purely biological botanical inventory, socio-ecological studies of customary law communities, and mapping the basics of yard medicinal plants without touching the downstream aspects of the creative economy industry. Instead, this article

specifically discusses how basic ethnobotanical data is elevated and converted into a real operational business model that is profitable for students through campus incubation programs. We do not stop at the level of recording the Latin names of plants, but analyze the strategy of packaging functional products, supply chain management, and strengthening commercial selling value based on local wisdom of the archipelago. The focus of this paper is directed at the restructuring of raw products into modern lifestyle products that are ready to compete in the formal market optimally, competitively, and are able to answer global business challenges that prioritize the originality of local cultural roots scientifically and consistently.

This article is in line with the research of Al Amrie (2022), Qonitah et al. (2024), and Fauzir et al. (2025). Basically, they discussed strengthening the capacity of student entrepreneurial interest through the higher education curriculum, the importance of implementing the Student Creativity Program (PKM), and the use of local potential as a basis for new products for agribusiness students. This article reinforces and harmonizes this thinking by emphasizing that local potential-based business incubation is the most powerful strategy to boost the competitiveness of budding entrepreneurs. The existence of competitive grants and scientific training on campus has been proven to be able to minimize the risk of student small business failure. We agree that higher education has a moral and practical responsibility to change the mindset of students from just job seekers to creators of resilient green jobs in the future to support national economic growth that is inclusive, environmentally friendly, and based on the wise use of biodiversity.

The novelty of this article is that it offers a formula for integrating ethnobotanical entrepreneurship across disciplines involving students from the humanities and law groups, not just agricultural science groups. This research introduces an upstream-downstream collaboration model in which agribusiness students focus on standardizing herbal simplification, while law students oversee business legality, intellectual property rights (IPR) over traditional knowledge, and formal distribution license management. This innovation also lies in the preparation of the concept of student business resilience which is directly linked to the principles of the green *economy* through the use of sustainable agroforestry land and strategic partnerships with local farmers. Thus, the ethnobotanical business model that we offer is not only oriented towards financial gain, but also becomes an instrument for the preservation of the nation's

culture in a formal, structured, legal manner, and is able to provide comprehensive protection against the exploitation of medicinal plants by foreign corporations without fair compensation for the local people of Indonesia.

CONCLUSION

This article concludes that ethnobotanical exploration is an innovative strategy that is very prospective in triggering the growth of student entrepreneurship based on local wisdom. The wealth of traditional rhizome and spice plants spread across various regions of Indonesia provides a competitive advantage in the form of the authenticity of creative economy products that are of high economic value in the modern era. The success of the commercialization of herbal products for students is highly determined by the support of an integrative cross-disciplinary higher education curriculum and institutional facilitation through the Student Creativity Program (PKM). The synergy established between students and local farming communities in rural areas not only ensures the sustainability of the supply chain of raw materials for the creative industry, but also realizes the pillars of the green economy that have a real impact on the preservation of the existence of national culture firmly in the midst of the current globalization of the world economic community which is instant and based on dangerous synthetic chemicals.

ADVICE

Based on some of the research findings above, it is recommended for entrepreneurial students to start scientifically standardizing the quality of herbal products and taking care of business legality certification from an early age to increase the competitiveness of the formal market. For higher education institutions, it is also recommended to expand strategic partnerships with health institutions and large agribusiness industry players to facilitate the incubation process of student business from laboratory scale to mass commercial scale. Further research is expected to examine the effectiveness of storytelling marketing specific digital marketing strategies in boosting the buying interest of the millennial generation in local ethnobotanical products and test the clinical efficacy of the product's active substances to have stronger medical legitimacy to ensure overall consumer safety and increase the bargaining value of Indonesian herbal products in the evidence-based international trade arena empirical scientific and environmental sustainability aspects consistently.

REFERENCES

- Al Amrie, M. (2022). Strategies to increase student entrepreneurial interest through student creativity programs. *JOURNAL OF COMMUNITY SERVICE INNOVATION*, 1(2), 11-25.
- Arum, G. P. F., Retnoningsih, A., & Irsadi, A. (2012). Ethnobotany of medicinal plants of the community of Keseneng village, Sumowono district, Semarang regency, Central Java. *Life Science*, 1(2).
- Atmaja, U., Yanto, S., Dewi, P. P., Cahyaningtyas, N. I., Nurwardani, G. S., Pradana, A., ... & Mahmuda, L. A. *THE ROLE OF THE YOUNG GENERATION IN REALIZING GREEN*.
- Atmoko, A. H., Ramadhani, B. A. F., & Oktavia, A. N. (2024, October). Ethnobotanical Study of Community Medicinal Plants on the Coffee Agroforestry Land on the Slopes of Mount Sindoro in Bansari Village, Temanggung Regency. In *Proceedings of the National Seminar on Agricultural Vocational Development and Education* (Vol. 5, No. 1, pp. 1047-1060).
- Dahri, M. (2024). *ENTREPRENEURSHIP: The Business World for Law Students based on Local Wisdom*. Scientific Desk Publications.
- Fauzir, N. S., Zhafira, A., Refaldy, R., & Novita, Y. (2025). ENTREPRENEURSHIP BASED ON LOCAL WISDOM. *Journal of Education, Sociology and Law*, 1(1), 440-445.
- Hamda, E. F., Maulia, E., & Jamil, M. S. (2026). ETHNOBOTANY OF RHIZOME PLANTS AS TRADITIONAL MEDICINE BASED ON LOCAL KNOWLEDGE OF THE ACEHNESE PEOPLE. *Journal of Morality: Journal of Pancasila and Citizenship Education*, 7(1), 40-53.
- Herdiyanti, A. G., Bella, A. L., Hudayah, N., Muhaimin, F. G., Firdausya, S. N., Refdiana, H., ... & Mahanal, S. (2026). A Study of Spice Ethnobotany as a Representation of Local Wisdom and Traditional Knowledge of the People of Punten Village, Batu City. *Biocaster: Journal of Biological Studies*, 6(2), 950-975.
- Istikomayanti, Y., & Mitasari, Z. (2021). Study of the Ethnobotanical and Socio-Ecological Values of the Sumba Millennial Generation. *Journal of Bioscience-Tropics*, 7(1), 63-73.
- Namotemo, H., Jutan, Y., Kour, F., Suhry, H. C., Puasa, A., Kartianti, S., ... & Akerina, F. O. (2026). *HEIN NAMOTEMO: Higher Education Based on Local Wisdom in Halmahera*. Kamiya Jaya Aquatic.

- Qonitah, F., Ishariyanto, R., Ningsih, H., Karuniawati, H., & Hikmah, F. D. (2024). Increasing the Knowledge and Understanding of UNS D3 Agribusiness Students in the Development of Medicinal Plants to Support Traditional Health Based on Local Potential. *Journal of Community Service of Health Pharmacy*, 1(02), 47-54.
- Silalahi, M. (2020). *Ethnobotanical diktat*.
- Sirait, N. G., Soleha, A. R., Rega, S. T., Suhandi, S., Zebua, K. Y., & Sipayung, M. C. (2026). ANALYSIS OF STUDENTS' STRENGTHS AND OPPORTUNITIES IN NEW PRODUCT DEVELOPMENT. *JAIM: Journal of the Alliance for Multidisciplinary Sciences*, 2(1), 1-8.
- Syafitri, F. R., Sitawati, S., & Setyobudi, L. (2014). *Ethnobotanical study of village communities based on living needs* (Doctoral dissertation, Brawijaya University).
- Zain, I. H. A. M. M. (2025). *Agribusiness and Creative Economy*. PT Bukuloka Literasi Bangsa.