

Assessing the Viability of Identified Livelihood Opportunities in Cagayan State University

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Abstract:

This study aims to evaluate the viability of Cagayan State University's (CSU) established livelihood options according to the assessment of business faculty members and trainers of the university who will provide trainings to people interested in establishing livelihood ventures. Using qualitative and quantitative methods of data collection, this study seeks to identify established livelihood activities that are offered or available to the university, and assess how the university's faculty members or trainers perceive each of these livelihood activities based on five types of livelihood capital (i.e., physical, human, social, natural, and financial). Findings are expected to guide CSU administrators in prioritizing livelihood initiatives that empower employees, enhance financial resilience, and foster inclusive economic growth within the university community. At the same time the study can be also be an avenue for faculty/trainers' development plan.

Keywords: livelihood capitals, livelihood opportunities, viability

INTRODUCTION

Cagayan State University (CSU) has diverse employees, each with unique knowledge, skills, and values. While it is true that employment at CSU is financially rewarding, many employees still seek additional source/s of income to support their families and needs. Livelihood opportunities; like small-scale businesses, service-based ventures and others can provide them with an avenue not only for financial growth but empowerment as well.

The recognized livelihood opportunities are not equally viable. Therefore, this study seeks to evaluate these livelihood opportunities through the perspectives of knowledgeable business faculty members and expert trainers/faculty of these livelihood opportunities. Their knowledge and expertise in business provides valuable insights into which ventures are most likely to flourish. By analyzing their insights, the study will be able to compare and rank the identified livelihood opportunities, highlighting the ones that offer the strongest chance for long-term success.

This assessment is important for it provides CSU employees and administrators with clear, simple and evidence-based insights into which proposed livelihood opportunities have the highest capability for success. Later on, this will help ensure that the chosen livelihood opportunity provides meaningful and positive impact to the employees of Cagayan State University.

Objectives

This study aims to assess the viability of the identified livelihood opportunities through the perspectives of business faculty members and livelihood faculty/ trainers. Their knowledge and expertise seek to provide a clear information of the viability of the identified livelihood opportunities, with the objective of identifying the most promising option/s for training priority.

Specifically, it answers the following questions:

1. What is the demographic and professional profile of the business faculty members and livelihood trainers/faculty, in terms of:

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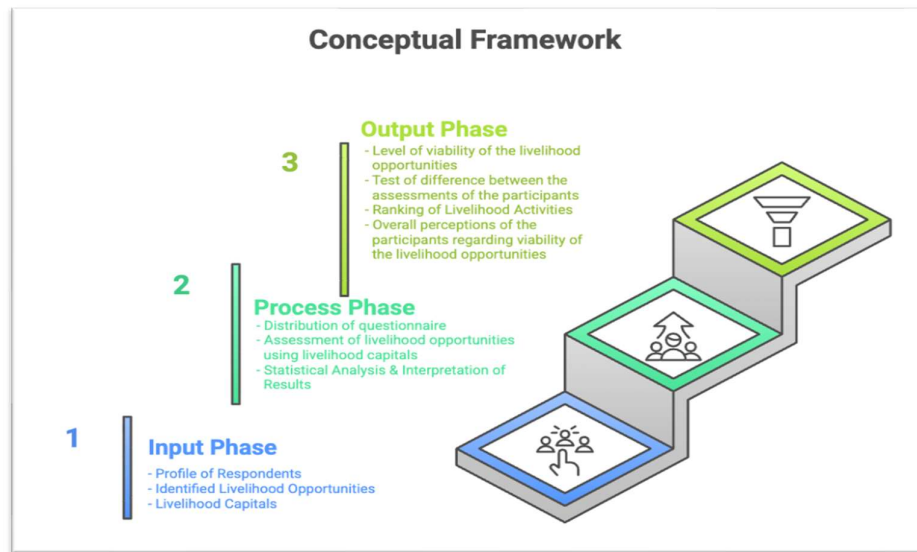
- 1.1 Age
- 1.2 Sex
- 1.3 Highest educational attainment
- 1.4 Area of specialization
- 1.5 Years of teaching or training experience
2. What livelihood opportunities have been proposed for the employees of Cagayan State University (CSU)?
3. What is the level of viability of each proposed livelihood opportunities, as assessed by respondents in terms of the following livelihood capitals:
 - 3.1 Human Capital
 - 3.2 Social Capital
 - 3.3 Natural Capital
 - 3.4 Physical Capital
 - 3.5 Financial Capital
4. Is there a significant difference between the assessments of the two groups of participants regarding the viability of the proposed livelihood opportunities?
5. In what order of priority do the business professors and livelihood trainers rank the identified livelihood opportunities based on their perceived viability for CSU employees?
6. What are the key insights of the respondents regarding the proposed livelihood opportunities?
7. What is the overall perception of the respondents regarding the viability of the identified livelihood programs, as measured through their level of agreement using the key viability indicators?

Review of Literature/Conceptual Framework

This study is anchored on the Sustainable Livelihood Framework (SLF) developed by the Department for International Development (DFID) in 1999. It tells us that livelihood is the collection of skills, resources, and activities that allow people to secure and improve their means of living. It highlights that a livelihood program prospers with the existence of the five interrelated forms of capital such as: human, social, natural, physical, and financial.

The identified livelihood opportunities at Cagayan State University (CSU), such as; food processing, electronics repair, air-conditioning servicing, sewing and fashion, automotive maintenance, and driving provide practical means for CSU employees to better their financial status. However, the success of this project does not rely on their knowledge and skill alone. It is deeply influenced by how these five livelihood capitals interact and reinforce one another.

This conceptual framework assumes that when CSU's employees have strong human and social networks, access to resources, adequate support from the administration, and sound financial systems, the proposed livelihood opportunities will be feasible and sustainable.

Figure 1. Conceptual Framework

The conceptual framework shows the flow of the research process from understanding expert perspectives of respondents to generating actions that can benefit CSU employees through viable and inclusive livelihood opportunities. The *input* phase comprises the demographic and professional profiles of the respondents; as well as the identified livelihood opportunities and livelihood capitals. The *process* involves collecting of data and insights through questionnaire and interview from business faculty members and livelihood faculty/ trainers. Then, the statistical analysis and interpretation for the gathered data. Finally, the *output* consists of determining which livelihood opportunities are the most viable that will guide CSU in implementing programs that are both profitable and sustainable to employee needs. This may be supported through the establishment of a living laboratory, where employees can implement hands-on livelihood activities.

RESEARCH METHODOLOGY

Research Design

This study utilized a mix method research design. Quantitative is used to describe the demographic and professional profile of respondents, identify proposed livelihood activities, and assess their perceived viability. On the other hand, to give a better understanding of the research, qualitative through interview was also utilized. This approach provides a systematic analysis of expert perceptions to determine which livelihood opportunities are the most viable for sustainable implementation.

Respondents of the Study

The respondents were the 14 faculty members in the business cluster of CBEA and 21 livelihood program trainers/faculty of CIT in CSU, Carig Campus. They were selected through purposive sampling, for they possess relevant knowledge and expertise in business education and livelihood program implementation.

Research Instrument

Data were collected through a researcher-made questionnaire, which includes the following sections:

1. **Profile Information** including the demographic and professional profile of respondents.
2. **List of Proposed Livelihood Activities** pre-identified by CSU's livelihood committee.
3. **Viability Assessment**; a 4-point Likert scale evaluating each livelihood opportunity in terms of

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five livelihood capitals (i.e., human, social, natural, physical, and financial).

4. **Ranking Sheet** which allows respondents to rank livelihood opportunities based on perceived overall viability.

5. **Interview Guide** to provide a better understanding of the study.

The instrument underwent validation by experts and pilot testing to ensure clarity and reliability before full administration.

Data Gathering Procedure

Approval from the college deans was sought prior to data collection. The questionnaire was personally distributed to the respondents and they were interviewed. After collecting the data and interview, responses were carefully reviewed, tallied, and encoded for analysis.

Data Analysis

The following statistical tools were used:

1. Frequency and Percentage Distribution, this is to describe the demographic and professional profile of respondents.
2. Weighted Mean and Descriptive Interpretation, in order to assess the perceived viability of each livelihood opportunity.
3. t-tests and Analysis of Variance (ANOVA), this is to determine if there is a significant difference between the assessments of the two groups of participants regarding the viability of the proposed livelihood opportunities
4. Ranking Method, in order to determine the priority order of the identified livelihood programs.
5. Composite Viability Score, to identify the livelihood opportunity perceived as most viable for implementation.
6. Thematic Analysis for the analysis of the qualitative data.

RESULTS AND DISCUSSION

1. Participants' Demographic and Professional Profile

1.1 Profile of CBEA Faculty Members

Table 1: Frequency and Percentage Distribution of CBEA Business Faculty Members in Terms of Age

Age	Frequency	Percentage
20 – 29 years old		
30 – 39 years old	3	21.42
Above 40 years old	11	78.58
Total	14	100.00

Table 1 presents the frequency and percentage distribution of CBEA Business Faculty Members in terms of age. The data shows that the majority or 78.58% of participants are above 40 years old. Meanwhile, 30–39 age group, with 3 respondents, was the lowest represented category.

This shows that the responses are from the views of older and more experienced business faculty members. Their age is a proof that they have extensive teaching experience making them experts in terms of livelihood-related initiatives as well as extension activities.

Recent literature states that experienced faculty members tend to emphasize feasibility and institutional alignment, compared to younger faculty members who are more likely to introduce innovation or technology-oriented ideas into livelihood programs (Santos & Villanueva (2023).

Table: Frequency and Percentage Distribution of CBEA Business Faculty Members in Terms of Sex

Sex	Frequency	Percentage
Male	7	50.00
Female	7	50.00
Total	14	100.00

Table 2 presents the frequency and percentage distribution of CBEA Business Faculty Members in terms of sex. The sex distribution shows an equal representation between male and female participants, with 7 or 50% are males and 7 or 50% are females. This indicates that both sexes were proportionally represented in the sample.

The equal sex distribution means that the findings reflect perspectives from both male and female faculty members. This proportional representation may result to varied assessments. Several research indicates that men and women have different perspective when it comes to livelihood, entrepreneurship, and economic opportunities. Therefore, the proportional representation conveys richness of insights regarding livelihood viability.

The study of Lorenzo & De Guzman (2024) noted that faculty groups with a balance amount of female and male individuals, tend to provide more comprehensive and detailed analyses of entrepreneurial and livelihood-related initiatives, since both male and female perspectives are distinct.

Table 3: Frequency and Percentage Distribution of CBEA Business Faculty Members in Terms of Highest Educational Attainment

Highest Educational Attainment	Frequency	Percentage
College Degree		
Master's Degree	10	71.42
Doctorate Degree	4	28.58
Total	14	100.00

Table 3 presents the frequency and percentage distribution of CBEA Business Faculty Members in terms of highest educational attainment. The data shows that 71.42% or majority of the participants hold a Master's Degree, while 28.58% of the participants hold a Doctorate Degree.

The result indicates that respondents have high qualifications in academics. Faculty members holding a Master's Degree have more depth in their assessments because they commonly have more experience to teaching, research, and analyses related to the academe. On the other hand, Doctorate Degree holders can further contribute proficient insights, specifically during the evaluation of viability and sustainability of livelihood opportunities and how it aligns with the needs of its beneficiaries.

The study of Mendoza & Ramos (2023) supports this finding, reiterating that faculty employees with advanced degrees tend to provide evaluations that are more informed and evidence-based not only for academic but also livelihood initiatives due to stronger research training and exposure to community engagement programs.

Table 4: Frequency and Percentage Distribution of CBEA Business Faculty Members in Terms of Area of Specialization

Area of Specialization	Frequency	Percentage
Business	14	100.00
Total	14	100.00

Table 4 presents the frequency and percentage distribution of CBEA Business Faculty Members in terms of area of specialization. The data shows that all respondents specialize in Business. This indicates a fully homogeneous set of participants in terms of academic and professional specialization.

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Since, the study focuses on assessing the viability of identified livelihood opportunities in Cagayan State University thru the insights of business faculty members, the uniform specialization is favorable. Having all respondents from the field of Business guarantees that the insights are anchored from professional expertise, particularly in the areas of entrepreneurship, viability assessment, and livelihood projects sustainability. The respondents' expertise in business makes their assessments both contextually appropriate and discipline-informed.

Relevant literature, like the study of Delos Santos (2024), highlights that faculty specialization improves the significance and depth of assessment in livelihood project evaluation.

Table 5: Frequency and Percentage Distribution of CBEA Business Faculty Members in Terms of Years of Teaching or Training Experience

Years in Service	Frequency	Percentage
1 – 3 years	1	7.14
4 – 6 years		
7 – 10 years	3	21.43
More than 10 years	10	71.43
Total	14	100.00

Table 5 presents the frequency and percentage distribution of CBEA Business Faculty Members in terms of years of teaching or training experience. The data reveals that the majority or 71.43% of respondents have been in service for more than 10 years. Meanwhile, 3 or 21.43% of participants have been in service for 7–10 years, and only 1 has served for 1–3 years.

This means that the respondents' insights are the from substantial university experience. Faculty members with longer length of service typically are more familiar with university programs, university historical trends and livelihood initiatives. Their insights on livelihood projects may therefore highlight not only viability but also sustainability, and its alignment with the university's mandates.

Studies indicate that faculty with longer tenure tend to provide a more context-based evaluations due to accumulated university knowledge and community exposure (Cruz and Jimenez, 2023).

1.2 Profile of CIT Faculty Members

Table 6: Frequency and Percentage Distribution of CIT Faculty Members/Livelihood Trainers in Terms of Age

Age	Frequency	Percentage
20 – 29 years old	1	4.76
30 – 39 years old	9	42.86
Above 40 years old	11	52.38
Total	21	100.00

Table 6 presents the frequency and percentage distribution of CIT Faculty/ Trainers in terms of age. As shown in the table, above 40 years old age group registered the highest percentage of 52.38%. Respondents in this age range are usually in the peak of their career as faculty/trainers and usually have sufficient technical experience to industry-based practices relevant to livelihood development and training specifically on the identified livelihood opportunities. Meanwhile, 20–29 age group had the lowest percentage of 4.76%. This tells us that few early-career faculty/trainers in CIT are involved in providing livelihood programs.

This means that the viability assessment of identified livelihood opportunities relies on the technical expertise of the respondents. Faculty within this age range usually apply book concepts and their industry skills to various training programs, which can lead to more grounded evaluations of livelihood viability.

Recent studies highlight that mid-career technical faculty, ages 30–39 tend to provide better assessments of livelihood or skills-based programs due to combined field experience and instructional competence according to (Bautista & Soriano, 2024).

Table 7: Frequency and Percentage Distribution of CIT Faculty Members in Terms of Sex

Sex	Frequency	Percentage
Male	11	52.38
Female	10	47.62
Total	21	100.00

Table 7 presents the distribution of CIT Faculty Members/ Trainers according to sex, showing both frequency and percentage. Out of a total of 21 respondents, males constitute 11 individuals or 52.38% of the group, while females make up 10 individuals, representing 47.62%. This indicates a slightly higher number of male faculty members or livelihood trainers compared to females.

It may be observed that the College of Industrial Technology attract more male individuals because the data shows more males in this department, especially in technical education. This may be due to the nature of industrial technology programs which emphasizes technical and practical skills, usually associated with male-dominated fields. However, the gap between male and female respondents is not significant. Females comprise almost half of the total population. This close representation shows that there is a growing participation of women in technical education, livelihood training, and community-based enterprise development. The participation of both female and male faculty members displays a balanced environment which allows different perspectives and approaches to livelihood training.

Villanueva and Dizon (2023) support this finding, highlighting in their study that male faculty members often exhibit strong engagement in livelihood and skills-based training,

Table 8: Frequency and Percentage Distribution of CIT Faculty Members in terms of Highest Educational Attainment

Highest Educational Attainment	Frequency	Percentage
College		
Master's Degree	17	80.95
Doctorate Degree	4	19.05
Total	21	100.00

Table 8 presents the frequency and percentage distribution of CIT Faculty Members/ Livelihood Trainers in terms of highest educational attainment. The Master's Degree level obtained the highest percentage of 80.95%, indicating that most livelihood trainers or faculty members in the College of Industrial Technology hold master's degrees. Similar to the other group of respondents, this means that a higher degree is common in technical-vocational and skills-oriented fields, where industry experience, hands-on competence, and applied technical skills are prioritized for instructional and livelihood training roles. On the other hand, the Doctorate Degree obtained the lowest percentage of 19.05%, indicating limited representation of highly developed academic qualifications among CIT livelihood trainers or faculty members.

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It may still be advantageous to have a majority of the faculty members as Master's Degree holders since the study focuses on the viability of livelihood opportunities, and CIT's training environment put emphasis on applied skills, production processes, and practical know-how. The existing academic qualifications align with CIT's competency-based and industry-focused framework, supporting realistic and practice-based assessments of livelihood viability. The study of Domingo & Catapang, (2024) indicates that in technical and livelihood training disciplines, faculty members with higher degrees or educational attainment, often provide strong applied competencies that are important when evaluating viability.

Table 9: Frequency and Percentage Distribution of CIT Faculty Members s in terms of Area of Specialization

Area of Specialization	Frequency	Percentage
Foods Technology	6	28.57
Electrical Technology	1	4.76
Electronics Technology	3	14.29
Heating Ventilation and Air-Conditioning Technology	1	4.76
Fashion and Apparel Technology	1	4.76
Mechanical Technology	2	9.52
Automotive Technology	4	19.05
Others (BSFT)	3	14.29
Total	21	100.00

Table 9 presents the frequency and percentage distribution of CIT faculty members or livelihood trainers in terms of area of specialization. Foods Technology recorded the highest frequency of 6 or 28.57%, indicating that the majority of them specialize in this area. This implies a strong orientation on food processing, commonly associated with viable livelihood opportunities both on campus and within local communities due to high demand. In contrast, Electrical Technology and HVAC Technology and fashion and apparel technology registered the lowest frequency with 1 or 4.76% each, reflecting limited faculty members under this field. It can be attributed to the fact that these are more technical and industry-specific fields.

This evaluates the viability of identified livelihood opportunities, including the dominance of Food Technology specialists, explaining that assessment perspectives are likely based on resources and community demand. Food-related livelihood projects often require lower capital and align with existing household, making assessment more favorable from this group of respondents with such contexts. The lower representation of Electrical Technology and HVAC Technology and Fashion and Apparel Technology specializations may have correlation with opportunities requiring technical certification, industrial-level competencies, or equipment-dependent operations. These areas may offer livelihood potential but often require formal training pathways, higher start-up costs, and more specialized labor, which are factors that may influence their perceived viability.

The study of Santiago & Macaspac (2024) highlights that food-related technical specializations are often dominant to community livelihood initiatives due to high demand, lower barriers to entry, and adaptable production processes, whereas specialized industrial trades require more resource input and certification to operationalize.

Table 10: Frequency and Percentage Distribution of CIT Faculty Members/Livelihood Trainers in Terms of Years of teaching or training experience

Years in Service	Frequency	Percentage
1 – 3 years	5	23.81
4 – 6 years	1	4.76
7 – 10 years	7	33.33
More than 10 years	5	23.81
Total	21	100.00

Table 10 presents the frequency and percentage distribution of CIT faculty members or livelihood trainers in terms of years of teaching or training experience. The 7–10 years category recorded the highest frequency of 7 or 33.33%, indicating that most livelihood trainers or faculty members in the CIT have been in service for nearly a decade. Faculty within this tenure range are often considered mid-career, possessing both classroom teaching experience and exposure to technical or industry-based training, essential for assessing livelihood viability. Meanwhile, 4-6 years category has the lowest frequency of 1 or 4.76%, suggesting minimal representation of early-career faculty in livelihood training or assessment roles.

Since the study focuses on evaluating the viability of identified livelihood opportunities, 7–10 years may better the assessment. These faculty members are likely knowledgeable with livelihood and business principles/concepts, competency standards and community engagement activities; factors that impact the viability of livelihood projects connected to technical trades. In contrast, 4–6 early-service faculty may have fewer contributions to the university but still they introduce new teaching strategies and updated industry techniques. Nonetheless, the current tenure profile aligns well with CIT's practice-oriented environment, where accumulated knowledge and technical experience with livelihood training outcomes are valuable in evaluating livelihood viability.

Research of Fernandez and Llorente, (2023) states that mid-career technical faculty provide better assessments in skills-based and livelihood programs due to accumulated institutional knowledge and sustained exposure to field practices.

2. Livelihood Opportunities Proposed for the Employees of Cagayan State University

Table 11: Identified Livelihood Opportunities Proposed for CSU Employees

No.	Livelihood Opportunity	Description / Nature of Work
1	Food Processing	Production of food products for retail or consumption (e.g., snacks, preserved items, baked goods, etc.)
2	Electronics Repair	Repair and maintenance of electronic devices such as appliances and gadgets
3	Airconditioning Servicing	Installation, cleaning, and technical servicing of air-conditioning units
4	Sewing / Fashion	Tailoring, alteration, garment production, and related clothing services
5	Automotive Maintenance	Repair, servicing, and preventive maintenance of vehicles

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6	Driving	Operating vehicles for transport, mobility, delivery, or service-based work
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Table 11 presents the Identified Livelihood Opportunities Proposed for the employees of Cagayan State University. The table shows six livelihood opportunities proposed for them, representing a mix of food-based, service-oriented, and technical occupations. The various choices shows that livelihood projects for employees may address both accessible micro-enterprise activities (e.g., food processing and sewing) and specialized technical services (e.g., air conditioning, electronics, and automotive servicing). This range allows employees with varying skills, interests, and resource capacities to engage in income-generating activities that match their background, interest and needs.

3. The level of viability of each proposed livelihood activity, as assessed by the two groups of participants in terms of livelihood capitals.

Table 12: Participants' Assessment of the Level of Viability of the Livelihood Opportunities Proposed for Cagayan State University Employees in Terms of Livelihood Capitals

Live liho od Acti vity	Group of Partici - pants	Hum an Capit al	DI	Social Capital (network, cooperatio n, communit ies	DI	Natural Capital (availabil ity/	DI	Physic al Capita l (faciliti es, tools, equip ment)	DI	Fina ncial Capit al (prof ita- bilit y, cost- effici ency)	DI	Overall Mean	DI
		(skills , manp ower, knowl edge)				use of natural resources)							
		Mean		Mean		Mean		Mean		Mea n			
Foo d Proc essi ng	CBEA Busine ss Facult y Memb ers	3.25	H V	3.27	H V	3.29	H V	3.24	V	3.28	H V	3.27	Hig hly Via ble
	CIT Facult y Memb ers/ Liveli hood Traine rs	3.28	H V	3.28	H V	3.27	H V	3.23	V	3.27	H V		

Electronics Repair	CBEA Business Faculty Members	3.01	V	3.11	V	3.15	V	3.11	V	3.13	V	3.12	Viable
	CIT Faculty Members/Livelihood Trainees	3.03	V	3.11	V	3.15	V	3.13	V	3.11	V		
Airconditioning Servicing	CBEA Business Faculty Members	3.33	HV	3.17	V	3.02	V	3.21	V	3.33	HV	3.25	Highly Viable
	CIT Faculty Members/Livelihood Trainees	3.19	V	3.21	V	3.31	HV	3.32	HV	3.21	V		
Sewing / Fashion	CBEA Business Faculty Members	3.31	HV	3.22	V	3.21	V	3.19	V	3.31	HV	3.25	Highly Viable
	CIT Faculty Members/Livelihood Trainees	3.22	V	3.21	V	3.19	V	3.33	HV	3.31	HV		
Automotive Maintenance	CBEA Business Faculty Members	3.02	V	3.21	V	3.22	V	3.21	V	3.03	V	3.23	Viable

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	CIT Facult y Memb ers/ Liveli- hood Traine rs	3.19	V	3.25	H V	3.28	H V	3.21	V	3.02	V		
Driv ing	CBEA Busine ss Facult y Memb ers	2.49	SV	2.05	SV	2.48	SV	2.48	SV	2.51	V	2.49	Slig htly Via ble
	CIT Facult y Memb ers/ Liveli- hood Traine rs	2.05	SV	2.06	SV	2.49	SV	2.22	SV	2.63	V		
Overall Mean		3.11	V	3.10	V	3.10	V	3.07	V	3.13	V	3.10	Via ble

Table 12 presents the respondents' assessment of the level of viability of the livelihood opportunities proposed for Cagayan State University employees in terms of livelihood capitals. Food processing obtained the highest rating mean score of 3.27, implying that two groups or respondents consider food processing as truly viable because of its demand. Aside from this, as shown in the demographic profile of respondents the highest number of trainers specialize in food processing. Another reason is the availability of other resources. Government support is possible. Hence, is easy to manage and viable.

Driving, in contrast has the lowest rating mean of 2.49. The rating shows that from among the livelihood opportunities, respondents consider it as the least feasible. Unlike, food processing, driving has a bigger demand, such as higher capital for car ownership/rental. Aside from these operational costs are also expensive. It can also be shown in the testimonies of respondents that compliance with regulatory requirement is not an easy task.

Moreover, driving has challenges in terms of sustainability and risk. Income from transport services can be unstable due to fluctuating fuel prices and changing demand just like oil crisis brought about by war. There is also higher exposure to external risks such as accidents and traffic conditions. These challenges reduce its attractiveness as a livelihood option for the respondents.

These results are consistent with the research of Cruz and Bautista (2023) and Lopez and Santos (2024), which emphasize that micro-enterprises in food production tend to have higher adoption and success rates due to the following reasons: low entry barriers, manageable, regulatory accessibility, and stable market demand. Conversely, livelihood options that are capital-intensive and highly regulated often has limited viability.

4. Test of Significant Difference of the Participants' Assessment of the Level of Viability of the Livelihood Opportunities Proposed for Cagayan State University Employees

Table 13: Test of Significant Difference in the Participants' Assessment of the Viability Level of the

Proposed Livelihood Opportunities for Cagayan State University Employees

Proposed Livelihood Opportunities		CBEA Business Faculty Members	CIT Faculty Members/ Livelihood Trainers
Food Processing	Mean	3.25	3.27
	SD	0.351	0.271
	T-value	1.290	
	p-value	0.423	
	Decision	Accept Ho	
Electronics Repair	Mean	3.14	3.11
	SD	0.266	0.415
	T-value	1.562	
	p-value	0.220	
	Decision	Accept Ho	
Airconditioning Servicing	Mean	3.22	3.27
	SD	0.245	0.330
	T-value	2.140	
	p-value	0.014**	
	Decision	Reject Ho	
Sewing / Fashion	Mean	3.22	3.20
	SD	0.114	0.212
	T-value	1.067	
	p-value	0.141	
	Decision	Accept Ho	
Automotive Maintenance	Mean	3.23	3.24
	SD	0.123	0.210
	T-value	1.023	
	p-value	0.651	
	Decision	Accept Ho	
Driving	Mean	2.50	2.48
	SD	0.415	0.311
	T-value	1.891	
	p-value	0.102	
	Decision	Accept Ho	

Table 13 presents the significant difference in participants' assessment of the viability of proposed livelihood opportunities for CSU employees. Among the proposed livelihood opportunities, Food Processing with a Mean of 3.27 obtained the highest overall rating, interpreted as Highly Viable. This implies that both CBEA Business Faculty Members and CIT Faculty Members/Livelihood Trainers consistently viewed food processing as a strong livelihood activity. Its high rating may be attributed to its steady market demand, and practical skill requirements.

On the other hand, driving with a Mean of 2.49 obtained the lowest overall rating, interpreted as Slightly Viable. Both groups assessed driving as a less viable livelihood opportunity for employees due to potential challenges such as higher operational costs, regulatory compliance, and the need for specialized resources like vehicle ownership and maintenance.

The results of the test of significant difference indicate that there is no significant difference in the assessment of the two groups of participants regarding the viability of the livelihood opportunities. This means that both the CBEA Business faculty and the CIT livelihood trainers/livelihood faculty have similar views in evaluating the viability of the proposed livelihood opportunities. It is evident that their evaluation was based on normative factors in business such as capital, practicality, demand

and sustainability. Hence, despite their different areas of specialization they have common perspective. Their common views support the relevance of the proposed livelihood opportunities for CSU employee and strengthens the credibility of the viability findings.

The study of Aguilar, F. D., & Montemayor, L. T. (2024) supports the finding that business and technical faculty can share similar assessments in livelihood evaluation. Meanwhile, Reyes, J. P., & Dizon, M. S. (2023), supports the implication that feasibility judgments are based on common standards such as profitability, demand, and resource availability. In like manner, Tolentino, S. A., & Rivera, C. G. (2024), relates directly to livelihood viability determinations in university contexts.

5. The Ranking of the Identified Livelihood Opportunities Based on the Participants' Perceived Viability for CSU Employees.

Table 14: Category Mean and Ranking of Identified Livelihood Opportunities (Perceived Viability)

Livelihood Opportunity	Mean	Interpretation	Rank
Food Processing	3.27	Highly Viable	1
Sewing / Fashion	3.12	Viable	5
Airconditioning Servicing	3.25	Highly Viable	2.5
Automotive Maintenance	3.25	Highly Viable	2.5
Electronics Repair	3.23	Viable	4
Driving	2.49	Slightly Viable	6

Table 14 presents the category mean and ranking of identified livelihood opportunities of respondents. As shown on the means presented, food processing ranked first with a mean of 3.27 or highly viable. This indicates that respondents perceived it as the most viable livelihood option. This high viability may be due to its easy management and low investment requirements. Moreover, food is a basic necessity, making this livelihood opportunity a realistic income-generating option.

Airconditioning Servicing and Automotive Maintenance have a mean of 3.25, making them highly viable and placing them second rank from among the six livelihood opportunities. This is a manifestation how technical service-based livelihoods are increasingly perceived as a viable livelihood activity. Meanwhile, automotive maintenance is also highly viable, in Tuguegarao City there are many vehicles which means more regular checkups and repairs. Skilled mechanics and technicians are always in demand, since vehicle owners want their cars to be properly maintained. As for airconditioning servicing, its high ranking makes sense, especially in Tuguegarao City, where the hot weather means AC units are practically a necessity in homes and institutions alike. That climate-driven need keeps the service market strong and boosts its perceived viability for CSU employees.

Electronics Repair ranked forth with a mean of 3.23 or viable. While these livelihoods offer a viable service-oriented income potential, respondents may have considered inadequacy of their training, resources, or certification as requirements.

Sewing/Fashion ranked fifth and received a mean of 3.12 or viable. Despite 4th in rank, this remains to be viable and profitable, particularly for those who have skills in sewing/fashion. In Tuguegarao City, tailoring shops and home-based dressmakers cater to a steady market for school uniforms, office attire, and personal alterations. The presence of a large student and working population in cities ensure a continuous stream of customers.

Finally, driving ranked sixth, indicating that respondents view it as the least viable livelihood option among those identified by the university. While driving-based services can offer flexible income opportunities, their perceived viability may be reduced by practical considerations in Tuguegarao City, where traffic congestion and limited parking make commuting more convenient than owning or

operating a vehicle.

The above findings explain that the respondents ranked the six proposed livelihood opportunities based on the livelihood capitals specifically those related to demand, accessibility, availability of trainers and resources needed. They also consider the possible challenges trainers may experience like capital and compliance to regulations. The findings were supported by several literatures showing that that livelihood choices are usually based on affordability, practicality, and compatibility with everyday routines. Food-based, Airconditioning Servicing and Automotive Maintenance for instance are widely viable due to a consistent market demand according to Bernardo, (2022). In contrast, technical service livelihoods such as electronics repair and automotive servicing require specialized training and equipment, which may limit participation despite strong income potential (TESDA, 2023). Other conditions; such as heavy traffic can also influence livelihood viability, particularly for driving-based services according to (Rolda, 2022).

6. Insights of the Respondents Regarding the Proposed Livelihood Opportunities

Accessibility and Practicality of Livelihood Opportunities

Participants specially CIT faculty/trainers said that food processing like food preservation is easy to learn, something that they can do at home. They said that this livelihood opportunity matches the knowledge, skills, and available time of CSU employees. They also pointed out that ingredients are affordable and readily available in Tuguegarao markets. This makes food processing easier to manage without disrupting their daily routines and responsibilities as employees of Cagayan State University.

Sustainability and Consistent Market Demand

Some participants said that food products are always needed and easy to sell. Tuguegaraoneos love to eat, making it viable. While some, also stated that food processing is something they can start small and can gradually expand, this also supports income and viability.

Manageable Processes and Regulatory Compliance

Just like the participants response under sustainability and consistency of market demand, they likewise noted that food products are always needed and easy to sell, which makes the market stable. Some also mentioned that food processing allows gradual expansion, which supports long-term sustainability and better income.

Financial, Technical, and Regulatory Barriers

Respondents with specialization in Automotive Technology pointed out that livelihood activities related to automotive maintenance and driving require “professional licenses,” “vehicle ownership or rental,” ongoing expenses such as “fuel and maintenance” and a “well-trained and skilled mechanics”. They also expressed concerns about “road risks,” and “competition,” which make the activity less viable.

7. Overall Perception of CBEA Business Faculty Members and CIT Faculty/ Livelihood Trainers Regarding the Viability of the Identified Livelihood Programs, as Measured through their Level of Agreement with Key Viability Indicators.

Table 15: Overall Perception of Business Faculty Members and CIT Faculty/Livelihood Trainers on the Viability of the Identified Livelihood Programs Based on Key Indicators

Statements	Rating (1–4)
1. The identified livelihood programs are feasible and can be implemented effectively at CSU.	SA
2. The programs align with the available human resources and skills of CSU employees.	SA
3. The programs have strong potential for profitability and income	SA

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generation.	
4. The programs require reasonable startup costs relative to expected returns.	A
5. The programs are sustainable and can operate long-term with minimal external support.	A
6. The programs can promote financial stability and self-reliance among CSU employees.	SA
7. The livelihood opportunities encourage employee empowerment and entrepreneurship.	SA
8. CSU has sufficient institutional capacity to support and manage these programs.	SA
9. The programs will contribute positively to CSU's socio-economic development.	SA
10. Overall, the identified livelihood opportunities are viable and worth prioritizing for implementation.	SA

Table 15 presents the overall perception of business faculty members and CIT faculty/livelihood trainers on the viability of the identified livelihood programs for the employees of Cagayan State University. The overall perception of CBEA Business Faculty Members and the CIT Faculty/Livelihood Trainers toward the identified livelihood programs was positive in general. Most of the statements were rated Strongly Agree (SA), showing strong belief in the viability of the proposed livelihood activities for CSU employees.

Respondents strongly agreed that the identified livelihood programs are viable, can be implemented effectively, and are aligned with the knowledge and skills of human resources available within the university. They further perceived these livelihood programs are profitable and can promote employee empowerment, entrepreneurship, and financial self-reliance. The respondents' assessment means that the identified livelihood programs are socially relevant and financially beneficial.

The two groups of respondents agree that the six (6) livelihood programs for CSU employees are indeed viable. Statements on sustainability and start-up costs show a positive assessment. This tells us the respondents consider planning, considering availability of resources and the monitoring of the university administrators essential. The overall rating of strongly agree by the respondents is a way for them to signal the university administrators that this livelihood programs need to be fulfilled. In fact, the mutual understanding of the CBEA business faculty members and CIT trainers, despite their different field of specialization is a proof that this livelihood programs are indeed suited not only to the competencies of CSU employees, but with what the university have at present.

Moreover, the findings show that the six (6) identified livelihood program can offer several benefits to the employees of Cagayan State University. It will better their life by providing them extra income and at the same time help them improve their entrepreneurial competencies. This positive perception supports the study of Aguilar, F. D., & Montemayor, L. T. (2024). Aguilar, F.D., et.al states that organizations can implement livelihood programs with enough resources and with competent people who are willing to learn. Moreover, Reyes, J.P., & Dizon, M.S. (2023) view that this livelihood programs can improve entrepreneurial competencies and finances of people. The respondents' assessment is also aligned with Velasco and Dacumos (2024), who emphasized that long-term viability depends on sustainability planning and resource allocation.

SUMMARY

The participants' demographic and professional profile of CBEA Business faculty members show the following: 78.58% of them are above 40 years old, 71.42% are with Master's Degree and 71.43 are more than 10 years in the teaching profession. On the other hand, CIT faculty members demographic and professional profile show the following: 52.38% are above 40 years old, 52.38% are male, 80.95% are

with Master's Degree, 28.57% specializes in Food Technology and 33.33% have been in service for 7-10 years.

The identified livelihood opportunities for CSU employees are food processing, electronics repair, air conditioning servicing, sewing or fashion, automotive maintenance and driving. When it comes to level of viability of these livelihood opportunities, food processing has the highest rating of 3.27 while driving has the lowest rating mean of 2.49. The viability was based on the five (5) livelihood capitals. On the other hand, despite having different field of specialization between the two groups of participants, statistical test showed no significant difference in their assessments of the level of viability of the livelihood opportunities.

Food Processing ranked the highest followed by Airconditioning Servicing and Automotive Maintenance. While Electronics Repair ranked 4th followed by Sewing/Fashion. Driving remained the lowest ranked. In terms of the insights of the respondents regarding the proposed livelihood opportunities, the participants share positive insights related to accessibility and practicality of livelihood opportunities, sustainability of market demand, processes and regulatory compliance while a challenges in terms of financial, technical and regulations.

The participants strongly agree that the identified livelihood programs for CSU employees are viable.

CONCLUSION

The findings conclude that the identified livelihood opportunities for CSU employees are perceived as generally viable, practical, and aligned with both institutional capacity and employee competencies. The convergence of assessments across academic (business) and technical (industrial technology) sectors highlights the relevance and suitability of the livelihood initiatives for implementation. Livelihood options with accessible entry requirements and strong market demand are favored, while those requiring higher capital, certification, or operational logistics present greater viability challenges.

The results imply that CSU may successfully integrate livelihood programming into its extension and employee development efforts, provided that sustainability planning, resource support, and technical training are also addressed. Overall, the study affirms that livelihood interventions within higher education institutions can contribute to financial empowerment, entrepreneurial capacity-building, and socio-economic development for employees.

RECOMMENDATIONS

Based on the objectives and outcomes of the study, the following recommendations are proposed:

1. Prioritize the Most Viable Livelihood Program.

Livelihood opportunities with high ranks like food processing, airconditioning servicing and automotive maintenance should be implemented.

2. Institutionalize Livelihood Development under GAD.

The Gender and Development (GAD) Office can formally integrate livelihood training into its annual programs to ensure inclusivity, gender responsiveness, and long-term sustainability.

3. Strengthen Training, and Capacity Building.

The implementers or trainers of the livelihood program should work with business professors, local entrepreneurs and other institutions like NGOs, and government agencies. Implementers should also design training modules.

4. Provide Financial and Material Support.

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Partner with government agencies, private donors, and NGOs to fund programs, donate equipment, and sponsor skills-based workshops that directly benefit students.

5. Promote Interdepartmental Collaboration.

Encourage partnerships among CSU departments; particularly those related to business, agriculture, and technology in order to create a multidisciplinary approach to livelihood training and management.

6. Establish a Monitoring and Evaluation System.

Develop clear indicators to track the progress, profitability, and social impact of the implemented livelihood programs. Regular evaluation will help refine future training and ensure long-term success.

7. Encourage Entrepreneurship Mindset among Employees.

Offer relevant business trainings like seminars, conferences, mentoring etc. for CSU employees.

8. Strengthen the connection between curriculum and practice.

Establish a living laboratory, where CSU employees can actively engage in hands-on livelihood activities, test business models, and apply learned skills in a controlled yet practical environment.

9. Support the development of faculty members and trainers of CBEA and CIT.

Future researchers are recommended to identify relevant competencies, training needs, and areas for capacity building aligned with viable livelihood opportunities.

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