

Original Article

Income Generation and Livelihood Diversification: A Comparative Analysis of Traditional Occupations and Organic Farming among Women in Kakching District

¹Rajkumari Girija Devi, ²Padmabati Khundrakpam, ³Anandi Sarangthem

¹PhD Scholar, Department of Economics, Dhanamanjuri University, Imphal, Manipur, India.

²Professor, Department of Economics, Dhanamanjuri University, Imphal, Manipur, India.

³PhD Scholar, Department of Economics, Dhanamanjuri University, Imphal, Manipur, India.

Received Date: 29 May 2026

Revised Date: 15 June 2026

Accepted Date: 21 June 2026

Published Date: 22 June 2026

Abstract: This research provides a comparative assessment of income levels of women engaged in both traditional livelihoods and organic farming in Kakching District, Manipur. This is a cross sectional study. With more than 70% of the locals engaged in agriculture, Kakching has historically depended on activities such as kabok production, handloom weaving, and rice farming. The research concentrates on women farmers. Nonetheless, recent trends towards sustainable practices—especially organic turmeric cultivation—have brought about new income possibilities. The objective of the study is to analyze and compare average monthly earnings between these two sources of livelihood, evaluate the statistical significance of any income variations, and suggest policy improvements. Information was gathered from 200 women farmers who are part of the Kakching Organic Farming Producer Company (FPC), with many also participating in traditional economic endeavors. Through the use of descriptive statistics, Pearson correlation, and t-tests, the research revealed that organic farming produces notably higher and more stable income compared to conventional livelihoods. The average monthly income from organic farming was ₹9,857.92, while traditional activities generated ₹6,024.20, yielding a highly significant t-test result ($p < 0.0001$). The outcomes suggest that organic farming serves as a practical alternative to traditional roles and improves income stability for rural women. These findings have significant consequences for rural development initiatives, indicating a necessity to broaden support for organic farming as a sustainable and economically advantageous livelihood choice.

Keywords: Organic Farming, Traditional Ivelihoods, Income Comparison, Rural Women, Kakching District, Sustainable Agriculture.

I. INTRODUCTION

Kakching District earns the title, Granary of Manipur because of its highly fertile valley and a strong dependence on agriculture. Farming serves as the main livelihood for the majority of its people, with over 70% involved in agricultural work either directly or through related activities. Rice cultivation dominates the agricultural landscape, accounting for more than 90% of the total cultivated area, while the remaining land is used for growing spices, pulses, vegetables, sugarcane, and oilseeds. Within this agriculturally driven economy, the changing socio-economic landscape has also reshaped the roles of women, paving the way for increasing participation in entrepreneurship and income-generating activities. Women's entrepreneurship has been taken into consideration with the emergence of the 21st century, modern social order, lifestyle, and an important participant in the economic growth process. According to Singh et al. According to a report by the American Express, (2021), there are 13.5 million at least and 15.7 million maximum women-owned businesses in India. Around 79% of these companies are small micro-endeavors, self-financed. The district also covers some traditional occupations like fishing, handloom making and handicrafts, mat weaving using local reeds (Kouna) that act as another crucial additional income source for many families alongside agriculture Women are also central to these activities, with many involved in handloom weaving, handicrafts and mat production from Kouna. Besides working as farmers, women in Kakching are also involved in traditional economic activities of production of Kakching bora and Chakhao roti that not only contribute to family income but also play a vital role in preserving the local culture.

Over the past several years, economic shifts towards an economy centered upon sustainability, government – sponsored initiatives, and a growth in environmental consciousness have driven interest in new sustainable/rural jobs that include organic farming. With a new focus on environmental stewardship and health benefits, organic agriculture is becoming an increasingly viable livelihood choice. The changes are backed by better irrigation facilities, more mechanisation and the promotion of self-help groups (SHGs) that help improve credit access and skill training. Despite these developments, conventional livelihoods continue to play a key role in the socio-economic landscape of Kakching. Many of these, however like mat weaving by hand—



are labor intensive, low-paying, and done primarily by people with few choices. Innovations like the Kakching mat weaving machine have increased production and revenue for some but not necessarily for all people in the community.

This study seeks to compare the income-generating potential of traditional livelihoods versus organic farming in Kakching district. Through examining the economic returns, sustainability and social dimensions of these livelihood choices, the study aims to glean insights into the changing rural economy and inform policies that may enhance Kakching's households' income security and welfare.

II. OBJECTIVES

1. To compare the average monthly income generated from traditional livelihood activities (kabok making, weaving, and paddy cultivation) with income from organic farming.
2. To assess the statistical significance of the income difference between the two income sources.
3. To provide policy or livelihood improvement recommendations based on income-generating activities.

III. HYPOTHESIS

- Null Hypothesis: There is no significant difference in income from organic farming and income from traditional activities.
- Alternative Hypothesis: There is a significant difference in income from organic farming and income from traditional activities.

IV. METHODOLOGY

The study follows a descriptive cross-sectional research design, aimed at understanding the socio-economic profile and livelihood practices of women farmers associated with organic farming. A total of 200 women farmers affiliated with the Kakching Organic Farming Company (Farmer Producer Company – FPC) were selected as respondents. These participants are actively involved in organic farming as well as traditional economic activities such as cloth weaving and paddy cultivation. The sample represents women engaged in both agricultural and non-agricultural livelihood systems in the district. A comprehensive questionnaire was developed, and interviews were conducted to gather information about their earnings from organic farming and other traditional economic pursuits. The interviews were conducted individually as well as in groups with the participants. This research investigated different elements, such as the production of kabok, cloth weaving, and paddy farming, categorizing them as Traditional Economic activities, while organic turmeric cultivation was classified as a separate group to evaluate the income produced by both groups. Data collected were analyzed through the use of descriptive statistics, the Karl Pearson Correlation and the t-test.

V. IMPORTANCE OF THE STUDY

This research is crucial for comprehending the economic feasibility of various livelihood approaches among rural families in Kakching District, Manipur. For many farming areas, kabok production, textile weaving, and rice cultivating are time-honored undertakings that have come to be dependable revenue streams. However, given the increased emphasis on sustainable and organic farming practices, it is important to analyse whether a move to organic farming offers net advantages as the best available route for earning a more suitable livelihood. This paper gives insights into the benefits and challenges of the two livelihoods, comparing average income and income variability for each choice (traditional livelihoods vs organic farming). Results can help farmers, representatives of communities, development organizations and policymakers identify more durable and higher income-earning strategies. Moreover, identifying statistically significant income disparities can inform policy decisions that will promote the development of more sustainable and profitable livelihood models. This is particularly important for rural development programs, poverty alleviation programs and agricultural extension activities that improve the quality of life in farm households. In summary, the research contributes to the overarching objective of improving rural livelihoods, concentrating more on sustainable agriculture, and lessening economic vulnerability among smallholder farmers.

VI. DEMOGRAPHICAL AND GEOGRAPHICAL CONDITION OF KAKCHING DISTRICT

Kakching is a district situated in the southeastern part of Manipur. The district spans 192 sq. km and has a population of 1,35,481. It was formally created on December 8, 2016, after being announced by the government. Geographically, the district is bounded by Thoubal and Imphal West in the north, Tengenoupal and Chandel in the east, Bishnupur in the west, and Chandel once again along its southern boundary. Administratively, Kakching district is divided into two subdivisions—Kakching and Waikhong. It comprises four Assembly Constituencies: Kakching, Sugnu, Wabgai, and Hiyanglam. The district also has three municipal councils, namely Kakching, Sugnu, and Kakching Khunou. Each subdivision includes one community development block. Several rivers flow through the district, including the Imphal and Thoubal, which historically served as important trade routes. While these waterways are no longer used for transport, they continue to supply vital resources such as sand, pebbles, and boulders that help sustain local livelihoods. Other notable rivers in the area are the Wangjing, Arong, and Sekmai. The

southwestern part of Kakching forms a section of the Loktak Lake basin and features a number of shallow, rain-fed lakes such as Kharung, Ikop, Pumlun, Lousi, and Ngangou. Waithou Lake is situated in the northern part of the district (Kakching District Administration, 2025)

VII. LITERATURE REVIEW

M. A. Ansari et al. (2013) in their study Comparative study on conventional and improved integrated farming systems for sustainable production, income generation and employment opportunity among the tribal farmers in hilly Regions of Manipur, showed that Integrated farming systems (IFS), which integrate crop production with livestock, aquaculture, and other related practices, have become a revolutionary method for achieving sustainable agriculture. These systems focus on boosting productivity, income, and job opportunities while maintaining environmental integrity (Anonymous, 2012-13). A comparative analysis carried out in the hill districts of Chandel, Churachandpur, and Ukhrul in Manipur assessed the effectiveness of Improved Integrated Farming Systems (IIFS) compared to Conventional Farming Systems (CFS). As many as 70 farmers, each from the three districts, a total of 210 sample surveyed farm producers and an equal representation of IIFS and CFS practitioners were targeted in the survey. The finding revealed Ukhrul district as the leading producer in various sectors like paddy, vegetables, fruits, piggery, backyard poultry, aquaculture and water resource management. IIFS produced much higher productivity and financial profitability than CFS on average. The economic viability of IIFS was also demonstrated by the reports of higher net profits and benefit-cost ratios among farmers adopting IIFS. Moreover, the study also highlighted that within gender there is a division of tasks: namely, where females are often found to be working in agriculture more than men, suggesting that if designed correctly, such systems can positively empower women from rural backgrounds. The inferences substantiate the promotion of IIFS on a sustainable basis for large-scale cultivation as a source of livelihood among smallholder and marginal farmers, especially in hilly-cum-rural areas such as Manipur.

In her analysis called, Comparative Analysis of Organic and Conventional Agriculture highlights that agriculture constitutes the basis of human communities' survival and requires encumbering the growing demand for food (Ankita Yadav, 2023). Two of the major agricultural systems that have received much discussion by both academics and policymakers lately are conventional agriculture and organic agriculture. The majority of farming, which produces high yields, known as conventional farming, primarily depends on synthetic fertilizers and pesticides combined with advanced technology to enhance output. This method has raised doubts about its contribution to environmental damage, such as greenhouse gas emissions (Khan et al., 2018), soil degradation (Yadav, n.d.), water pollution (De et al., 2017), and human health hazards. In contrast, organic agriculture, also known as ecological farming, includes sustainable methods like crop rotation, companion planting and the use of organic materials such as compost, green manure and bone meal. Organic agriculture, which originated in the early twentieth century as a response to industrial agricultural practices, emphasizes biodiversity, soil health, and systems management to reduce unwanted environmental impacts. Studies show that while organic produce tends to be lower than conventional methods, it produces food deemed more nutritious and safer for consumers. Many comparative studies show that organic farming systems are better for the environment and more sustainable in the long run. It should be recognized however, that mainstream acceptance faces challenges including decreased productivity, increased expenditure and inadequate knowledge of consumers. According to Yadav (n.d.), there is a clear need for alignment with national agriculture policies, government intervention efforts, and knowledge enhancement of consumers in order to encourage transition from conventional-based methods into organic form.

V.K. Wardhani, J. Sutrisno, and Isti Khomah(2021). Research were conducted on the "Income And Welfare In Sambirejo Sub-district: Organic vs Conventional Rice Farming" They stress that climate change is dependent on a combination of factors, carbon emissions among them. Transitioning to large-scale organic farming might reduce the use of more commercially produced chemicals, which could further translate into carbon emissions reduction over time. However, the full-scale application of organic farming in Indonesia faces various challenges such as its complexities, certification requirements, temporary yield decreases and increased expense. That has led farmers to think that organic farming is largely unviable in improving their income or welfare at large.

The study employed a descriptive research design, and the respondents were selected through proportional random sampling. Results indicate that organic rice farmers have higher farm household incomes than non-organic ones. However, the gap in price between organic rice and non-organic rice is only IDR 855.00 per kilogram, which causes non-organic farmers to tend to stick with their regular rice. While organic farmers are found to have better welfare levels by the Rice Farmer Exchange Rate, their welfare does not differ significantly from the conventional group based on the Food Expenditure Share.

A Comparative Study of Employment and Income in Farm and Non-Farm Activities in Raipur District, Chhattisgarh by Dr A.K. Pandey, Dr. (Smt.) Radha Pandey and Dr Ashok Sharma (2013). The focus of the paper, in addition to agriculture, is on rural non-farm sector (RNFS) activities such as mining, manufacturing, trade and services. Both sectors are important in Chhattisgarh, where farmers rely on either farming or non-farm income during off-seasons, especially marginal and

smallholders from rain-fed rice-growing areas. Using primary data from 200 randomly selected households and analysing income and employment patterns using averages, percentages, and the Gini coefficient for inequality measurement, for example. Findings indicated that employment was measured as 65.45% farm sector and only 34.55% in the non-farm sector, leading to a higher agriculture share, especially in the Kharif season. The percentage of women doing non-farm work was minuscule at just 0.46% compared to men, who made up 19%. The results underscore the importance of strengthening women-oriented small-scale and cottage industry sectors to promote non-farm employment and reduce reliance on agriculture.

Birthal et al. The extensive analysis of the sources of income for farming households in India was conducted by (year) using nationally representative survey data. Results, which contradict the common assumption that agriculture is the primary source of income for these families, show that non-farm activities account for 50% of total household income. It is strongest among families with smaller landholdings, as captured from a limited agricultural area, and the need to absorb surplus labor has impelled band production for non-farm activity. But this much broader scope usually results in low-paid, low-profit work and households being employed at lower wages. Access to opportunities for non-farm income is not available equally or widely, and often aggravates income disparities. Nonetheless, non-farm income remains positively correlated with total household income, indicating that the non-farm sector could provide important opportunities for income improvement, especially for farm households with limited land.

VIII. RESULTS AND DISCUSSIONS

A) Demographic Profile of the Respondents

Table 1: Demographic Profile of the Respondents

Demographic Profile	No. of Respondents
Age	
18-28	30
29-39	50
40-50	75
50 above	47
Marital Status	
Single	10
Married	185
Widowed	5
Educational Level	
Below Primary	22
Primary	57
Higher Secondary	100
Graduate and Above	21

Source: Primary Data

The respondents were distributed on the basis of age and marital status, and showed that the majority of them are married and have a graduate degree. Middle Age 35-65. The majority of respondents are in the age demographic. The most numerous are those that fell under 40–50 years (75 respondents), followed by NOMAD (50 respondents) aged 29–39 years. We have 30 younger respondents aged 18 to 28 years, 47 of the respondents belong to the category from age from 50 and above. This pattern shows that the present study primarily represents adults during their age of economy and maturity, possibly indicating a higher participation in decision-making and livelihood activities. It can be observed that the sample consists primarily of married respondents (n= 185), indicating the high rate of family populated households within the community. 10 respondents are single, and 5 are widows. This distribution highlights that the majority of respondents are also primary caregivers, meaning that their preferences, perceptions and socioeconomic decisions could reflect those family responsibilities. For educational level, most of the respondents fall into the higher secondary–educated group (100), indicating a sample with a moderately educated population. Next is primary level education (57) and below primary education (22). On the other hand, 21 of the respondents have completed postgraduate studies or higher. Education: The distribution of years of schooling shows that most respondents have basic and secondary school education, while some others hold lesser levels of higher education.

IX. FINDINGS

A) Kabok Making

Kabok, which is made of puffed rice mixed with jaggery or sugar and said to have originated in Manipur, is the special snack prepared in Kakching town. You will be puffing the rice, preparing a jaggery syrup, and mixing to prepare sweet or spicy rice cakes. Kabok has cultural significance, and during festivals like Lai Haraoba, it serves as a cottage industry (primarily for women) which contributes to the local economy. There are numerous kabok types available in Kakching, both sweet and spicy or mixed, which act as a representation of one's local identity and tradition. (MASTEC, Manipur Science and Technology Council, 2023)

B) Paddy Cultivation

Rice is the dominant crop in the Kakching district. The main varieties cultivated are Thoibiphou and Taothabi. The valley also has fertile soil, which is best suited for the cultivation of paddy. Regarding the water requirement in paddy fields, they are supported by both natural rainfall and man-made irrigation systems. These opportunities make the cultivators more economically viable by doing double cropping in a year. (The Sangai Express, 2024).

C) Cloth Weaving

Weaving is a major traditional craft of Kakching District, mainly practiced by womenfolk of the family and passed down from generation to generation. Handlooms are the most common looms for weaving, especially the loom and throw shuttle loom, which are used in rural areas. (Amita Pandya and Joymati Thoudam, 2010). The Products obtained by Weaving consist of various textiles, such as Phanek (a traditional wraparound skirt worn by women in Manipur), Shawls, and Scarves, frequently displaying intricate designs and symbols with deep significance. Cotton and silk are the main materials used, with an emphasis on using local natural dyes that are less harmful to the environment. Weaving even has a social and cultural importance, serving as an economic activity and more importantly an important expression of the Meitei way of life and culture that is being showcased during festivals, rites and communal gatherings.

D) Economic Contributions

Weaving provides a supplementary income to so many families dwelling and living in rural areas. More and more cooperatives, as well as government programs, are working to provide local artisans with greater access to larger markets via the Internet.

Table.2: Distribution of Women Farmers by Livelihood Activities

Traditional Livelihood Activities	No.of Women engaged	Percentage
Kabok Making	74	37%
Paddy Cultivation	55	27.5%
Cloth Weaving	71	35.5%
Total	200	100%

Source: Primary Data

Table 2 indicates that the women farmers of Kakching District are undertaking diverse traditional livelihood activities in addition to organic farming. Of the 200 respondents, Kabok making attracts the largest number of women (37%), showing it as a well-represented cottage industry, contributing more to household earnings in rural areas. The second most prevalent activity was cloth weaving, which explained 35.5% of the respondents, and this indicates that handloom weaving still retains a cultural and economic force in the district. Of these, Paddy cultivation accounts for 27.5% of the women, revealing farming is still a significant part of their livelihood, though lower than other activities. This overall distribution shows the female farmer's redundancy of skills and multifunctional roles, sustaining traditional economic practices of the community.

E) Organic Turmeric Cultivation

Turmeric (*Curcuma longa*), as one of the main and high-value commercial spices in India, is grown in several states, but is mostly found in Manipur. It belongs to the Zingiberaceae family. Curcuma in the rhizome pigment yellow, our active substance compound and main colourings. Curcumin possesses several therapeutic properties. It is traditionally also an important ingredient in curry, being used in religious ceremonies along with cosmetics and dyes. It is extensively applied in the formulation of traditional medicines (e.g. Cenmichon Khodang, et. al., 2025). Turmeric is closely related to ginger as it consists of the dried rhizome of a herbaceous plant (Swain et al., 2022). Kakching District offers a favorable climatic condition for the cultivation of turmeric, which is also a commercially important spice in India. The Organic turmeric is cultivated without any chemical or synthetic fertilisers or pesticides. Rather, the farmers use only the natural fertilizers like Vermicompost and natural pesticides like Neem cakes, etc.

F) Descriptive Statistics

Table No.3 Descriptive Statistics

Income Source	Mean Income (per month)	Variance	Observations
Kabok making, weaving, and paddy cultivation	6024.2	4,658,774.101	100
Organic farming	9857.92	1,098,301.004	100

Organic farming has a much higher average income than kabok making, weaving, and paddy cultivation. The variance is higher for kabok-related income, indicating more variability (i.e., income is more inconsistent). In Kakching District (Manipur), activities like kabok production, handloom weaving, and rice farming are part of the traditional economy, alongside organic agriculture. The dataset describes the monthly average income from traditional practices is seen to be ₹6,024.20, and for those into organic farming, it is as high as almost ₹9,857.92 (nearly ₹10,000). This disparity is greater than the ₹3,800,

which signifies that organic farming yields more income and also possibly reduces rural household risk relative to conventional agriculture.

In terms of income variability, we see that the traditional livelihoods have a variance of 4,658,774.101, whilst organic farming has a lower variance at 1,098,301.004. An increase in variance means increased instability or ups and downs in the monthly earnings of those involved with kabok production, weaving, and rice farming. This indicates that income from the sources which were traditionally high is not only low but also less structured, putting individuals at a greater risk of financial instability. On the contrary, a more consistent and reliable income stream is indicated through organic farming income, as they experience a small variance in income from this activity, which is crucial to rural women's economic empowerment. In addition, the two groups have equal sample sizes; each contains 100 observations. Such equivalency improves the soundness of comparative statistics (e.g., t-test in the study), permitting fair assessment of income differences. Overall, this data analysis clearly reinforces the idea that organic farming is a better option when it comes to long-term residence compared to other conventional livelihood mechanisms in terms of profit and consistency. This demonstrates the need for targeted policies to increase opportunities in rural Manipur for women seeking to mitigate poverty and economic insecurity through organic farming.

X. KARL PEARSON'S COEFFICIENT OF CORRELATION

Karl Pearson's Coefficient of Correlation, often denoted by r , is a statistical measure that quantifies the strength and direction of a linear relationship between two continuous variables. It was developed by the British statistician Karl Pearson, and remains one of the most widely used tools in statistics for examining the association between paired data.

Pearson Correlation = 0.0025: This suggests virtually no linear relationship between the two income sources. In other words, earning more in one doesn't predict earning more or less in the other.

The Pearson correlation coefficient of 0.0025 between incomes from traditional. Livelihoods (kabok making, weaving, and paddy cultivation) and organic farming indicate an extremely weak and practically nonexistent linear relationship between the two income sources. This implies that a woman has greater odds of earning more—and not less—from organic farming than from traditional activities if she earns higher wages from traditional activities, or the other way around. Within this study, the fact that there was no correlation indicates that the income from each source function independently of one another, depending on a range of variables including time availability, market access, skill sets, land ownership and level of involvement in each activity.

This result is especially important in light of policy suggestions. Given that income from organic farming does not seem to be correlated with income from traditional livelihoods, expanding organic agriculture could offer a complementary, independent stream of earnings instead of just adding on top. People in rural areas, especially women who can only work around their home when they are limited to working around their homes, face challenges in earning a living. Indication of independence in terms of sources of income also conveys that investments in organic farming do not come at the expense of traditional practices but rather offer an alternate or additional livelihood opportunity, which adds to overall household income diversification and financial resilience. Hence, the lower association strengthens the argument to promote support within organic farming as a separate livelihood.

XI. HYPOTHESIS TEST (t-test)

- **Hypothesized Mean Difference = 0:** This is the null hypothesis: that there is no difference in mean income between the two sources.
- **Degrees of Freedom (df) = 99**
- **t Stat = -15.9939:** This is a very large negative t-value, which means the observed difference between the two income sources is far from what we'd expect if there were truly no difference.
- **P-value (one-tail) = 1.70×10^{-29}**
- **P-value (two-tail) = 3.40×10^{-29} :** These values are extremely small (almost zero), meaning the difference in income is highly statistically significant.
- **t Critical (two-tailed) = 1.9842:** Since the absolute value of t Stat (15.99) is far greater than this critical value, we reject the null hypothesis.

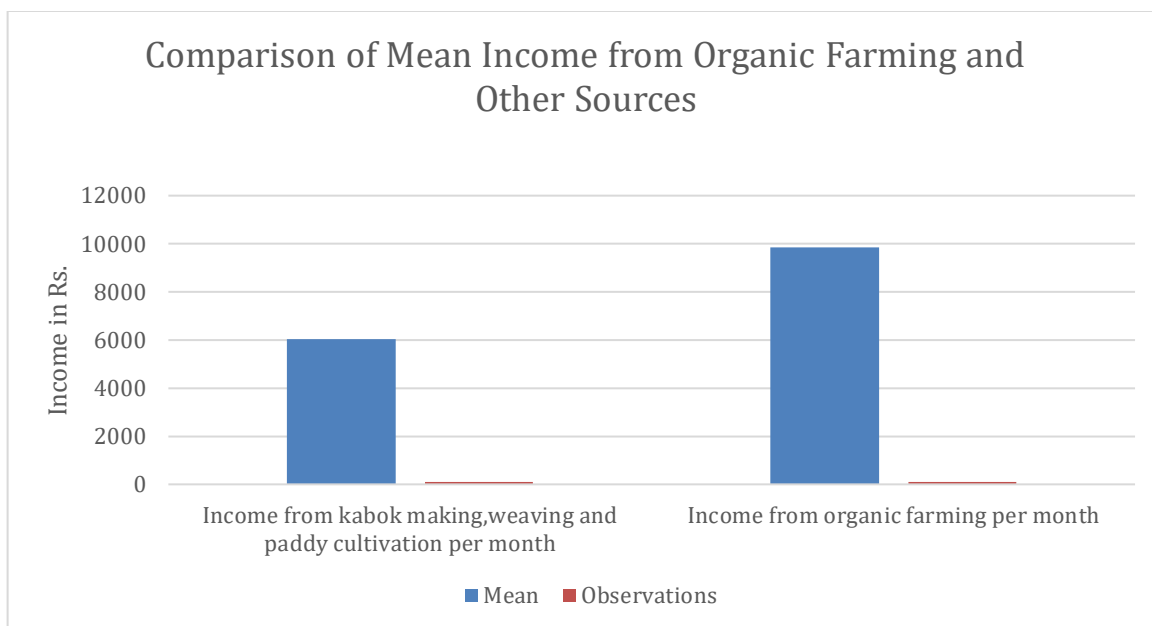


Figure 1. Comparison of Mean Income from Organic Farming and Other Sources

XII. SUMMARY

1. There is a statistically significant difference in mean income between the two sources.
2. Organic farming provides a significantly higher average monthly income compared to kabok making, weaving, and paddy cultivation. Income from kabok-related activities is more variable and generally lower.
3. No meaningful correlation exists between earnings from these two sources.

XIII. POLICY AND LIVELIHOOD IMPROVEMENT RECOMMENDATIONS BASED ON INCOME GENERATION

Based on the findings of this study, several strategic policy and livelihood initiatives are proposed to enhance income in rural areas – one such option is for them to engage in organic production, as it involves higher profits than traditional livelihoods. First, organic farming should be among the highest priorities in state ag programs and rural development efforts. You offer money to wage labourers, like weavers and kabok producers, to enable them to transition to organic farming or at least have it as a secondary occupation. Profits from organic turmeric farming can be increased many times by intercropping high-value spices like ginger and lemongrass with turmeric and adding value via agro-processing plants. Traditional livelihoods can also be improved through modernisation with better branding, product development and access to digital marketplaces. Clusters and support for talent development can help enhance the quality and reach of the market. They should be employed to bolster women’s economic participation through the extension of: Women entrepreneurship support, Self-Help Group Development (SHG), leadership training and specialised finance facilities. Enhancement of the capacity of Farmer-Producer Companies and group-based peer-led extension services, along with strengthened infrastructure like rural marketing hubs and linkages to large buyers and digital platforms, will assure resilience and a persistent increase in income level for organic as well as conventional livelihoods.

XIV. CONCLUSION

This study provides ample evidence regarding the economic benefits of organic farming over conventional methods of livelihood in the Kakching District of Manipur. In the paper, researchers analyze the paychecks of 200 women working in both industries and discover that organic farming, especially organic turmeric, greatly increases mean monthly income. Statistical data have shown that organic farming not only brings more profit, but also provides a much higher stability than most conventional fields (like rice cultivation) and also the traditional methods applied in handloom weaving or kabok manufacture. The study’s results evidently show the potential for organic farming to enhance livestock output, which in turn boosts incomes among rural households and provides a reliable income source, with women benefitting most. To capitalise on this potential, policymakers and development organisations must focus on better infrastructure for organic farming, easier access to markets and enhanced training. Not only does expanding this form of assistance strengthen household incomes, but it will also encourage the region’s future economy and environmental resilience.

Interest Conflicts

The authors declare that there is no conflict of interest concerning the publication of this paper.

Funding Statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. The authors received no financial support for the publication of this article.

XV. REFERENCES

- [1] Ansari, M. A., Prakash, N., Baishya, L. K., Punitha, P., Yadav, J. S., Sharma, P. K., Sailo, B., & Ansari, M. H. (2013). Comparative study on conventional and improved integrated farming systems for sustainable production, income generation and employment opportunity among the tribal farmers in hilly regions of Manipur. *Indian Journal of Agricultural Sciences*, 83(7).
- [2] Birthal, P. S., Negi, D. S., Jha, A. K., & Singh, D. (2014). Income sources of farm households in India: Determinants, distributional consequences and policy implications. *Agricultural Economics Research Review*, 27(1), 37–48. <https://doi.org/10.5958/j.0974-0279.27.1.003>
- [3] *Flood devastated paddy lands in Kakching*. (2024, August 26). *The Sangai Express*.
- [4] Kakching District Administration. (n.d.). *About district*. <https://kakching.nic.in/about-district-2>
- [5] Khodang, C., & Rohith, G. V. (2025). Study on relationship between climate variability and turmeric production in Manipur, India. *Agricultural Science Digest*. Advance online publication. <https://doi.org/10.18805/ag.D-6225>
- [6] Krause, J., & Machek, O. (2018). A comparative analysis of organic and conventional farmers in the Czech Republic. *Agricultural Economics*, 64(1), 1–8.
- [7] *Manipur: 'Black Rice' of Kakching gets GI tag*. (2021, October 27). *Northeast Today*.
- [8] Mie, A., Andersen, H. R., Gunnarsson, S., Kahl, J., Kesse-Guyot, E., Rembiałkowska, E., Quaglio, G., & Grandjean, P. (2017). Human health implications of organic food and organic agriculture: A comprehensive review. *Environmental Health*, 16(1), 1–22. <https://doi.org/10.1186/s12940-017-0315-4>
- [9] Pandey, A. K., Pandey, R., & Sharma, A. (2013). A comparative study of income and employment in farm and non-farm sectors in Raipur district of Chhattisgarh. *International Journal of Advances in Social Sciences*, 1(1), 25–28. <https://www.i-scholar.in/index.php/Ijass/article/view/42933>
- [10] Wardhani, V. K., Sutrisno, J., & Khomah, I. (2021). Analysis of the income and household welfare of organic and non-organic rice farmers in the Sambirejo Sub-Regency of Sragen Regency, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 724(1), 012106. <https://doi.org/10.1088/1755-1315/724/1/012106>
- [11] Yadav, A. (2023). Comparative study of organic agriculture and conventional agriculture. *International Journal of Innovations & Research Analysis (IJIRA)*, 3(3[II]), 7–11.
- [12] Zorich, J. N. (2024). *The history of correlation*. CRC Press.