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Local Wisdom of *Miang* Lifestyle and Community for Sustainable Development in Northern Thailand

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Abstract: *Miang* or fermented tea leaf has been a part of the Mae Kampong community, one of northern Thailand's famous tourist attractions, for a long time. Although the demand and popularity of *Miang* are decreasing, *Miang* is still important to the community lifestyle in various ways. Thus, this study aimed to investigate *Miang* consumption behavior, lifestyle, and wisdom in the Mae Kampong community, which would lead to sustainable development. The study involved a cross-sectional survey and a qualitative study. The research was done in Mae Kampong Village, Mae On District, Chiang Mai, Thailand. A total of 335 participants participated; 60.9% were female with an average age of 61.3 ± 12.2 years old. In all, 93.7% of the participants consumed *Miang* daily, mostly as a snack (86.5%). Consuming *Miang* as a staple food and beverage were less common. Furthermore, only 2.5% of the participants considered *Miang* as medicine. *Miang* is also the primary source of income and a tourist attraction. Additionally, *Miang* is an item in religious and local rituals. The *Miang* culture and the local lifestyle are bonded deeply as a sustainable economy, society, and environment. The wisdom in *Miang* culture encourages a better quality of life for the Mae Kampong community.

Keywords: *Miang*; local wisdom; lifestyle; sustainability; health; physical activity



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1. Introduction

Miang or fermented tea is made from leaves of Assam tea or *Camellia sinensis* var. *assamica*. *Cha Miang* is the fresh Assam tea that is naturally grown in the mountain terrain from 450 to 1500 m above sea level [1]. The cultivation of *Cha Miang* dates back to the 13th century in the Lanna Kingdom, including Thailand, Myanmar, the Lao People's Democratic Republic, and the People's Republic of China. The Lanna civilization is one part of Thailand that covered most of northern Thailand. *Cha Miang* requires a specific process of cultivation and environment. The high mountain terrain in northern Thailand is the perfect environment for *Cha Miang* cultivation. Thus, most of the northern part of Thailand, such as Chiang Mai, Chiang Rai, Nan, Phrae, Mae Hong Son, and Phayao, grow *Cha Miang* [1]. The knowledge and wisdom of *Miang* was passed throughout northern Thailand by the Khmu, Lua, and H'tin ethnic groups who lived in the previous Lanna Kingdom and preserved the culture since the age of Lanna civilization [1].

Miang became a vital part of the northern Thai lifestyle, especially in the high mountain terrain. *Miang* is considered as a staple food and snack; people would chew *Miang* along with smoking or drinking. Aside from the daily consumption of *Miang*, the tea is also

recognized as a welcome item to offer guests and offering in religious rituals like funerals or worship rituals [1–3]. The other critical perspective of *Miang* for the northern community is as a career. *Cha Miang* cultivation is the primary income source of northern people; they grow, ferment, and sell *Miang* in the local market. A *Cha Miang* farm, or as the locals call “*Suan Miang*”, is a highland forest, hillside, or slope used to grow *Cha Miang*. *Cha Miang* can be found in the forest along with other wild plants [3]. Villagers and farmers wake up early to harvest *Cha Miang* leaves in the mountain areas. The harvesting can take from a couple of hours until sundown. Then *Cha Miang* leaves go through the process of fermentation, starting by tying *Cha Miang* leaves in a small bundle with a bamboo strip and steaming for 1 to 2 h. Then, the bundle is moved to a fermenting container and left for five days to years, depending on the recipe. The longer the fermentation, the sourer the *Miang* will be [1,3,4].

The culture of using *Miang* as medicine to promote health is not sufficiently supported. However, one study reported that the *Miang* possesses antioxidant, antimutagenic, anticarcinogenic, and antimicrobial effects [1]. Therefore, *Miang* is not only healthy but also plays an important role in some local northern Thai cultures, lifestyles, and economic systems.

In the past, chewing *Miang* was most common among the elderly, less common among the middle-aged, and infrequent among the young [5]. On the contrary, *Miang* has become less popular in the current generation, but the demand is still high in some areas of northern Thailand. Chiang Mai Province comprises one of the largest *Cha Miang* cultivation areas in Thailand [1]. Mae Kampong Village is located in Mae On District, Chiang Mai, and is one of the villages that cherishes *Miang* and has preserved the culture since ancient times. Mae Kampong is a suburban village over 50 km away from the city and 1300 m above sea level. For over a century, the first generation of the Mae Kampong community has sought the ideal place for *Cha Miang* cultivation and to form a community [6], as shown in Figure 1.



Figure 1. Mae Kampong village, *Cha Miang* forest, and *Cha Miang* leaf salad.

Mae Kampong Village is famous for *Miang* production [6], as shown in Figure 2. The community consumes *Miang* as a staple food and snack, offers it in rituals, and makes a living by *Cha Miang* cultivation. Thus, *Miang* has long been part of the Mae Kampong daily life and economy, but in 1981, His Majesty King Bhumibol Adulyadej the Great visited the village and established two projects that would change the life of Mae Kampong villagers. The first project was the Huai Hong Khrai Royal Development Study Center to conserve water sources and improve people’s quality of life in the watershed area [7]. The second project was Teentok Royal Project Development Center, a project dedicated to

promoting agriculture, including *Cha Miang* cultivation, and to provide the opportunity to earn income from farming [8,9].

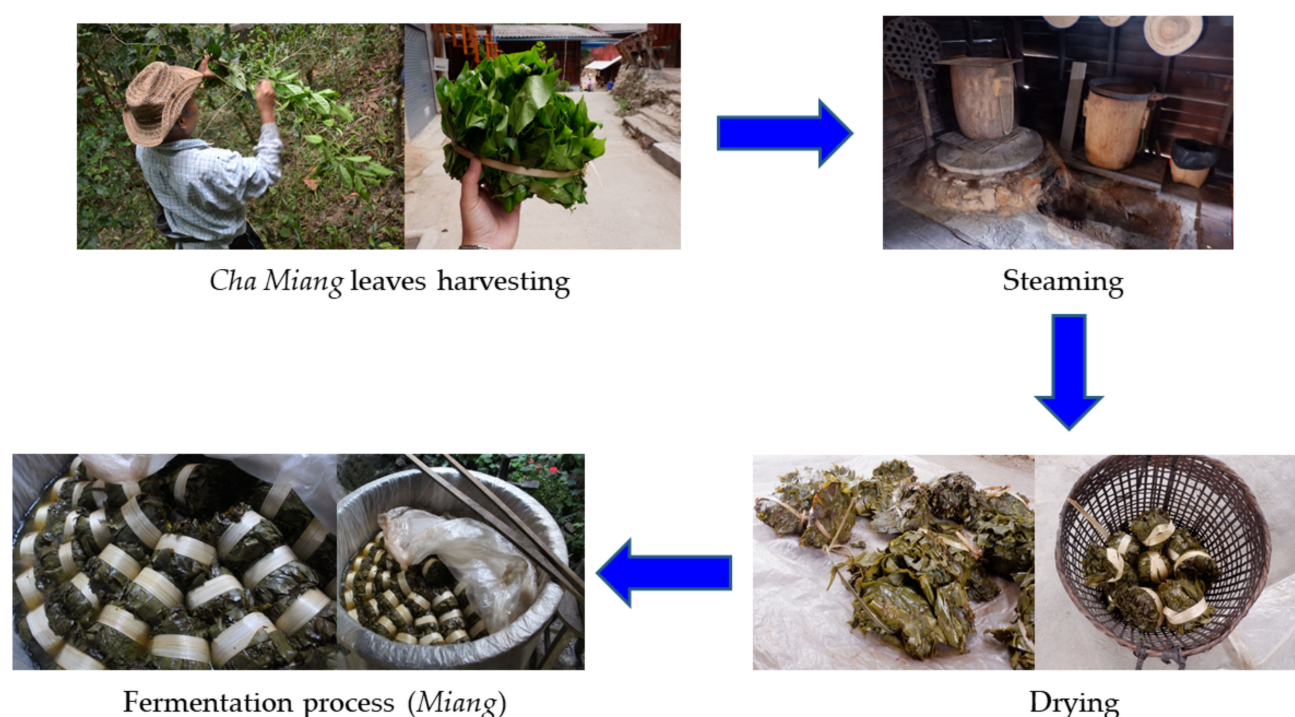


Figure 2. Traditional *Miang* production process by local wisdom in Mae Kampong Village.

Furthermore, in 2002, the Mae Kampong community was granted community development support from the government, and the ordinary agricultural-based village became a destination community for recreation and tourism [9]. Furthermore, Mae Kampong Village is also known for its homestays, which have received many rewards such as Thailand Homestay Standard and Green Innovation in Chemical Analysis with Local Wisdom [10,11]. Since Mae Kampong became Chiang Mai's well-known tourist attraction [12], tourist-related *Miang* activities emerged and increased local economic growth [6,9]. Currently, *Miang* is an essential part of Mae Kampong's economy and has increased the overall income of the villagers from both *Cha Miang* cultivation and *Miang* related businesses. Moreover, the *Cha Miang* forest creates balanced agroforestry by conserving soil moisture and protecting natural water sources [3].

This study aimed to investigate *Miang* consumption behavior, lifestyle, and wisdom of the Mae Kampong community, which leads to sustainable development. Therefore, a cross-sectional and qualitative study was conducted to survey and gather in-depth information about *Miang* consumption behavior in the Mae Kampong community, Chiang Mai Thailand.

2. Materials and Methods

The study was composed of two different attributes, a cross-sectional study and a qualitative study. The cross-sectional study was conducted by researchers using a survey, and the qualitative study was conducted using a structured in-depth interview of participants until the required information was obtained, as shown in Figure 3.

The study protocol was approved by the Human Ethics Committee of the Faculty of Pharmacy, Chiang Mai University (No. 26/2016, Date of approval 29 April 2016). Furthermore, all participants consented to be interviewed and were informed about the study protocol.



Figure 3. Interviewing participants at Mae Kampong Village.

2.1. Cross-Sectional Study

The population of this study comprised residents in Mae Kampong Village, Mae On District, Chiang Mai, Thailand. The eligible criteria were at least 18 years old and residing in Mae Kampong Village from 2016 to 2017. Of 418 Mae Kampong villagers, 335 participants were recruited for the research [13].

The required information was obtained by interview, conducted by approximately 20 interviewers. Before the actual interview, the interviewers were briefed and trained to perform unbiased interviewing. The interview was conducted by interviewers who read the questions out loud for the participants and wrote down the answers. The interview questionnaire was composed of 3 parts. Part 1 consisted of general information such as gender, age, address, and education. Part 2 included health behavior, for instance, smoking status, drinking status, underlying disease, and diet. Finally, the last part comprised *Miang* consumption, for which all the questions were multiple choice with open questions to allow participants to express their opinion, experience, and perspective completely.

STATA, Version 14 was used to analyze descriptive data: frequencies, percentages, means, and standard derivations.

2.2. Qualitative Study

The qualitative information of *Miang* consumption was gathered from randomized villagers from the cross-sectional study above. The eligible criteria for participants to be included in the qualitative study were consenting to provide information and consuming *Miang* daily. Of the 335 participants in the cross-sectional study, 10 to 15 participants were estimated to provide sufficient data until the researchers concluded that no new information or themes were discovered.

A structured in-depth interview and audio recordings were used to conduct the qualitative study. The audio recordings were converted to text, and the participants' answers were confirmed. The interview concepts were to capture the essence of a Mae Kampong villager's lifestyle, health profile, sickness, and wellness and how it related to *Miang*. The story behind the use of *Miang* and how it became a tradition in the village were also part of our focus. Furthermore, as *Miang* consumption behavior differs from the past, the reason for changes was one of the interesting points.

As for interview validation, the questions and their content were reviewed and validated by professional counselors. The acquired information was analyzed using content analysis to describe the in-depth perspective of the participants.

3. Results

3.1. Cross-Sectional Study

Of 335 participants, 131 (39.1%) were male with an average age of 61.3 ± 12.2 years old. Over 79.6% of participants were married. The education level of the participants was mostly primary or below (69.2%), and 38.8% worked as a freelancer occasionally depending on an employer. The monthly income of the participants ranged from less than 3000 to 10,000 THB (Table 1).

Table 1. Characteristics of participants (n = 335).

Characteristic	Total	Percentage
Gender		
Male	131	39.1
Female	204	60.9
Mean age (years) (n = 315)	61.3 ± 12.2	
Status (n = 304)		
Single	29	9.5
Married	242	79.6
Divorced/separated	18	5.9
Other *	15	4.9
Education (n = 325)		
Illiterate	45	13.9
Primary or below	225	69.2
High school	42	13.0
Diploma/Vocational/Bachelor's degree or higher	13	4.0
Occupation (n = 309)		
Agriculturist	94	30.4
Freelancer	120	38.8
Government official or private sector employee	6	1.8
Unemployed	68	22.0
Other *	21	6.8
Monthly income (THB)(n = 307) **		
<3000 (96.15 USD)	143	46.6
3001–10,000 (96.19–320.51 USD)	130	42.4
>10,001 (320.54 USD)	34	10.4

* Other occupations included merchant, housewives, and homestay owner. ** Exchange rate: 31.20 THB to 1 USD, according to the exchange rate, Bank of Thailand on 30 April 2021 [14].

According to the participant's health profile, smoking and drinking status mainly comprised never smoking (62.3%) and never drinking (58.9%). As for smokers, most used roll-your-own cigarettes. Some of the participants had hypertension (35.1%) and diabetes (21.3%); some participants were on medication (58.5%). The top three medications were for diabetes, hypertension, and dyslipidemia. While over one half of the participants were on medication, only 17.7% used supplements. The supplements that had been used frequently were vitamins, nutritional supplements, and calcium supplements. As for herbal supplements, only 30.8% used them, and the herbs came from shops, folk healers, were produced from their garden, or were from foraging. Over 59.9% of the participants exercised, mostly by walking. For instance, *Cha Miang* farmers had to walk around, watering and tending the farm crops, and foragers had to walk through countless mountains on foot. The main diet of the participants was a home cooked meal (97.8%) instead of dining out/take out (1.2%) (Table 2).

Participants preferred to integrate *Miang* into their diet and used *Miang* as a snack (86.5%), staple food (35.5%), and beverage (13.2%). The main reason that participants in

Mae Kampong consumed *Miang* was to relax, as they claimed *Miang* could make you relax (Table 3).

Table 2. Participant health profile.

Variable	Total	Percentage
Weight (kilogram; n = 310)	53.9 ± 10.9	
Height (centimeter; n = 293)	155.4 ± 8.3	
Smoking status (n = 318)		
Never smokers	198	62.3
Active smokers	70	22.0
Ex-smokers	50	15.7
Drinking status (n = 316)		
Non-drinkers	186	58.9
Active drinker	79	25.0
Ex-drinkers	51	16.1
Underlying disease * (n = 328)		
Diabetes or hyperglycemic	70	21.3
Dyslipidemia	28	8.5
Hypertension	115	35.1
Cardiovascular diseases	8	2.4
Depression/anxiety disorder	8	2.4
Other **	71	21.7
Medication use (n = 318)		
None	132	41.5
On medication	186	58.5
Supplement use (n = 311)		
None	256	82.3
On supplements	55	17.7
Herbal use (n = 318)		
None	220	69.2
Use herbs	98	30.8
Exercise (n = 317)		
Did not exercise	127	40.1
Exercise	190	59.9
Diet (n = 323)		
Home cooking meals	316	97.8
Eating out/take out	4	1.2
Other	3	0.9

* Participants could answer more than one option. ** Other underlying disease such as bone and joint disease, gastrointestinal disease, allergy, and chronic muscle pain.

Table 3. Daily *Miang* consumption.

Variable	Total	Percentage
Do you consume <i>Miang</i> daily? (n = 334)		
No	21	6.3
Yes	313	93.7
What do you consume <i>Miang</i> as? * (n = 318)		
Snack, e.g., Sour <i>Miang</i> or Sweet <i>Miang</i>	275	86.5
Staple food, e.g., <i>Miang</i> salad, concentrated <i>Miang</i> juice	113	35.5
Beverage, e.g., <i>Miang</i> tea	42	13.2
Medicine	8	2.5
Healthy baked goods	1	0.3
Why do you consume <i>Miang</i> ? * (n = 318)		
Use <i>Miang</i> as a snack	220	69.2
Use <i>Miang</i> as a staple food	80	25.2
Use <i>Miang</i> to relax or energize	160	50.3
Use <i>Miang</i> to relieve thirst	65	20.4
Use <i>Miang</i> as medication	9	2.8
Other **	19	6.0

* Participants could answer more than one option. ** Other such as having something to chew on or religious-related reason.

3.2. Qualitative Study

The researchers were able to recruit 15 participants who used *Miang* daily for the qualitative study. *Miang* was consumed as a staple food, but it could also be processed to other products such as *Miang* healthy baked goods or *Miang* gummies. The more we investigated Mae Kampong villagers' lives, we found that *Miang* was more than a diet; it had local wisdom and stories behind it.

3.2.1. *Miang* Consumption Behavior of Mae Kampong Villagers

The history of *Miang* came a long way from the wisdom and tradition of the Mae Kampong community. Each part of *Cha Miang* was used as a staple food and processed in other condiments. "The shoot was used to make a salad, or the bud was brewed into tea. Also, the larger leaves could be processed into *Cha Miang* tea pillows; we did not throw the larger leaves away. We made *Cha Miang* tea pillows at local temple gatherings, and people used them in cars for display." (Ms. A)

"In our village, only the elders chewed *Miang*. Most people cooked *Cha Miang* leaves by deep-frying, in salads, and as a paste." (Ms. K)

People rarely used *Miang* as medicine, but *Miang* can be used as an energizing herb. "But as long as I know, *Miang* contains caffeine, which is the same substance you can find in coffee, but most people prefer coffee over *Miang*." (Mr. M)

"I ate *Miang* for 5 to 6 years. It was part of my main diet. Whenever I was tired or could not sleep, I would chew *Miang*, and many of the symptoms would go away. Whenever I ate *Miang*, I felt awake and energized. *Cha Miang* comes in different types of products; the leaves can be made into tea pillows, and when you felt tired, you just sleep on that pillow." (Ms. J)

3.2.2. *Miang* Lifestyle and Wisdom in Mae Kampong

The interviews showed that *Miang* played a significant part in the Mae Kampong community for all ages, especially during their meals or by consuming it while smoking. Furthermore, *Miang* also had its role in the religious traditions in the Mae Kampong community.

"When I was born, my parents had to eat *Miang* right after they finished their meal. They also put it in their mouth while they smoked, just like a lollipop." (Ms. A)

"*Miang* and smoking are inseparable. If you smoke, you had to have *Miang*, and if you eat *Miang*, you have to smoke because the unique scent of the cigarette paired well with the sourness of *Miang*, perfectly!!! But, since I quit smoking, I did not chew *Miang* that much. I mean, sometimes I had it but not very often. The fresh *Cha Miang* leaves have an aroma, so I ate them, but when I ate *Miang*, I meant really ate them, did not chew and spit. Sometimes if the leaves were too old, they become rough and hard to chew, so I spit it out, while the young leaves were still chewable." (Mr. M)

"The elders eat *Miang* because they feel it makes them calm and relaxed. Also, *Miang* can get rid of the fishy odor when you have fish in your meal. But as for using *Miang* to cure disease or sickness, I have never heard of it. As far as I know, *Miang* is a part of ritual items. *Miang* and roll-your-own cigarettes are an item in some traditional or religious rituals. It was considered quite special and important to the lifestyle of the people in an older time." (Ms. H)

Moreover, *Miang* is associated with the Mae Kampong villager's career. Harvesting *Cha Miang* in the wild was once the main career associated with *Miang*. Even though the pay rate was low and people in the village tended to go for the tourism business, harvesting *Cha Miang* was still one of the main incomes in some families to guarantee their living's sustainability.

"It (*Cha Miang* harvesting) is our original career. We still believe that even though it paid less than the tourism business, it was sustainable when we had no tourists. This career is still there. Today, people might travel a lot, but we will lose everything when people travel less, and we are without *Miang*. We need a backup plan." (Mr. C)

“Even though we did not get a lot of money making a living of *Miang*, we could save. It was not like once we harvest *Cha Miang*, we sell it. We have to ferment the leaves for over a year. When the time comes, and fermented *Miang* is ready, we sell it and gain some amount of money for saving.” (Ms. F)

The more money made in the tourism business, the more it costs. Even though it was more profitable than *Cha Miang* harvesting, Mae Kampong villagers might become more in debt if they chose only to do tourism business for a living.

“The old philosophy of *Miang* was harvesting, buying, selling *Miang*, and creating savings out of the money we got from *Miang*. These past two years, we had homestay and tourism business, and when I went out for *Cha Miang* harvesting, just about noon, the village chief called me. Some tourists wanted to book the homestay, and I had to rush to the homestay and clean it. The money I made from the homestay business was good, do not get me wrong, it was not as reliable as the money I made from *Cha Miang* cultivation. Tourists come and go, depending on the season, but *Miang* is always there. We can be sure of the money, and we can make from it each year.” (Ms. F)

Mae Kampong villagers were trying to preserve their unique culture and tradition. Still, due to multiple variables and factors, including the decreased demand for *Miang*, villagers were getting older, and the younger generations paid less interest to pursuing and continuing this culture. In addition, the changes in the *Miang* culture were due to the complications of the *Miang* making process, the time and effort used in the process, combined with the shift in social structure, which caused villagers to choose another career instead of making *Miang*.

Nevertheless, the Mae Kampong community still strongly believed in their *Miang* culture and *Miang* making career to be a sustainable way of life and provide the money they needed. “Right now, *Miang* is our main way to make a living; tourism is a side business. I do not believe that it will remain profitable for the rest of my life. My family comprises farmers, and sure, it has its ups and downs. Even though the *Miang* demand is decreasing, I will not clear the field. *Miang* is my backup plan.” (Mr. C)

Miang might not grant you a fortune, but the Mae Kampong community was still able to stay content with their life. The sustainable way of life was key to their wisdom. “You see, we as farmers will not be rich, but we can still support our family and continue on with our life. Just like our former king, King Bhumibol Adulyadej, said. Even though our country has the sufficiency economy philosophy, we also have to be self-sufficient.” (Mr. Z)

Miang runs in the Mae Kampong villagers’ veins. The culture and wisdom are passed from generation to generation, and the community hoped it would continue. “Well, I think it (*Miang* culture) will continue in this village for a long time because our ancestors preserved it, and when it comes to our time, we cannot ignore it. The new generations in this village will be educated about *Miang*, no matter where you have been.” (Mr. C)

The tradition of chewing *Miang* might change over time, but the other products of *Cha Miang* are still relatable such as *Cha Miang* tea, *Cha Miang* tea pillows, cosmeceutical products, or healthy baked goods. “Our village chief said that he did not want the *Miang* culture to fade through time. We have maintained this culture since the time of our grandparents. If outsiders or tourists ask about our village culture, we need to present our *Miang* and coffee culture; we have to know it.” (Ms. J)

4. Discussion

4.1. *Miang* Consumption Behavior in Mae Kampong

This study discovered that over 93.7% of Mae Kampong villagers consumed *Miang* daily. Chewing *Miang* as a snack was a habit of elders in the village. Since most of our participants were elderly, with an average age of 61.3 years old, the most popular way to consume *Miang* in this study was to chew it as a snack. The elders in the Mae Kampong community claimed that *Miang* could wash out fishy odor and clean their pallets after meals. Moreover, *Miang* seems to be an energizing snack throughout the day. Aside from snacks, *Miang* was consumed as a staple food and beverage, which is preferred among younger

generations. The newer generation preferred to use *Cha Miang* leaves as an ingredient in a meal instead of directly chewing it, for example, *Cha Miang* leaf salad, tempura, concentrated *Miang* juice, or *Cha Miang* leaf tea. *Miang* might be an old culture in the opinion of some, but the nutritional value and benefits of *Miang* unquestionably satisfied people who seek an alternative healthy diet [15]. Thus, *Miang* constitutes a crucial part of the Mae Kampong community and integrates perfectly in their lifestyle to achieve the third of the sustainable development goals: ensure healthy lives and promote well-being for all [16].

Although *Miang* is considered a herb, it is not frequently used as medicine. About 2.5% of participants used *Miang* as medicine. Similar to the rationale of using *Miang*, 2.8% of Mae Kampong villagers used *Miang* to cure diseases. Mae Kampong folk medicine and doctors did not study or use *Miang* to cure or prevent disease. However, studies [1,17] showed that *Cha Miang* contains chemical constituents like caffeine and polyphenol. The dried tea leaf of var. *assamica* contains from 2.67% to 5.46% caffeine, higher than the Chinese or Japanese strain (var. *sinensis*). In addition, *Cha Miang* (var. *assamica*) has 2 to 3 times higher amounts of caffeine than coffee [18]; this explains why Mae Kampong villagers enjoy *Miang* as an energizing snack and beverage. When the leaves pass through the process of steaming, the amount of caffeine is lowered. On the other hand, if the leaves pass through fermentation, the amount of caffeine could increase up to 6.0% of dry weight [19]. Caffeine is a stimulant causing vigorous activity, and it resolves drowsiness [20]. This result explained why Mae Kampong villagers used *Miang* as an energizing snack. Furthermore, a study [1] showed that the polyphenol found in *Cha Miang* leaves has antioxidant, antibiotic, antimutagenic, and even anticarcinogenic properties. Researchers were working on finding the curative properties of *Cha Miang* or wheatear. It can be processed as other health products to increase value, for instance, cosmeceutical products or healthy baked goods [15].

4.2. *Miang* Lifestyle and Wisdom in Mae Kampong

Mae Kampong villagers had a prevalence of depression (2.4%) and dyslipidemia (8.5%) that was less than average Thais with a similar average age of 45 to 69. According to the 2014 Thai annual health survey [21], the prevalence of health issues of Thais at this age range included cardiovascular disease (1.7–3.7%), depression (3.0–9.0%), diabetes mellitus (12.1–19.2%), hypertension (32.7–48.4%), and dyslipidemia (50.4–53.3%). However, the health conditions of Mae Kampong villagers were acquired through interviews without official medical records. Even though Mae Kampong villagers did not consider *Miang* as a medicine, they managed to stay healthy because of *Miang* related health behaviors. *Cha Miang* harvesting made the villagers wake up early, hike across countless mountains far from the village, and harvesting *Cha Miang* in vast fields. The physical activity among the 59.9% of Mae Kampong villagers who exercised daily from *Miang* harvesting promoted Mae Kampong villagers' health. Although *Miang* might not directly affect the health of Mae Kampong villagers, *Miang* still had impacts on the villagers' health and well-being, as mentioned in the third goal of the sustainable development goals.

Miang also played an essential role in Mae Kampong tradition, religious beliefs, and rituals. Aside from being edible, *Miang* can be seen as an offering during religious rituals or welcome snacks. Because Mae Kampong has become one of the tourist attractions, homestay businesses and rental houses are the community's primary careers, along with running cafés and ziplines [9]. Despite the booming travel business, the community still wants to preserve the *Miang* culture. As a result, the Mae Kampong community has fused the *Miang* culture with tourism by creating a nature and history tour. The tour is run by Mae Kampong villagers exploring the *Cha Miang* farm, the fermentation house, *Cha Miang* and *Miang* products stores, and tourist-related *Miang* activities. The goal is to show the tourists about sustainability and connection to *Miang* and how much it means to the community.

Furthermore, the community established the Villager–Forest–*Miang* Museum to preserve the *Miang* culture. Currently, *Miang* demand and manufacturing fluctuates, but through the tourist-related *Miang* activities, *Miang* culture and business could be sustained

and continue growing [6]. Thus, the Mae Kampong community has embraced *Miang* as part of its culture from the past, corresponding to the first and eighth goals of sustainable development: to end poverty in all its forms everywhere and promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all [17].

Miang also plays an important role in the sustainability of terrestrial ecosystems. *Cha Miang* forest exhibits biological diversity and other plant and wildlife species, indicating the abundance of the forest [3]. As a result, the Mae Kampong community water resources and healthy environment fit the fifteenth goal of the sustainable development goals: protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss [17].

This study showed that the Mae Kampong community was turning towards the tourism business and, on the other hand, paid less attention to the *Miang* business. The rationale why villagers turned to pursue the tourism business was that the number of *Cha Miang* farms has reduced the demand on *Miang* over time and generations. Additionally, the superior income and lesser physical workload of the tourism business, the complicated method of *Miang* manufacturing, and the social conditions that obligate younger villagers to work outside the village have influenced these changes.

Although the tourism and homestay businesses were more profitable than the *Miang* business, part of the Mae Kampong community still insists on continuing the *Miang* culture and tradition and has turned them into a career. The high season of Chiang Mai is from December to February. In this period, traveling is the primary source of income for the villagers, but during the low season when the business is stagnating, *Miang* is the way for villagers to make their living. *Miang* is an alternative source of income if any unexpected event occurs. For instance, the COVID-19 pandemic affected countless lives worldwide during this challenging time when people were quarantined and afraid of going outside [22,23], let alone traveling. The COVID-19 pandemic caused a sudden stop to tourism in the Mae Kampong community. As a result, the number of tourists and income drastically decreased, affecting the villagers and their tourism business. As for the *Miang* community, farmers could continue farming because *Cha Miang* could still be harvested despite the pandemic. *Cha Miang* requires just clean water and nutrients from the soil; no advanced agricultural technology is needed [3]. Furthermore, *Cha Miang* can be harvested only four to five times a year, from January to April, May to July, August to October, and November to December [1–3].

As the sufficiency economy philosophy of His Majesty King Bhumibol Adulyadej the Great described, the potential and capability of people to work and fulfill their needs during unexpected events are achieved by self-immunity or the capability to cope with adverse consequences caused by unpredicted events [3,24]. The similarity of the sufficiency economy philosophy and sustainable development goals are the ultimate goals to develop and create equity among social, economic, and environmental factors [25]. Additionally, the sustainability of *Miang* culture may tempt the newer generation to become part of the *Miang* community in their hometown.

Our study illustrates sustainable development in northern Thailand from local issues to global impact. Moreover, the researchers pursued the interviews on foot in Mae Kampong Village, Chiang Mai, Thailand. We also caught a glimpse of the wonderful and extraordinary wisdom existing in the community. We were honored to be welcomed with such a warming and endearing atmosphere by the villagers. The strength of this study was the authentic knowledge of the *Miang* culture, tradition, and community.

However, the study encountered some limitations. Firstly, the researchers could not interview all the villagers in the Mae Kampong Village because some were working and studying outside the village during the interviews. Secondly, the information gained from interviewing the villagers, the data interpretation, and essence might vary for each interviewer. However, this study attempted to narrow this limitation by preparing the interviewers to achieve the same standard in each interview. Finally, the results of this

study explicitly represented Mae Kampong's unique community, society, and lifestyle. If there were to be an adaptation or interpretation for further investigation, please note that the results might differ from this study. Further research of the association between *Miang* and the health profile should be conducted using the national healthcare database.

5. Conclusions

The local wisdom of the *Miang* lifestyle and community for sustainable development in northern Thailand is dedicated to investigating *Miang* consumption behavior, lifestyle, and wisdom of the Mae Kampong community, which contributes to sustainable community development. The people in the Mae Kampong community, Chiang Mai, Thailand, mostly consumed *Miang* as a snack because most villagers were elderly and have enjoyed chewing *Miang* as a snack for a long time. *Miang* in the diet and beverages was less commonly found in the Mae Kampong community. Only a few of the villagers considered using *Miang* as medicine or herbal supplement. More than edible and medicine, *Miang* was also an offering in many religious and local rituals. The economic situation in the village evolves around *Miang*, such as *Cha Miang* cultivation and tourism, and it has become the primary source of income in some households. The ecosystem is sustained, and the water sources are preserved by the *Cha Miang* forest. *Miang* has become the soul of the community's culture, economy, environment, and lifestyle. The sustainable development of *Miang* supports and encourages Mae Kampong villagers' growth and sustainable quality of life. The history and wisdom of *Miang* have come a long way, and the community continues to cherish and preserve the *Miang* culture for the next generations and the future. Although *Cha Miang* is unique in Mae Kampong Village and not widely cultivated, people's willingness in the community and the eagerness to learn and adapt to the modern world can be an example for any community with their own culture and lifestyle. The Mae Kampong Villagers used the old existing culture that might be neglected and turn it into a sustainable community-based local wisdom, or as Thai citizens know it as the sufficiency economy philosophy, which is ready to walk alongside the constantly shifting world.

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Data Availability Statement: The data presented in this study are available on request from the corresponding author.

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