



เทศบาลตำบลอัมพวา
AMPHAWA SUBDISTRICT MUNICIPALITY



WPI

SUSTAINABLE TOURISM INITIATIVES FOR AMPHAWA

Interactive Qualifying Project Report completed in partial fulfillment
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Abstract

This project focused on revitalizing the economy of Amphawa, Thailand, by promoting sustainable tourism practices. The community faced a downturn due to the COVID-19 pandemic, necessitating a transformation in its weekday tourism industry. Our project aimed to redefine Amphawa's appeal by emphasizing environmentally friendly tourism. Through partnerships with local businesses, we advocated for sustainable activities aligned with ecotourism principles, aiming to boost the economy while preserving the environment and local culture.

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We would like to thank our esteemed sponsor, Krit Meetavee, Deputy Mayor of the Municipality of Amphawa for generously dedicating his time to assist us in collaborating with homestay and eco-friendly activity owners in Amphawa. His guidance ensured the successful execution of this project.

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Executive Summary

Amphawa, situated in Samut Songkhram Province, boasts a rich history of water transportation and is renowned for its picturesque riverside communities and intricate canal networks. This district has architectural gems steeped in culture and natural allure, including a vibrant floating market revived in 2004 to bolster the economy and preserve local livelihoods.

However, the surge in tourism has led to a decline in the firefly population due to habitat degradation and various forms of pollution such as water, air, noise, and light pollution. The absence of official measures exacerbates these risks, threatening the delicate balance between tourism and firefly conservation.

The outbreak of COVID-19 has drastically altered Amphawa, severely impacting its once-thriving tourism sector as visitor numbers decline. In response, local businesses have pivoted to online retailing, while traditional activities rooted in local wisdom have also suffered.

To address these challenges, the Chaipattana Foundation established the Amphawa Chaipattananurak Conservation Project in 2008 near the floating market. This initiative aims to preserve and promote cultural heritage in the Amphawa district while fostering ecotourism practices. The project then collaborated with Amphawa Chaipattananurak and local business owners, engaged in the areas of Nakawarang Cultural Square and cooperated with community-run homestays to offer tourists an authentic local experience while supporting sustainable development. This includes environmentally friendly endeavors like firefly viewing that minimizes habitat disruption and partnerships with eco-conscious restaurants utilizing locally sourced ingredients to support the local economy and farmers. Community participation

is pivotal in this project, providing job opportunities and income while facilitating cultural exchange. The project's goal is to rejuvenate Amphawa's economy, promote sustainable tourism practices, and attract more visitors on weekdays. By prioritizing ecotourism, the project aims to mitigate environmental impacts, conserve natural resources, and preserve local culture and traditions. The four main objectives have been set out to be used as a guideline in this project:

1. Understanding current tourism in Amphawa
2. Sustainable tourism development
3. Interpret marketing strategies
4. Emphasizing environmental conservation

To fulfill the first objective, our team undertook a comprehensive approach by gathering both quantitative and qualitative data. We aimed to gain insights into the tourist demographics, preferences, satisfaction levels, and the prevailing tourism challenges in Amphawa. Employing quantitative methods, our team devised questionnaire surveys to both local residents and visitors frequenting the Amphawa Canal area, as well as those who had previously visited Amphawa. Additionally, we conducted interviews with key stakeholders including Mr. Krit Meetavee, the Deputy Mayor of Amphawa, various restaurant owners, and local businesses owners engaged in eco-friendly activities. These interactions yielded valuable information concerning environmentally sustainable activities and the current economic landscape.

From the questionnaire responses and interviews, our team has discovered four interesting and useful findings for the project:

1. There are fewer tourists during the weekdays
2. Current tourists in Amphawa visit for one day with their family on a weekend

3. Locals seek weekday tourism push
4. The tourism industry faces a decline post-pandemic

Having gained a nuanced understanding of the current state of ecotourism in Amphawa, our team progressed towards achieving the second objective: sustainable tourism development. This involved addressing identified challenges and aligning tourist needs with environmentally conscious practices. Initiating with thorough surveys and data collection within the locality, we pinpointed eco-friendly activities, dining options, and accommodations that catered to tourist demands while promoting environmental conservation. We devised a sample travel itinerary tailored for Amphawa, intended for presentation to homestay operators and utilization in tourist questionnaires. Through this process, we aimed to get feedback, gauge tourist interests, and gather suggestions for refining the tourism plan.

From the survey data and questionnaire analysis, we uncovered two findings:

1. Tourists are interested in eco-friendly development
2. Potential Amphawa tourists liked our package options

To address the need for making ecotourism in Amphawa more accessible and widespread, our team focuses on the third objective: creating easily accessible advertising media. Recognizing the effectiveness of online promotion, we emphasize the use of a website for dissemination. This website will serve as a centralized platform featuring information about eco-friendly activities, homestays, restaurants, and sample tour plans tailored for ecotourism. Additionally, we utilize the Linktree platform to consolidate relevant links for users convenience. To complement online efforts, printed materials incorporating QR codes are strategically placed throughout Amphawa

to direct visitors to the website, also receiving feedback from the website as users are solicited through a questionnaire to continually enhance users' experiences.

By creating advertising media, our team discovered two significant findings regarding the utilization of media for promoting tourism:

1. Viewing our website made people want to visit Amphawa during the week
2. Our website is easy to understand, is aesthetically pleasing, and is accessible

Understanding the significance of ecotourism in Amphawa and its inherent connection to environmental conservation, our team has prioritized raising awareness among both local communities and tourists. We have utilized ecotourism-related information to craft informative infographic media, which is made accessible on our website. Additionally, we have prepared a questionnaire survey to gauge opinions on environmental conservation information, aiming to refine and enhance its accuracy and suitability for use.

Through our efforts to communicate information and foster awareness of environmental conservation, our team has made two notable findings:

1. Local support ecotourism implementation
2. Tourists lack knowledge of firefly conservation

Our team aspires to foster economic growth and sustainable practices in Amphawa. We intend to share our creations with project sponsors and collaborating businesses owners, utilizing the website as a tool to promote sustainable tourism practices. Social media platforms like Facebook and TikTok will be utilized for website promotion, leveraging QR codes to enhance visibility and accessibility of information. Additionally, the municipality of Amphawa advocates for measures

such as funding electric boats and implementing policies to reduce nighttime lighting, thereby creating a dark zone as a conducive environment for firefly breeding and bolstering sustainability. These efforts aim to preserve Amphawa's attractions while promoting eco-friendly tourism activities, restaurants, and homestays.

Executive summary (Thai) บทสรุปโครงการ

อัมพวาเป็นอำเภอหนึ่งในจังหวัดสมุทรสงคราม ตั้งอยู่ทางทิศตะวันตกเฉียงเหนือของอ่าวไทยตอนใน ซึ่งมีประวัติศาสตร์มาอย่างยาวนานด้านการขนส่งทางน้ำ มีความโดดเด่นด้วยสภาพแวดล้อมที่เป็นเอกลักษณ์ของชุมชนริมน้ำและลำคลองที่เชื่อมต่อถึงกัน อีกทั้งยังมีสถานที่สำคัญทางสถาปัตยกรรมที่เต็มไปด้วยคุณค่าทางประวัติศาสตร์ วัฒนธรรม และความงดงามทางธรรมชาติที่เป็นสิ่งดึงดูดนักท่องเที่ยวให้ไปเยี่ยมชม เช่น ตลาดน้ำที่ได้รับการฟื้นฟูในปี 2547 เพื่อกระตุ้นเศรษฐกิจและอนุรักษ์ความเป็นอยู่ของชุมชนริมน้ำ

เมื่ออัมพวาได้กลายเป็นสถานที่ท่องเที่ยวที่น่าสนใจและเป็นที่ยอมรับสำหรับนักท่องเที่ยว ทำให้จำนวนประชากรที่อาศัยในอัมพวาได้ลดลงอย่างมีนัยสำคัญ อันเนื่องมาจากความเสื่อมโทรมของถิ่นที่อยู่อาศัยและมลภาวะ ได้แก่ มลภาวะทางน้ำ มลภาวะทางอากาศ มลภาวะทางเสียง และมลภาวะทางแสง อันเป็นผลมาจากกิจกรรมการท่องเที่ยว โดยขาดมาตรการป้องกันอย่างเป็นทางการ ทำให้เกิดความเสี่ยงต่อการอยู่ร่วมกันของการท่องเที่ยวและการอนุรักษ์ที่ห้อย

เนื่องจากการแพร่ระบาดของเชื้อไวรัสโควิด19 อัมพวาได้เปลี่ยนแปลงไปอย่างสิ้นเชิง ได้รับผลกระทบต่อกิจกรรมการท่องเที่ยวที่เคยเจริญรุ่งเรือง โดยมีจำนวนนักท่องเที่ยวที่ลดลงอย่างมาก ทำให้ธุรกิจในพื้นที่ต้องปรับตัวเพื่อความอยู่รอด ผู้ประกอบการส่วนหนึ่งจึงเปลี่ยนวิธีการขายแบบเดิมมาสู่การค้าปลีกออนไลน์ ไม่ใช่แค่ภาวะเศรษฐกิจถดถอยที่เกิดขึ้น แต่กิจกรรมที่เป็นภูมิปัญญาดั้งเดิมก็ได้รับความเดือดร้อนเช่นกัน

มูลนิธิชัยพัฒนาได้สร้างโครงการอัมพวาพัฒนานุรักษ์ขึ้นในปี 2551 ซึ่งตั้งอยู่ห่างออกไปไม่กี่กิโลเมตรจากตลาดน้ำอัมพวา เพื่อมุ่งเน้นการอนุรักษ์และการส่งเสริมรดกทางวัฒนธรรมในพื้นที่อำเภออัมพวา ด้วยวิสัยทัศน์ของการอนุรักษ์อัมพวา ทางกลุ่มนิสิตจึงร่วมมือกับเจ้าของโครงการและผู้ประกอบการในพื้นที่เพื่อสนับสนุนแนวทางการปฏิบัติด้านการท่องเที่ยวเชิงนิเวศ โดยเริ่มเข้าไปมีส่วนร่วมในส่วนในพื้นที่พัฒนานุรักษ์ ลานวัฒนธรรมนาคะวังค์ และร่วมมือกับโฮมสเตย์ที่ดำเนินการโดยคนในชุมชน อาทิ บ้านพลอยน้ำ บ้านแม่อรทัย และบ้านรัก

ซึ่งทำให้นักท่องเที่ยวสามารถดื่มด่ำกับวิถีชีวิตแบบท้องถิ่นไปพร้อมๆกับการมีส่วนร่วมในการพัฒนาที่ยั่งยืน ตัวอย่างเช่น การเข้าร่วมกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อมและการได้รับประสบการณ์การชมหิ่งห้อยที่ไม่ก่อให้เกิดมลพิษหรือทำลายแหล่งที่อยู่อาศัยของหิ่งห้อย นอกจากนี้ยังร่วมกับร้านอาหารที่เป็นมิตรต่อสิ่งแวดล้อม ได้แก่ ร้านเสน่ห์ท่าคา ร้านอิมโพรไวส์โมคแอนด์กริลล์ (Improvised Smoked'n Grilled) และร้านรัฐจวน ที่ได้มอบประสบการณ์การทำอาหารจากวัตถุดิบในท้องถิ่น ในขณะเดียวกันก็สนับสนุนธุรกิจและเกษตรกรในท้องถิ่น พร้อมแสดงให้เห็นถึงการช่วยเหลือซึ่งกันและกันในชุมชน โดยการนำผลผลิตที่ทำได้ภายในท้องถิ่น ตัวอย่างเช่น ถั่วลิสงและมะพร้าว ซึ่งเป็นของขึ้นชื่อในอัมพวา ไปเป็นส่วนหนึ่งของวัตถุดิบเพื่อใช้ในการประกอบอาหารและขนมหวาน

กลุ่มนิสิตได้ให้ความสำคัญกับกิจกรรมการมีส่วนร่วมของชุมชน การสร้างงานสร้างรายได้ให้กับคนในชุมชน และการส่งเสริมการแลกเปลี่ยนทางวัฒนธรรมโดยคำนึงถึงประวัติศาสตร์อันยาวนานของอัมพวา โดยกำหนดเป้าหมายของโครงการไปที่การฟื้นฟูเศรษฐกิจในอัมพวา ส่งเสริมแนวทางการปฏิบัติต่อการท่องเที่ยวที่มีอยู่ให้เกิดความยั่งยืน และเพิ่มจำนวนนักท่องเที่ยวให้ล้นหลามเข้ามาในวันธรรมดามากยิ่งขึ้น เพื่อสร้างการเติบโตทางเศรษฐกิจในขณะที่ยังคงรักษาแนวทางปฏิบัติเดิมที่ยังเป็นเอกลักษณ์ของอัมพวาให้มีความต่อเนื่องไปอย่างยั่งยืน ผ่านการท่องเที่ยวเชิงนิเวศ ซึ่งการจัดลำดับความสำคัญของแนวทางปฏิบัติเหล่านี้จะช่วยลดผลกระทบต่อสิ่งแวดล้อม ช่วยอนุรักษ์ทรัพยากรธรรมชาติ และยังช่วยสนับสนุนวัฒนธรรมและภูมิปัญญาท้องถิ่น โดยกลุ่มนิสิตได้กำหนดวัตถุประสงค์หลักขึ้นมาทั้งหมด สี่ประการ เพื่อใช้เป็นแนวทางในโครงการศึกษา ได้แก่

1. การทำความเข้าใจต่อการท่องเที่ยวเชิงนิเวศในปัจจุบันของอัมพวา
2. การพัฒนาการท่องเที่ยวอย่างยั่งยืน
3. การสร้างสื่อโฆษณาที่สามารถเข้าถึงได้ง่าย
4. การเน้นย้ำถึงการอนุรักษ์สิ่งแวดล้อม

เพื่อบรรลุวัตถุประสงค์ที่หนึ่ง กลุ่มนิสิตได้ทำการเก็บข้อมูลในเชิงปริมาณและเชิงคุณภาพ เพื่อประเมินข้อมูลเกี่ยวกับประชากรนักท่องเที่ยว ความชอบ ความพึงพอใจ และเข้าใจถึงปัญหาการท่องเที่ยวในปัจจุบันของอัมพวาได้อย่างถูกต้องและครบถ้วน ทั้งปัญหาทั่วไปและปัญหาเชิงลึก โดยการเก็บข้อมูลเชิงปริมาณ กลุ่มนิสิตได้จัดทำแบบสอบถามสำหรับคนในท้องถิ่นและนักท่องเที่ยวที่เดินเที่ยวบริเวณคลองอัมพวาและนักท่องเที่ยวที่เคยไปอัมพวา เพื่อที่จะเก็บข้อมูลได้อย่างกว้างขวางและครบถ้วน กลุ่มนิสิตได้มีโอกาสนัมภาษณ์นายกฤตย มีทวี รองนายกเทศมนตรีตำบลอัมพวา ผู้ประกอบการร้านอาหารต่างๆในอัมพวา และผู้ประกอบการกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อม จากการสัมภาษณ์ทำให้กลุ่มนิสิตทราบถึงข้อมูลเกี่ยวกับกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อม และสภาพเศรษฐกิจในปัจจุบัน

จากการทำแบบสอบถามและสัมภาษณ์ กลุ่มนิสิตได้ค้นพบข้อมูลที่น่าสนใจและมีประโยชน์ต่อโครงการทั้งหมดสี่ข้อ คือ

1. จำนวนนักท่องเที่ยวในวันธรรมดาลดลง
2. นักท่องเที่ยวในปัจจุบันส่วนใหญ่เดินทางมาเป็นครอบครัวและมาเพียงหนึ่งวันในช่วงวันหยุดสุดสัปดาห์
3. คนในท้องถิ่นต้องการที่จะกระตุ้นการท่องเที่ยวในวันธรรมดา
4. อุตสาหกรรมการท่องเที่ยวได้เผชิญกับภาวะเศรษฐกิจที่ถดถอยลงหลังการแพร่ระบาดของเชื้อไวรัสโควิด19

หลังจากกลุ่มนิสิตได้ทราบและเข้าใจถึงการท่องเที่ยวเชิงนิเวศในอัมพวา ณ ปัจจุบัน จึงนำไปสู่การบรรลุวัตถุประสงค์ที่สอง คือการพัฒนาการท่องเที่ยวอย่างยั่งยืน เพื่อแก้ไขปัญหาและตอบสนองความต้องการของนักท่องเที่ยว โดยเริ่มจากการสำรวจและเก็บข้อมูลจริงในพื้นที่ เพื่อคัดเลือกกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อม ร้านอาหาร และโฮมสเตย์ ที่ทั้งตอบโจทยความต้องการของนักท่องเที่ยว ความตระหนักรู้ต่อการอนุรักษ์สิ่งแวดล้อม และความสามารถในการดึงดูดนักท่องเที่ยวด้วยเช่นกัน กลุ่มนิสิตได้จัดทำตัวอย่างแผนการท่องเที่ยวในอัมพวา เพื่อนำเสนอให้แก่ผู้ประกอบการโฮมสเตย์และใช้เพื่อจัดทำแบบสอบถามสำหรับนักท่องเที่ยว โดย

สำรวจความสนใจและรับข้อเสนอแนะเพิ่มเติมต่อกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อมและโฮมสเตย์ เพื่อนำไปสู่การพัฒนาแผนการท่องเที่ยวให้ดียิ่งขึ้น

จากการสำรวจ รวบรวมข้อมูล และวิเคราะห์ข้อมูลแบบสอบถาม กลุ่มนิสิตได้ค้นพบข้อมูลที่น่าสนใจทั้งหมดสองข้อ คือ

1. นักท่องเที่ยวให้ความสนใจกับกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อม
2. นักท่องเที่ยวที่มีแนวโน้มจะเยี่ยมชมอัมพวาได้ให้ความสนใจกับทุกตัวอย่างแผนการท่องเที่ยวที่มี

การริเริ่มการท่องเที่ยวเชิงนิเวศในอัมพวาจะเกิดขึ้นได้ก็ต่อเมื่อมีการเข้าถึงการท่องเที่ยวได้ง่ายขึ้นและขยายไปสู่วงกว้างมากขึ้น จึงนำไปสู่วัตถุประสงค์ที่สาม คือการสร้างสื่อโฆษณาที่สามารถเข้าถึงได้ง่าย กลุ่มนิสิตได้สังเกตเห็นถึงประโยชน์ของการโฆษณาผ่านสื่ออินเทอร์เน็ต โดยใช้เว็บไซต์ เนื่องจากการใช้งานและเข้าถึงได้ง่าย ซึ่งเว็บไซต์จะประกอบไปด้วย ข้อมูลของกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อม โฮมสเตย์ ร้านอาหาร และตัวอย่างแผนการท่องเที่ยว ที่เหมาะสมกับการท่องเที่ยวเชิงนิเวศ นอกจากนี้ยังมีการใช้ แพลตฟอร์ม Linktree ในการรวบรวมลิงก์ข้อมูลให้อยู่ในที่เดียวกัน เพื่อง่ายต่อการเข้าถึงข้อมูลของผู้ใช้งาน และใช้สื่อสิ่งพิมพ์ในรูปแบบของคิวอาร์โค้ดตามสถานที่ต่างๆในอัมพวา เพื่อนำไปสู่เว็บไซต์อย่างง่ายดาย อีกทั้งยังมีการจัดทำแบบสอบถามสำหรับผู้ใช้งานเว็บไซต์เพื่อทราบถึงความเห็นเกี่ยวกับเว็บไซต์ และนำข้อคิดเห็นที่ได้รับไปปรับปรุงเว็บไซต์ให้ดียิ่งขึ้น ในการสร้างสื่อโฆษณา กลุ่มนิสิตได้ค้นพบข้อมูลและความคิดเห็นเกี่ยวกับการใช้สื่อโฆษณาเป็นองค์ประกอบของการท่องเที่ยว แบ่งออกเป็นสองข้อ ดังนี้

1. ผู้คนอยากไปเที่ยวอัมพวาในวันธรรมดาหลังจากได้รับข้อมูลผ่านทางเว็บไซต์
2. เว็บไซต์มีการออกแบบที่ดี สามารถเข้าใจและใช้งานได้ง่าย

จากที่มาและความสำคัญของการท่องเที่ยวเชิงนิเวศในอัมพวา เพื่อบรรลุวัตถุประสงค์ที่สี่ กลุ่มนิสิตจึงมีความตระหนักถึงการเน้นย้ำการอนุรักษ์สิ่งแวดล้อม เพื่อเพิ่มความตระหนักรู้ไปยังชุมชนและนักท่องเที่ยว ทำให้มี

การนำข้อมูลที่เป็นประโยชน์ต่อการท่องเที่ยวเชิงนิเวศมาจัดทำสื่ออินโฟกราฟิกเพื่อการเรียนรู้ และรวบรวมไว้ในเว็บไซต์ ในขณะเดียวกัน มีการจัดทำแบบสอบถามถึงความคิดเห็นเกี่ยวกับข้อมูลการอนุรักษ์สิ่งแวดล้อม เพื่อนำไปปรับปรุงและพัฒนาข้อมูลให้ถูกต้องและเหมาะสมแก่การใช้งานมากยิ่งขึ้น

หลังจากได้สื่อสารข้อมูลที่มีผลต่อความตระหนักรู้ของการอนุรักษ์สิ่งแวดล้อม กลุ่มนิสิตได้ค้นพบข้อมูลที่น่าสนใจสองข้อ คือ

1. ชาวท้องถิ่นสนับสนุนการท่องเที่ยวเชิงนิเวศในอัมพวา
2. นักท่องเที่ยวขาดความรู้ในเรื่องของการอนุรักษ์หิ้งห้อย

กลุ่มนิสิตหวังว่าจะสามารถสร้างการเติบโตทางเศรษฐกิจและแนวทางปฏิบัติอย่างยั่งยืนของอัมพวาผ่านสิ่งที่กลุ่มนิสิตได้มุ่งมั่นสร้างเพื่อช่วยเหลืออัมพวาไม่มากนักน้อย พร้อมทั้งเสนอให้ผู้สนับสนุนโครงการและผู้ประกอบการที่ร่วมมือกับโครงการ ใช้เว็บไซต์ที่กลุ่มนิสิตได้สร้างขึ้นเพื่อส่งเสริมแนวทางปฏิบัติด้านการท่องเที่ยวอย่างยั่งยืนในอัมพวา โดยหนึ่งในวิธีที่สามารถทำได้คือ การโปรโมตเว็บไซต์ และคิวอาร์โค้ดที่กลุ่มนิสิตได้มอบให้ ผ่านทางสื่อโซเชียลมีเดียต่างๆ อาทิ แอปพลิเคชันเฟสบุ๊กและติ๊กต็อก เพื่อเพิ่มการมองเห็นและการเข้าถึงข้อมูลบนสื่อโซเชียลมีเดียได้มากขึ้น ทำให้นักท่องเที่ยวมีแนวโน้มที่จะสนใจเยี่ยมชมอัมพวามากขึ้น ในขณะเดียวกัน การจัดทำป้ายข้อมูลเกี่ยวกับวิธีการดูหิ้งห้อยอย่างยั่งยืน การระดมทุนจัดซื้อเรือไฟฟ้าโดยเทศบาล และการจัดทำพื้นที่ที่มีความมืดโดยสร้างนโยบายการลดการใช้ไฟในเวลากลางคืน เพื่อสร้างพื้นที่ปลอดภัยสำหรับการเพาะพันธุ์หิ้งห้อย เพื่อเพิ่มความยั่งยืน อนุรักษ์สถานที่ท่องเที่ยวในอัมพวา และส่งเสริมกิจกรรมการท่องเที่ยว ร้านอาหาร และโฮมสเตย์ที่เป็นมิตรต่อสิ่งแวดล้อม

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1. Introduction

In its prime, the Amphawa District was rich in history, culture, and natural resources that drew in tourists. However, the onset of the COVID-19 pandemic cast a shadow over its once-thriving tourism industry. In the aftermath of the outbreak, the tourism landscape experienced a significant shift. Local businesses underwent a transformative process to align their products with the evolving demands. The shift to online retail became essential for survival, as traditional sales channels faded away. Amphawa found itself struggling to salvage its former vibrancy in a world that had changed. Amidst these challenges, a local effort to revive Amphawa unfolded, with a renewed focus on environmentally friendly initiatives. By recognizing the pivotal role of tourism in this revival, we were set to redefine its appeal, by emphasizing the preservation of the environment and economy.

The goal of this project was to revive the economy in Amphawa, Thailand, by promoting existing ecotourism practices with an emphasis on weekday travel. This involved understanding the current tourism industry and partnering with local businesses to advocate for sustainable activities aligned with the principles of ecotourism. Tourism serves as a significant economic contributor, by furthering development and boosting economic stimulation. However, it is crucial to recognize that unregulated tourism can have adverse effects on the environment and cause the depletion of natural resources. As a response to this, many countries prioritize ecotourism, which emphasizes responsible practices that aim to minimize the impacts on the natural environment, promote conservation, and cultivate an appreciation for local cultures in an attempt to boost the local economy.

In this project, we aimed to achieve our goal of improving the economic state in Amphawa by focusing on four main objectives: Understanding current tourism in Amphawa, Developing sustainable tourism, Interpret marketing strategies, and Emphasizing environmental conservation. We worked to achieve our goal and objectives by keeping in mind our definition of ecotourism. The concept of ecotourism was narrowed into three main categories, economic, social, and environmental sustainability. We aimed to ensure our packages are economically sustainable by emphasizing family-run homestays, farmers and artisans, and small businesses. These packages were also socially sustainable as they emphasized locally run practices instead of big tourism industries. We were able to support environmental sustainability through the education and recycling of natural resources. Caring about sustainable tourism in the Amphawa Canal meant it was crucial to support economic growth, community well-being, and an appreciation for the natural world.

2. Background

2.1 Amphawa and the Economy

Amphawa, the largest district in Samut Songkhram province, lies at the northwestern tip of the Bay of Bangkok, alternatively referred to as Ao Krung Thep, approximately 80 kilometers Southwest of Bangkok. The Amphawa Canal community is an ancient city from the Ayutthaya period. It spans the Amphawa subdistrict municipality and parts of the Bang Chang district, which is known for its agricultural and commercial prosperity. This area features a unique environment with natural canals connected to the Mae Klong River on both sides, and it displays a variety of cultural heritage, including architecture, waterfront buildings, arts and crafts, ancient sites, and food (Nuanpan, 2009). It is also a historic site with a long history as a riverbank settlement community. During the Ayutthaya period, Amphawa was called Khwaeng Bang Chang or Bang Chang, as it used to be the habitat of wild elephants. It is a small community that thrived in agriculture and trade, as evidenced by a market during King Prasat Thong's reign. A national exhibition on Amphawa's cultural history and products was presented in 2005 and 2006, leading to a dramatic increase in tourism in the Amphawa community. Following that, in 2008, the Amphawa community received an honorable mention award from the UNESCO Asia-Pacific Awards for heritage conservation (UNESCO, 2008).

Amphawa, known for its scenic floating markets and cultural heritage, is part of a country experiencing economic recovery post-covid and growth in 2024. Various sectors drive this recovery, each contributing to the local economy in its own way. The tourism sector, a significant contributor to Thailand's economy, is expected to see a robust recovery. The World

Bank projects that the resurgence of tourism and exports will play a crucial role in Thailand's economic growth in 2024 (World Bank, 2023). Amphawa, with its popular floating markets and traditional ways of life, stands to benefit from this upturn in tourism. These markets are not just tourist attractions but also vital to the local economy, supporting numerous small businesses and vendors.

In line with national trends, the property market in regions like Amphawa is evolving. There is a growing preference for properties that cater to well-being and sustainable living. This shift is evident in the increasing demand for spaces that support relaxation and remote work, highlighting energy conservation and green initiatives (Thaiger, 2024). Such trends in the property market reflect a broader national movement towards sustainable development, which could impact local real estate and construction sectors in Amphawa.

Amphawa is also influenced by Thailand's national economic trends, including the renewable energy sector and the growing electric vehicle market. The government's push for renewable energy, expected to advance in 2024, is a key part of these trends, with growth depending largely on state support. Additionally, the electric vehicle market's rapid expansion is impacting related businesses, signaling a shift in the country's energy and automotive sectors (Thaiger, 2024). These developments could affect Amphawa's local economy, particularly in infrastructure and energy usage.

Lastly, the MICE (Meetings, Incentives, Conferences, and Exhibitions) sector is another key economic driver for Thailand. The government's initiative to promote secondary tourism cities,

including areas like Amphawa, is part of this strategy. The TCEB (Thailand Convention and Exhibition Bureau) anticipates a significant number of MICE visitors in the fiscal year 2024, which could potentially bring substantial revenue and international exposure to lesser-known regions (Thaiger, 2024).

In summary, Amphawa's economy, while rooted in traditional markets and cultural tourism, is part of a larger, dynamic economic system in Thailand. The district is likely to experience the ripple effects of national economic trends, including advancements in renewable energy, changes in the property market, and an increase in MICE activities, contributing to a diverse and evolving economic landscape.

2.2 Amphawa Floating Market & Firefly Tourism

Amphawa was a major hub for the water transportation system of Samut Songkhram province. This hub comprised a waterfront community with a large floating market. However, the expansion of land transportation led to a decline in Amphawa's central business district, causing the floating market to lose its prominence and leave behind only remnants of its former affluence, which are still visible today. On August 11, 2004, with the help of residents, the municipality of Amphawa revitalized the Amphawa Floating Market. This initiative aimed to preserve the unique character of the waterfront community, a heritage increasingly rare and worthy of permanent inheritance. Renamed the “Evening Floating Market,” it is now popularly known as the “Amphawa Floating Market.” For over a hundred years, the Amphawa Floating Market has been one of the most popular floating markets with the charm of wooden houses along the canal and the use of boats as water transportation. On Friday, Saturday, Sunday, and

public holidays the floating market is the most lively. A variety of foods, including Pad Thai, noodles, Thai traditional snacks, and many more, are sold by vendors on rowboats, which is considered the identity of Amphawa Floating Market, and where tourists can experience Thai culture. Additionally, the market offers night boat trips to view fireflies. These boats navigate through darker areas of the Mae Klong River or its sub-canals, lined with mangrove trees along the riverbanks. The best time for visitors to see the firefly is the rainy season, from May to October (YourThaiGuide).

In the past, Amphawa has been well known for beautiful firefly displays, but lately, firefly populations have been decreasing. Now, the area is mostly just visited for the floating market. Since the tourism boom between 2004 and 2010, big tourism companies have dominated the tourism industry in Amphawa. In recent years, over 19,200 tourists have visited Amphawa every year (Lewis et al., 2020). The surge in tourism has led to a rise in various forms of pollution and firefly habitat degradation in the region. Heightened noise levels from motorboats, tourists, and construction have sparked frustration among locals. In response, some individuals have resorted to further damaging the firefly habitats by cutting down trees in an attempt to reduce the number of tourists visiting. This inconsistency of resources between the local community and large tourism companies has created a challenging environment, adversely affecting both the local economy and firefly conservation efforts.

Despite these challenges, there are local individuals actively engaged in conservation initiatives. Some locals living along the canal have taken the initiative to install buoys aimed at protecting vulnerable firefly eggs and larvae. Unfortunately, a setback occurred as certain tour guides

removed these protective measures (Lewis et al, 2020). While many firefly tourism sites worldwide benefit from governmental or NGO protection and enforce guidelines for tourists, Ampahwa currently lacks such measures. The absence of formal protection measures poses a risk to the sustainable coexistence of tourism and firefly conservation in the region.

Preserving the firefly habitat is unquestionably crucial; however, ensuring a positive experience for tourists is equally vital, especially given Amphawa's heavy reliance on tourism for its economic sustenance. Striking a balance between conservation and a vibrant tourist experience is imperative. A 2016 study conducted at a firefly tourism site in Malaysia employed Important Performance Analysis (IPA) to gauge the significance of various aspects of visitors.

Survey participants were given the task of rating different facets of the tour and motivations for undertaking it on a scale of 1-5, reflecting the importance of each element to their overall enjoyment. Key motivations included an interest in fireflies, curiosity about wildlife flora and fauna, and the desire to explore a new environment. Notably, the most important aspects of the tour for participants were the proximity to fireflies, the quantity observed, and the clarity of visibility of the fireflies (Saib, 2016). Recognizing these priorities is essential when formulating new guidelines for visitor conduct and enhancing conservation efforts. It emphasizes the need to align conservation strategies with the very elements that make the tourist experience meaningful and enjoyable. These findings will be helpful not only when making recommendations regarding firefly tours, but also for tourism events in general.

2.3 What is Ecotourism?

Ecotourism is a form of sustainable travel that supports the conservation of the environment and improves the well-being of local people (Thomas, 2022). It emphasizes the health and diversity of ecosystems while promoting responsible visitor behavior. The principles of ecotourism revolve around minimizing impact, fostering environmental awareness, providing direct financial benefits for conservation, and respect for local culture and rights (Mudasir, Ghausee, & Stanikzai, 2020). Ecotourism can help protect the firefly populations in the Amphawa Canal by ensuring that tourism has a limited environmental footprint. Ecotourism not only aims to conserve the environment and protect native species like the fireflies of the Amphawa Canal but also serves as a vital economic engine for local communities (Hamka et al., 2022). By focusing on sustainable practices, ecotourism ensures that the attractions that draw visitors today will remain for future generations, thereby safeguarding long-term economic stability for the locals who depend on tourism for their livelihoods.

The implementation of ecotourism in Amphawa can directly benefit the local economy in several ways. First, it can create jobs that are directly related to the eco-friendly tourism sector, such as guiding services, hospitality, and local conservation projects (Bazazao et al., 2017). These jobs often require specific skills and knowledge about the local ecosystem, which means they can command higher wages and therefore contribute to raising the overall standard of living in the community. Additionally, ecotourism encourages the preservation of local cultures and traditions, which can be packaged into authentic, enriching experiences for tourists (Chaikaew, 2005). It also encourages the use of local services and products. Tourists engaged in ecotourism are more likely to support local businesses such as restaurants, homestays, and artisans, circulating money

within the community and helping to distribute the economic benefits of tourism more widely (Nguyen Duc & Nghi, 2023). This focus on local acquisition creates a multiplier effect as money spent by tourists helps sustain several other sectors of the local economy (Hamka et al., 2022). By promoting responsible tourism in the Amphawa Canal that respects the natural limits of the environment, the local community can build a reputation as a premier ecotourism destination. The establishment of ecotourism in Amphawa has the potential to draw a consistent stream of visitors. This influx can result in a more stable and predictable source of income compared to conventional tourism. Traditional tourism often experiences wide fluctuations, contributing to unpredictable business cycles that can leave communities vulnerable as highlighted by Bazazao et al (2017).

Local capacity-building is also a crucial component of ecotourism. Training programs can be established to teach locals how to manage tourism sustainably, create eco-friendly products, and conduct tours that educate tourists about the importance of conservation (Thomas, 2022). These skills not only enhance the quality of the tourist experience but also ensure that the local community can manage and direct the growth of their tourism sector, retaining control and profits within the local economy. By focusing on these sustainable and locally beneficial practices, ecotourism at the Amphawa Canal has the potential to preserve the fireflies' natural habitat while also providing economic opportunities that are aligned with the conservation goals, ensuring that both nature and the local community thrive together (Hamka et al., 2022).

2.4 Virtual Advertising for Economic Growth

Virtual advertising has emerged as a powerful tool for economic growth in the current day and age. Utilizing a virtual realm to promote tourism opportunities creates the ability to break down geographical barriers, reach target demographics, and connect community members directly with potential consumers. Websites and social media eliminate the restraints of solely reaching individuals in their vicinity by allowing people all over the world to access and educate themselves on the opportunities available. This can attract a more diverse range of tourists, leading to more economic opportunities for local businesses. Through virtual advertisement, the communities of Amphawa are able to showcase their culture and offerings to a global audience, promoting tourism and economic development, and environmental conservation efforts.

Our target audience of ecotourists will effectively be able to view these virtual advertisements. The internet can not only play a role in economic prosperity, but can also be used to help reduce waste and protect the environment. Information Technology can reduce CO₂ emissions as they minimize the labor force and waste production needed to produce physical advertisements. (Danish, 2019) Most individuals interested in ecotourism are of the Gen Z and Millennial generations. The prevalence of smartphones amongst Gen Z and Millennial generations creates a unique time for targeted virtual advertisement. As 94.4% of millennials have access to smartphones and 98% of Gen Z following suit, online campaigns are known to be effective in reaching these age ranges (Karim, 2019). With Asia being home to a quarter of the global Gen Z population, targeting these demographics can significantly impact tourism, especially in Amphawa (Gen Z in Asia, 2023). By catering advertisement material to appeal to these ages, businesses in Amphawa could effectively promote themselves to the new age ecotourist.

2.5 Tourism Package Building

There are seven main steps to take into account when building a tourist package deal (Ruffaut, 2021). First, it is important to determine the needs and assets of the package. This is a brainstorming step where the goal of the package must be determined and figuring out what can be put in the package to achieve that goal. Second, the target audience must be set. Examples of target audiences include families, couples, and single travelers. Our target audiences will be people looking for sustainable eco-tourism options. Third, partnerships must be established. We will try to connect family-run homestays with locals who run sustainable restaurants and ecotourism activities. The fourth step is to design the package itself. With this step, it's important to keep in mind that the package must have something unique to attract tourists, and that do not exist in other competing packages. The next step is to set the price of the package in a way that is competitive with other packages while benefiting all members affiliated with the package. The sixth step is to create a marketing plan for the package. This can be done through the hotel, the tour agency, or a third party. The most effective way to reach the most people is by marketing through a third party travel company, but it would also decrease profit because the travel company would receive a commission. The last step is to release the package and allow booking to start (Ruffaut, 2021).

2.6 Beyond the Market- Local Run Practices

While Amphawa's bustling Floating Market and the firefly night tours captivate tourists on weekends, there are also many culturally immersive opportunities available during the week. Hidden gems like Tao Thai Derm 2, Amphawa-Chaipattananurak, and Baan Rak homestay offer a glimpse into the heart of local life.

Coconut farming practices at Tao Thai Derm 2 have been transformed. This coconut sugar house offers tourists the opportunity to experience not only the sugar-making process but the entire life span of the coconut from tree to table. Visitors can witness the process of turning sap into sugar, and purchase goods that turn husk into bowls, milk into candy, and flesh into chips. There is even a museum where guests can see a Thai traditional house. Amphawa-Chaipattananurak elevates eco-conscious practices with educational nature walks to provide information about coconut sugar, coconut vinegar, and artistic pursuits like Benjarong pottery workshops, acrylic paint, cold-pressed coconut oil soap, local foods from vendors and cafes, along the scenic Amphawa Canal. Moreover, locally sourced honey from stingless bees and fish sauce add a touch of authenticity, ensuring every element reflects the town's distinctive character.

Amphawa-Chaipattananurak allows tourists to delve into the lives of fireflies and local communities, fostering a deeper appreciation for Amphawa's delicate balance between nature and human ingenuity. The comprehensive questionnaire and corresponding responses for the interview are located in Appendix A and Appendix B.

Locally operated homestays, like Baan Rak, offer enriching cultural experiences. Guests can participate in the traditional morning ritual of offering food to monks by the water, gaining insight into local religious practices. There are many temples to explore in the city, such as the canal side Wat Chulamanee, where worshipers often give flowers and roses as offerings. One community initiative at the Suan Nork Learning Center and Community Enterprise has sustainable methods of transforming these discarded rose stems into paper, minimizing waste, and exploring artistic expression. Their workshops extend beyond floral repurposing, educating visitors on natural dye extraction from coconut, mango, lychee, and indigo. Using traditional tie-dye techniques, participants then create unique clothing, from button-down shirts to scarves, bringing home a piece that holds memories and cultural significance. By looking beyond the typical experiences, tourists not only enrich their own experiences but also contribute to the preservation of Amphawa's society and environment. The comprehensive questionnaire and corresponding responses for the interview are located in Appendix A and Appendix B.

2.6.1 Amphawa Conservation Project

Located in Amphawa District near the Amphawa Floating Market, this conservation project is on land donated by Khun Prayong Nakawarang. Guided by H.R.H Princess Mahachakri Sirindhorn and utilizing Chaipattana Foundation activities, it aims to preserve the wisdom and lifestyle of the Amphawa people, reflecting their rich cultural history linked to Thailand. This initiative allows the younger generation to appreciate the community's prosperous past. The Chaipattana Foundation, a non-governmental organization established on June 14, 1988, by King Bhumibol Adulyadej with Princess Mahachakri Sirindhorn as the executive chairperson, focuses on sustainable development, local participation, and non-political, effective projects. The

project's goals include preserving Amphawa's cultural heritage, using social capital for development, creating jobs through community activities, connecting cultural and tourist sites, fostering suitable careers, and involving the community in development (Chaipattana Foundation).

The foundation is composed of five main sections. Chaipattananurak Park Area showcases traditional agriculture and local plants like lychee and coconut, promoting knowledge exchange about Amphawa's agricultural methods. Nakawarang Cultural Square offers a multi-purpose space for local culture promotion, hosting activities like traditional Thai music and puppet plays, and enabling income generation through local product sales. The community shops sell local and Chaipattana Foundation products, focusing on marketing promotion and product development. Chaan Chala Coffee & Tea House provides drinks and snacks, links activities along the canal with cultural and park areas, and sells high-quality local and foundation products. Chaipattananurak Exhibition Room displays cultural stories and artifacts, encouraging community participation and knowledge dissemination (Chaipattana Foundation).

2.6.2 Ploynam Homestay

The first homestay we are working with is the Ploynam Homestay. They have two room configuration options. The first is a double room that can accommodate three people and has a full bed and bunk beds. The second room type is a family room that can accommodate five and has two full beds and a single bed. Some of the amenities are a private bathroom for each room, free toiletries, a TV, free breakfast, free parking, air conditioning, free WiFi, room service, and laundry service. It is located right on the canal. Ploynam Homestay is only a six-minute walk to

the floating market and a two-minute walk to the Amphawa-Chaipattananurak Conservation Project. The corresponding responses for the interview is located in Appendix B.

2.6.3 Ban Mae Arom Homestay

The second homestay we are working with is Ban Mae Arom Homestay. They also have two options for room configuration. The first room is a double room with one full bed that can accommodate three and the second option is a family room that can accommodate five and has two double beds and a single bed. Some amenities available are a shared bathroom, free toiletries, free breakfast, free parking, free WiFi, air conditioning, and shuttle service from the airport. Baan Mae Arom is a nine-minute walk to the Amphawa-Chaipattananurak Conservation Project and a thirteen-minute walk to the floating market. The corresponding responses for the interview is located in Appendix B.

2.6.4 Baan Rak Homestay

The third homestay we are working with is Baan Rak Homestay. They have three options for room configurations. The first room is a room with a king-size bed with the river front view which can accommodate three people. The second room is a room with one double bed that can accommodate two people. The last type of room is a room that can choose between one double bed and two single beds. Some of the amenities are a private bathroom for each room, air conditioning, free toiletries, free WiFi, free TV, room service, free parking, free luggage storage, and free breakfast. Baan Rak Homestay is also open as a restaurant and coffee shop. It is located right on the canal, a nine-minute walk to the Amphawa-Chaipattananurak Conservation Project,

and a thirteen-minute walk to the floating market. The corresponding responses for the interview is located in Appendix B.

2.6.5 Restaurants

Three eco-friendly restaurants found in Amphawa are Sa-Ne Thaka Cafe and Restaurant, Improvise Smoked & Grill, and Ranjuan Restaurant. These restaurants contribute to the economic well-being of the community by utilizing locally sourced ingredients. Amphawa is famous for their coconuts and fresh caught seafood. Sa-Ne Thaka is a popular cafe because they can host large tour groups and provide activities such as food offering to monks, and row boat tours through the Thaka Canal. They grow their own coconut trees and also source food from local farmers to bolster community support and generate additional income for the locals. The menu is carefully curated to showcase local products, featuring specialties like coconut coffee, date coffee frappe, and coconut smoothies. They also offer interactive activities such as teaching tourists how to cook their orders without extra charge. The corresponding responses for the interview is located in Appendix B.

Improvise Smoke n Grill is known for their community support through art shows and live music. The owner of Improvised, plans to open a branch as a street food cart as he feels that Amphawa lacks street food options and would like to expand this community atmosphere beyond the restaurant location. He also has partnered with a local brewery that brews beer using locally sourced lychee fruit, which he feels could be an attractive sustainable tourist activity. The corresponding responses for the interview is located in Appendix B.

Lastly, we worked with Ranjuan restaurant where they put the traditional taste of the owner's mother's cooking in all their food and recreate them into modern dishes. The signature dish of

the restaurant is Kaeng Kua with mussels and young coconut shoots. All of the mussels used in the restaurant come from their farm. They first deliver the mussels to a local business to separate the meat from the shell and then they get sent back to the restaurant for cooking to create work opportunities for locals. They also support local products such as coconut milk made by locals in the community. The corresponding responses for the interview is located in Appendix B.

3. Methodology

The goal of this project is to help increase the economy in Amphawa by promoting existing and sustainable tourism practices. To achieve this, we constructed a multifaceted approach centered around four key objectives:

1. Understanding Current Eco-Tourism in Amphawa
2. Developing Sustainable Tourism
3. Interpret Marketing Strategies
4. Emphasizing Environmental Conservation

This involves understanding the current tourism industry in Amphawa and partnering with local businesses to advocate and promote sustainable activities aligned with the principles of ecotourism. This chapter delves into our comprehensive methodology to attain an equilibrium between the economic development and environmental preservation of Amphawa through ecotourism. By keeping our goal in mind, we set out to foster sustainable activities that enhance the local economy while preserving Amphawa's ecological charm.

3.1 Objective 1: Understanding Current Tourism in Amphawa

To gain a comprehensive understanding of the current state and future trajectory of tourism in Amphawa, we aligned our initiatives with the expectations of locals and tourists. We developed surveys and interviews in Thai and English, tailored for distribution to residents and tourists in the Amphawa Canal area. The detailed questionnaire and consent scripts for both surveys can be

found in Appendix C. Eighty-three tourists and forty-two locals were surveyed. We did this to gain information about what the current tourism statistics are like so we could see if our background research about tourism in Amphawa was true.

3.1.1 Tourist Demographics and Understanding Our Target Audience

We first surveyed tourists along the Amphawa Canal and Bangkok residents who had recently visited Amphawa to better understand the current tourism industry and obtained eighty-three responses. To gain an understanding of who was visiting the area, we asked the travelers to do our survey to identify their age ranges, the size of the group they were traveling with, and how long they were staying in Amphawa. This was important information to ascertain because it helped us to see what types of people Amphawa is currently attracting. This demographic information on the tourists would be useful for the team when promoting activities for tourists. Understanding the tourists' ages and travel patterns such as and sizes of groups solo travelers, families, or couples, would help make the tourist packages more successful. We also determined trends in the amount of time people were spending in the region along with what days were most popular for visiting. Combining the answers to these surveys we were able to gain a basic understanding of who was visiting Amphawa and how long they were inclined to stay in the region.

3.1.2 Interviews with Locals to Understand All Amphawa Has to Offer

To understand the current tourism in Amphawa the BSAC team conducted open-ended interviews with the owners of three homestays: Rattiya Chamsakon from Ban Raak Homestay, Parinya Pruekhatpong from Ban Mae Arom Homestay, and Punyanuch Klamklin from Ploynam

Homestay. We asked questions that would help us learn how they view tourism in Amphawa. We first asked them about the effects of COVID-19, differences in tourism between weekdays and weekends, and also the current tourist activities offered on each day. Secondly, we asked them to describe their homestays so we would know how best to advertise their homestays to our target group of eco-tourists. We asked them about the prices of the rooms available in each homestay, whether they are willing to implement eco-friendly practices, and how each homestay uses sustainable methods. All of this information was used to gain a further understanding of the lodging accommodation available in Amphawa and what would appeal most to the tourists, while supporting the families that rely on the homestay revenue. The comprehensive questionnaire for the interview is located in Appendix A.

We also discussed with local businesses the vast array of activities they offer and how they create engaging experiences with tourists from all different backgrounds. These discussions were organized by our sponsor and the questions were asked by the BSAC students. We asked them to describe their activity in detail, including how it is eco-friendly and their preferred way for it to be booked. The businesses we conducted open-ended interviews with were: Pairoj Kongvijit (Coconut Sugar House), Dr. Kamoltip Guntapeng (Manager of Amphawa Chaipattananurak), Thitipan (Benjarong artist), and Saksun Waijarean (Coconut tie-dye and Paper Making Center). We used this information to gauge the current ecotourism practices available beyond the floating market and how we can utilize them to draw more people into Amphawa. We wanted to learn how the pandemic affected the number of tourists coming to their businesses, how the activities they offered were eco-friendly, and how they navigated language barriers with tourists who

wanted to participate in the activities they offered. The comprehensive questionnaire for the interview is located in Appendix A.

3.2 Objective 2: Developing Sustainable Tourism

Our second objective centered around developing activity packages for tourists that would be both environmentally and economically sustainable, therefore following the definition of ecotourism. We found out what types of activities tourists were most interested in so we could include similar activities in our packages using the survey from objective one. A second survey was created to gain feedback on the packages after they were created. The detailed questionnaire and consent script for the second tourist survey can be found in Appendix C. Eighty-one people from our target demographic of Gen-Z and Millennial ecotourists were surveyed.

3.2.1 Gaging & Combining Tourist Peak Interests

To develop economically and environmentally sustainable tourism, we constructed activity packages with local homestays. To design packages that visitors would be interested in, in the same survey as objective one, we surveyed tourists who have been to Amphawa to gain their opinions. The survey was divided into two parts, each with distinct objectives. The first segment aimed to gauge tourists' awareness of current ecotourism practices in Amphawa and assess their likelihood of engaging in such activities. The second segment aimed to gain insight into their perception regarding locally-run homestays as well as gain feedback on potential activities to be included in the packages.

3.2.2 Receiving Feedback on How to Improve the Packages

After the development of the homestay packages, we created a second survey to give to our target ecotourist demographic. We made this survey so we could see if our packages and the activities included in them would draw people to visit Amphawa. We included descriptions on all of the packages and asked if people would be interested in doing them or not. We also created an open feedback question to ask what people liked or disliked about each package. We used the data collected to make edits and improvements to the packages.

3.3 Objective 3: Interpret Marketing Strategies

After the creation of the packages and website, we needed to develop ways to best promote them. We aimed to make our promotional materials widely accessible and available. This means for many different people, our materials had to be easily accessible online. We made our materials available in multiple languages and the online formats use alt text on all images for people who use screen readers. We then created a survey to prove the understandability, looks, and accessibility of the website. Twenty-one people were surveyed and the questions can be found in the Appendix C. The data collected from this survey was analyzed and used to improve the website.

3.3.1 Online Resources

To effectively advertise the packages to our target population, we implemented a comprehensive digital strategy by integrating a website, a user-friendly Linktree platform, and QR code

technology. This approach aimed to enhance domestic tourism during weekdays by showcasing ecotourism opportunities, local homestays, and culturally rich activities.

The website is designed to be a primary source of information, featuring photos of Amphawa and clear descriptions of what tourists can expect. It covers details about eco-friendly homestays, activities, and restaurants, along with different package options available. The main purpose of the website is to inform potential tourists about these sustainable travel opportunities during the week and to market them engagingly and effectively. Our target audience for the website are eco-tourists, who typically fall into the age ranges of millennials and Gen Z. The best way to get information out to these groups is online. Our website differs from websites currently available because it includes activities that are eco-friendly and unable to be found on any other websites. Most of the homestay and activity business owners do not have websites, just Facebook pages, and much of the information is only available in Thai. Our website is available in English and Thai to reach the greatest number of tourists. After the conclusion of this project, the sponsor has confirmed that he will upkeep the website and further contact with a private organization of independent entities to continue updating that website and for future funding.

In addition to the website, we used Linktree, a streamlined and efficient platform designed to consolidate all essential links in one accessible location. This would make it easier for users to find what they need by providing a centralized point for all relevant information and actions. Whether it is booking a homestay, registering for an eco-friendly activity, or filling out one of our feedback surveys, Linktree ensures that these resources are easily accessible. The Linktree's straightforward design makes it user-friendly, which significantly eases the planning process for

tourists by removing potential obstacles. This combination of a detailed, informative website and the simplicity of Linktree creates a seamless and hassle-free experience for users, encouraging them to explore and embrace sustainable tourism in Amphawa.

3.3.2 Physical Advertisements

QR codes are another key part of our approach. This allowed individuals to quickly scan the codes and access our website, connecting them from our physical advertisements to our digital platforms. This enabled us to track the effectiveness of our marketing strategy through the analysis of QR code scans. By integrating this technology, we created an interactive and engaging experience for potential tourists, encouraging exploration of eco-friendly tourism practices while gathering valuable data to refine our outreach efforts. These codes were printed on signs and distributed to the homestays, local restaurants, Chaipattananurak Park, and our sponsor and allowed audiences to easily navigate to our website for in-depth information.

3.4 Objective 4: Emphasizing Environmental Conservation

Our last objective was to contribute to the environmental conservation aspect of ecotourism, with a specific focus on the protection of the *Pteroptyx malacca* firefly population. We achieved this through extensive literature research, surveys of local conservation efforts, and including firefly-safe activities in our package.

3.4.1 Literature Research

We began our efforts with an in-depth literature review of firefly populations as laid out in the background. This knowledge was then used to create educational infographics promoted through our website. These infographics included information on why people should care about firefly species, population endangerment in Amphawa, and how we can best protect them.

3.4.2 Local Efforts Towards Conservation

We took our knowledge of firefly protection methods to create a survey for the locals and business owners along the Amphawa Canal, the same as used in objective one. In this online survey, we asked them about their previous knowledge of eco-friendly practices, and if they were already implementing these practices. If the answer was no, we asked how interested they would be in learning more about how they can make small changes to protect natural resources. The locals were then informed via a paragraph in the survey about a few sustainable practices such as switching to paddle boats or electric motors, and reducing artificial light sources. Of these changes, they were asked to indicate which method they would be most likely to implement. These survey questions helped us to understand the current knowledge on ecotourism efforts in Amphawa and what methods would be most likely to be adopted into industry practices.

3.4.3 Firefly Awareness in the Advertisements

Using the knowledge gained through our literature review and surveys, we next designed ways to incorporate firefly awareness into our ecotourism advertisements. We developed unique firefly

awareness Benjarong pottery designs that can be found at Thitipan's pottery workshop at Amphawa-Chaipattananurak to enhance both local and visitor engagement and education. These designs are available for tourists to paint on local pottery with eco-friendly paint made from stones and can be found in Appendix D. At the workshop tourists can scan QR codes that link to our website to further educate themselves on this special species. Additionally, we have partnered with two companies that focus on firefly conservation in their nighttime display tours. Amphawa-Chaipattana Learning Center allows visitors to walk around their park after dusk and a local known as Uncle Daeng, runs paddleboat tours. Both of these options offer tourists the opportunity to view the fireflies in a manner that is not only safe for the species but also provides a close view of fireflies. In each package, we made sure to include one or both of these firefly awareness activities to ensure that our packages were not only improving the business of locals but also educating those visiting on how to help conserve the natural resources and firefly populations in Amphawa.

4. Results and Analysis

Our goal was to revive the economy in Amphawa, Thailand by promoting sustainable tourism practices with an emphasis on weekday travel. We accomplished our goals by focusing on our objectives of understanding the current state of tourism, developing sustainable tourism, creating accessible advertisements, and emphasizing environmental conservation. We collected data and feedback through interviews and surveys and analyzed this data through graphical analysis.

4.1 Objective 1: Understanding Current Tourism in Amphawa

Our first objective is centered around comprehending the dynamics of tourism and identifying the target demographic in Amphawa. To achieve this, we administered surveys to both local residents and visiting tourists and engaged in interviews with local business owners and homestay owners.

Key Findings:

Many tourists only stay one day in Amphawa on a weekend, but many business owners are willing to open more hours during the weekdays if there were more tourists there during the week. The local business owners believe that a greater number of tourists during the weekdays would help their business and be good for the economy of Amphawa as a whole.

Finding 1: There are fewer tourists during the weekdays

Based on our observations, weekdays in Amphawa are characterized by a notable absence of tourists, with a majority of local vendors along the canal choosing to temporarily close their

businesses. Conversely, weekends witness a significant influx of tourists drawn by the attractions of the floating market and the captivating sight of fireflies by motorboats along the canal. As seen in Figure 1 and Figure 2 weekends attract a higher number of tourists compared to weekdays. Thirty-four of forty-one local residents and business owners surveyed said that there were few tourists during the weekdays, giving weekday tourism a score of five or lower. Thirty-one of the same locals said that the weekends drew in lots of tourists by ranking weekend travel as six or higher. As a result, our attention was directed towards promoting tourism and eco-friendly activities to stimulate business during weekdays in Amphawa.

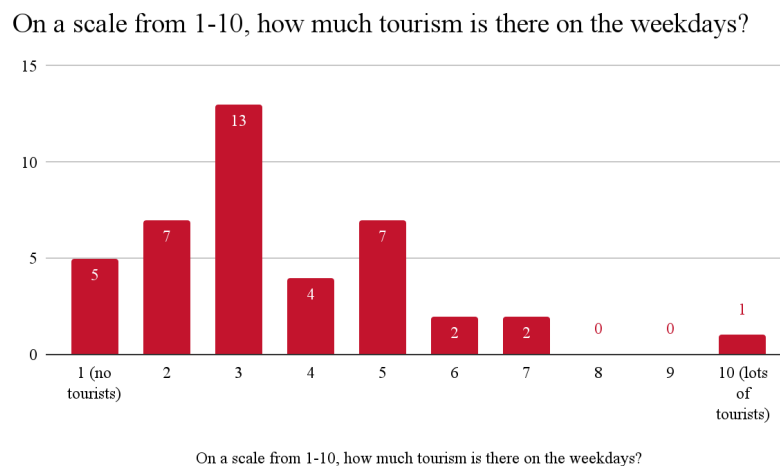


Figure 1: Weekday Tourism bar graph

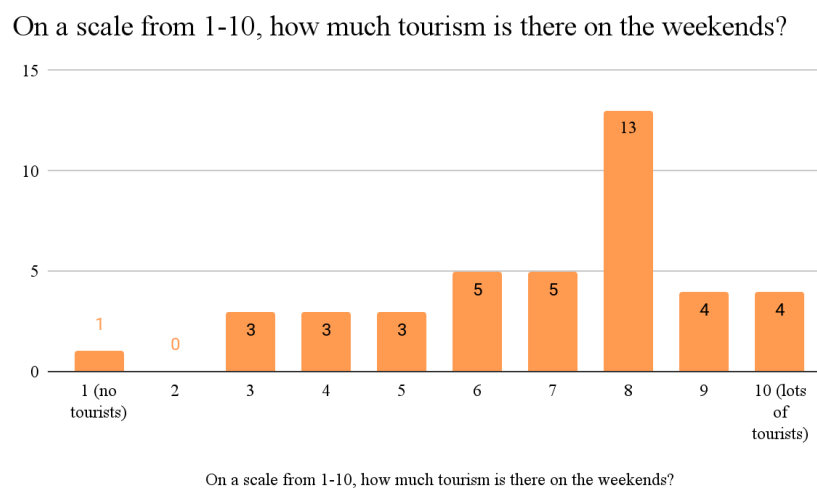


Figure 2: Weekend Tourism bar graph

Finding 2: Current tourists in Amphawa visit for one day with their family on a weekend

Conducting surveys with tourists was vital for knowing our audience as we designed our website and helped us to understand what people are currently doing when they visit Amphawa. As seen in Figure 3, forty-three people, or 53% visiting Amphawa are currently only staying for one day as seen in Figure 3. This finding led us to incorporate homestays on our website as we are hoping to increase the number of tourists spending the night in Amphawa. As seen in Figure 4, forty-eight or 59.3% of people surveyed were visiting Amphawa with their families. Due to this response, activities that were family-friendly were included on our website, such as the Benjarong painting workshop at Chaipattananurak Conservation Park.

How many days are you staying?

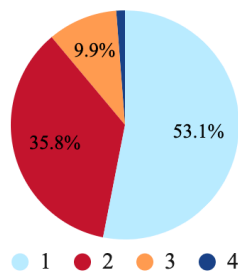


Figure 3: Time Spent in Amphawa

Who are you here with?

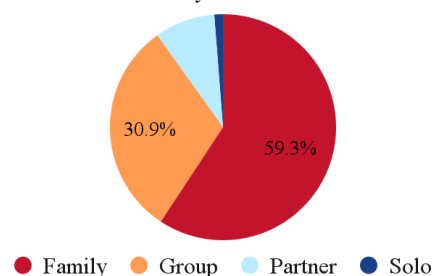


Figure 4: Travel Group Demographic

Finding 3: Locals seek weekday tourism push

There was a near-unanimous consensus, as all but 1 of 36 local business owners said that more tourism, especially during the weekdays, would be beneficial to their business as seen in Figure 5. Thirty-three business owners would also be willing to increase their hours during the weekdays to provide tourists with more available attractions shown in Figure 6. The current lack of open establishments during the week poses a challenge for visitors, hindering tourism

potential. By increasing accessibility, businesses could capitalize on the demand generated by implementing the sample ecotourism packages, which are specifically designed for weekday activities. As shown in figure 7, Sixty-eight percent of business owners also noted that there were more or an equal number of Thai tourists compared to foreign tourists visiting Amphawa, so it was important to make sure all materials were available in both Thai and English

Do you want more tourism during the weekdays?

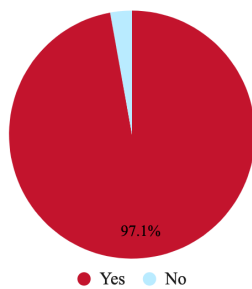


Figure 5: More Tourism Wanted on Weekdays

Would you be willing to add more business hours during weekdays?

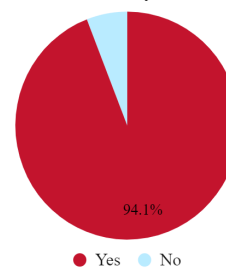


Figure 6: Thai vs. Foreign Tourist Numbers

Do you think there are more Thai tourists or foreign tourists?

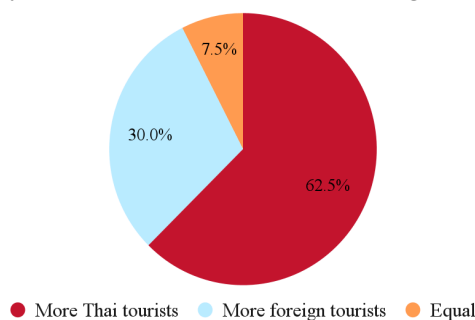


Figure 7: Willingness to Increase hours

As seen in Figure 8, when asked what activities the businesses noticed tourists were engaged in 31 respondents said the floating market, 21 said firefly tours, 19 said restaurants, and 10 said artisan/cultural activities. From this data, we were able to determine that the biggest attractions to Amphawa came from weekend activities, such as the floating market and restaurants that have

limited to no weekday hours, and that more weekday offerings should be promoted. This information also helped us to infer that the craft and cultural activities may not be as well known and advertised, however, there is limited data on this inference and further analysis would have to be conducted to prove this finding.

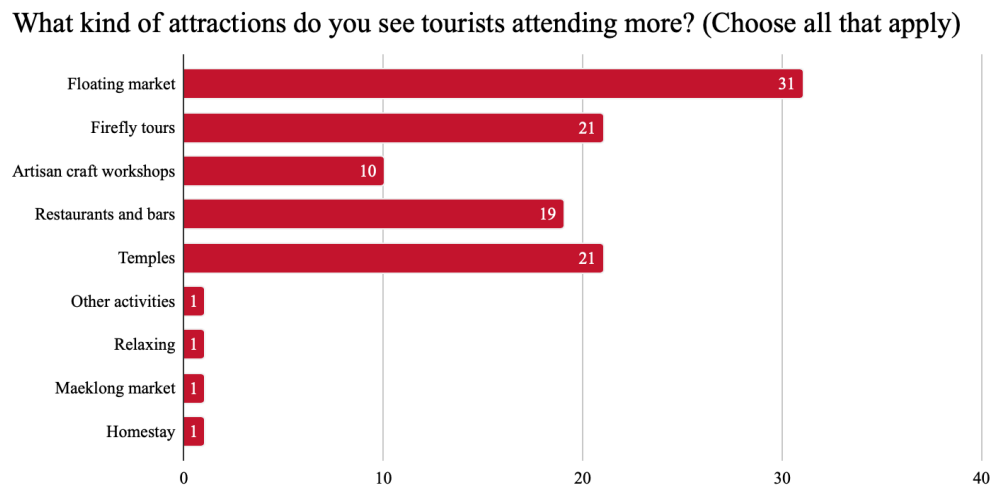


Figure 8: Tourist Activity Engagement

Finding 4: The tourism industry faced a post-pandemic decline

According to local business owners, the COVID-19 pandemic had a significant impact on nearly all local businesses in Amphawa as shown in Figure 9, causing a substantial decrease in tourism overall. Thirty-nine business owners said that they were directly affected by the pandemic and 38 said that they noticed changes in the tourism industry in the years following COVID-19. One individual described that customers often canceled their stays in Amphawa during the pandemic, especially travel agents with an international customer base. A restaurant owner expressed that restaurants cannot operate normally if closed for a long period of time, such as during the pandemic, causing a lack of liquid assets from the cost to stay open exceeding the profits earned. This presents an issue as the pandemic brought travel restrictions and health concerns, leading to

a sharp decline in visitor numbers. Our findings tell us that many businesses felt the effects of COVID-19 and are still struggling with the challenges of economic decline in the following years, thus the importance of reviving their tourism industry through weekday advertisement.

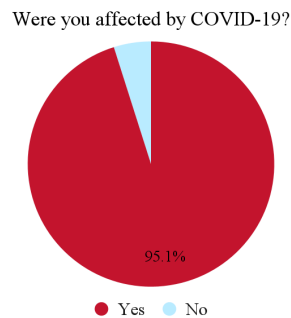


Figure 9: Individuals Affected by COVID-19

4.2 Objective 2: Developing Sustainable Tourism

In our second objective, we focused on the development of sustainable tourism. Our primary aim was to elevate the homestay experience and to develop promotional packages. We interviewed homestay owners and surveyed those who had been to Amphawa (tourist survey 1) and those who were interested in visiting Amphawa (tourist survey 2).

Key Findings: Tourists are interested in many eco-friendly activities in Thailand. They are interested in the idea of sustainable activity packages and the data showed that there are people interested in all of the sample package options created.

Finding 5: Tourists are interested in eco-friendly activities

All activity packages received a positive response with people in our target demographic expressing interest in the packages. In Figure 11 the Local Foodie package was the most popular with 91.4% of people showing interest in this package option. One individual stated that they were interested because they love to try foods from each region in Thailand. The Arts and Culture package interested 72.8% as seen in Figure 12. Surveyees expressed interest in Benjarong pottery painting as it is a well-loved art style in Amphawa. In Figure 13, 79.0% of those surveyed were interested in the adventure package and noted that they liked that they enjoyed nature and liked that activities were family-friendly. This data guided our decision to advertise the selected activities on the website and in the suggested packages. It demonstrated that there was a potential market of individuals who may book these packages in the future should they choose to visit Amphawa.

Are you interested in The Local Foodie package?

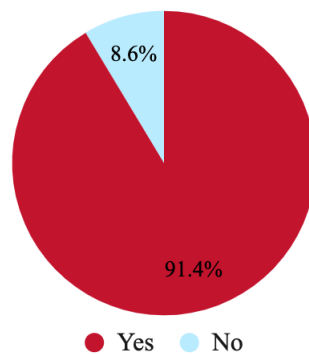


Figure 10: Local Foodie Interest

Are you interested in The Arts & Culture package?

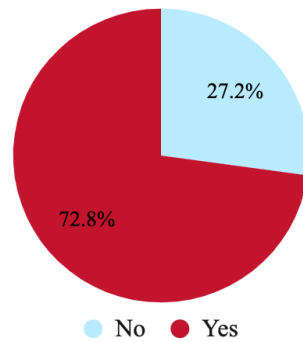


Figure 11: Art & Culture Interest

Are you interested in The Adventurer package?

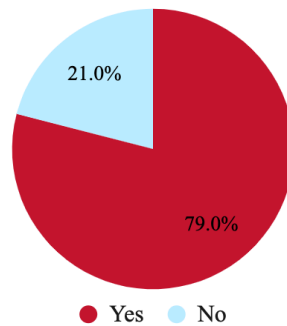


Figure 12: Adventure Interest

Finding 6: There is an interest in all of our package options among potential Amphawa tourists

The diversity of preferences among respondents highlighted in Figure 14 shows varied opinions regarding the most appealing package. This is a positive result because it shows that there would be interest for all of the packages. Our analysis revealed that the majority of the respondents expressed a preference for the Local Foodie Tour, followed by the Art and Culture Tour, and then the Adventure Tour. With this insight, we can strategically utilize this data in refining each package. It enables us to anticipate the popularity of specific activities, particularly those requiring larger groups for booking. This data empowers Amphawa businesses to efficiently

allocate resources and materials, ensuring that they can adequately accommodate the anticipated number of visitors for each package. The data also helped our team in the creation of a page on our website, the “Where to Eat” section, specifically catered to advertising dining options in Amphawa.

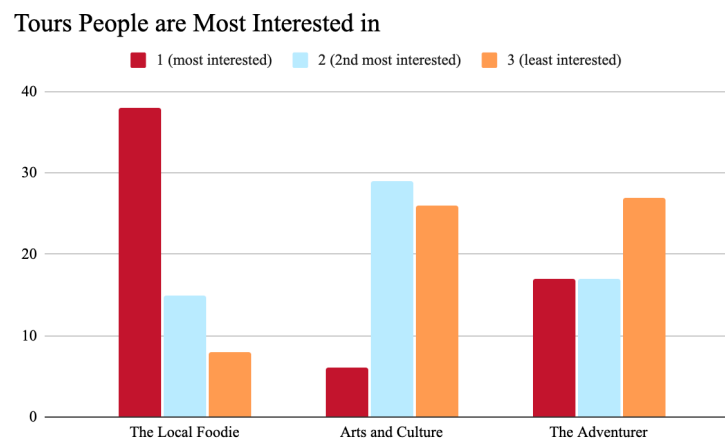


Figure 13: Package Interest Rankings

4.3 Objective 3: Interpret Marketing Strategies

For our third objective, we intended to promote our website by making it widely accessible and available online. We also used a Linktree and physical QR codes to make it even more accessible. We then surveyed people to gain their thoughts and feedback on the website.

Key Findings: Looking at our advertising website increases people’s desire to visit Amphawa during the week. People had a positive response to how easy the website was to understand, its aesthetics, and its accessibility.

Finding 7: Viewing our website made people want to visit Amphawa during the week

Once the website was finalized, we added a feedback survey to the homepage and surveyed people who were part of our target population. We asked respondents how looking at our website made them feel about visiting Amphawa on a weekday. One hundred percent of the people surveyed who viewed our website and filled out our survey said they would be interested in visiting Amphawa during the week.

Finding 8: Our website is easy to understand, is aesthetically pleasing, and is accessible

In the same survey we wanted to determine if people found our website effective in attracting potential tourists. The website is thoughtfully organized into five key sections for user convenience: About Amphawa, Homestays, Eco Activities, Where to Eat, and Educational Information with images of each section provided in supplementary materials. We the survey participants to rank different aspects of our website on a scale of one to five with one being the lowest and five being the highest. As shown by figures 16, 17, and 18, when asked if they found our website understandable, 95% of respondents gave our website a score of 4, when asked if the website was eye-catching, 100% of respondents gave our website a score of 4 or higher for looks, and when asked how easily they were able to view our website, 86% of respondents gave our website a score of 4 or higher for accessibility. As of February 23rd, 2024, the site has received 232 views from countries such as Thailand, Hong Kong, China, the United Kingdom, the United States of America, the Netherlands, Japan, and the Philippines.

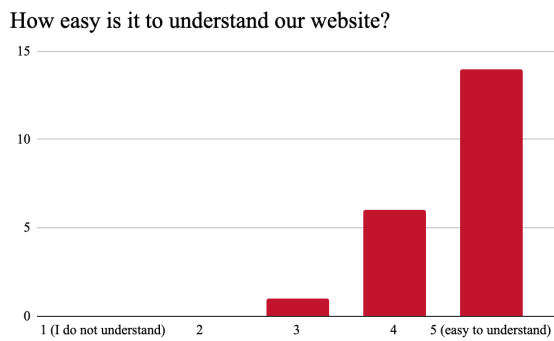


Figure 14: Website Understandability

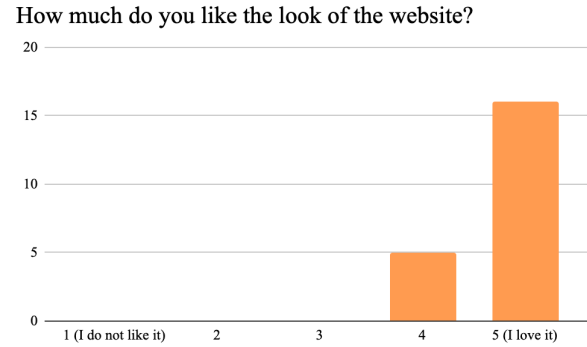


Figure 15: Website Aesthetics

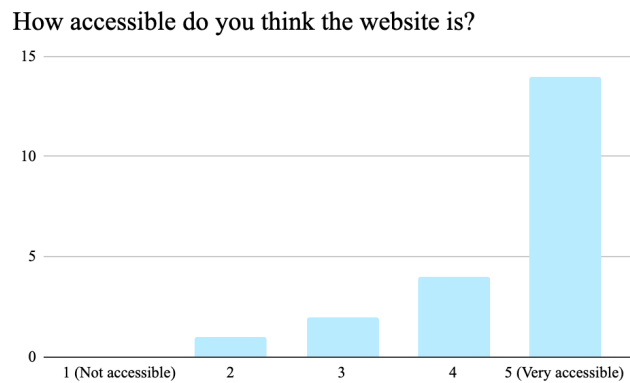


Figure 16: Website Accessibility

4.4 Objective 4: Emphasizing Environmental Conservation

Objective four was centered around environmental efforts in eco-tourism. We surveyed locals to see their thoughts on sustainability and surveyed tourists to see if they participated in sustainable practices.

Key Findings: Locals are willing to learn more about sustainable practices and many of them already implement sustainable practices or are interested in starting. However, almost half of the tourists surveyed are currently viewing fireflies in an unsustainable way.

Finding 9: Locals support ecotourism implementation

One hundred percent of 42 local business owner respondents demonstrated an interest in expanding their knowledge of eco-friendly practices and further shown in figure __, 97.4% exhibited a keen willingness to integrate sustainable practices in their business. Among the responses, 85% indicated that they were already familiar with and actively incorporating such practices into their businesses as shown in Figure 21. This positive feedback displayed the community's readiness to embrace sustainable tourism initiatives, suggesting a promising inclination towards adopting environmentally conscious strategies.

Would you be willing to implement more ecofriendly practices?

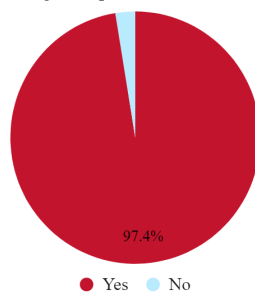


Figure 17: Willingness to Implement Eco-Friendly Practices

Do you already use ecofriendly practices or know of any existing ecofriendly practices?

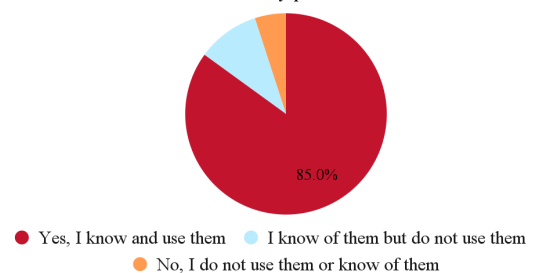


Figure 18: Knowledge of Sustainable Practices

Finding 10: Tourists lack knowledge of firefly conservation

One of Amphawa's main attractions is the firefly tourism industry. We surveyed 81 tourists and learned that 58.5% of them said that they were planning on taking a firefly tour while visiting and an additional 22% said that they could be interested in taking a tour. This meant that there is a large market for sustainable firefly viewing as many people would like to view fireflies in Amphawa. However, as shown in Figure 22, 46.2% of people who said they were viewing fireflies opted for the motorboat option which is harmful to firefly populations, as the motor oil

leads to water pollution and river bank habitat loss. This data told the team that there are currently few sustainable options advertised to tourists to view fireflies and that more educational efforts could be made for tourists to better understand and minimize their effects on the environment when traveling.

How do you plan on viewing the fireflies?

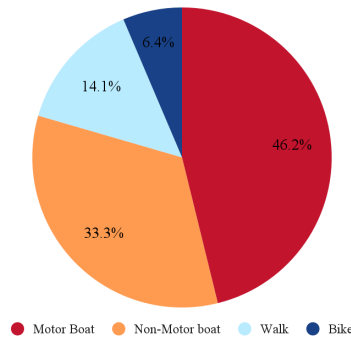


Figure 19: Method of Firefly Touring

5. Recommendations and Conclusions

Conclusion

In recent years, tourism in Amphawa has experienced a sharp decline, primarily attributed to the COVID-19 pandemic. Before the outbreak, tourism had been steadily increasing, but not without detrimental effects on the local environment. While revitalizing tourism is crucial for restoring the local economy, it is equally important to mitigate its adverse environmental impacts, particularly to safeguard the firefly population from past instances of destruction. Ecotourism emerges as a viable solution, blending sustainable practices that benefit the community economically, culturally, and environmentally. All identified accommodations, restaurants, and activities adhere to these ecotourism principles. To amplify our efforts towards sustainability in Amphawa, we propose promoting our newly launched ecotourism website across sponsor's and partner's platforms, leveraging their websites and social media channels to drive internet tourist traffic to the new website. We have created a set of further recommendations that we believe will truly help Amphawa become the ultimate sustainable tourist location. We recommend that our sponsor view these recommendations and take steps to further implement them, or use them to create projects in the future. It is our hope that as the website gains attention, more tourists will choose to visit Amphawa sustainably, boosting their economic prosperity while conserving the environment.

Further recommendations

In addition to our website, we recommend that **the creation and usage of social media advertisements could further help establish Amphawa as an ecotourist oasis.** The implementation of Facebook and TikTok pages, which are the most popular platforms for our

target audience, could help visually appeal to potential visitors with the creation of engaging videos that capture the beauty of the city. However, someone would have to be employed to upkeep and put out content which could be a potential limitation for the municipality. Our team also recommends that the homestays use the sample packages created and shown in supplementary materials to **work within the community and bring the packages into fruition**. This would involve collaboration amongst businesses and community members, providing transportation, offering housing accommodations with potentially discounted rates, and determining a streamlined booking system. To complement our online educational resources, we recommend **the installation of permanent signage in Amphawa, providing information on ethical firefly viewing practices**. Ensuring that all tour operators have access to this information in order to educate their customers before tours would enhance visitors' awareness and promote responsible tourism behavior. Distributing educational materials at key locations such as Amphawa-Chaipattananurak would expand outreach efforts beyond online platforms, reaching a broader audience.

Another set of recommendations stems from our background research, focusing on sustainable practices aimed at conserving firefly habitats. We propose a **transition from motorboats to paddle, electric, or solar-powered alternatives**. This shift would not only benefit firefly habitats by reducing pollution in riverbeds but also by reducing noise pollution and improving air quality with cost savings in the long term. While we acknowledge the cultural significance of motorboats in Amphawa, initiating discussions around transitioning to more sustainable practices is crucial for long-term conservation efforts. Additionally, **implementing dark zones in key firefly habitats could provide crucial sanctuaries for these insects**. Dark zones, devoid of artificial light, would facilitate uninterrupted mating signals and breeding, contributing to firefly

population conservation. However, implementing dark zones may face logistical challenges, particularly in gaining the community's support and addressing potential disruptions to existing businesses and residents.

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7. Appendix

Appendix A: Interview Question for the Locally Run Businesses

The interviews were conducted utilizing a smartphone secured with a password, with the recordings subsequently uploaded to a designated Google Drive folder. Only the voices of the subjects were captured during the interviews. The listed questions were posed to the local run businesses during the scheduled visits to Amphawa.

Homestay owners

1. How many rooms are available for accommodation at your homestay?
2. What is the variation in room rates between weekdays and weekends at your homestay?
3. Could you describe the unique features and amenities of your homestay?
4. Who is your primary target demographic or audience for your homestay services?
5. What types of activities do you offer to guests staying at your homestay?
6. Does your homestay currently offer activity packages for guests, and if so, could you provide details regarding the range of activities available and any additional services included in these packages?
7. Are your employees proficient in languages other than Thai language, and if so, which languages are they able to communicate in effectively to accommodate diverse customers?
8. What is the approximate distance between your homestay and Amphawa floating market?
9. What is the procedure for booking accommodations at your homestay?
10. Can you outline any challenges you've encountered in managing a homestay business in Amphawa, and how you've addressed them?

11. How do you promote sustainability and environmental conservation practices within your homestay operations?
12. What specific activities offered at your homestay would you recommend including package deals for guests?
13. Could you please outline any activities or services that can be offered to guests without interrupting the regular operations of your establishment?

Restaurant owners

14. What inspired you to establish a restaurant in Amphawa?
15. How would you describe the culinary style and specialties of your restaurant?
16. Could you recommend a signature or standout dish from your restaurant's menu?
17. What are the primary types of customers that your restaurant attracts?
18. Does your restaurant provide any workshops or educational experiences for customers, such as cooking classes, and if so, could you elaborate on the types of workshops offered and how customers can participate?
19. In what ways do you engage with the local community or support local initiatives through your restaurant?
20. Has your business been impacted by the COVID-19 pandemic, and if so, could you describe the specific challenges or changes you have experienced in relation to operations, customer engagement, and overall business performance?
21. Are your employees proficient in languages other than Thai language, and if so, which languages are they able to communicate in effectively to accommodate diverse customers?

22. What are the operational hours of your restaurant, including opening and closing times, and are there any variations on specific days or seasons?

Eco-friendly activities owners

23. Could you please provide a description of the activities available at your establishment, including the nature of each activity and what guests can expect to experience?
24. Could you provide a comprehensive list of activities offered to tourists at your establishment, detailing each activity along with its unique features and experiences?
25. What is the typical duration for tourists to participate in the activities offered by your establishment, and are there any options for shorter or longer durations depending on their preferences?
26. Could you provide information on the pricing or cost of each activity offered by your establishment?
27. Are your employees proficient in languages other than Thai language, and if so, which languages are they able to communicate in effectively to accommodate diverse customers?
28. What is the procedure for booking accommodations at your establishment?
29. Could you elaborate on the sustainability practices implemented by your establishment, including any initiatives or measures taken to minimize environmental impact and promote sustainable tourism?

Appendix B: The Locally Run Businesses Interview Answers

Homestays owners

Ms. Punyanuch Klamklin (Ban Ploynam homestay)

- The weekday room rate is 700 THB inclusive of breakfast or 500 THB without breakfast, while weekend rates range from 650 to 800 THB. For the two room types available, accommodating either 4 or 2+1 people, weekend prices are 1,200 THB with breakfast or 1,000 THB without breakfast, and weekday rates are 1,000 THB with breakfast. Breakfast is not served buffet-style.
- This homestay, situated near the floating market, caters to both foreign and Thai tourists.
- Guests can enjoy activities such as temple boat tours, motorboat rides to see fireflies and the floating market, as well as archery and kayaking.
- Although activity packages are not currently offered, the owner plans to introduce them in the future.
- The employees at the homestay do not speak English fluently, but the owner can communicate in basic English.
- Located a 6-minute walk from the Amphawa floating market
- Guests can book directly through the homestay's Facebook page or via various booking websites like booking.com, Trip.com, and Traveloka.
- Due to the decline in tourist numbers during the COVID-19 pandemic, the homestay did not have any guests and instead started baking bread for online delivery.
- Guests can easily access the floating market on foot or by bicycle.

- The owner suggested eco-friendly activities such as traditional archery, kayaking, and exploring Makuan garden, which includes coconut, lychee, melon, and pomelo farms, which features a café restaurant serving farm-to-table dishes.
- After reviewing proposed packages and activities, the owner selected several options, including Tao Thai Derm2, Suannork agriculture enterprise group, Thitipan Benjarong, and the Amphawa Chaipattananurak conservation project, as they align with the homestay's regular operations. These activities include providing food to monks, temple tours, walks to the floating market, kayaking, and paddle boat rides.

Mr. Parinya Pruekhatpong (Ban Mae Arom homestay)

- The homestay comprises five rooms, consisting of four small rooms and one family room.
- The Small rooms, accommodating two guests, are priced at 700 baht per night on weekdays and Sundays, except for Fridays at 800 baht and Saturdays at 1000 baht. For single occupancy, the room rate may be adjusted to 600 baht.
- The family room, accommodating up to five guests with an additional bunk bed, is priced at 2000 baht per night on weekdays and Sundays, with potential discounts, except for Fridays at 2200 baht and Saturdays at 2400 baht. All room rates include breakfast and private toilets.
- This homestay holds the distinction of being the first in Amphawa situated near the canal and has received recognition from UNESCO. Its location offers a unique view of the canal side.
- Both foreign and Thai tourists opt to stay here.

- The homestay currently offers activities such as motorboat rides around the canal and firefly sightseeing.
- Although they do not have specific activity packages, they suggest and recommend activities when guests inquire.
- Some employees are proficient in English, allowing for effective communication with English-speaking guests.
- Located a 13-minute walk from the Amphawa floating market
- Tourists can book accommodations through the homestay's Facebook page or various booking websites like Agoda.com, Trip.com, and Expedia.co.th.
- The COVID-19 pandemic significantly impacted the homestay due to a decline in tourist numbers, resulting in no visitors to Amphawa during that period.
- Given the provided sample packages and activities, the owner selected several options, including Thitipan Benjarong, the Amphawa Chaipattananurak conservation project, providing food to monks, and walking to the floating market, as they do not disrupt regular operations.

Ms. Rattiya Chamsakon (Ban Raak homestay)

- The room rates for this homestay are 1,000 THB for two people on weekdays and 1,400 THB on weekends, while the family room for five people is priced at 2,500 THB on weekdays and 3,500 THB on weekends, all inclusive of breakfast.
- Guests at this homestay can enjoy a buffet breakfast featuring Thai cuisine and desserts. Its proximity to the canal facilitates the provision of food to monks via boat and offers a pleasant view of the canal.

- The majority of tourists visiting on weekdays are Japanese, Chinese, Taiwanese, and European, while Thai tourists frequent the establishment on weekends.
- Although the homestay does not offer its own activity packages, guests can arrange external activities.
- Three employees are fluent in English, and one can communicate in Chinese.
- The homestay is located a 13-minute walk from the Amphawa floating market
- Bookings can be made through Facebook, WhatsApp, Line, or various booking websites such as Agoda.com, Expedia.co.th, and Trip.com.
- During the COVID-19 pandemic, foreign tourists were unable to visit Amphawa due to travel restrictions, resulting in a significant decline in visitors to this homestay.
- The owner recommends activities such as attending cooking classes at Madam Chup, known for teaching Thai dessert making, as well as fishing and shrimp-catching activities and whale watching, depending on the season and time of year.
- After considering proposed packages and activities, the owner selected various options, including Tao Thai Derm2, Suannork agriculture enterprise group, Thitipan Benjarong, the Amphawa Chaipattananurak conservation project, cooking classes, bike tours, providing food to monks, temple tours, walks to the floating market, SUP board rentals, and paddle boat rides, as these activities do not disrupt the homestay's regular operations.

Restaurants

Sa-Ne Thaka Cafe and Restaurant

- The cafe has been operational for three years, and despite the challenges posed by the Covid-19 pandemic, it has not experienced significant negative impacts. This resilience can be attributed to the café's popularity as a preferred destination for individuals seeking a serene and vibrant environment away from bustling urban areas. The café's ability to offer a welcoming and tranquil atmosphere has resonated with patrons looking to escape the hustle and bustle of city life.
- Highlighted menu items include shrimp paste fried rice and papaya salad as recommended dishes, date coffee frappe and coconut frappe as recommended drinks, and coconut cake as a recommended dessert.
- While the majority of tourists are Thai, approximately 20% are foreigners, mainly from Europe.
- Operating only on Thursdays through Sundays and holidays, the cafe's establishment stemmed from the absence of seating options for tourists at the Thaka morning market. Recognizing this opportunity, the owners strategically opened the café to attract tourists visiting both establishments. This initiative not only provides a resting place for tourists but also contributes to the income distribution of local vendors by drawing visitors to both locations.
- Large groups, particularly tour groups of around 30-50 people, are advised to contact the cafe in advance. It is recommended for them to visit on Thursday and Friday evenings, as Saturday and Sunday mornings typically attract cyclist groups looking to rest and enjoy drinks.

- Cooking classes, available with a one-day advance booking, offer participants the freedom to choose dishes from the menu at regular prices.
- The cafe actively supports the local community by growing its own coconut trees and sourcing coconuts from local farmers, thereby bolstering community support and generating additional income for locals. Local ingredients are prominently featured on the menu, with specialties such as coconut coffee, date coffee frappe, and coconut smoothies. By promoting and utilizing locally sourced ingredients, the café not only enhances its offerings but also contributes to the economic well-being of the community.

Improvise Smoked & Grill

- During the COVID-19 pandemic, he returned to his hometown of Amphawa to sell food, primarily grilled chicken and pork. However, an invitation to collaborate on craft beer, steak, and pasta at a nearby resort led him to establish his own restaurant situated by the canal, offering customers a picturesque view of the sunset and river.
- This restaurant specializes in a diverse range of cuisine styles, including Western and Italian dishes, and is known for its inviting ambiance and the friendly interaction provided by the owner. Highly recommended dishes include grilled and smoked pork ribs, steak, and Thai craft beer.
- The majority of customers consist of local residents, Thai tourists, and some foreign tourists.
- The restaurant occasionally offers activities such as beer crafting, coloring, and ceramic painting, depending on availability and special occasions.

- Engagement with the local community is prioritized through the utilization of local products, such as lychee for beer crafting, and the design of can packaging by Thai artists. The owner aims to support and enhance locally run businesses in the Amphawa area, while also contributing to the overall income distribution within the community.
- Operating hours are from Monday to Friday, 17:00 to 23:00, and Saturday to Sunday, 10:00 to 23:00.

Ranjuan Restaurant

- The restaurant infuses traditional flavors inspired by the owner's mother's cooking into all of its dishes, reimagining them as modern culinary creations. Their signature dish, Kaeng Kua with mussels and young coconut shoots, exemplifies this fusion of traditional and contemporary flavors.
- The customer base primarily consists of Thai patrons, comprising 80% of visitors, with the remaining 20% being Chinese and Japanese tourists. While the restaurant does not offer workshops, it provides picturesque settings for customers to take photos and an outdoor area adorned with charming decorations.
- All mussels served at the restaurant are sourced from their own farm. After harvesting, the mussels are sent to a local business for processing, creating employment opportunities for the community. Additionally, the restaurant supports local products such as coconut milk made by residents in the area.
- The staff members have a fundamental grasp of English, and to facilitate ordering for English-speaking customers, an English menu is provided.
- Operating hours are from 11:00 to 21:00, open every day of the week.

Eco-friendly activities

Mr. Pairoj Kongvijit (Tao Thai derm 2)

- The learning center focuses on providing knowledge about coconut sugar for tourists and gives opportunities for them to try doing in the process of how coconut sugar was made in Thai's style, see how the sap is collected and turned into the finished product.
- It is also a live museum to see Thai traditional houses that the owner and their family still live in.
- At first, they were selling only coconut sugar but later they wanted to add value to the coconut so they created new products from coconut such as coconut chips, coconut lotion, coconut oil, and coconut candy.
- One concern about bees and other insects that will follow the coconut sugar in this area.
- Contact via phone (061-989-2426) and facebook page
- Open everyday from 8:00 to 16:00
- Free entry

Dr. Kamoltip Guntapeng (Amphawa Chaipattananurak conservation project)

- It is the park area where tourists can walk through to get information and see how coconut sugar, coconut cider/vinegar, and honey from stingless bees are made.
- There is also a workshop provided for a group of tourists or students such as making Thai desserts, weaving palm leaves, acrylic painting, coconut soap making, and tie-dye.
- The open hours are different on weekdays and weekends. It is open from 8:30 to 4:30 on Monday to Thursday, extending to 19:00 on Friday, and 21:00 on Saturday and Sunday.

- The price of activities are different depending on the equipment that will be used and number of people attending each activity.
- Tourists must book the activities for 1 week in advance
- Contact and booking via phone (034-752-245) and facebook page

Ms. Thitipan (Benjarong pottery workshop)

- Benjarong is a traditional Thai porcelain consisting of five colors which are black, red, white, yellow, green. In this workshop, tourists will have a chance to learn more about Thai traditional culture and inherit to continue this unique artistic culture.
- Tourists can design their own patterns or use patterns that they already have.
- The price will be different depending on the object that you choose to paint such as cup and plate.
- Tourists must book the workshop 1 week in advance if they want to design or create their own patterns of benjarong.
- Contact via phone (082-348-6094) and facebook page

Mr. Saksun Waijarean (Suan Nork Learning Center and Community Enterprise)

- There are two activities in this learning center which are tie-dye and paper making workshops. He started to do the tie-dye because there are a lot of leftover coconut from coconut oil making so he tried to use all parts of the coconut for the most benefit.
- Natural dyes are made from leftover coconut husks, mango leaves, lychee leaves, and indigo to give brown, yellow, red, and indigo colors respectively.
- Paper is made from leftover rose stems that tourists use to offer for worship to Tao Wessuwan at Chulamanee Temple.

- Must be booked in advance, the center will prepare shirts and natural dyes for the workshop.
- Contact via phone (081-823-4229) or facebook page
- There are no employees that can speak other than Thai language

Ms. Pornthip Jareonrat (Thaka paddle boat tour)

- Paddle along the Thaka canal to view fireflies from a unique and close up experience which does not cause water pollution from oil spill of motorboats, nor disrupt the riverbank and habitat of fireflies in the area.
- The duration is 30 minute per ride with the distance of approximately 200 meters
- There are 6 boats in total, each boat can hold 4 people
- The price is 200 baht for the whole boat or 50 baht per person
- There are only 2 round per day, which the first round start at 19:00 and the second round at 20:00
- Booking via phone in advance before 1 hour of each round (081-059-4893 or secondary number 082-361-2140)
- Open every day of the week
- Offer day time paddles in Amphawa canal during the week
- There are no employees that can speak other than Thai language

Appendix C: Survey Questions

Tourist Survey

Consent form: This is an anonymous voluntary form. You may choose to abstain from any question you do not wish to answer. The goal of part one of this survey is to gain an understanding of tourists' knowledge of ecotourism practices in Amphawa and see how likely they would be to participate in them. The goal of part two is to find out how people feel about local run tourist homestays and activity packages. All answers to this survey will be kept confidential and only seen by the student researchers from Worcester Polytechnic Institute and Chulalongkorn University as well as our esteemed advisors. Thank you for your participation!

Section 1: Tourist Survey Questions

How old are you?

- ☐ Lower than 18
- ☐ 18 - 25 years
- ☐ More than 25

You come as...

- ☐ Solo
- ☐ Couple
- ☐ Group (more than 2 people)
- ☐ Family

How many days are you staying in Amphawa?

- ☐ 1

- 2
- 3
- 4 or more

Are you here as part of a tour group?

- Yes
- No

If yes, what is the name of the tour company?

Have you visited or do you plan to visit the Amphawa-Chaipattananurak Conservation Project?

- Yes
- No
- Maybe

Did you know that there's a workshop in Amphawa floating market?

- Yes
- No

If you have visited, did you attend one of the workshops there?

- Yes, I enjoyed it
- Yes, but I did not enjoy it
- No, I went to the Amphawa-Chaipattananurak Conservation Project, but did not attend a workshop
- No, I have not been to the Amphawa-Chaipattananurak Conservation Project

Which of the following workshops would you be most interested in attending? (Select up to 3)

- ☐ Benjarong (traditional Thai method) Pottery Painting

- ☐ Cooking a Thai dessert
- ☐ Tie-Dye with dye from coconut husks
- ☐ Keychain making
- ☐ Tote Bag Painting
- ☐ Making coconut and/or herbal products (lip balm, oil, soap)
- ☐ Making paper from roses stem
- ☐ Firefly origami from coconut leaves

Do you plan on or have you taken a firefly tour while here?

- ☐ Yes
- ☐ No
- ☐ Maybe

If yes, how did you/plan to view them?

- ☐ Motorboat
- ☐ Walking path
- ☐ Bike path
- ☐ Boat with no motor

Have you or do you plan to visit a local temple while in Amphawa?

- ☐ Yes
- ☐ No
- ☐ Maybe

Section 2: Local Run Tourism Packages

Description: We are working with locals who run homestays in the area and are trying to gauge tourist interest in them. Each homestay can accommodate groups of 1-5 people, are air conditioned, offer free breakfast, and have other amenities that vary by location.

How interested would you be in staying at a hotel versus a homestay?

Would only stay at a hotel (1) _____ (8) Would only stay at a homestay

Please describe why you picked your answer

Potential activity package descriptions:

Food: Visiting a temple and providing food to the monks, Interactive coconut sugar making activity, lunch at a local restaurant, Cooking class at the homestay, Zen firefly boat tour

Art & Culture: Benjarong Pottery Painting, Visiting a temple, Tie-Dying with coconut husks, Paper making from rose stems, Zen firefly boat tour

Adventure: Bike tour of Amphawa, Kayaking in the canal, Visiting a temple, Zen firefly boat tour

Which activity package(s) sound interesting to you?

☐ Food

☐ Art & Culture

☐ Adventure

☐ None

Please explain your answer to the previous question

Is there anything you don't like about these tour options?

If these tour packages of eco-friendly and local run activities were only available at the homestays would you be more likely to stay there?

This would not change my mind (1) — (5) This makes me want to stay at the homestay more

Tourist Survey (Thai) แบบสอบถามนักท่องเที่ยวในอัมพา

นี่เป็นแบบฟอร์มสมัครใจโดยไม่เปิดเผยตัวตน คุณอาจเลือกที่จะไม่ตอบจากคำถามใดๆที่คุณไม่ต้องการตอบ

เป้าหมายที่ 1 คือการทำความเข้าใจความรู้ของนักท่องเที่ยวเกี่ยวกับแนวทางปฏิบัติด้านการท่องเที่ยวเชิงนิเวศในอัมพา และดูว่านักท่องเที่ยวอยากจะมีส่วนร่วมมากน้อยเพียงใด เป้าหมายที่ 2 คือการสอบถามความรู้สึกของนักท่องเที่ยวเกี่ยวกับโฮมสเตย์และแพ็คเกจกิจกรรมที่ดำเนินการโดยท้องถิ่น คำตอบทั้งหมดของการสำรวจนี้จะถูกเก็บเป็นความลับและมีเพียงนักศึกษาจาก Worcester Polytechnic Institute และนิสิตจากจุฬาลงกรณ์มหาวิทยาลัยเท่านั้น รวมถึงอาจารย์ที่ปรึกษาของเรา ขอขอบคุณสำหรับการมีส่วนร่วมของคุณ

ส่วนที่ 1: แบบสอบถามนักท่องเที่ยว

คุณอายุเท่าไร?

- ☐ ต่ำกว่า 18
- ☐ 18 - 25 ปี
- ☐ 25 ปีขึ้นไป

คุณมาเที่ยวแบบไหน

- ☐ คนเดียว
- ☐ คู่
- ☐ กลุ่ม (มากกว่า 2 คนขึ้นไป)
- ☐ ครอบครัว

คุณมาเที่ยวอัมพากี่วัน?

- ☐ 1 วัน
- ☐ 2 วัน
- ☐ 3 วัน
- ☐ 4 วัน หรือมากกว่า

คุณมากับกรู๊ปทัวร์หรือไม่?

- ☐ ใช่
- ☐ ไม่ใช่

ถ้าใช่ คุณมากับกรู๊ปทัวร์อะไร?

คุณเคยไปหรือมีการวางแผนที่จะไปเยี่ยมชมโครงการอัมพวาชัยพัฒนานุรักษ์หรือไม่?

- ☐ เคยไป
- ☐ ไม่เคยไป
- ☐ มีการวางแผนที่จะไป

คุณทราบหรือไม่ว่าที่ตลาดน้ำอัมพวามีการจัดกิจกรรมเวิร์คช็อป?

- ☐ ทราบ
- ☐ ไม่ทราบ

ถ้าคุณเคยมาอัมพวา คุณเคยเข้าร่วมกิจกรรมเวิร์คช็อปในตลาดน้ำอัมพวาหรือไม่?

- ☐ เคยเข้าร่วมและอยากทำอีก
- ☐ เคยเข้าร่วมแต่รู้สึกเฉยๆ
- ☐ ไม่เคยเข้าร่วมแต่เคยไปโครงการอัมพวาชัยพัฒนานุรักษ์
- ☐ ไม่เคยเข้าร่วมและไม่เคยไปโครงการอัมพวาชัยพัฒนานุรักษ์

คุณสนใจที่จะเข้าร่วมเวิร์คช็อปไหนมากที่สุด 3 อันดับ

- ☐ เพ้นท์สีเบญจรงค์
- ☐ ทำขนมไทย
- ☐ ทำผ้ามัดย้อมจากสีธรรมชาติ เช่น กะลามะพร้าว
- ☐ ทำพวงกุญแจ
- ☐ ระบายสีกระเป๋ผ้า

- ☐ ทำผลิตภัณฑ์จากมะพร้าวหรือสมุนไพร เช่น น้ำมันมะพร้าว ลิปปาล์ม สบู่
- ☐ ทำกระดาษจากก้านดอกกุหลาบ
- ☐ สานใบมะพร้าวเป็นรูปหิ้งห้อย

คุณมีการวางแผนที่จะชมหรือเคยชมหิ้งห้อยในอัมพวาหรือไม่

- เคย
- ไม่เคย
- มีการวางแผนที่จะไปชม

ถ้าเคยหรือมีการวางแผนที่จะชมหิ้งห้อย คุณจะชมหิ้งห้อยผ่านวิธีใด

- เรือยนต์
- เดินชมในสวน
- ปั่นจักรยาน
- เรือพาย

คุณเคยหรือมีการวางแผนที่จะไปเที่ยววัดในอัมพวาหรือไม่

- เคย
- ไม่เคย
- มีการวางแผนที่จะไป

ส่วนที่ 2: แพ็คเก็จท่องเที่ยวเพื่อสนับสนุนกิจกรรมของคนในท้องถิ่น

คำอธิบาย: พวกเรากำลังวางแผนการทำงานร่วมกับคนในท้องถิ่นที่ดูแลโฮมสเตย์ในพื้นที่ และพยายามวัดความสนใจของนักท่องเที่ยวในอัมพวาซึ่งโฮมสเตย์แต่ละหลังสามารถรองรับกลุ่มนักท่องเที่ยวได้ 1-5 คน มีเครื่องปรับอากาศ อาหารเช้าฟรี และมีสิ่งอำนวยความสะดวกอื่น ๆ ที่แตกต่างกันไปตามสถานที่

คุณสนใจที่จะเข้าพักในโฮมสเตย์หรือโรงแรม

พักในโรงแรม (1) _____ (8) พักในโฮมสเตย์

อธิบายคำตอบในข้อที่แล้ว

กิจกรรมในแต่ละแพ็คเกจ

แพ็คเกจอาหาร: เยี่ยมชมวัดและใส่บาตรพระ เยี่ยมชมสาธิตการทำน้ำตาลมะพร้าว แวะกินอาหารเที่ยงที่ร้าน

อาหารท้องถิ่น เรียนการทำอาหารไทยที่โฮมสเตย์ ล่องเรือพายชมหิ่งห้อย

แพ็คเกจศิลปะและวัฒนธรรม: พื้นทึ่สีเบญจรงค์ เยี่ยมชมวัด ทำผ้ามัดย้อม ทำกระดาษจากก้านดอกกุหลาบ ล่อง

เรือพายชมหิ่งห้อย

แพ็คเกจผจญภัย: ปั่นจักรยานทัวร์รอบอัมพวา พายเรือคายัค เยี่ยมชมวัด ล่องเรือพายชมหิ่งห้อย

แพ็คเกจการท่องเที่ยวไหนที่คุณสนใจเป็นพิเศษ (เลือกได้มากกว่า 1 ข้อ)

☐ อาหาร

☐ ศิลปะและวัฒนธรรม

☐ ผจญภัย

☐ ไม่มี

บอกสาเหตุที่ชอบจากข้อที่แล้ว

มีอะไรที่อยากจะเปลี่ยนแปลงในโปรแกรมไหม เพราะเหตุใด

หากแพ็คเกจทัวร์จัดกิจกรรมที่เป็นมิตรต่อสิ่งแวดล้อมและกิจกรรมในท้องถิ่นที่มีเฉพาะที่โฮมสเตย์เท่านั้น คุณมี
แนวโน้มที่จะไปพักที่นั่นมากขึ้นหรือไม่

ไม่เปลี่ยนใจอยู่ดี (1) _____ (5) อยากเปลี่ยนไปพักที่โฮมสเตย์

ขอบคุณสำหรับการทำแบบสอบถาม

Local Survey

Consent form: This is an anonymous voluntary form. You may choose to abstain from any question you do not wish to answer. The goal of part one of this survey is to gain an understanding of tourists' knowledge of ecotourism practices in Amphawa and see how likely they would be to participate in them. The goal of part two is to find out how people feel about local run tourist homestays and activity packages. All answers to this survey will be kept confidential and only seen by the student researchers from Worcester Polytechnic Institute and Chulalongkorn University as well as our esteemed advisors. Thank you for your participation!

Section 1: Local Business Owners

Are you a local business owner

- ☐ Yes, I am a local business owner
- ☐ No, I am not a local business owner

If yes, what kind of business do you own?

If yes, would you be willing to add more business hours during weekdays to attract more tourists?

- ☐ Yes, I would add more business hours
- ☐ No, I would not add more business hours

Would you want more tourism during the weekdays?

- ☐ Yes, I want more tourism
- ☐ No, I don't want more tourism
- ☐ Neither

Please explain your answer

Do you or any of your employees speak English or any other languages?

- Yes, there are English speakers or other language speakers
- No, there are not

Section 2: Tourism in Amphawa

Do you think there are more Thai tourists or more foreign tourists?

- More Thai tourists
- More foreign tourists
- Neither

On a scale from 1-10, how much tourism is there on weekdays?

Very empty, no tourists (1) ————— (10) Very crowded, a lot of tourists

On a scale from 1-10, how much tourism is there on weekends?

Very empty, no tourists (1) ————— (10) Very crowded, a lot of tourists

What kind of attractions do you see tourists attending more? (Choose all that apply)

- ☐ Floating market
- ☐ Firefly tours
- ☐ Artisan craft workshops
- ☐ Restaurants and bars
- ☐ Temples
- ☐ Other

Please list any additional attractions that weren't mentioned

Section 3: Eco-friendly Practices

Would you be willing to learn more about possible eco-friendly practices?

- ☐ Yes, I would like to learn more
- ☐ No, I would not like to learn more

Would you be willing to implement more eco-friendly practices?

- ☐ Yes, I would try
- ☐ No, I would not try

If yes, what would interest you the most?

Do you already use eco-friendly practices or know of any existing eco-friendly practices?

- ☐ Yes, I do use them and know of them
- ☐ I know of them, but do not use them
- ☐ No, I do not use them or know of them

If yes, please explain

Section 4: COVID-19

Were you affected by COVID-19?

- ☐ Yes, I was affected by COVID-19
- ☐ No, I was not affected by COVID-19

If yes, how were you affected?

Have you noticed any changes in tourism following COVID-19?

- ☐ Yes, I have noticed changes
- ☐ No, I have not noticed changes
- ☐ Neither

If yes, can you describe any changes you have noticed?

Did switching to online sales positively or negatively affect you?

- ☐ Positively affected
- ☐ Negatively affected

Local Survey (Thai) แบบสอบถามคนท้องถิ่นในอัมพา

นี่เป็นแบบฟอร์มสมัครใจโดยไม่เปิดเผยตัวตน คุณอาจเลือกที่จะไม่ตอบจากคำถามใดๆที่คุณไม่ต้องการตอบ

เป้าหมายที่ 1 คือการทำความเข้าใจความรู้ของนักท่องเที่ยวเกี่ยวกับแนวทางปฏิบัติด้านการท่องเที่ยวเชิงนิเวศในอัมพา และดูว่านักท่องเที่ยวอยากมีส่วนร่วมมากน้อยเพียงใด เป้าหมายที่ 2 คือการสอบถามความรู้สึกของนักท่องเที่ยวเกี่ยวกับโฮมสเตย์และแพ็คเกจกิจกรรมที่ดำเนินการโดยท้องถิ่น คำตอบทั้งหมดของการสำรวจนี้จะถูกเก็บเป็นความลับและมีเพียงนักศึกษาจาก Worcester Polytechnic Institute และนิสิตจากจุฬาลงกรณ์มหาวิทยาลัยเท่านั้น รวมถึงอาจารย์ที่ปรึกษาของเรา ขอขอบคุณสำหรับการมีส่วนร่วมของคุณ

คุณเป็นผู้ประกอบการท้องถิ่นหรือไม่

- ☐ เป็น (คำตอบไปยังส่วนที่ 1)
- ☐ ไม่ได้เป็น (คำตอบไปยังส่วนที่ 2)

ส่วนที่ 1: ผู้ประกอบการท้องถิ่น

คุณทำธุรกิจเกี่ยวกับอะไร

คุณอยากจะเพิ่มเวลาทำการในวันธรรมดาเพื่อดึงดูดและเพิ่มจำนวนนักท่องเที่ยวหรือไม่

- ☐ อยาก
- ☐ ไม่อยาก

หากมีนักท่องเที่ยวเพิ่มมากขึ้นจะส่งผลดีต่อคุณหรือไม่

- ☐ ส่งผลดี
- ☐ ไม่ส่งผลดี

โปรดอธิบายเหตุผลของคุณ

คุณหรือลูกจ้างของคุณสามารถสื่อสารภาษาอังกฤษหรือภาษาอื่นได้หรือไม่

- มีคนที่พูดภาษาอังกฤษได้
- มีคนที่พูดภาษาอื่นได้
- มีทั้งคนที่พูดภาษาอังกฤษและภาษาอื่นได้
- ไม่มีคนที่สามารถพูดภาษาอังกฤษหรือภาษาอื่นได้

ส่วนที่ 2: คนท้องถิ่นในอัมพวา

คุณเป็นคนท้องถิ่นในอัมพวาหรือไม่

- เป็นคนอัมพวาตั้งแต่เกิด
- เป็นคนท้องถิ่นแต่ย้ายมาอยู่อัมพวา

คุณเห็นอัมพวาเปลี่ยนแปลงไปในทางไหนบ้าง

ส่วนที่ 3: การท่องเที่ยวในอัมพวา

คุณคิดว่ามีนักท่องเที่ยวไทยหรือนักท่องเที่ยวต่างชาติมากกว่ากัน

- นักท่องเที่ยวไทย
- นักท่องเที่ยวต่างชาติ
- ไม่ใช่ทั้งสอง

ให้คะแนน 1-10 มีนักท่องเที่ยวมากแค่ไหนในวันธรรมดา

นักท่องเที่ยวน้อยมาก จนถึงแทบไม่มีเลย (1) ——— (10) นักท่องเที่ยวเยอะมากจนถึงแทบจะแออัด

ให้คะแนน 1-10 มีนักท่องเที่ยวมากแค่ไหนในวันหยุดสุดสัปดาห์

นักท่องเที่ยวน้อยมาก จนถึงแทบไม่มีเลย (1) ——— (10) นักท่องเที่ยวเยอะมากจนถึงแทบจะแออัด

สิ่งไหนที่คุณคิดว่านักท่องเที่ยวเข้าร่วมเยอะ (เลือกได้มากกว่า 1 ข้อ)

- ☐ ตลาดน้ำ
- ☐ การเที่ยวชมหิ้งห้อย
- ☐ กิจกรรมงานฝีมือ (ทำผ้ามัดย้อม, ทำผลิตภัณฑ์ชุมชน, เบญจรงค์)
- ☐ ร้านอาหาร หรือ สถานบันเทิง
- ☐ วัด
- ☐ อื่น ๆ

ส่วนที่ 4: การปฏิบัติที่เป็นมิตรต่อสิ่งแวดล้อม

คุณยินดีที่จะเรียนรู้เพิ่มเติมเกี่ยวกับการปฏิบัติที่เป็นมิตรต่อสิ่งแวดล้อมหรือไม่

- ☐ ยินดี
- ☐ ไม่ยินดี

คุณยินดีที่จะใช้แนวทางปฏิบัติที่เป็นมิตรต่อสิ่งแวดล้อมมากขึ้นในอัมพวาหรือไม่ เช่น การลดการใช้แสงเทียม และการใช้เรือพายแทนรถยนต์

- ☐ ยินดีที่จะลองทำ
- ☐ ไม่ยินดีที่จะลองทำ

ถ้าคุณยินดีที่จะลอง อะไรเป็นสิ่งที่สนใจที่สุด

คุณรับทราบและใช้แนวทางปฏิบัติที่เป็นมิตรต่อสิ่งแวดล้อมอยู่แล้วหรือหรือไม่?

- ☐ ทราบและปฏิบัติตาม
- ☐ ทราบแต่ไม่ได้ปฏิบัติตาม
- ☐ ไม่ทราบเลย

ถ้าปฏิบัติตาม ช่วยอธิบาย

ส่วนที่ 5: โควิด19

คุณได้รับผลกระทบจากโควิด19หรือไม่?

- ได้รับผลกระทบ
- ไม่ได้รับผลกระทบ

ถ้าได้รับผลกระทบ ช่วยอธิบาย

คุณสังเกตเห็นถึงเปลี่ยนแปลงของการท่องเที่ยวหลังจากโควิด19มั้ย?

- เห็น
- ไม่เห็น
- ไม่ทราบ

ถ้าคุณเห็นถึงเปลี่ยนแปลง ช่วยอธิบายและยกตัวอย่าง

ขอบคุณสำหรับการทำแบบสอบถาม

Ecotourism in Amphawa Interest Survey

Consent form: For our Interactive Qualifying Project, the students from Worcester Polytechnic Institute and Chulalongkorn have created three tourist packages for a culturally immersive and eco-friendly experience in Amphawa Thailand, The following survey explains each packages and gages which packages peak the most interest in those looking to visit the region. This is an anonymous voluntary form. You may choose to abstain from any question you do not wish to answer. All answers to this survey will be kept confidential and only seen by the student researchers from Worcester Polytechnic Institute and Chulalongkorn University as well as our esteemed advisors. Thank you for your participation!

Package 1: The Local Foodie Tour

This package allows visitors to try all the tasty cuisines that Amphawa has to offer. Start your day by offering food to a monk along the Amphawa canal. Then, experience an interactive tour to learn the harvest to husk life span of a coconut. Learn how to cook delicious Thai foods and desserts for lunch with the families from local homestays. Ending the day off with a remote firefly tour that allows you to paddle along the Thaka canal and see their amazing show from just a few feet away! From fresh Seafood to tasty street vendors this package will leave you with a happy stomach and memories to last a lifetime!

Would you be interested in this package?

- ☐ Yes
- ☐ No

Why or why not?

Package 2: Art and Culture Explosion

This package allows visitors to experience unique artistic experiences as well as a chance to participate and express their own creative nature! Start your day off with breakfast cooked at the local homestay. Then journey to Chaipattananurak Cultural Learning Center and meet with local Benjarong artists, who have prepared limited edition firefly awareness pottery painting for guests to participate in. Learn of the traditions of Benjarong and create a custom piece to take home! Stop by a local favorite restaurant for lunch after working up an appetite painting! The tour continues with chances to Tie Dye with dyes made from coconut, mango, and lychee. Learn how to create beautiful origami pieces from banana leaves. Connect to your spirituality by visiting some of the many temples Amphawa has to offer. Ending the day with a zen paddle firefly tour along the Thaka that is sure to take your breath away. This package will leave you in awe of the rich culture, art and beautiful natural world that is Amphawa.

Would you be interested in this package?

- ☐ Yes
- ☐ No

Why or why not?

Package 3: The Adventurer

This package is perfect for the outdoors enthusiast in your life! Start your day off with breakfast at the homestay before embarking on a bike ride around the city. Don't forget to stop by local street vendors to fuel up along the way! Next hit the water and see the town via kayak through the canals. Swing by a waterfront restaurant to try some fresh caught fish before checking out a temple in town, Wat Bang Kung is a must see! End the night off with a once in a lifetime firefly tour via paddle boat. The adventurer pack will leave you with endorphins pumping and a smile that you just can't wipe off your face!

Would you be interested in this package?

- ☐ Yes
- ☐ No

Why or why not?

What package sounds the most interesting to you?

(Rank your most interested as 1, next most interested as 2, and least interested as 3)

	1	2	3
The Local Foodie Tour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Art and Culture Explosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Adventurer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ecotourism in Amphawa Interest Survey (Thai) แบบสอบถามความสนใจในการท่องเที่ยวอย่างยั่งยืนในอัมพวา

แบบสอบถามนี้มีจุดประสงค์ที่จะประเมินผลของนักท่องเที่ยวในพื้นที่อัมพวา ประเทศไทย โดยนักศึกษาจาก Worcester Polytechnic Institute และจุฬาลงกรณ์มหาวิทยาลัยได้สร้างแพ็คเกจท่องเที่ยว 3 แบบที่มุ่งเน้นทัศนคติทางวัฒนธรรมและมีส่วนร่วมในด้านสิ่งแวดล้อมในพื้นที่ดังกล่าว การสำรวจต่อไปนี้จะอธิบายข้อมูลของแต่ละแพ็คเกจและวัดความสนใจสูงสุดของกลุ่มคนที่สนใจท่องเที่ยวในอัมพวา นี่เป็นแบบสอบถามที่อนุญาตและเป็นอนุสัญญาข้อมูลส่วนตัวเพื่อให้คุณสามารถปฏิเสธการตอบคำถามในข้อที่คุณไม่ต้องการตอบ ข้อมูลทั้งหมดที่ได้รับจากแบบสอบถามนี้จะถูกเก็บเป็นความลับโดยนักศึกษาจาก Worcester Polytechnic Institute และจุฬาลงกรณ์มหาวิทยาลัยรวมถึงอาจารย์ที่ปรึกษา ขอขอบคุณที่ร่วมมือในการตอบแบบสอบถามนี้

แพ็คเกจที่ 1 - สายกิน

แพ็คเกจนี้จะช่วยให้ทุกคนได้ลิ้มลองรสชาติอาหารที่หลากหลายในอัมพวา โดยเริ่มต้นวันด้วยการใส่บาตรพระที่พายเรือมาตามลำน้ำอัมพวา จากนั้นคุณจะได้มีโอกาสสัมผัสประสบการณ์ที่หาที่ไหนไม่ได้ โดยคุณจะได้เรียนรู้เกี่ยวกับช่วงเวลาของการเก็บเกี่ยวมะพร้าวจนถึงการปอกเปลือก ต่อมาคุณจะได้ลองลงมือทำอาหารไทยและขนมหวานแสนอร่อยในมือกลางวันโฮมสเตย์ของคุณ และจบวันด้วยการนั่งเรือพายชมทิวทัศน์ที่ตลาดน้ำท่าคา อีกทั้งกินอาหารทะเลที่สดและอร่อย แพ็คเกจนี้จะทำให้คุณอิ่มท้องและสร้างความทรงจำที่ยากที่จะลืม!

คุณสนใจแพ็คเกจนี้ไหม?

- สนใจ
- ไม่สนใจ

เพราะเหตุใด (จากข้อที่แล้ว)

แพ็คเกจที่ 2 - สายศิลปะและวัฒนธรรม

แพ็คเกจนี้จะมอบประสบการณ์ท่องเที่ยวที่เต็มไปด้วยประสบการณ์ศิลปะที่ไม่เหมือนใคร ทำให้นักท่องเที่ยวมีโอกาสเข้าร่วมได้แสดงออกถึงความคิดสร้างสรรค์ของตนเอง! โดยเริ่มต้นวันด้วยอาหารเช้าแบบท้องถิ่นที่โฮมสเตย์ของคุณ จากนั้นเดินทางไปโครงการอัมพวาชัยพัฒนานุรักษ์เพื่อพบกับผู้วาดลายเบญจรงค์ท้องถิ่นที่เตรียมการวาดลายพิเศษสำหรับท่านที่จองผ่านแพ็คเกจนี้ นักท่องเที่ยวยังสามารถมีส่วนร่วมในการวาดลวดลายของตนเองและสามารถกลับบ้านได้ด้วย! แวะหยุดที่ร้านอาหารท้องถิ่นสำหรับมื้อกลางวันเพื่อพักให้หายเหนื่อยจากกิจกรรมในช่วงเช้า ต่อมาทัวร์จะพาทุกท่านไปยังสถานที่ทำผ้ามัดย้อมโดยมีโอกาสดูและเรียนรู้เทคนิคการทำสีจากมะพร้าว มะม่วง และลื่นจี และได้เรียนรู้วิธีการสร้างสรรค์งานศิลปะอริกาที่มีสวยงามจากใบมะพร้าว และเชื่อมต่อกับจิตวิญญาณของคุณโดยการเขียนวัดหลายแห่งในอัมพวา และสิ้นสุดวันด้วยการนั่งเรือพายชมทิวทัศน์ที่สวยงามทำให้คุณประทับใจในวัฒนธรรมของอัมพวาทั้งในด้านศิลปะ วัฒนธรรม และความสวยงามของที่แห่งนี้

คุณสนใจแพ็คเกจนี้ไหม?

- สนใจ
- ไม่สนใจ

เพราะเหตุใด (จากข้อที่แล้ว)

แพ็คเกจที่ 3 - สายผจญภัย

แพ็คเกจนี้เหมาะสำหรับผู้ที่ชื่นชอบกิจกรรมกลางแจ้ง! โดยเริ่มต้นวันใหม่ด้วยการกินอาหารเช้าที่โฮมสเตย์ก่อนออกไปปั่นจักรยานชมเมือง และอย่าลืมแวะแผงขายอาหารริมทางเพื่อเติมพลังตลอดทาง! จากนั้นไปเล่นน้ำและชมเมืองด้วยเรือคายัคผ่านลำคลอง แวะร้านอาหารริมน้ำเพื่อลองชิมปลาที่จับสดๆก่อนไปเยี่ยมชมวัดในเมืองเช่นวัดบางกุ้งที่เป็นสถานที่ที่ต้องไปดู! ปิดท้ายคำคืนด้วยการชมทิวทัศน์ที่สวยงามที่คุณควรลองสักครั้งหนึ่งในชีวิต แพ็คเกจนี้ผจญภัยจะทำให้คุณหลงใหลในธรรมชาติและความสุขที่ไม่สามารถหาได้บ่อยๆ

คุณสนใจแพ็คเกจนี้ไหม?

- สนใจ
- ไม่สนใจ

เพราะเหตุใด (จากข้อที่แล้ว)

แพ็คเกจไหนที่ฟังดูน่าสนใจที่สุดสำหรับคุณ? จัดอันดับความสนใจของคุณ สนใจมากที่สุดเป็น 1 รองลงมาเป็น 2 และสนใจน้อยที่สุดเป็น 3

	1	2	3
สายกิน	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
สายศิลปะและวัฒนธรรม	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
สายผจญภัย	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Website Accessibility Survey

On a scale of 1-5 with one the lowest, how easy is our website to understand?

I do not understand the website (1) ————— (5) I understand everything on the website

On a scale of 1-5 how much do you like the look of the website?

The website does not look good (1) ————— (5) The website looks great

On a scale of 1-5 how accessible do you think the website is?

The website is not accessible (1) ————— (5) The website is very accessible

How do you find our website?

- ☐ Homestay
- ☐ Restaurant
- ☐ Online/Social Media
- ☐ Amphawa-Chaipattananurak
- ☐ Friends/Family

Do you have more interest in visiting Amphawa on weekdays?

- ☐ Yes, I'm very interested
- ☐ No, I am not interested

Do you have any specific feedback you would like to give?

Website Accessibility Survey (Thai) แบบสอบถามความคิดเห็นสำหรับการเข้าถึงของเว็บไซต์

ให้คะแนน 1-5 เว็บไซต์นี้มีเนื้อหาที่เข้าใจง่ายขนาดไหน

เว็บไซต์นี้เข้าใจยาก (1) ————— (5) เว็บไซต์นี้เข้าใจง่าย

ให้คะแนน 1-5 คุณชอบการออกแบบเว็บไซต์นี้หรือไม่

เว็บไซต์นี้ดูไม่ค่อยดีเท่าไร (1) ————— (5) เว็บไซต์นี้ดูดีมาก

ให้คะแนน 1-5 คุณคิดว่าเว็บนี้เข้าถึงง่ายหรือไม่

เว็บไซต์นี้เข้าถึงยาก (1) ————— (5) เว็บไซต์นี้เข้าถึงง่าย

คุณเจอเว็บไซต์นี้ได้อย่างไร

- โฮมสเตย์
- ร้านอาหาร
- สื่อออนไลน์
- อัมพวาชัยพัฒนานุรักษ์
- เพื่อนหรือครอบครัว

คุณมีความสนใจที่จะเยี่ยมชมอัมพวามากขึ้นในวันธรรมดาหรือไม่

- สนใจเป็นอย่างมาก
- ไม่สนใจเลย

มีข้อเสนอแนะเพิ่มเติมหรือไม่

Appendix D: Supplementary Materials

Website

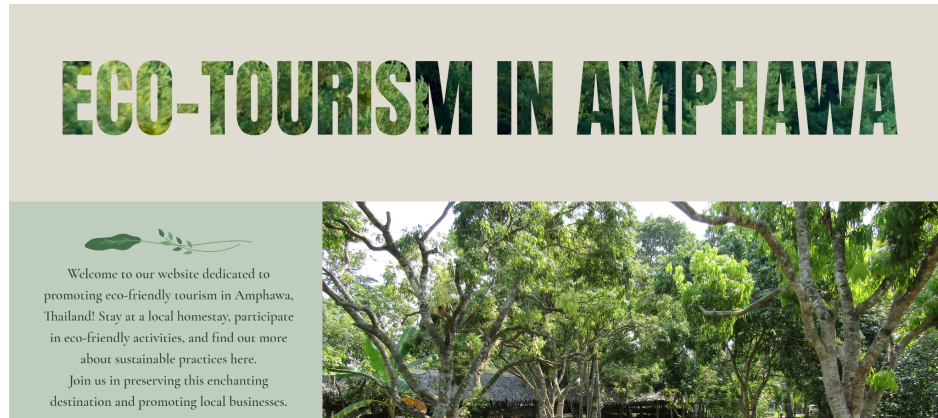


Figure 20: Home Page of Website

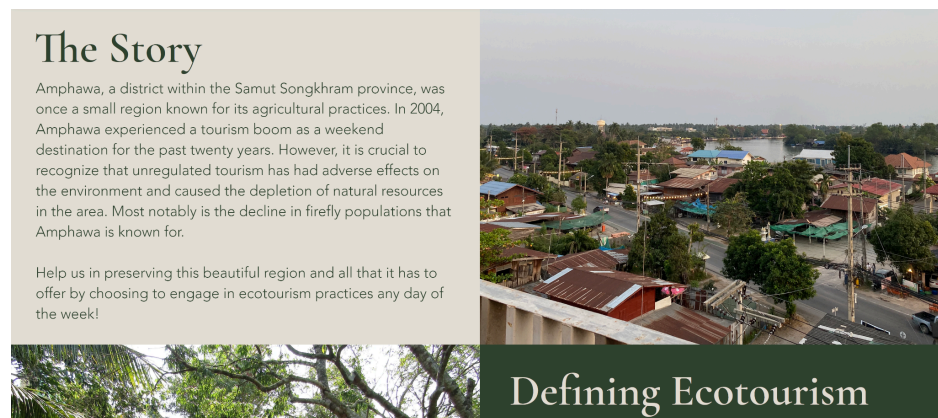


Figure 21: About Amphawa Page of Website

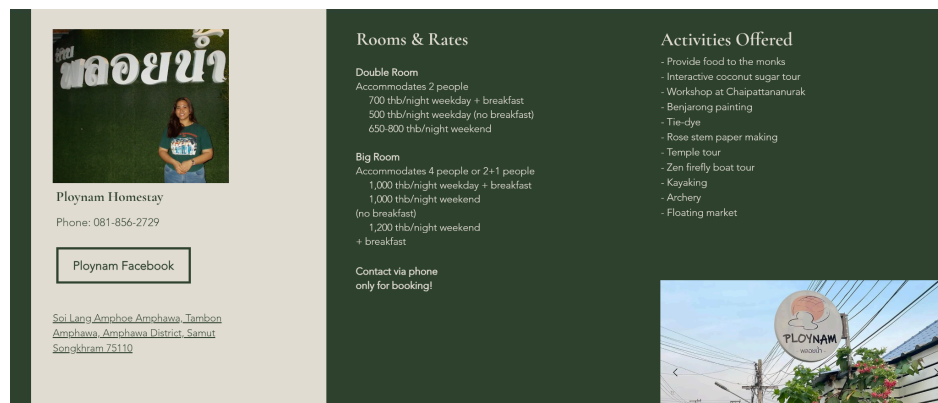


Figure 22: Homestays Page of Website

Eco-Friendly Activities

Contact and Booking

Phone: 034 752 245
Email: amphawa_chaipattananurak
@hotmail.com

Facebook Page

Amphawa Chaipattananurak Conservation Project

See an interactive coconut sugar making, get a tour of how coconut vinegar and honey from stingless bee are made. Explore many activities of Thai culture such as making Thai desserts, weaving palm leaves, acrylic painting, coconut soap making, tie-dye, and learn more about firefly in Amphawa.



Figure 23: Activities Page of Website

Where To Eat



Ranjuan Amphawa

The restaurant blends the owner's mother's traditional recipes with a modern touch, featuring a signature dish of Kaeng Kua with mussels and young coconut shoots. They run their own mussel farm, supporting local businesses and creating job opportunities. The commitment extends to using locally made coconut milk, emphasizing a harmonious blend of tradition, sustainability, and community engagement.

Figure 24: Local Restaurant Page of Website

Saving the Fireflies



Fireflies in Amphawa, Thailand

Fireflies have been a staple in Amphawa for years, both for tourism and for the surrounding ecosystem. Many tourists have flocked to the Amphawa Canal to view the fireflies at night through boat tours. Unfortunately due to an increase in tourist activity, the area was overdeveloped and the fireflies found their habitat disappearing. In addition to habitat destruction, the noise pollution, light pollution, and water pollution from surrounding businesses and motorboat usage negatively impacted the fireflies too.

Read the flyers attached to learn about how you can help protect this special species!



Figure 25: Protecting the Fireflies Page of Website

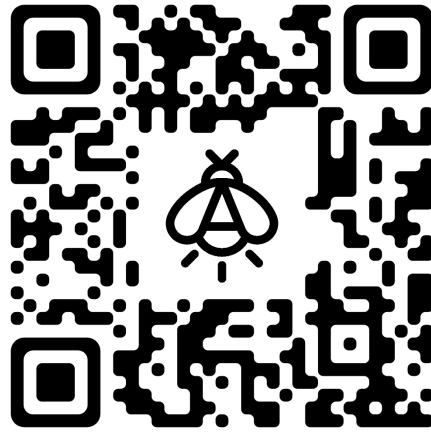



Figure 26: QR code for website

Sample Homestay Packages



พลอยน้ำ
โฮมสเตย์
PLOYNAM
HOMESTAY


20% OFF
3 Day
2 Night

OUR ROOMS

DOUBLE ROOM <small>CAN ACCOMMODATES 3 1 FULL BED AND BUNK BEDS</small>	FAMILY ROOM <small>CAN ACCOMMODATES 5 2 FULL BEDS AND 1 SINGLE BED</small>
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BOOK NOW **081 856 2729**

Soi Lang Amphoe Amphawa, Tambon Amphawa,
Amphawa District, Samut Songkhram 75110



พลอยน้ำ
โฮมสเตย์
PLOYNAM
HOMESTAY

ลด 20%
3 Day 2 Night

ประเภทห้อง

ห้องเตียงคู่ <small>รองรับผู้เข้าพักได้ 3 คน 1 เตียงใหญ่ 1 เตียงเสริม</small>	ห้องครอบครัว <small>รองรับผู้เข้าพักได้ 5 คน 2 เตียงใหญ่ 1 เตียงเดี่ยว</small>
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จองตอนนี้ **โทร: 081 856 2729**

ซอยหลังอำเภอมะปาว, ตำบลมะปาว, อำเภอมะปาว, จังหวัดสมุทรสงคราม 75110

Figure 27: Ploynam Homestay Package Sample



Figure 28: Ban Mae Arom Homestay Package Sample



Figure 29: Baanrak Homestay Package Sample

รายละเอียดห้องพัก			
ห้องเดี่ยวคู่		ห้องครอบครัว	
ขนาดเตียง 1,600 ซม 44 USD	ขนาดเตียง 1,540 ซม 35 USD	ขนาดเตียง 2,000 ซม 88 USD	ขนาดเตียง 2,400 ซม 70 USD
<p>มีอาหารเช้ารวมในตัว</p> <p>เตียงเดี่ยว หนึ่งเตียงต่อเตียง เตียงเดี่ยว มีอาหารเช้าสองเตียงพร้อม อาหารเช้า</p>		<p>บริการเพิ่มเติม</p> <p>อาหารเช้า อาหารเช้า อาหารเช้า อาหารเช้า อาหารเช้า อาหารเช้า</p>	
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Travel Itinerary

Destination :	Amphawa, Thailand
Duration :	1-3 days
Arrival :	Tuesday
Departure :	Thursday

Figure 31: Travel Itinerary Sample for 1-3 Days Trip

Benjarong Pottery Design

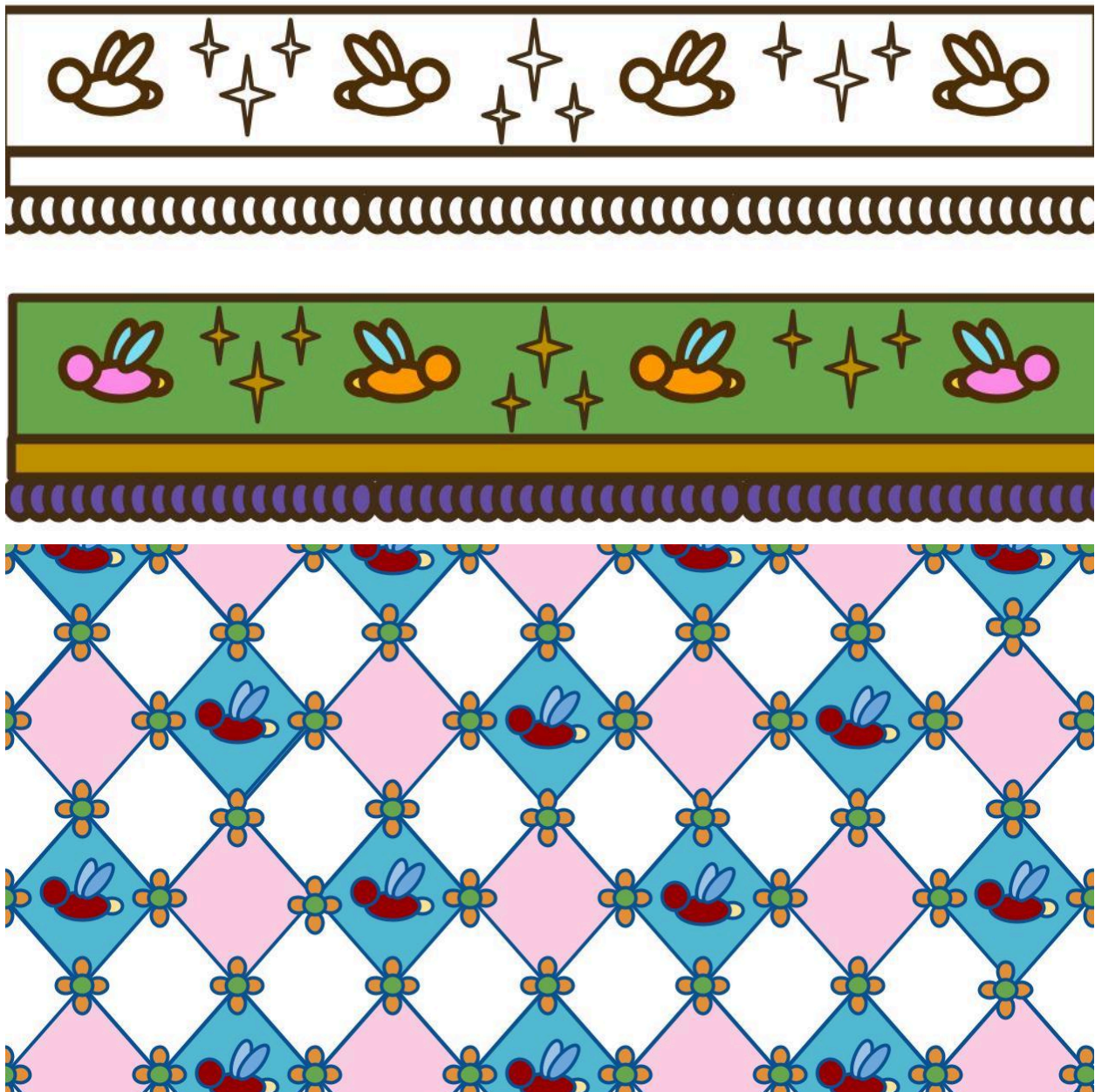


Figure 32: Outer layer design

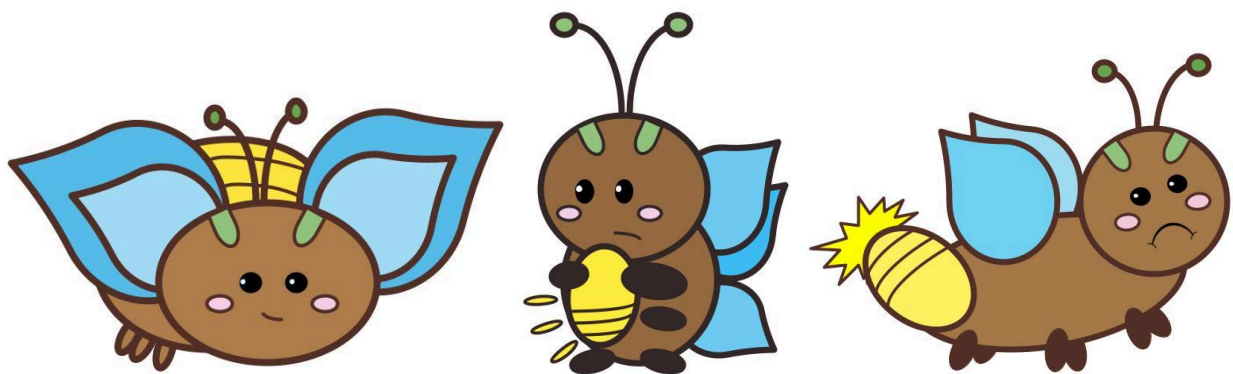


Figure 33: Firefly design