

## **The Connection and Extended Development in Making for Khmer Ceramics Culture: A Case Study of Thailand and the Kingdom of Cambodia**

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### **Abstract**

*The objectives of this research are to study the current status of the earthenware production profession, develop and disseminate knowledge gained from research about the cultural landscape network of Khmer-culture ceramics, and promote the exchange of knowledge in Khmer-culture ceramic production between Thailand and the Kingdom of Cambodia. The ultimate goal is to transfer the research findings into practical applications for both commercial and public benefits. The results of the research study have provided insights into the characteristics, patterns, and motifs of Khmer-inspired glazed ceramics in Thailand. Through the collection and study of various relevant data related to Khmer-inspired glazed ceramics, the wares used in Khmer-style glazed ceramics can be broadly categorized into two main groups based on their usage. The first group includes wares used in daily life, such as earthen jars, pots, cassettes, bottles, bowls, water pots with spouts, animal sculptures, and jewelry. The second group consists of wares used on special occasions or in religious ceremonies, such as fish and conch objects. Both groups of glazed ceramics are classified as stoneware fired at high temperatures. The cultural landscape network of Khmer-culture ceramics has identified three groups of pottery producers in present-day Cambodia. These groups are 1) the National Center for Khmer Ceramics Revival (NCKCR), 2) the Kampong Chhnang Ceramic Artisans Group, and 3) the Siem Reap Mordock Ceramics Group. To facilitate the transfer of professional skills in Khmer ceramics, training and skill-sharing programs have been established in designated locations in Thailand, specifically at the Department of Ceramics Technology, Faculty of Industrial Technology, Buriram Rajabhat University, and in Cambodia at the Siem Reap Mordock Ceramics Group. These practical training programs cover the entire process of Khmer-style glazed ceramic production, including soil preparation, shaping, decorative techniques, glazing, and firing. A collaborative work evaluation and a summary of the training results are conducted together. After conducting training workshops to transfer knowledge and skills in the pottery profession, the research team presented the outcomes of the training in three locations in Thailand, namely, the exhibition "Millennium Porcelain Fair, Ban Kruat Tradition" in Ban Kruat District, Buriram Province, "Bond Klay Ceramic: International Ceramic Art Workshop & Conference 2017" at Ruen Thai, Valaya Alongkorn Rajabhat University under the Royal Patronage, Khlong Luang District, Pathum Thani Province, and "Exhibition at RMA Gallery Sukhumvit Soi 22, Bangkok." In Cambodia, the works were showcased at the Angkor Handicraft Association (AHA) in Siem Reap, Kingdom of Cambodia. Both*

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*exhibitions received significant interest from the visitors, contributing to the international recognition and dissemination of the creative ceramic works resulting from the cultural landscape network of Khmer-culture ceramics.*

**Keywords:** *Cultural Landscape Network of Pottery, Wisdom, Khmer-culture Glaze Ceramics, Buriram Glaze Ceramics.*

## **Introduction**

The Khmer-culture glaze ceramics, which predominantly originate along the Royal Road route within the province of Buriram, are also widely distributed throughout the southern part of the northeastern region (Isan), including the Surin and Sisaket provinces. The term widely adopted by scholars worldwide to denote these ceramics in the southern Isan region and Cambodia is “Khmer ceramics”.

In the context of Thailand, our research commonly refers to Khmer-style ceramics as "Buriram Ceramics" due to the discovery of numerous small and large kiln sites primarily located within the province of Buriram, totaling over 200 kilns. Alternatively, they are also referred to as the "Ban Kruat Kiln Sites" since they are predominantly concentrated in the Ban Kruat District, which is the sole district where a significant number of large Khmer-style glaze ceramic kilns, exceeding 100 sites, have been found.

The Khmer glaze ceramics and kilns in the southern Isan region of Thailand and Cambodia are believed to have emerged during the early 13th–14th Buddhist centuries, influenced by the culture and technology (wisdom) of the southern Chinese ethnic groups. This influence began around the 8th Buddhist century as they traveled along the coastal zone of the South China Sea, passing through the cultures of Champa and eventually reaching the Mekong River basin in the Khmer-Cambodian culture, which spread and reached the highlands of the Khmer region (southern Isan) around the 15th Buddhist century (Source: Voranai Pongsachalakov, December 11, 2011, Permalink: <http://www.oknation.net/blog/voranai>).

The research project titled "The Study of Patterns and Motifs for the Development of Buriram Glaze Ceramics" by Vatchara Vachirapattarakul and team received research funding from the National Culture Commission Office, Ministry of Culture, for the fiscal year 2007. Additionally, another research project on "The Development and Knowledge Transfer of Creative Buriram Glaze Ceramics" received funding from the same source for the fiscal year 2013. Both projects successfully achieved their research objectives, which included a comprehensive understanding of the creative wisdom of patterns and motifs and the revival of ancient production techniques. The projects also focused on utilizing modern technology to improve raw materials and production processes. Furthermore, they aimed to develop and transfer local knowledge in the production process, enabling the creation of new products that are relevant and beneficial in contemporary usage. These research endeavors have contributed to the integration of research, teaching, and academic services, providing valuable knowledge to further enhance the development of innovative ceramic products suitable for present-day needs.

Based on the aforementioned reasons, the Department of Ceramics Technology, Faculty of Industrial Technology, under the management of the Research and Development Institute of Buriram Rajabhat University, recognizes the urgency of implementing the project "Research and Development of the Cultural Landscape Network of Ceramics between Thailand and Cambodia." The aim is to develop knowledge, intellectual values, cultural identity, traditional crafts, and the diversity of people, as well as to create value in the international market based on a creative economy, supported by fostering a network of collaboration that integrates local intellectual resources with knowledge. It encourages

the establishment of various networks in the regional and main tourist destinations linked to tourism and exports. This is in line with the income generation policy, enhancing competitiveness and expanding market channels in the industrial sector, service businesses within the country, and community-based enterprises, contributing to the creative economy system in the production of high-value products and services. It further extends research knowledge to foster innovation derived from local wisdom, particularly in the cultural heritage of craftsmanship linked to tourism in Khmer civilization. Subsequently, a database of the tourism network between Thailand and Cambodia was established, promoting knowledge, expertise, and creative thinking and expanding economic connections, trade, investment, and finance by utilizing the cultural network collaboration between Thailand and Cambodia as a comprehensive network in all dimensions. It supports the development of potential professions capable of linking the culture and lifestyles of communities to attract and accommodate high-quality tourism markets efficiently in the future.

#### Objectives

1. To study the status of the pottery profession and to further develop and disseminate the knowledge gained from research within the cultural landscape network of Khmer-culture ceramics between Thailand and the Kingdom of Cambodia
2. To exchange and learn the wisdom of Khmer ceramics production between Thailand and the Kingdom of Cambodia by transferring the practical results of research to enable actual production for both commercial and public benefits

#### Scope

1. Establish a cultural landscape network of ceramics between Thailand and the Kingdom of Cambodia.
2. This is a study conducted to further develop and enhance the production process, patterns, and techniques by analyzing the current production practices, identifying areas for improvement, and then developing and transferring this knowledge to the cultural landscape network of ceramics between Thailand and the Kingdom of Cambodia.
3. Transfer local wisdom in pottery production to achieve standardized product quality and produce goods according to the plans and methods developed in collaboration with participating producers, including planning and implementation to enable actual production.
4. This is a study conducted to develop and disseminate knowledge, as well as exchange and share learning with communities, for both commercial and public benefits.

### Conceptual Framework

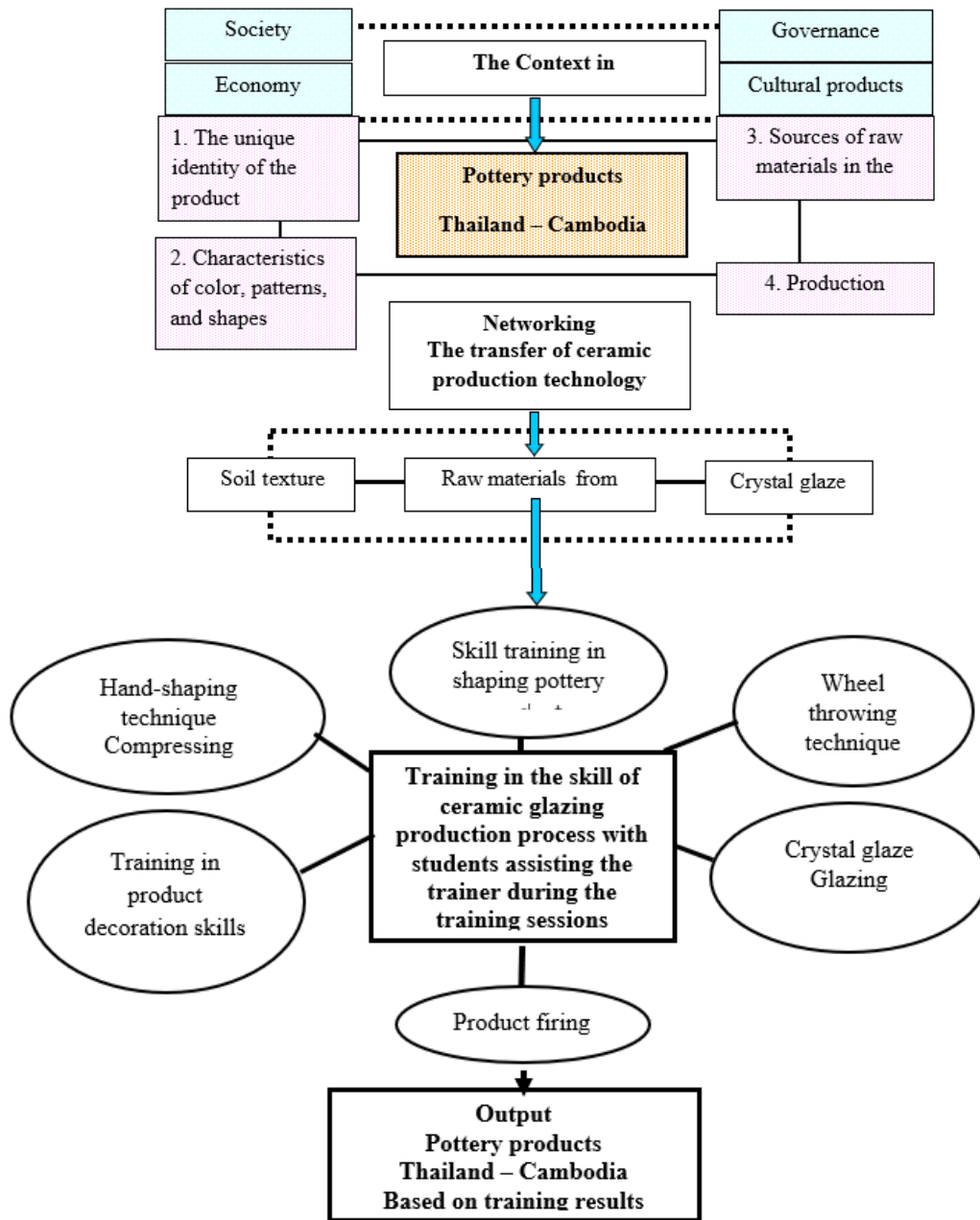


Figure 1: Research Framework

### Research Methodology and Procedures

This research follows a participatory action research approach and employs a qualitative research methodology. The research process consists of various steps, outlined as follows:

1. Conduct a literature review of documents, research reports, and online resources related to the study of ceramics in Thailand and Cambodia.
2. Establish a cultural landscape network of ceramics between Thailand and Cambodia to explore various patterns and motifs in primary image representation and study Khmer ceramics.

3. Facilitate knowledge exchange platforms for sharing information, experiences, and expertise among academics, community developers, and practitioners regarding ceramic products between Thailand and Cambodia.

4. Conduct in-depth studies on prototype ceramic production using appropriate production processes suitable for the network between Thailand and Cambodia.

5. Survey the needs related to building facilities and organize forums to summarize various issues regarding creative development, design concepts, marketing strategies, and knowledge transfer for practical application in the current context.

6. Establish guidelines for preserving, transmitting, and developing the profession of ceramic production to produce unique products within the network between Thailand and Cambodia.

7. Conduct training and skill transfer sessions for ceramic production.

8. Evaluate the outcomes of the training sessions.

9. Summarize the research findings and prepare a complete research report.

10. Present the research findings and disseminate the work from the training conducted in both Thailand and Cambodia.

## **Results**

The process and steps in the initial phase of work involve the collection of knowledge on the historical background, patterns, motifs, decorative techniques, and technological aspects of ancient Khmer-culture ceramics from various sources of information in both Thailand and the Kingdom of Cambodia. The conclusions are as follows:

The characteristics, patterns, and motifs of Khmer-culture ceramics in Thailand: Through the study and collection of relevant data from various sources, including documents from the Fine Arts Department and general scholars, as well as field surveys conducted at different museums and interviews with scholars, collectors, and local experts, valuable information about the wares associated with Khmer-culture ceramics has been obtained and can be summarized as follows:

The wares of Khmer-culture glaze ceramics, based on discoveries and studies, can be broadly categorized into two main groups:

1. Wares for daily life

2. Wares for special occasions or religious ceremonies

The group of wares for daily life is generally found in greater abundance. They mainly consist of various types of containers, such as earthen jars, pots, cassettes, bottles, bowls, water pots with spouts, animal sculptures, and jewelry appliances, which include complete wares, incomplete wares, and fragments.

As for the group of wares for special occasions, they are relatively less common compared to the first group and are primarily used in ceremonial rituals. Examples include fish, conch, and others. This group also consists of complete wares, incomplete wares, and fragments.

Both groups of these ceramic wares are classified as stoneware, which is fired at high temperatures. They are considered earthenware vessels produced using ancient manufacturing techniques. Evidence from archaeological excavations conducted by the Fine Arts Department indicates that the production of such ceramics was a significant industry during the 16th to 19th Buddhist centuries. These products were also made for export to various local and international markets.

## Summary of the status of the cultural landscape network of Khmer-culture ceramics between Thailand and the Kingdom of Cambodia

The status of the ceramic pottery occupational group within the cultural network was determined through on-site data collection in Ban Kruat District, Buriram Province. The ceramic pottery occupational group in Ban Kruat District is a community group within the district area that has come together to engage in the traditional craft of ceramic pottery. The group is led by Mrs. Yot Paiboon as the group leader and Mrs. Maneewan Yingcherdngam as the deputy leader, with approximately 20 members.

They collaborate to create pottery pieces, receiving support from researchers of Ceramics Technology program, Buriram Rajabhat University. The researchers provide knowledge on various aspects, such as patterns, motifs, and colors of Buriram's traditional ceramic glazing, and the production process, including soil preparation, shaping techniques, glazing, and firing. The group has established cooperation agreements with Ban Kruat Wittayakarn School, Bang Kruat Cultural Council, and Ban Khok Yang School to carry out activities aimed at preserving and developing the cultural heritage of Khmer ceramics.

Based on the researchers' fieldwork in the Kingdom of Cambodia, it was found that there are still three active pottery occupational groups engaged in pottery production. The overview of each group can be summarized as follows:

### 1. National Center for Khmer Ceramics Revival (NCKCR)

This center, which was established for the revival of Khmer ceramics in the Kingdom of Cambodia and was founded by Mr. Serge Rega, is a private organization aimed at researching and restoring the wisdom and techniques of ancient Khmer-culture ceramic production. It also promotes the development of contemporary ceramic arts by providing opportunities for people in rural areas, particularly the underprivileged, to receive free training in pottery making. In the initial stage, participants receive a stipend and are trained in wheel-throwing techniques, glazing, firing, and the construction of various tools used in ceramic work. This training enables them to pursue pottery as a profession, and those with advanced skills may be hired by the center for employment. In August 2007, the NCKCR conducted a practical workshop to construct a dragon kiln in Koh Ker, located approximately 80 kilometers northeast of Siem Reap. This initiative aimed to extend ceramic training programs to rural areas and involved collaboration with the NGO Heritage Watch. The second activity took place in May 2008 in the Pouk Area, located about 30 kilometers northeast of Siem Reap. The efforts of kiln construction and studios in rural areas will contribute to increasing economic value and address issues related to the illicit excavation of ancient Khmer ceramics.

Regarding the establishment of a network with this group, it was found that the members are highly interested in participating in knowledge exchange activities with researchers to further preserve the wisdom of traditional Khmer ceramic production. However, there is a lack of flexibility in decision-making due to the majority of artisans being employees of the center. The authority to participate in various activities relies mainly on the center's manager. Nevertheless, the center continues to conduct practical training activities continuously to seek collaboration with international ceramists in order to collectively develop contemporary ceramic products. Thai researchers within the group also possess the readiness and expertise in knowledge, techniques, and production skills to effectively transfer and contribute to the production network of the National Center for Khmer Ceramics Revival (NCKCR) in future opportunities.

### 2. The Kampong Chhnang Ceramic Artisans Group

Kampong Chhnang City is a province located in the central part of the Kingdom of Cambodia. It is one of the nine provinces that shares a border with Tonle Sap Lake. Kampong Chhnang City serves as the provincial capital and has contiguous territories. To the north, it borders Kampong Thom Province; to the south, it borders Kampong Speu

Province; to the west, it borders Pursat Province; and to the east, it borders Kampong Cham Province. Kampong Chhnang City is renowned for its production of pottery, earning it the name "Kampong Chhnang," which means port of pottery.

In the past, the people of Kampong Chhnang had a pottery-making profession because they had access to clay deposits of superior quality compared to other areas. Even today, there are communities that continue to engage in pottery-making, although the techniques have evolved with the times. The pottery village is located approximately 7 kilometers away from the town and is a small rural community characterized by expansive rice fields and situated behind hills with scattered sugar palm trees. The majority of the population is engaged in farming, with pottery-making serving as a supplementary occupation. The traditional pottery-making technique involved hand-shaping and molding the clay, followed by beating the pot into shape by hand and using a rotating motion. However, in the present day, this method is still practiced but is limited to a small number of elderly individuals. The younger generation tends to use a foot-powered molding technique. The community has a traditional and familial character, and there is a transmission of knowledge and expertise in pottery-making dating back to ancient times. The clay used for pottery comes from the nearby vicinity of Tonle Sap Lake and is a mixture of clay and other soil. After drying, the clay is pulverized, sieved, and mixed together before being kneaded to achieve consistency, and then it is molded using predominantly pedal-operated potter's wheels.

In addition, in the hilly area near the village, there is a vocational development center for pottery supported by the Nippon Foundation of Japan. It was established as a learning center that incorporates knowledge and modern tools and machinery, such as clay crushers, clay grinding mills, and clay pressing machines. Professional training in stoneware ceramics is provided, and studies cover topics ranging from clay sources to clay composition, glazing techniques, and the construction of large-scale kilns. There are three firing chambers located on the hillside, along with a small-scale kiln situated in the same area.

In terms of the soil texture at the center, a newly prepared soil called stoneware clay is used. It consists of a mixture of white soil and clay soil from the paddy field. The soil is moistened using the triangular table theory for glaze mixing. The products produced by the professional group vary and include tableware, tea sets, pots, vases, decorative items, and souvenirs. These products are predominantly shaped using a pottery wheel and coated with plant ash and chemical glazes. The colors range from greenish-brown, matt black, to glossy black. Upon investigating the patterns of cultural glaze production, it was found that only urn jars, elephant motif jars, vase jars, and small jars were present. There was no emphasis on producing cultural glaze products in other patterns. However, the glaze does not closely resemble ancient glaze. In in-depth interviews regarding the development of cultural glazing techniques, the group has shown great interest and is willing to collaborate in aspects of building facilities and exchanging knowledge to further enhance the expertise in producing glazed ceramic products using the Kammer ware cultural heritage. They are open to future collaborative opportunities.

### 3. The Siem Reap Mordock Ceramics Group

The operations of Siem Reap Mordock Ceramics began with Mr. Seyhak Son, a local resident from the traditional pottery production area in Kampong Chhnang province. He received training from the Nippon Foundation of Japan on the production of high-fire ceramics or stoneware using kilns. In the early stages, after completing his training, he joined the restoration center for Khmer ceramics in the town of Siem Reap. After encountering difficulties with business owners or investors, he decided to establish his own venture. He gathered and encouraged young members from Kampong Chhnang town to collaborate in creating and selling pottery products, as well as providing experiential

pottery workshops and firings for tourists, by renting space within the Angkor Handicraft Association (AHA).

The characteristics of the product patterns produced by the Siem Reap Mordock Ceramics group, ceramics, exhibit a significant level of diversity. There are traditional patterns in the form of Khmer cultural heritage ceramics, such as lime pots and urn jars. In addition, there are smaller jars decorated with applied patterns. Furthermore, there are contemporary works that are particularly interesting, mainly focusing on functional pieces such as water glasses, coffee cups, vases, jars, lidded containers, plant pots, lamps, and tableware items like bowls and plates. Regarding glazing, it can generally be classified into two main types. Firstly, there is a glaze derived from plant ash, which has a greenish-brown color and closely resembles the glazing technique used in ancient times. It exhibits a semi-glossy, semi-matte glaze with a flowing and slightly uneven texture. Secondly, there is a pre-made glaze that is imported from Thailand, including both transparent glaze and opaque white glaze. Additionally, various pre-made stains are also utilized to create different colors.

In the aspect of product shaping, the majority still utilizes the technique of wheel throwing, using pedal-operated potter's wheels to create various ware forms. In this study, the researchers conducted in-depth interviews and engaged in a knowledge exchange process. They experimented with wheel-throwing techniques and exchanged technical expertise in various aspects, including clay preparation, shaping techniques, decorative embellishments, glazing, firing, and even marketing and distribution strategies.

The establishment of a network with the Siem Reap Mordock Ceramics group. The researchers have studied the information on ceramic production groups within the Kingdom of Cambodia, specifically focusing on three groups. Among them, the Siem Reap Mordock Ceramics group stands out, led by Mr. Seyhak Son, who is considered a young leader with a passion for pottery. He has had the opportunity to learn traditional pottery techniques from his hometown, Kampong Chhnang, and has also studied modern techniques from the Nippon Foundation of Japan, which promotes the pottery profession in Kampong Chhnang. Furthermore, Mr. Seyhak Son has also worked at the National Center for Khmer Ceramics Revival (NCKCR) for approximately 2–3 years, which has provided him with experience in production processes and a well-established marketing system for ceramic artworks. Subsequently, he joined forces with others to establish a creative factory for the purpose of distribution, located within the Angkor Handicraft Association (AHA) in Siem Reap, Kingdom of Cambodia.



Figure 2: Kampong Chamang Ceramics Retail Center and Siem Reap Mordock Ceramics Group

When the research team collaborated with the Siem Reap Mordock Ceramics group, they discovered a great level of interest and enthusiasm within the group to participate in the knowledge exchange activities with the researchers to revive and preserve the cultural wisdom of Khmer ceramic glazing techniques. Both parties aimed to raise widespread awareness and appreciation for Khmer ceramic glazing arts on a broader scale. The group



expressed admiration for the research team's achievements in ceramic glazing and was particularly impressed by their ability to effectively communicate in the Khmer language. These factors contributed to the successful establishment of a harmonious network dedicated to the preservation and promotion of Khmer ceramics.

### Discussions

Transfer the knowledge gained from research and development to the cultural landscape network of Khmer-culture ceramics.

The research project aims to transfer ceramic pottery skills within the cultural landscape network of ceramics in order to further develop and exchange knowledge in the production of glazed ceramics between Thailand and the Kingdom of Cambodia. The research team has identified two training areas for the transfer of pottery skills, as follows:

#### 1. The training program for transferring ceramic pottery skills in Thailand

The training program aimed to transfer ceramic pottery skills to the cross-border network between Thailand and the Kingdom of Cambodia. The participants included groups from the Ban Kruat district community, youth students, teachers, students from Ban Kruat Wittayakarn School and Ban Khok Yang School, as well as ceramic producers, ceramics technology students from the Faculty of Industrial Technology, and all Cambodian scholarship students studying at Buriram Rajabhat University during the academic year 2016–2017. The research findings were utilized to bring both commercial and public benefits and to elevate the knowledge and craftsmanship of Khmer-culture glazed ceramics, leading to the creation of complete ceramic artworks.



Figure 3: Pottery Vocational Training Management

The practical training begins with a focus on raw materials, clay, and glazing knowledge. Participants are equipped with skills in preparing clay and glazes using locally available and cost-effective materials. They learn the techniques of hand-shaping and wheel-throwing, using existing products as models. The training also covers decorative techniques, where participants learn various methods of surface embellishment based on patterns from existing products. They acquire skills in preparing, mixing, and applying glazes, as well as the process of loading and firing the glazed products. The training includes informative lectures and hands-on practice to elevate their proficiency in the art of ceramic glazing, resulting in beautifully crafted ceramic works.

#### 2. The training program for transferring ceramic pottery skills in the Kingdom of Cambodia

In carrying out the training program for transferring ceramic pottery skills in the Kingdom of Cambodia, the research team has collaborated with the Angkor Handicraft Association (AHA), located in Siem Reap, Cambodia. The group involved in the training is called Siem Reap Mordock Ceramics.

The training program for transferring ceramic pottery skills in the Kingdom of Cambodia involves an exchange of techniques between the research team, Thai ceramic artisans, and the artisans from Siem Reap Mordock Ceramics Group. The Siem Reap Mordock Ceramics group predominantly uses wheel-throwing techniques to create various pottery forms. The research team, assistant researchers, and professional ceramic artisans from Ban Kruat District participating in the project have conducted study exchanges and learning experiences. They have experimented with wheel-throwing techniques and exchanged knowledge in various aspects such as clay preparation, shaping, decoration, glazing, firing, and even marketing and distribution.

The results of the knowledge exchange and showcasing of the outcomes from the vocational training program

After conducting the vocational training program to transfer knowledge and skills in ceramic pottery in Thailand and the Kingdom of Cambodia, the researchers organized exhibitions and showcased the outcomes resulting from the research and training as follows:

### 1. Showcasing the artworks in Thailand

1.1. Organizing an exhibition and demonstration at the "Millennium Porcelain Fair, Ban Kruat Tradition" event in Ban Kruat District, Buriram Province, Thailand, Year 2017, from April 1st to 3rd, 2017.

During the "Millennium Porcelain Fair, Ban Kruat Tradition" event, which is an annual event held in Ban Kruat District, Buriram Province, Thailand, and has been organized continuously for 26 years as of 2017, an exhibition and demonstration of Khmer-culture ceramic production techniques were showcased. The event aimed to conserve the valuable cultural heritage of the local community, promote tourism to the ancient Khmer cultural sites, and serve as a center for Khmer-culture ceramic production. Additionally, it aimed to enhance tourism and connect with other cultural tourism destinations in Buriram Province. The event featured an extravaganza parade of ceramic glazing from each municipality and sub-district, a parade competition, simulated ceramic glazing competitions, a beauty pageant, Thai cultural performances, community product sales, and light and sound shows, all of which were free for public viewing. The researchers also participated in organizing an exhibition of ceramic glazing techniques, demonstrating the processes involved in ceramic production, including soil preparation, kneading, shaping, engraving, applying decoration, glazing, and firing. During the demonstrations, there were presentations on the history of Buriram's ceramics and detailed explanations of the processes. Importantly, this event provided an opportunity for children, youth, and the general public to actively participate by engaging in hands-on activities at various stages of the ceramic production process. Many government officials, students, scholars, merchants, and members of the public showed great interest and actively participated in the activities, exhibitions, and demonstrations. This event highlighted the public's enthusiasm for preserving the intangible cultural heritage of Buriram's ceramic glazing tradition, which has been developed and perfected over generations, and aimed to foster a sense of pride and encourage the transmission of this ancient ceramic production occupation, ensuring its valuable existence as a cultural heritage for future generations.

1.2 The international academic exhibition "Bond Klay Ceramic: International Ceramic Art Workshop & Conference 2017" was held at Ruen Thai, Valaya Alongkorn Rajabhat University under the Royal Patronage, Khlong Luang District, Pathum Thani Province, between June 4th and 11th, 2017.

The 5th International Contemporary Ceramic Art Workshop and Conference were organized to promote the integration of research and education with the creation of ceramic art. The event fostered collaboration among organizations, institutions, artists, professors, and students. The seminar included activities related to contemporary ceramic

art, featuring international artists, creative workshops, art exhibitions, and presentations by international artists. The hosting responsibilities were alternated among participating countries, inviting leading artists from each country to participate and exchange knowledge in various techniques and processes, including raw materials, shaping, product decoration, and firing. The research team presented the techniques used in the production of Buriram ceramics, which involved wheel throwing and decorative techniques such as incising patterns, combing patterns, and curved patterns, leaving a profound impression on the participants. Additionally, there were opportunities for exchange and collaborative analysis of the historical background of ancient Khmer ceramic glazes. Artists from different countries, who had heard of its reputation, expressed their interest in studying and experimenting with the creation of artworks in the style and characteristics of ancient Khmer ceramic glazes. The research team presented and explained the techniques and experiences gained from their research work.

1.3 The international academic exhibition "Bond Klay Ceramic: International Ceramic Art Workshop & Conference 2017" was exhibited at RMA Gallery, Sukhumvit Soi 22, Bangkok, and took place from June 9th to July 10th, 2017.

As part of the international academic exhibition "Bond Klay Ceramic: International Ceramic Art Workshop & Conference 2017," two venues showcased the artworks. The first exhibition took place at Ruen Thai, Valaya Alongkorn Rajabhat University under the Royal Patronage, Khlong Luang District, Pathum Thani Province. The second exhibition was held at RMA Gallery, Sukhumvit Soi 22, Bangkok. The researchers developed creative works of art using the traditional Khmer pottery technique derived from their research. These works were innovative creations that built upon the ancient glazing technique of Khmer pottery. They consisted of two sets of artwork. The first set was a series of bird-shaped pottery called "Bird Pot," crafted using the wheel throwing technique with clay from Buriram. The pottery was coated with a simulated wood ash glaze, creating flowing brown lines. It was meticulously decorated with carving, incising, creating textured surfaces, and shaping the bird's form. The eyes of the bird were accentuated with green and red gems to add visual interest. Both pieces of artwork had dimensions of 22 x 26 centimeters and garnered attention from international artists as well as students who inquired about and engaged in discussions about the conceptual origins and technical aspects of glazing and firing processes. The second set of artworks was a series of elephant-shaped vases called "Elephant Vase." These vases were also crafted using the wheel throwing technique with clay from Buriram and coated with a transparent glaze tinted with a greenish-brown color. The vases featured sculpted elephant heads and various attachments on their bodies. They had four legs and a high, flared rim with decorative edges inspired by ancient Khmer glazing techniques. The vases exhibited intricate carving and incising, resulting in beautiful and distinctive patterns that highlighted the uniqueness of the ancient Khmer glazing tradition. These artworks attracted significant interest from exhibition visitors. Furthermore, all the artworks received invitations to be exhibited at the Asian Ceramic Bangkok 2017 event, held at Bitec Bangna in August 2017. This event served as a platform to promote the creative ceramic works that stemmed from the cultural landscape network of Khmer-culture ceramics, introducing them to an international audience.

## 2. Showcasing the artworks in the Kingdom of Cambodia

The exhibition was held at the Angkor Handicraft Association (AHA) in Siem Reap, Kingdom of Cambodia. This exhibition showcased the collaborative artworks resulting from the joint practical training between ceramic artists from both countries. The exchange of knowledge and skills aimed at further development and transmission of expertise in the traditional Khmer ceramics process, including soil preparation, shaping, decorating, glazing, and firing. It was considered a collaborative effort to create ceramic artworks using different skills and experiences, with the same goal shared by Cambodian and Thai ceramic artisans, students, and professors. The created artworks exhibited

beauty according to the principles of aesthetics, including surface texture, color, simplicity of form, and intricate details. Additionally, the decorative elements incorporated in the production process were suitable for the foundational skills possessed by the ceramic artisans. The selection of materials, both clay and crystal glaze, was appropriate, and the production process was not overly complex. Furthermore, it allowed for the potential development and advancement of artworks as desired. However, it still adhered to the principles of creativity, encompassing forms, patterns, and traditional production techniques that were reintroduced using current technology to enhance the raw materials and production processes. This was in line with the distinctive characteristics of Khmer-culture glazed ceramics, aiming to elevate the quality of products and services. It was achieved by establishing a network community in the field of earthenware that fulfilled the desired objectives, namely the continuous development and transmission of knowledge related to Khmer-culture ceramics between Thailand and the Kingdom of Cambodia, involving researchers, manufacturers, target communities, and students in the field of ceramics technology. The research findings were then applied to produce earthenware artworks that possessed aesthetic and sculptural value as well as practical benefits for commercial and public use, thereby supporting the complete cycle of promoting and developing potential occupations that connect art and the community's way of life. This facilitated the effective attraction and support of high-quality tourist markets in the present and ensured long-term sustainability in the future.



Figure 4: Artwork Exhibition

### Suggestions

1. It is recommended to continue developing and transferring knowledge to the cultural landscape network of Khmer-culture ceramics between Thailand and the Kingdom of Cambodia in future opportunities. This is to ensure the sustainability of knowledge as a supplementary profession for the members of both communities in the long run.
2. It is recommended to conduct research on marketing, product development to stay current, and packaging design of souvenir ceramics to promote widespread distribution.
3. To promote diversity in the use of raw materials for maximum benefits and cost reduction in the production process, as well as to create variety in the products, local research and development of raw materials should be conducted to transform them into finished products.
4. It is recommended to formally establish a group of professional ceramic artisans to conduct continuous creative activities in producing pottery artworks.

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