

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/391776103>

# THE CONTRIBUTION OF TRADITIONAL HANDICRAFT TO SUSTAINABLE COMMUNITIES AT KRABEI RIEL: TOWARD SAFEGUARDING AND TRANSMITTING ICH WITHIN ANGKOR WORLD HERITAGE PROPERTY

Article · March 2025

CITATIONS

0

READ

1

1 author:



**Im Sokrithy**

Royal University of Fine Arts

9 PUBLICATIONS 534 CITATIONS

SEE PROFILE

# THE CONTRIBUTION OF TRADITIONAL HANDICRAFT TO SUSTAINABLE COMMUNITIES AT KRABEI RIEL: TOWARD SAFEGUARDING AND TRANSMITTING ICH WITHIN ANGKOR WORLD HERITAGE PROPERTY

IM Sokrithy,<sup>1</sup> OU Kong Kea,<sup>2</sup> PHON Tara,<sup>2</sup> TOUCH Sopheak,<sup>2</sup> and LIM Bunhong<sup>2</sup>

## INTRODUCTION

Angkor is a well-known archaeological site in Cambodia. The complexity of the site, composed of ancient monuments, water reservoirs, settlements, and roads, reveals the urbanization of the empire. Some of those ancient structures still function for communities living within and around the site. In 1992, Angkor was listed as a UNESCO World Heritage Property (<https://whc.unesco.org/en/list/668>) under selection criteria (i), (ii), (iii), and (iv). Beyond monuments, the Angkor protected zone covers an area of 401 square kilometres, consisting of forests, rice fields, and 112 villages in the province of Siem Reap.

The interconnectedness of community, culture, and nature creates inseparable elements to promote the values of heritage and shape the characteristic landscape of Angkor. The 17 Sustainable Development Goals (SDGs) and 169 targets were adopted during a United Nations summit in 2015 as a plan to tackle global issues by 2030 (<https://sdgs.un.org/2030agenda>). Sustainability of the community and the cities, including World Heritage Sites, was evident in goal number 11.4 to strengthen community development. Clearly, natural resources from Tonle Sap's shore, the Angkor World Heritage Site, and northern Siem Reap region, play significant roles in safeguarding and sustaining Intangible Cultural Heritage (ICH) through traditional handicraft practices. The study aims to investigate the connection between ICH roles, nature, and communities within and around World Heritage protected areas by focusing on handicraft production in Krabei Riel, a village located at the southern part of Angkor World Heritage Site. The study illustrates the importance of ICH in shaping the cultural landscape of Angkor World Heritage Site and its environment, and identifies involved stakeholders in handicraft production at international, national, subnational, and

---

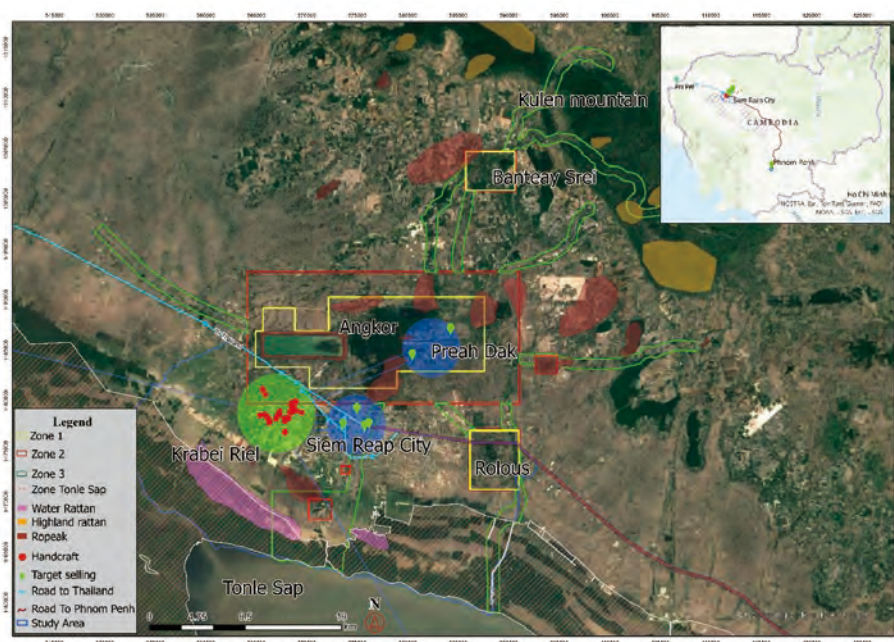
<sup>1</sup> Director, Department of Research Training and Communication, APSARA National Authority, Cambodia

<sup>2</sup> Technical Staff, APSARA National Authority, Cambodia

community levels, including raising awareness on knowledge transmission, which is the core component of ICH.

## GEOGRAPHICAL ENVIRONMENT OF KRABEI RIEL

Geographically, Angkor World Heritage Site is located between the Kulen mountain range in the north and Tonle Sap River in the south. The Kulen mountain range contains the majority of forest and water resources for the Angkor region and Siem Reap city. Meanwhile, Tonle Sap Lake, the largest water reservoir in Cambodia, supplies invaluable resources for fishery, biodiversity, and local consumption for the region, which consequently can be distinguished by three major types of village community. Community Type 1: floodplain stretching from the shore of Tonle Sap, up to the level of the southern area of Siem Reap city, and the area lying along the riverbank of the Pouk, Siem Reap and Rolous rivers. Community Type 2 encompasses the villages scattered from the level of Siem Reap city to the north, to include the main area of the Angkor Park. Community Type 3 covers the upper plains, lying to the north of Angkor Thom up to the Kulen foothills. Each community type occupies one of the main ecological sub-zones of the region and is differentiated by socio-cultural characteristics. It is useful to mention that in 1992 UNESCO adopted 'Cultural Landscape' (<https://whc.unesco.org/en/culturallandscape/>) to recognize the relationship between human and natural environment, while the Angkor landscape protected area was issued in 1991 by royal decree and currently rezoning in 2023.



**Figure 1** The geography of Krabei Riel community and raw materials locations. The map also shows Angkor World Heritage protected zone and Tonle Sap biosphere protection Zone.

Krabei Riel, renowned for handicraft skills and agricultural production, is located at the southern part of Angkor World Heritage Site, south-west of Siem Reap city and 10 kilometres from Tonle Sap Lake. The shore of Tonle Sap (Figure 1) is home to some important areas of biodiversity for aquatic species and plants, which can be harvested all year round. In the monsoon season, the Mekong River flows into the Tonle Sap Basin, with the resulting increase in water levels and water surface flooding the surrounding area for five to six months each year. This ecology creates benefits for local communities living around the lake. The north is home to the Angkor monuments, the beating heart of Siem Reap tourist destination. Besides temples, Angkor also hosts some natural resources to benefit handicraft production. Meanwhile, the Kulen mountain in the upper north stretches from east-to-west, where numerous natural resources are available for harvesting.

## CURRENT STATE OF HANDICRAFT PRODUCTION IN KRABEI RIEL

### Raw Materials and Their Locations

Handicraft production in Krabei Riel employs a number of raw materials (Figure 1 refers), of which the most common is rattan, a climbing palm belonging to the Palm family. Many rattan species are found in Cambodia but most weavers in Krabei Riel use two kinds, which can be harvested in Siem Reap, Kompong Thom, and Preah Vihear provinces. One is called '*ropeak*,' or '*l'peak*' (*Calamus salicifolius*), native to Cambodia and south Vietnam, and the other is generally known as '*pdao*' (detailed later). These materials are essential for handicraft weavers and are found in conditions favourable to soil, sunlight, and environment (Khou, 2008). Weavers in Krabei Riel divide *ropeak* into two different kinds, which are used for different production and purposes due to their shape and length. The first one is called *ropak jael*, while the second is known as *repeat car*. The two kinds of *ropeak* grow at the same habitat, light, and temperature, but weavers will harvest the type best suited to their production activities.

Another important raw material is *pdao*, which weavers categorize into two types: *pdao teuk* (water rattan, *Calamus godefroyi*) and *pdao kok* (highland rattan, *Calamus viminalis*).<sup>3</sup> *Pdao teuk* can be collected from the Tonle Sap shore (Figure 2). During the rainy season, the rising water levels of Tonle Sap Lake create challenges for people collecting *pdao teuk*, unlike *pdao kok*, which can be harvested from mountainous areas of northern Siem Reap city (Kulen mountain) and Preah Vihear province (Tbeng mountain). In Khmer culture, rattan is a much-valued material for its durability and aesthetics (Preap, 2013–2014) and, consequently, weavers in Krabei Riel rarely weave *pdao kok* into mats.

<sup>3</sup> See also Khou (2008) for the various kinds of rattan grown in different regions of Cambodia.





**Figure 2** Local weavers harvest *pdao teuk* from the shore of Tonle Sap (©APSARA National Authority, 2023)

Beside rattan, '*romchek*' (*Pandanus pierrei*) is another important material for handicraft production in Krabei Riel and parts of Siem Reap (Figure 3). *Romchek* can be collected near bodies of water like rivers, channels, streams, and ponds (Ang, 2008–2009). In Krabei Riel, the water irrigation system is actively used in both the dry and rainy seasons for flood prevention and agriculture. The water is irrigated from the western Baray to southern Siem Reap, playing a crucial role in local livelihood. Along those hydraulic systems, *romchek* naturally flourishes and



**Figure 3** *Romchek* harvesting along the irrigation channel in Krabei Riel (©APSARA National Authority, 2024)

provides benefits to weavers searching for easy-to-harvest materials. *Romchek* is mainly used in mat weaving. *Theang tnot* (palm petiole) is widely accessible in and around villages and its palm trees can be used in a variety of ways. Leaves and parts of the *theang tnot* are used in handicraft production and in foods commonly available throughout Cambodia. Many luxury objects are created from *ropeak* and *theang tnot*. Lastly, coconut leaves are also used for handicraft production.

## Handicraft Community and Market Study

The study revealed that the number of families involved in handicraft production increased from 1 percent (2008) to 2.31 percent (2010), for 35 families working on furniture made from rattan and bamboo. The data stabilized at around 2.5 percent in the period 2019–2021, according to Siem Reap Provincial Department of Planning (2022). Nevertheless, it is important to note that the number of families involved in weaving activities differs from village to village and varies in response to trends or challenges. For instance, in Totea village, most weavers abandoned handicraft production in favour of construction work when tourism registered a significant growth in 2012–2013, with many new hotels, restaurants, and houses built in the area. However, the study also noted that weavers in Popis village resumed their handicraft activities during the Covid-19 pandemic, when travel restrictions forced many villagers to work from home.

Crucially, the study noted that more middle businessmen, within and outside the community, had developed a deeper understanding of all aspects of the product, with an additional seven depots created at various villages in the community. These depots collect finished products for export from Phnom Penh capital city to places like Europe and Japan, and from Poipet (a town on the Thai-Cambodian border) destined for Thailand. Other production centres are found in tourist areas and local markets (*psar chas*), frequented by tourists transiting or staying in Preah Dak village (Map in Figure 1 refers).

Current market development creates a competitive environment. In general, weavers divide their products into two main types, based on aesthetics, skill levels, size, and quality. Type 1 is called '*jojjos*,' literally meaning 'second hand' in reference to their modest standards, while Type 2, known as '*mode Japan*', means Japanese style, following the current orders by middlemen for exports to Japan, Europe, and the U.S. Type 1 products are usually large in size and devoid of detailed decorations (Figure 4), favoured by some weaving families because they are easy to produce and are in demand. Orders for Type 1 products are received from middle agents for onward sale to Siem Reap city and for export to Thailand (see Annex).



**Figure 4** Weavers create a Type 1 (*joj*) product (©APSARA National Authority, 2023)

Unlike Type 1 items, the size of Type 2 products can be large or small and requires extended weaving times and complex decorations (Figure 5). Several private enterprises purchase Type 2 products from villagers and have assembled catalogues and models for weavers to follow, including suggested size, width, and ornament,<sup>4</sup> resulting in a new level of innovation for Type 2 products. More weavers work on Type 2 items, which are generally designed by, or under instruction from, middlemen, for their ability to generate higher rewards than Type 1 products. One of the findings from our study concerns the weavers of Type 2 items in Roka village, who trained groups in handicraft skills and formed them into units to improve their supply capabilities. Some weavers can now supply both traditional and modern products, depending on material availability and the requirements stipulated by middlemen.

Beyond commercial products, several types of woven items are in demand by villagers as offerings to monks, for use in religious events or traditional ceremonies in Buddhist monasteries. Additionally, some families have switched from *ropeak* to *pdao*, the latter being more readily available near the village, resulting in *ropeak* no longer used in weaving, as observed in several weaving families in Totea village. On the other hand, the diminishing use of *romchek*, in the past widely employed in most villages to weave mats for domestic use, is a cause for concern, with only a few weavers now employing *romchek* to produce mats, due to the rapid influx of modern materials in numerous villages, as discussed later.

<sup>4</sup> A sample catalogue is available at <https://www.manava-cambodia.com/> (Accessed on 4 February 2025).



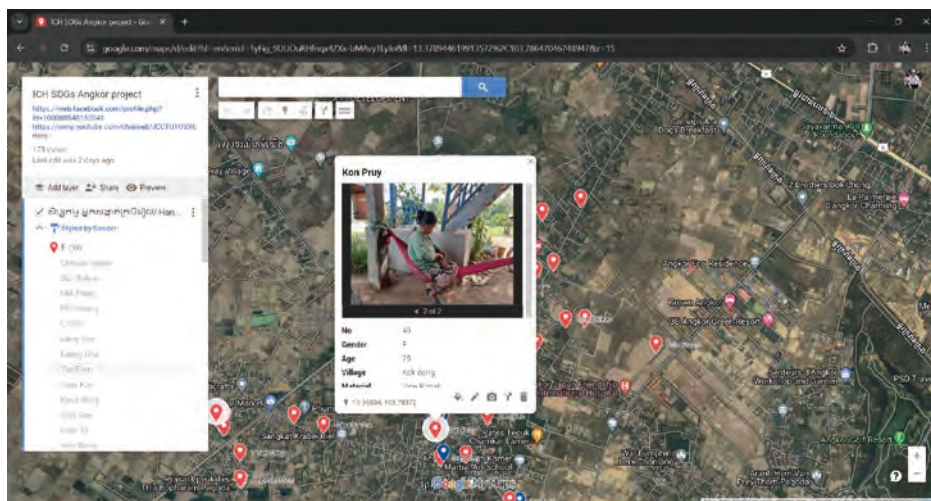


**Figure 5** Type 2 items on display at the private Manava enterprise (©APSARA National Authority, 2023)

## Mapping Weavers to Customers

Aiming at connecting local weavers and customers, a QR code has been generated to ensure that the products can be easily found and can freely reach government institutions as well as public and tourist outlets (both at national and international levels). The QR code connects communities with Google Maps and is a very effective way to identify and locate handicraft communities easily and in real time (Figure 6). This system benefits tourism by developing the availability of tourist products beyond the temples, as well as preserving ICH practices and supporting Krabei Riel communities. Through festivals, events, gastronomy, crafts, arts, and so on, ICH engages local communities with tourists and creates unique experiences. However, plans and strategies need to be based on creative industries for tourist activities. The use of creative industries to promote tourism encourages a unique experience for visitors, supported by a strategy to create more authentic experiences (Arcos-Pumarola et al., 2023). Therefore, sustainable tourism should be clearly explained to local communities to ensure that negative issues are properly managed and reduced.

The QR application is intended to bridge the gap between local weavers and customers. More importantly, tourists can learn about the environment and its neighborhood, to locate weavers working from home within the community, beyond the Angkor monuments. The online platform can also be used to gather information about shops in Siem Reap town and tourist spots where tourists can purchase products near their accommodation. The QR code will hopefully be adopted by local communities and displayed in their business posters and



**Figure 6** Screenshot of mapping displays in Google Maps

installed at conspicuous locations, including tourist spots, in the town and in local stores near the temples. However, it is imperative to boost the technological literacy of local villagers with training programs supported by governmental and NGOs sectors.

### **Transmission of Knowledge in terms of Heritage Education**

In terms of a heritage education program at the APSARA National Authority, a transmission workshop was created at the core of knowledge dissemination to encourage people, particularly the young living close to a World Heritage Site, to recognize the value of heritage, understand the importance of safeguarding ICH, and transmit handicraft knowledge to their peers. A workshop held at Krabei Riel primary school was attended by a commune representative, as well as the village chief, village committee, teachers, weavers, and 200 students. The purpose of the workshop was to disseminate the research results to the community and raise awareness on the importance of knowledge transmission to young people, in order to bridge the gap between theory and practical experience for students engaged in heritage programs conducted by the APSARA National Authority.

ICH is taught in heritage education programs in the Angkor region, with programs educating students on basics such as introduction to ICH and relevant practical examples in the community. Hence, posters were designed with four focus areas consisting of (1) introduction to natural resources and harvest, (2) materials and weaving activities, (3) research methodologies and networking, and (4) marketing of the products (Figure 7). Moreover, three handicraft representatives — practitioners of traditional handicraft activities for generations — were invited to share with students their experience and insights on weaving techniques. The students were interested in the workshop and engaged in the raw materials and the



**Figure 7** Knowledge transmission to students in the community (©APSARA National Authority, 2024)

weaving process. This initiative invites educational institutions to adopt the findings from the annual study program and set up courses for one or two weeks in duration at each school.

## Challenges

The study noted the issues faced by handicraft communities in relation to their craft and ability to support their families financially, with several of them potentially switching to other activities in the near future. Three main challenges have been identified to date: (1) raw materials, (2) financial viability and (3) market opportunity.

Additionally, handicraft production is affected by two major concerns: urban development and growth in demand without sustainable initiatives. The availability of natural resources, and *ropeak* in particular, has caused concerns for the last five years, due to changes in land-use to meet growing demographics in the last decade. For instance, forest areas have been cleared to make room for agricultural cultivation or residential buildings in particular, except in the Angkor protected area, where such developments are not allowed. Current studies on measuring and predicting urban growth in Siem Reap point to an expansion towards the northwest-to-east and west-to-southeast, along the main road, as a result of population growth and tourism development (Liu et al., 2019). The problem of high demand for weaving materials is exacerbated by increasing numbers of people collecting the dwindling stocks of *ropeak*. Lands in these areas were formerly rice fields dedicated to *ropeak*, which could be easily found in Krabei Riel and neighbouring villages until a decade ago. However, weavers report



that these locations have since been transformed into construction sites for real estate development, forcing weavers to travel longer distances and spend more time collecting raw materials, resulting in higher expenses and reduced income. Hien (2023) reports that, in addition to Krabei Riel communities, Angkor villagers face similar issues for the harvest of raw materials, searching for *ropeak*, usually in the hot rainy season after completing the rice harvest, in Prasat Balang district, Kompong Thom province. It has also been noted that, for weavers, *ropeak* is no longer a seasonal harvest but a year-round activity, since handicraft production plays a major role in their family economics.

As mentioned earlier, *pdao teuk* can be extracted from flooded forests of the Tonle Sap shore in both the dry and rainy seasons. In the rainy season, it is necessary to ride a boat to reach the *pdao teuk*, with some weavers selling the raw materials to weavers unable to harvest the product in flood conditions, with the price of raw materials increasing in the rainy season. In the dry season, groups of weavers can harvest *pdao teuk* using a land vehicle. The harvesting of raw materials is being impacted by climate change. According to Fishery Administration and Siem Reap Provincial Administration (2021), wildfires have destroyed floodplain forests in six districts of Siem Reap province, damaging 1289 hectares of flooded forest in 2016–2020. The report identifies causes of fire, but climate change is also playing a role in causing severe droughts to the region, increasing the risk of wildfires.

The use of modern materials is also forcing weavers to modify traditional skills. *Romchek*, which grows in areas close to bodies of water, in the past could be easily harvested and woven into mats. Our study found that weavers are being asked to share some benefits with landowners when real estate increases in value, pushing up the cost of handicraft activities and reducing the net gain from handicrafts compared to past years. Meanwhile, the use of nylon imported from neighbouring countries is becoming increasingly prevalent. In some villages, the number of weavers using *romchek* has decreased from five to one. Political instability also affects shipments and marketing activities. Type 1 rattan handicrafts, for example, are exported overland by Cambodian middlemen to Thailand through the border at Poipet. In the last two years, events in the run up to a general election in Thailand have caused disruptions to production activities where *ropeak* is used. In turn, this has affected the supply chain and the movement of goods, with Type 1 products failing to sell because they were detained at the Cambodian-Thai border for months.

Lastly, while for some families' handicraft weaving is an additional source of income, for many others it is the only source of income and plays a substantial role in their economic viability. According to Pwint (2015) and Richard (2007), who conducted research in Totea and Roka villages, respectively, most weavers in

these villages have produced handicrafts, on average, for more than 25 years. Villagers produce handicrafts with traditional methods, without business knowledge or creativity input. Therefore, the value of traditional weaving techniques should be promoted for its capacity to generate economic benefits for the village, despite the lack of a business concept or modest creativity/design input. Traditional knowledge and handicraft skills should be encouraged to improve the livelihoods of local communities (APSARA, 2013). This means that their handicraft production is driven by demand from middlemen. Moreover, rattan shortages are also a factor mentioned by researchers, who advocate for maintaining the rain forest or replanting rattan to replenish stocks.

## DISCUSSION

The discussion highlights a complex interplay between traditional handicraft practices, environmental conservation, and economic development in the Siem Reap region of Cambodia. A central challenge is the scarcity of traditional raw materials like *ropeak*, used for weaving. This scarcity stems from a combination of factors, including:

- **Over-harvesting:** The demand for *ropeak* has led to its depletion in easily accessible areas, forcing weavers to travel great distances (120–150 kilometres) to source it. This increases costs and time, impacting their livelihoods.
- **Protected Areas:** *Ropeak* grows within the Angkor World Heritage Site protection area and other protected zones like Phnom Kulen, where development and resource extraction are restricted for conservation purposes. While these restrictions are crucial for preserving the natural and cultural heritage, they limit access to vital raw materials, with no viable solution in sight.
- **Shifting Materials:** The shortage of *ropeak* has forced some weavers to switch to alternative materials like *pdao*, which is more readily available. Although *pdao kok* can be harvested from mountainous areas of northern Siem Reap city and Preah Vihear province, this material is much valued in Khmer culture and consequently it is rarely woven into mats. This shift may impact the quality, uniqueness, and cultural significance of weavers' crafts. *Pdao* harvesting also presents challenges, relying on seasonal availability and requiring travel to different areas, including the Tonle Sap Biosphere Reserve.

These challenges also point to the importance of handicrafts for local livelihoods and the government's efforts to support this sector through initiatives like the 'one village, one product' policy. However, several hurdles remain:

- **Market Access:** While the government and some NGOs are facilitating product displays and exhibitions, many weavers still rely on middlemen, limiting their direct access to markets and potentially reducing their profits. A more unified approach to marketing and distribution is needed, which could include: (a) negotiating lower commission rates for the middlemen; (b) forming a consor-

tium of weavers to deal directly with buyers and consumers, to diminish or even omit the role of middlemen; (c) through the direct support from the concerned authorities.

- **Tourism and Cultural Dissemination:** The proximity of handicraft villages like Preah Dak to major tourist attractions presents an opportunity to showcase and sell local products. However, these villages often lack signage and information about the craft traditions, hindering cultural dissemination and potential economic benefits. Integrating these craft communities into the tourism experience is crucial.
- **Sustainability:** The long-term sustainability of the handicraft sector depends on responsible resource management. The revival of *ropeak* farming in Pursat province, with NGO support, is a positive example. However, broader discussions involving the government, NGOs, and communities are needed in order to address issues like rattan farmlands, sustainable harvesting techniques, market support, and community participation in resource management. Clarifying community access rights within existing environmental regulations is also essential.
- **Collaboration and Investment:** Addressing these challenges requires collaboration among various stakeholders, including international organizations, national institutions, designers, educators, and local communities. Investment in infrastructure, training, and market development is also crucial. Integrating sustainability into subnational master plans is essential for long-term success (United Nations, 2017).

In summary, the future of handicraft production in Siem Reap hinges on finding a balance between environmental protection, economic development, and the preservation of cultural heritage. This requires a multi-faceted approach that addresses raw material access, market development, tourism integration, community empowerment, and sustainable resource management through collaboration and investment.

## CONCLUSION

The intricate woven crafts of Krabei Riel, a testament to generations of tradition, face a precarious future. This study reveals the inseparable link between the natural environment and the continuation of these traditional practices, highlighting how access to resources directly impacts income sustainability and the preservation of ICH. While rattan weaving offers vital economic opportunities for villagers, the craft is facing a critical decline. Material shortages, coupled with changing employment patterns, evolving education systems, and demographic shifts, have significantly hampered the intergenerational transmission of these valuable skills. Consequently, many weavers in Krabei Riel struggle to survive, their livelihoods threatened by the increasing scarcity and cost of raw materials.

Two critical interventions are paramount. First, securing sustainable access to raw materials is essential. This requires collaborative resource management programs involving government agencies, NGOs, and, most importantly, the local communities themselves. A joint task force, comprised of representatives from these stakeholders, should be established to develop and implement a sustainable development plan for the handicraft industry. This plan must address rattan farming initiatives, sustainable harvesting practices, and clear regulations regarding communities' rights to access natural resources (Kingdom of Cambodia, 2023), preventing overconsumption and ensuring long-term availability. Second, establishing direct market linkages with the burgeoning tourism sector is crucial for economic viability. Moving beyond reliance on middlemen, handicraft communities should be empowered to showcase and sell their products directly to tourists. This can be achieved through the creation of dedicated spaces within or near existing tourist attractions, such as the Angkor monuments, and through the development of online platforms to reach a wider client base.

Integrating these craft traditions into the tourism experience not only provides crucial economic opportunities but also fosters cultural exchange and appreciation. It creates a valuable meeting point for culture, recognizing the pride of the community and encouraging local communities to actively safeguard their ICH and the knowledge passed down through generations. By prioritizing environmental stewardship, economic development, and cultural preservation, and by fostering genuine collaboration among all stakeholders, we can ensure that the vibrant tradition of weaving in Krabei Riel not only survives but thrives, enriching both local communities and the cultural landscape of Siem Reap for generations to come.

## **ACKNOWLEDGEMENTS**

The authors wish to express gratitude to all those experienced handicraft weavers who sacrificed their time allowing us to conduct the research and made the invaluable contribution to the workshop at primary school. They kindly welcomed us and told their stories regarding handicraft and family experiences in the recent rapid changes in the community. Local commune chiefs and village chiefs in Krabei Riel also made significant contributions to the study and facilitated administrative needs for a smooth research flow. Moreover, we thank teachers and school managers of the primary school in Krabei Riel for providing the place for the dissemination workshop to students. Finally, our heartfelt thanks to Dr Lia Genovese for editing this article.

## **REFERENCES**

Ang, C. (2008–2009). វិញ្ញាណកម្ម [Screw-pine]. *Khmerrenaissance*, 4, 94–95.

- APSARA. (2013). Guidelines: Safeguarding Intangible Cultural Heritage within the Angkor World Heritage Site and other Sites under the Jurisdiction of APSARA Authority.
- Arcos-Pumarola, J., Paquin, A.G., & Sitges, M.H. (2023). The use of intangible heritage and creative industries as a tourism asset in the UNESCO Creative Cities Network. *Heliyon*, 9 (1), e13106. Retrieved on 8 November 2024 from <https://doi.org/10.1016/j.heliyon.2023.e13106>
- Fishery Administration and Siem Reap Provincial Administration. (2021). *Inundated Forest Fire Prevention and Management Plan for Siem Reap Province 2021–2025*. Kingdom of Cambodia, Fisheries Administration.
- Hien, S. (2023). រោក និងប្រយោជន៍ក្នុងហត្ថកម្ម [Ropeak and Its Benefits for Handicraft]. *AMS Khmer Civilization*. Retrieved on 8 November 2024 from <https://ams.com.kh/khmercivilization/detail/26820>
- Khou, E. (2008). *A Field Guide of the Rattans of Cambodia*. Cambodia, WWF Greater Mekong.
- Kingdom of Cambodia. (2023). Royal Kram no. 0623/007 on Environment and Natural Resources Code. Retrieved on 14 February 2025 from [https://data.opendevdevelopmentcambodia.net/laws\\_record/royal-kram-no-0623-007-on-environment-and-natural-resources-code/resource/0894d3f7-051f-4235-8206-375efe4d98a4](https://data.opendevdevelopmentcambodia.net/laws_record/royal-kram-no-0623-007-on-environment-and-natural-resources-code/resource/0894d3f7-051f-4235-8206-375efe4d98a4)
- Liu, J., Ren, H., Wang, X., Shirazi, Z., & Quan, B. (2019). Measuring and predicting urban expansion in the Angkor region of Cambodia. *Remote Sensing*, 11 (17), 2064. Retrieved on 8 November 2024 from <https://doi.org/10.3390/rs11172064>
- Preap, C. (2013–2014). រុក្ខជាតិដែលអាចធ្វើកន្លែង [Plants use to craft mats]. *Khmerrenaissance*, 9, 103–106.
- Pwint, A. C. (2015). Investigating village socio-economic conditions in Cambodia: The case of rattan handicraft village of Tor Tea, Siem Reap. *Journal of Economics*, 22(1-2), 145–166.
- Richard, N. (2007). *Handicraft and Employment Generation for the Poorest Youth and Women* (UNESCO Intersectoral Programme on the Cross-cutting Theme ‘Poverty Eradication, Especially Extreme Poverty’ *Policy Paper*, 17). Paris, UNESCO.
- Siem Reap Provincial Department of Planning. (2022). ឯកសារព័ត៌មានស្ថានភាពព្រឹទ្ធសង្គមក្នុងសង្កាត់ក្របេរីល [Socio-Economic Information Situation of Krabei Riel Commune]. Kingdom of Cambodia.
- United Nations. (2017). New Urban Agenda. Retrieved on 9 November 2024 from <https://habitat3.org/wp-content/uploads/NUA-English.pdf>






## Annex

### Catalogue of Handicraft Productions

No.	Type	Size (cm)	Material	Period (day)	Price (riel)	Photo
1	Spok (ស្ពុក)	50–100	<i>pdao teuk</i> and <i>pdao kok</i>	1–1.5	8,000–50,000 (Price varies with size)	
2	Round mat with slots (ថាស)	50	<i>pdao teuk</i> and <i>ropeak</i>	2	25,000	
3	Round plate with handles (ទ្រនាប់កែវ)	10	<i>ropeak</i> and <i>pdao</i>	0.5	3,000	
4	Round plate (កំប្លោកមូល)	10–20	<i>ropeak</i>	0.5	4,000	
5	Betel box (កន្ត្រកស្លា)	20	<i>pdao</i>	2	60,000	
6	Small basket (កូនបានតូច)	10	<i>pdao</i>	0.5	6,000	
7	Tissue box (កំប៉ុងក្រដាស)	15	<i>pdao</i> and <i>ropeak</i>	2–2.5	16,000	
8	Oval food tray (កំប្លោក ពងក្រពើ)	20	<i>pdao</i>	0.5	6,000–8,000	



No.	Type	Size (cm)	Material	Period (day)	Price (riel)	Photo
9	Mat (កន្លែង)	120 x 200	<i>pdao</i> and <i>khleung por</i>	15	100,000	
10	Mat (កន្លែង)	130 x 200	<i>romchek</i>	7	50,000	
11	Broom (វ៉ែងស)	200	bamboo and coconut petiole	0.5	5,000	
12	Flower basket (កន្ត្រក់ផ្កា)	30	<i>pdao</i>	0.5	7,000	
13	Dish mat (ទ្រនាប់បាត)	30–40	<i>pdao</i>	0.5	5,000–9,000	
14	Tea pot-shaped container (ប៉ានតែ)	40	<i>pdao</i>	2	60,000	
15	Fruit basket (កន្ត្រក់ផ្លែឈើ)	40	<i>pdao</i>	0.5	10,000	

No.	Type	Size (cm)	Material	Period (day)	Price (riel)	Photo
16	Fruit basket (ថាសប្រាំបីជ្រុង)	40	<i>pdao</i>	0.5	8,000	
17	Food box (ថាសស្រាក់)	30	palm petiole and <i>pdao</i>	3	16,000	
18	Present box (ប្រអប់កាដូ)	20	palm petiole and <i>pdao</i>	0.5	6,000	
19	Vase (ថង់)	10	<i>pdao</i>	0.5	6,000	
20	Trash bin (ធុងសំរាម)	30–50	<i>pdao</i>	2	40,000	
21	Oval tray (ថាសពងក្រពើ)	10	<i>pdao</i>	0.5	4,000	
22	Oval jeal with handles (ជាលពងក្រពើ)	40–60	<i>ropeak</i>	1	14,000	

No.	Type	Size (cm)	Material	Period (day)	Price (riel)	Photo
23	Basket (កន្ត្រក)	20	<i>ropeak</i>	1	10,000	
24	Square jeal (ជាលជ្រុង)	40–60	<i>ropeak</i>	1	15,000	
25	Basket (ជាលជ្រុងមានដៃ)	40	<i>ropeak</i>	2	18,000	
26	Tall container with legs (ជាលសំរាមមានជើង, ជើងផ្កា)	50	<i>ropeak</i> and <i>pdao</i>	2	23,000	
27	Trash bin (ជាលសំរាម, ជាលខោអាវ)	30	<i>ropeak</i>	0.5	8,000	