

Handwoven interior accessories from palm leaves as sustainable elements

Handwoven
interior
accessories

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Abstract

Purpose – This paper argues that cultures with the same climate have similar handicrafts as they have similar cultivation and identical raw materials. This study focuses on how mountainous, coastal and hot regions partaking in similar crafts and cultural heritage use palm leaves and analyses the resulting handicrafts' similarities.

Design/methodology/approach – A review of mapping these samples establishes this similarity in the traditional industries of some civilizations' cultural heritage from countries sharing similar climates.

Findings – The handwoven crafts using palm leaves were significant patrimonial artifacts in different societies' and communities' cultural heritage. Our studies revealed that climate plays an active role in influencing all aspects of humanity's life. It affects the construction methods and style, agriculture and lifestyles.

Research limitations/implications – Traditional handwoven palm leaf product models, especially plates and baskets, are studied from South America, Africa, Gulf Countries and Asia.

Practical implications – Additionally, this paper focuses on preserving these treasures as an essential part of interior elements as accessories for most inhabitants of these areas.

Social implications – Cultural heritage also embraces intangible aspects such as skills passed down through generations within a particular society. The tangible and intangible elements complement each other and contribute to an overall legacy.

Originality/value – Cultural heritage reflects a society's way of life carried down through the years across lands, items, customs and aesthetic concepts. People are the gatekeepers of society, as they preserve their way of life for future generations to emulate. Tangible artistic and cultural heritage comprises artifacts. It comprises all human evidence and expressions, such as traditional handicrafts, pictures, documents, books and manuscripts.

Keywords Cultural heritage, Handwoven heritage, Identity, Interior accessories, Traditional crafts, Interior heritage

Paper type Research paper

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Introduction

Traditional crafts play a significant part in each country's historical context. It reflects a particular region's culture and customs (Scrase, 2003). Even though the handicraft industry is essential for developing jobs and wealth (International Trade Centre, 1997), it is widely used to alleviate poverty. It is passed down through generations as a cultural legacy. Therefore, it is considered critical for preserving and promoting cultural heritage (UNESCO, 2003). The transfer of artistic and cultural traditions, such as the methods and skills of various traditional crafts among generations, preserves the unique cultural heritage of many countries (Grobar, 2019). Although the handicraft industry's importance has long been accepted, it faced many challenges because of industrialization and globalization (Scrase, 2003). Regardless of its many practices worldwide, there is no consensus on the definition of handicraft. It is described as handcrafted products with an artistic and cultural appeal based on materials, design, and industry, and some related terms could be derived based on these limitations (Li *et al.*, 2019). While it certifies that artisan products must be 80% handmade, natural fibers, fabrics, palm leaves, earthenware beads, and recyclable materials are among the common raw materials used (UNESCO, n.d.a, b, c, d, e). However, "Handwoven craft with palm leaves" describes handmade products using palm leaves and woven techniques (Ertu, 2019).

In hot and arid places of the world, palm dates have played a crucial role in the formation and growth of civilizations through centuries. In addition, the tree, which has deep roots in the soil, allowing it to grow in arid climates, was a source of food and economic gain (Waterton and Watson, 2011). According to the United Nations Food and Agriculture Organization (F.A.O.), the date palm is possibly the oldest cultivated tree, dating to 4000 BC (Moore, 2011). The date palm's longevity is also legendary: reports indicate that one seed may germinate successfully after being dormant for 2,000 years. The countries that utilized date palms have been linked for centuries as they helped build their civilization through products such as handicrafts, mats, ropes, and furniture.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has included the date palm in the list of humanity's intangible cultural heritage. The agency congratulated 14 Middle Eastern countries that submitted the nomination and praised the date palm's role in civilization (Li *et al.*, 2019). In December 2011, UNESCO stated that knowledge, skills, traditions, and date palm practices were pivotal in strengthening the link between people and land. This historical relationship has produced a rich cultural heritage of the relevant practices among communities where considerable knowledge and skills are preserved to date. For thousands of years, the date palm was significant for life in the Middle East, North Africa, and South Asia (<https://ich.unesco.org/en/traditionalcraftsmanship-00057>). Experts disagree about the date palm's origins, but it is likely from the Fertile Crescent between Egypt and Mesopotamia. Dates were crucial in the Indus Valley Civilization, spread across Afghanistan, Pakistan, and northwest India, and shared in ancient Rome. Following the trade routes to Spain, historians said they arrived in Mexico and California by the middle of the eighteenth century (Ertu, 2019).

The countries that nominated date palm to UNESCO as an intangible heritage in 2019 were Bahrain, Egypt, Iraq, Jordan, Kuwait, Mauritania, Morocco, Oman, the Palestinian territories, Saudi Arabia, Sudan, Tunisia, United Arab Emirates (U.A.E.), and Yemen (Table 1) (<https://ich.unesco.org/en/RL/date-palm-knowledge-skills-traditions-and-practices-01509>). The appointment happened at the fourteenth session of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage in Bogota, Colombia (UNESCO, 2003). Hence, this paper investigates Mexico, Egypt, the U.A.E., and India's products to centralize diversity and symbolism from various countries.

UNESCO label	Country	Primary concepts	Secondary concepts
Date palm, knowledge, skills, traditions, and practices	Bahrain, Egypt, Iraq, Jordan, Kuwait, Mauritania, Morocco, Oman, Palestine, Saudi Arabia, Sudan, Tunisia, United Arab Emirates, Yemen	Fruit; Horticulture; Trees	Agricultural economics; Agriculture; Basket weaving; Deserts; Drylands; Festivals; Food customs; Furniture; Games; Handicrafts; Income; Irrigation; Knowledge and practices concerning nature and the universe; Oases; Oral traditions and expressions; Performing arts; Social practices, rituals, and festive events; Technical skills; Traditional craftsmanship; Traditional medicine

Table 1.
Representation of the date palm – 2019 showing the countries, primary and secondary concepts

Source(s): Adapted from the UNESCO dynamic and interactive space of intangible cultural heritage practices and expressions – <https://ich.unesco.org/en/RL/date-palm-knowledge-skills-traditions-and-practices-01509>

Research aims

On exploring the cultural handicrafts resulting from the palm leaves, we find that handwoven crafts are a visual and functional heritage to consider from regions with similar climates. The first objective of this paper is to explore the similarities in and identify the issues of traditional handwoven crafts based on palm leaves in specific societies in different countries with similar climates. The second objective is to examine the state of handwoven crafts in these countries as examples that provide a further understanding. The third objective is to analyze the traditional outcomes used over generations and preserved in daily life. This paper intends to map the comparability of handwoven palm-based crafts from similar climates and their interior function contributing to their preservation.

Materials and methods

The historical significance of the palm in human heritage

Since pre-industrial times, indigenous peoples have had a close and continuous interaction with the renewable natural resources in their climatological environment (Waterton and Watson, 2011). Prior to the emergence of the industrial period, wild and cultivated plants, both natural and domesticated, produced all the essential food and the majority of the raw materials required by certain groups of people. Looking back at the lifestyle in the past, it was evident that some plant species played a significant role as both food sources and non-edible primary resources (Moore, 2011).

In this context, this debate outlines the economic impacts of palms throughout history (Rivera *et al.*, 2019). Much information on this topic is in the literature and social history as part of ethnographic interventions for tropical cultural groupings (Paige, 2009).

Moreover, historically, in major economic studies, the products found from individual species were generally coconut or palm types. It is worth mentioning that, besides being highly utilitarian, the palm plays a pivotal role in some cultures' myths and rituals. The palm tree cultivated in specific weather conditions results in leaves that provide the most versatile end-use opportunities. Full-length palm leaves have special meanings in the Jewish, Christian, and Muslim cultural festivals (Pierantoni, 2018). The introduction of the date palm to South America was credited to missionaries who brought the ancient world's date seeds to ensure a supply of palm leaves for their religious ceremonies (Karim and Karim, 2017).

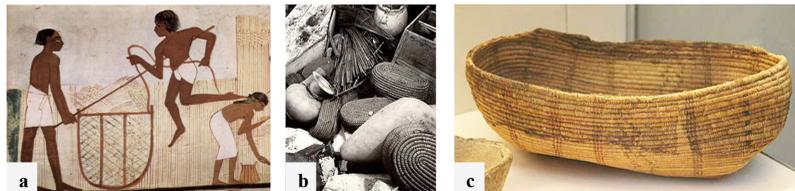
Handwoven plates and baskets are among the oldest crafts and perhaps the origin of all the world's art fabric, classified among the oldest industries (UNESCO and ICH, n.d.). Archaeologists tell us that the oldest known baskets seem to be discovered in Fayum in Upper Egypt, with tests showing a radiocarbon age between 8,000 and 10,000 B.C. (Plate 1).

Studies from related fields argue that no tribe globally wove baskets in a particular way, and all of the fibers used today had their origins in creating our predecessors' baskets (Muscarella *et al.*, 2020). Therefore, it is natural that such a craft from beyond ancient times persists to date (Plate 2).

Ancient and traditional palm tree products

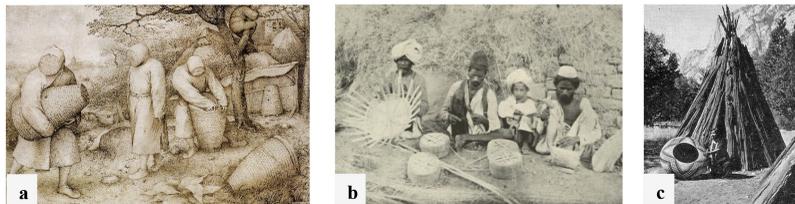
Over the millennia, the date palm has produced various products widely used in many facets of everyday life. Production areas, often with few other resources available, may stimulate and refine these coarse materials to some extent (Carrozzino *et al.*, 2011). However, while it has influenced modern technological developments, in many cases, its use has declined. On the other hand, technical advancements have enabled us to consider the palm as a raw material with commercial applications (Alivizatou-Barakou *et al.*, 2017). As a result, it appears reasonable first to study the traditional applications of palm dates in various sections and practically employ all date palm components except for the roots. The main components are the trunk, the leaves (whole, midribs, leaflets and spines, and the sheath at the leaf base), the reproductive organs (spathes, fruit stalk, spikelet, and pollen), and several palm extracts (Barreveld, 1993). Over the centuries, palm dates have provided several economic advantages, from cultivation and transportation to home usage and access to urban centers (Paige, 2009). Sometimes, palm tree

Plate 1.
Ancient Egyptian arts;
a – Ancient Egypt
Painting, 1400 B.C.,
b – Baskets found in
Tutankhamen's tomb,
c – Coiled Basket, 5450
B.C., Fayum, Egypt



Source(s): Photo credits: <https://www.gulmoharlane.com/blog/the-chronicles-of-basketry/>; <https://petlamp.org/tomb-of-tutankhuman-in-the-valley-of-the-kings-2/>; <https://petlamp.org/basketry/>

Plate 2.
Examples of old
handwoven baskets;
a – Beekeepers,
Brussels 1568,
b – Punjabi
Basketmakers, 1905,
and c – large basket, in
Yosemite National
Park, 1933



Source(s): Photo credits: By Pieter Brueghel the Elder - Christian Vöhringer – Pieter Bruegel. 1525/30–1569 Tandem Verlag 2007 (h.f.Ullmann imprint) S. 129 ISBN 978-3-8331-3852-2, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=9,483,474>; By Unknown author, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=19,997,097>; By India Illustrated - <http://digital.lib.uh.edu/u/?p15195coll29,124>, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=18711650>

production became equivalent to or more important than the date yields (Karim and Karim, 2017). This paper will focus on palm tree leaves as raw materials for handwoven crafts.

Handweaving processes. Each year, under regular growth environments, a typical of 12–15 new leaves are produced by a palm tree, and therefore, it can be expected to cut the same amount to preserve it (Ellis and Johnson, 2013; Sagar *et al.*, 2019). As a result, large amounts of leaves are available annually with more than hundreds or thousands of trees. Braids from these leaves are sewn together for baskets, bags, mats, and smaller items such as hats and fans (Norasingh and Southammavong, 2017). However, the primary technology for its more extensive use, the baskets, is to braid the palm leaves into long strips of rugs, then wrap them into a spiral and sew the edges with a thread of identical posts (Cunningham and Milton, 1987). Such baskets are widely available in markets (Plate 3) and are among the most popular products for private and professional use.

Interestingly, the ancient craft industry has never created a machine for making baskets, although many other trades have been mechanized (Dhehibi *et al.*, 2018). Baskets are still handmade. It is not easy to produce baskets in large quantities with molds, electrical saws, sanding machines, and many operations of the “assembly line” (Muscarella *et al.*, 2020). Although basket weaving is one of the most diverse crafts, it is difficult to determine its age accurately. The use of natural materials makes baskets decompose naturally and continuously. Appropriate conservation (which was not available two hundred years ago) enforces a continuation of the craft, making the industry economically sustainable (Li *et al.*, 2019; Ertu, 2019; <https://ich.unesco.org/en/RL/date-palm-knowledge-skills-traditions-and-practices-01509>).

Basketry lives in many parts of the world, and the formulas, methods, and resources used today are similar to those used in the past (Ugent, 2000). Obtaining comprehensive and consistent training for twelve months is necessary to become a professional. After three years, one gains the accuracy and practical speed (training eye on the formation and hand on the normal tissues) to meet requests for designing correctly and then re-produce specific measurement models. To be skilled at this work, one must be persistent and precise, have an eye for design, and be capable of efficient eye-hand coordination (Abisuga-Oyekunle and Fillis, 2017).

Types of techniques. Traditionally, the makers of baskets collect and prepare materials by themselves (Habib, 2006). There are five general types of handwoven techniques. “Coiled” uses lawns and dailies. “Plaiting” uses ribbon-like wide strips from palms or yucca. “Twining” uses roots and tree bark. “Wicker” and “Splint” use reed, cane, willow, oak, and ash (Plate 4) (Basketry Base Identification, n.d.). Palm leaves are among the materials that call for plaiting techniques. Each of these techniques contributes to the ingenuities of design.

This study confirms how ancient patterns have survived through generations by searching for similarities in handcrafted products from different countries based on similar climates that produce palm trees (Jones *et al.*, 2012). The raw material, specifications, expected



Source(s): Photos credits <http://www.fao.org/3/t0681E/t0681e10.htm>

Plate 3.
a – Variety of Handwoven Baskets made from Plaited Palm Leaflets on Sale in Local Market,
b – Basketries for Domestic Use made out of fiber of the Leaflets Wrapped around Cores Derived from fiber cut off the Fruit Stalk

dimensions, particular manufacturing methods, and decorative shapes unite handicrafts (Duval, 2019). Mats and braided baskets are manufactured worldwide, especially in hot conditions and humid weather (https://whc.unesco.org/en/interactive-map/?search=&id_states=eg%2Cin%2Cmx%2Cae&media=4). Handicrafts require high skill and have a complex manufacturing process carried out manually by the simplest of people.

The process starts by soaking the palm leaves in hot water to soften them and mixing regular and colored leaves since the dye does not go away with water. After unwinding the palm leaves, the manufacturing begins with making a long-woven braid. The width of the strand varies according to the type of production; the more significant the width, the higher the number of palm leaves used (Ellis and Johnson, 2013).

Dyes for palm leaves. Dyes in different colors are made from natural materials such as plants, animals, rocks, and other pigments. The natural colors include blue, yellow, scarlet, red, orange, brown, purple, green, black, and olive (Cunningham and Milton, 1987).

The dyeing process starts with boiling water in a large bowl and placing the required tincture in it; then, the sticks to be dyed are dropped and left for 5 min. It is then removed from the water and placed in the shade until it dries (Wills and Hacke, 2010) – white wicker results from exposure to the sun for a longer time.

The manufacturing processes. The manufacture of palm-based handicrafts goes through several stages (Ertu, 2019), from procuring the leaf to the final product:

The craftswomen chop dry leaves of the palm tree.

The drying process under the sun, takes from one week to ten days in the winter and about four days in summer.

They collect them in the form of a group of packages.

Palm leaves are divided into strips based on the quality of the product and the design.

They are placed in water in bundles to be softened for several days.

Weaving processes start with braids, and the number of braids varies according to the desired shape.

Finally, the braids are placed in the water again to become soft for use.

The methods of manufacturing products with palm leaves are almost the same everywhere, in preparation stages, except for some slight differences according to each area's specific methods among native communities. Barrère (2016)

This process will be examined in the four countries of the study: Mexico, Egypt, UAE, and India (Plate 5).

Mexico:

In Mexico, palm leaves are typically harvested from locally grown palms. The leaves are first dried to remove excess moisture. Skilled artisans then split the leaves into thin strips. These strips are woven into various shapes and patterns to create interior accessories, such as baskets, mats, and decorative items. The process often involves traditional weaving techniques passed down through generations.

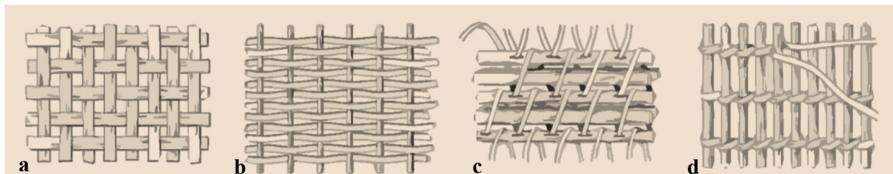


Plate 4.
Handwoven
techniques;
a – Plaiting, b – Wicker,
c – Coiling and
d – Twining

Source(s): Photos credits, Authors (2021)

Egypt:

Egypt boasts a rich tradition of palm leaf weaving, primarily using date palm leaves. The leaves are collected and sun-dried to make them pliable. Craftsmen carefully weave the dried leaves into intricate patterns, often incorporating geometric designs and motifs. The finished products can include baskets, trays, and storage containers.

UAE (United Arab Emirates):

In the UAE, palm leaves are sourced from date palms, which are abundant in the region. The leaves undergo a process of sun-drying and splitting into narrow strips. Skilled artisans employ their expertise in weaving to create an array of functional and decorative items, such as mats, coasters, and bags. Traditional Emirati patterns and designs are frequently incorporated into the woven pieces.

India:

India is renowned for its diverse palm leaf weaving traditions, with regional variations in techniques and designs. Palms like coconut and areca are commonly used. After harvesting and drying the leaves, artisans skillfully craft a wide range of interior accessories, including fans, wall hangings, and containers. Different regions of India showcase their distinct styles and patterns, making palm leaf weaving a culturally significant craft.

The methods of manufacturing products with palm leaves are almost the same everywhere in the preparation stages, except for some slight differences according to each area's specific methods among native communities (Barrère, 2016).

Patterns. Handicrafts have a unified weaving culture and tradition and are part of an ancient acquaintance (Ciofini *et al.*, 2017). Although each community has distinct patterns, weaving is always the same for baskets. Some common core methods are (Hou and Chan, 2017): fabric starts from the center core grid, each bar is intertwined, and colors are individually rotated until five points shape the texture. The composition of the four corners determines the basket's use and size, with the desired geometric shape of the basket being cylindrical, rectangular, conical, or tubular (Ertu, 2019).

As in many native tribes, handicrafts from weaving palm leaves are closely related to simple mathematical processes, natural sciences, and social sciences, making each basket a piece rich in these communities' cultural heritage (Karim and Karim, 2017). Some of the different patterns used by artisans that are part of this intangible cultural heritage may be alike because they use the same materials: palm leaves (Schreiber, 2017). The designs used – which are part of these communities' intangible cultural heritage are either animals – spider, shrimp, frog, crab, monkey, scorpion, fish, birdhouse, butterfly, small worm – or geometrical patterns (as Vandyke Check – similar to the chess game pattern), and some abstract representations of humans (D'Sources Products: Palm Leaf basketry, n.d.) (Plate 6)



Source(s): Photos credits: a. https://commons.wikimedia.org/wiki/File:FeriadeRebozo_2014_41.JPG b. https://commons.wikimedia.org/wiki/Commons:Wiki_Loves_Africa_2017/photo_essay/Palm_Leaves_Weaving c. <https://wam.ae/en/details/1395302793081> d. <https://www.dsource.in/resource/palm-leaf-craft-vellore/making-process>

Plate 5.
Manufacturing processes in the countries of study; a – Demonstration of baskets by the Apolinar Hernandez Balcazar family at the Feria de Rebozo in Tenancingo, Mexico state, Mexico. b – The sackcloth is being reshaped to form a rope, Egypt. c – palm weaving is part of the UAE's ancestral heritage. d – Segregation of palm leaf is being made, India

Results

This study aims to clearly visualize the shared characteristics of handwoven palm tree artifacts among countries. Artifacts have a systematic manufacturing process within specific structures using dyed colors (Cunningham and Milton, 1987). Furthermore, the selected countries with similar palm trees have a common climate type. These countries also share historical influences and social aspects to some extent. Mexico, Egypt, U.A.E., and India consider artefacts woven from palm leaves as significant patrimonial and cultural heritage in their societies.

Discussion

Countries with similar climates

The study underscores the pivotal role of palm trees in societies with similar climates, highlighting their historical significance and impact on various handicrafts and woven products. To provide a fuller context, it is essential to consider the comprehensive range of climate and growth conditions that contribute to the proliferation of palm trees and their leaves, which are integral to producing palm-based handicrafts.

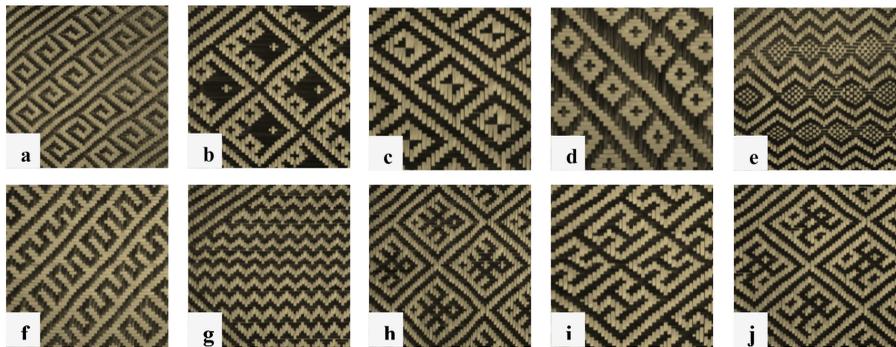
In Mexico, located in South America, the climate is characterized by an average temperature of 21 °C. The region experiences moderate to high humidity, particularly during summer. The soil conditions in Mexico vary from region to region, but well-draining soils are conducive to palm tree growth.

Egypt, situated in Africa, maintains an average temperature of 23.5 °C. The climate in Egypt is characterized by low humidity, especially in desert areas, while along the Nile River, humidity levels can be relatively higher. The fertile soil along the Nile and in oases provides an ideal environment for palm tree cultivation.

In the United Arab Emirates, located in the Middle East, the average temperature soars to 29 °C. The climate is marked by extremely low humidity, especially in arid desert regions. The soil conditions in the UAE are predominantly sandy, which poses challenges for agriculture but is suitable for palm tree growth due to its adaptability to arid environments.

India, with an average temperature of 23.5 °C, represents a diverse climate. The country experiences varying humidity levels across its regions, with higher humidity in coastal areas and lower humidity in arid regions. The soil conditions in India are highly diverse, ranging from alluvial soils in the Gangetic plains to laterite soils in certain regions, providing a wide range of conditions for palm tree cultivation.

Plate 6.
Samples of handwoven patterns; a – Hook, b – Fish, c – Butterfly, d – Rhombus, e – Anaconda, f – Monkey Ladder, g – Zig-Zag, h – Spider, i – Letter “I,” and j – Frog



Source(s): Photos credits, Authors (2021)

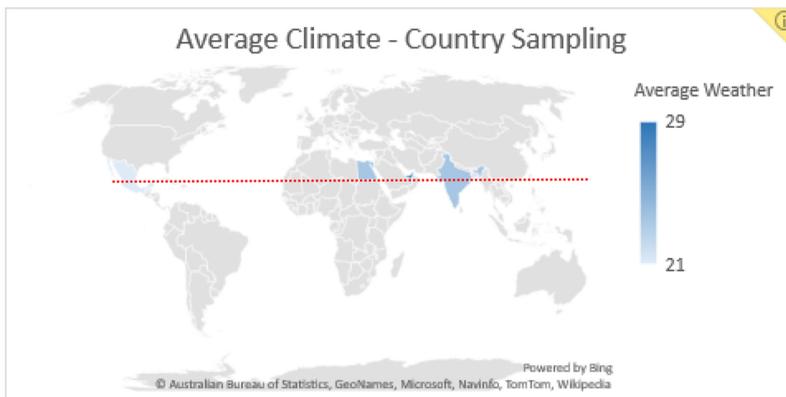
These countries were chosen not only for their similar average temperatures but also for their unique combinations of humidity, soil conditions, and other environmental factors conducive to palm tree growth and the sustainable harvesting of palm leaves for handicraft production. Understanding these multifaceted climate and growth conditions is vital to comprehend the cultural and environmental context of palm-based handicrafts in these regions (Figure 1).

Mapping analogs of handwoven palm leaf products

This study emphasizes the critical role of the palm tree in many societies with similar climates, producing analogous artifacts. Each country from the study selection emphasizes some characteristics more than others. The following section will describe these features (weather, structure, patterns, colors, products, shapes) in the mapping approach to explaining the shared points (Plate 7).

Mexico. The oldest traditional handicrafts known in Mexico, predating the Colombian era, were found to be the basketry made by women (Joyal, 1996). Palm fiber is considered a popular choice for the manufacture of baskets, with abundant palm groves in Toluca in the State of Puebla, Mexico. Even today, Mexican palm baskets are produced by hand in the same way as in the past centuries and made by two different Aztec families, Otomi and Nahua (Ugent, 2000). They used plant-based vivid colors, creating animal, human, and geometric motifs to shape the cylindrical, spherical, and convex baskets. The structure used is coiling, braiding, weaving, and twisting, the same as in the past, making it a cultural heritage of the inhabitants (Pérez-Valladares *et al.*, 2020).

Egypt. The Nubian woman is famous for producing handicrafts that distinguish her from others in the country (Boozer, 2016). They express the beauty of the great country of Nubia – the upper Egypt state, and their customs, traditions, and great heritage, which dates back to the Pharaoh's era. The work done by the women is passed down as an inheritance (Wills and Hacke, 2010). Hence, it must unify its assets and transfer the same values to future generations. The mother is keen to teach her daughter the origins of weaving, traditionally producing trays, bowls, and baskets. They use the same plaiting, coiling, and twining structures, shaping their products in black, red, and white colors, mainly geometric patterns (VanDyke Check). They produce plates and basketry, with or without a lid, in oval, conical, cylindrical, spherical, and convex shapes. The basket industry is limited to the traditions or culture of a specific group. However, it is also an important source of domestic income for the family.



Note(s): From the left: Mexico, Egypt, U.A.E., and India

Source(s): Based on <https://www.worlddata.info>

Figure 1.
Selected countries
based on the climate
similarity

			
<p align="center">MEXICO</p> <p>Weather: 21°C Structure: Coiling, Braiding, Weaving and Twisting Colours: Natural and Plant based vivid colors Patterns: animal, human decorative motifs, and geometric motifs Products: basketry and plates Shapes: Cylindric and spherical and convex</p>	<p align="center">EGYPT</p> <p>Weather: 23.5°C Structure: Plaiting, Coiling and Twining Colours: Natural, black, red and white Patterns: Geometric patterns, (Vandyke Check) Products: Plates and Basketry with and without lid, and breed suspenders Shapes: Oval, Conical, Cylindrical, Spherical, and Convex</p>	<p align="center">UAE</p> <p>Weather: 29°C Structure: Plaiting, Wicker Colours: Natural, red, green Patterns: Geometric patterns, such as Vandyke Check Products: Basketry, plate, mat, breed suspenders, furniture Shapes: plain or cylindrical</p>	<p align="center">INDIA</p> <p>Weather: 23.5°C Structure: Plaiting Colours: Red, Blue, Green, Natural Patterns: thadukumodachal (resembles small, diagonal checks) and thuppimodachal (big checks) Products: Basketry, mat and Plate Shapes: Cylindric and spherical</p>

Plate 7.
Mapping analogous cultural heritage' product – handwoven' palm leaves in the cases studies' countries

Source(s): Photos credits: Egypt: <https://www.metmuseum.org/art/collection/search/548735>; Mexico: <http://www.vintagemexican.com/baskets/basket-rabbit.html>; India: <https://cultureandheritage.org/2016/01/colourful-kottan-baskets-from.html>; UAE: <https://ich.unesco.org>

United Arab Emirates. The components of the surrounding environment inspired Emirati daily life. However, now that it is considered cultural heritage, it has become stronger (Canton, 2015). For example, baskets, mats, large reed suspenders, and furniture are produced using natural colors like green and red and geometric patterns, such as Vandyke Checks (Dhehibi *et al.*, 2018). Plaiting and coiling are the main techniques for creating products with plain or cylindrical shapes (FBMI, 2016). The authors note that many Emirati women who work in this industry seek to preserve them as part of the approach taken by the state (WAM – The Emirates News Agency, 2008). Despite the lack of resources in their environment, they could challenge the difficulties of using innovative ways to manufacture home appliances that draw upon their daily lives and convert palm fronds to handcrafted objects (khoos) for various uses around the house (Rizvi, 2018).

India. Each region in India made products with available materials to create complex baskets and plates for various purposes (Sagar *et al.*, 2019). These baskets are great for storage and serve as a colorful addition to the interiors. Their methods and techniques are plaiting and wicker to create baskets and containers with bright patterns and designs on the exterior and interior of the basket. The extensive use of bright colors manifests throughout with vivid red, green, and natural colors alongside black. The final products have cylindrical and cubical shapes (Mubayi, 2018). Again, Indian women are responsible for this production sector, and it serves as their primary income.

Handwoven palm tree – continuity in interiors

After reviewing the origin of handicrafts, the history of weaving palm leaves, and the similarity in shapes and designs across many societies, we can conclude that they strengthen the links between contemporary interior design elements and cultural heritage to preserve the

identity of cultures and crafts that reflect the past (Fatorić and Seekamp, 2017). The postmodernist interior design approach contributes to preserving an ancient cultural heritage and reusing it consistently in modern times. Furthermore, it offers sustainability in an integrated way (<https://ich.unesco.org/en/living-human-treasures>). Below, we review some examples that show how cultural heritage, handicrafts, and basket weaving industries can be revived from palm leaves and reused in interior design and all interior surfaces (Plate 8).

Conclusion

Historically, in many societies worldwide, most basket weavers are women (Techera, 2011). From a very early age, girls are taught this ancient craft and learn to weave baskets throughout their lives. Women make baskets for sale to get a small income for necessities (Havinga *et al.*, 2020) Men also weave rooftops and large basketry with palm fibers, among other natural fibers and decorative platters, and palm mats together to create walls in their traditional constructions (D'Sources Products: Palm Leaf basketry, n.d.). Crops and trees in societies with similar climates, especially palm trees, are considered at the forefront when a person depends on the date palm for daily life essentials. Moreover, the palm tree is known for its sanctity and religious implications.

The craft of weaving baskets has two types (Ertu, 2019). The first type uses the core of the wicker (located in the heart of the palm), characterized by its whiteness, small size, and ease of formation, to make small baskets and delicate artifacts. The second type consists of regular palm leaves, which are coarser and longer and are used to make mats and large baskets.

The methods of manufacturing products with palm leaves are almost the same everywhere regarding preparation stages and manufacturing techniques, except for slight differences depending on each area's nature.

This study found that the typical structures used in Egypt, the U.A.E., and India are all plaiting. Natural dyes are shared among all four countries. The geometrical patterns follow the leaf's shape. Cylindrical basketry and plates are the primary products from all four countries.

Since ancient times, woven baskets and plates made from palm leaves have been available in many countries and are handmade even today (Hirszenberger *et al.*, 2019) The specifics depend entirely on local resources, and the source of these resources are the crops and trees in the area (<https://ich.unesco.org/en/focus-onintegration-of-ich-safeguarding-into-cultural-policies-2016-00911>).

The production of handwoven baskets with palm leaves is still practiced globally, and they even have websites to sell them at high prices due to their intricate craftsmanship and the need for high skill (Pavlidis, 2019).



Source(s): Photos credits: a- <https://honestlywtf.com/wp-content/uploads/2016/03/loloi8-1.jpg>, b- Author, c- Ahmed Kutty/Gulf News, and d- <https://www.wsj.com/articles/how-instagram-algorithm-might-be-limiting-your-interior-design-11617374096>

Plate 8.
Contemporary
handwoven plates and
basketries as
sustainable,
preservation and
conservation concepts
a – Mexico, b – Egypt,
c – U.A.E. and d – India

Pre-industrial indigenous peoples in the past and present have an intimate relationship with the Palmae family. The palm family's importance is evident if the geographical and climatic focus narrows to tropical zones (Thorpe and Gamman, 2011).

Learning from our history while maintaining and protecting part of the cultural heritage, the handwoven palm leaves are essential for supporting communities. The production of palm-based products is their primary source of income. Hence, more studies are needed to help international institutions like UNESCO declare the tangible and intangible cultural heritage elements in countries other than those studied in this paper. Handicrafts from palm leaves need more focus in research. The inclusion of date palms, traditions, and crafts of weaving baskets from palm leaves in the UNESCO list of humanity's intangible cultural heritage shows its importance. Still, more elaborate studies must be conducted on the specific countries and techniques where this is practiced.

More studies are welcomed to help UNESCO add other countries with such a connection, not only the Arab countries, link them based on climate similarity related products, and investigate the origins of each pattern used in the handwoven palm tree cultural heritage.

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