Geojournal of Tourism and Geosites
ISSN 2065-0817, E-ISSN 2065-1198

Year XVIII, vol. 58, no. 1, 2025, p.465-474
DOI 10.30892/gtg.58143-1428

JORDANIAN WOMEN'S CONTRIBUTION TO THE REVIVAL AND PROTECTION OF HERITAGE INDUSTRY

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Citation: Al-Shurman, Y.M., Zainelabdin, F.A., Shneikat, K., Aljedayah, K.S., Elbashabsheh, H.A.E., Bani-Khair, B., Rababah, M.A., Alorani, O.I., & Bani-Hani, M.G. (2025). Jordanian women's contribution to the revival and protection of heritage industry. *Geojournal of Tourism and Geosites*, *58*(1), 465–474. https://doi.org/10.30892/gtg.58143-1428

Abstract: Handicrafts are a vital component of the cultural, civilizational, and social legacy passed down over the ages. They represent innovation derived from societal demands. In addition to being an important economic resource by creating jobs and reducing unemployment, traditional crafts are essential for maintaining cultural identity. Since rural people are crucial to fostering peace, achieving economic growth, and ensuring agricultural self-sufficiency, countries like Jordan work to integrate them into various artisan fields. This study is among the few that focus on the role and contribution of Jordanians to heritage revitalization and the importance of documenting heritage crafts in Jordan. Remarkably, many Jordanian heritage crafts have begun to disappear due to the shift toward modernity and urbanization, making it necessary to document heritage industries to preserve them from extinction. This study aims to identify the extent of Jordanians 'contribution to heritage industries that still exist in some Jordanian villages, as well as their role in meeting family needs in partnership with the family members to achieve a decent standard of living. The study employed in-depth interviews with 59 persons from 12 villages in Jordan for data collection. These Jordanian villages continue to preserve their heritage, and people still actively engaged in producing traditional handicrafts. The study revealed that Jordanians possess high skills in producing heritage crafts such as mud houses and clay ovens. It also highlighted how Jordanians utilize available raw materials from their surroundings and recycle certain materials, which have now become integral components of traditional heritage and comprise a significant portion of it. The significance of the study lies in highlighting the role of Jordanians in preserving the nation's material heritage. It also aims to document the traditional crafts produced by Jordanians, expanding our understanding of the elements and techniques involved in creating various crafts. This study underscores the importance of Jordanians, alongside men, in providing for their families over the past few decades.

Keywords: heritage, handcrafts, Jordanian heritage, traditional costumes, tangible heritage

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INTRODUCTION

Handicrafts are an essential part of cultural, civilizational, and social heritage passed down through generations. They represent creativity born from the daily needs of society. Traditional crafts play a vital role in preserving cultural identity

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and serve as a significant economic resource by providing job opportunities and helping reduce unemployment. Countries like Jordan strive to integrate rural people into various craft fields, especially since rural people play a prominent role in establishing peace, achieving economic development, and ensuring food self-sufficiency (Aljedayah et al., 2024; Hernes, 2018; Qiu et al., 2024). Despite the threats facing traditional crafts due to modern technology and globalization, Jordan is working diligently to protect this heritage by providing the necessary support to artisans. Rural people contribute significantly to the development of traditional industries, including handicrafts. Even though these crafts face challenges, rural people remain key development partners, and support must be provided to enhance their participation (Al-Abdulrazaq, 2024; Al-Rousan et al., 2025; Al-Rawashdeh et al., 2024; Harara et al., 2024; Newisar et al., 2024).

Craft industries are considered part of traditional industries. They represent an ancient cultural, social, and civilizational heritage passed down through generations. It is therefore crucial that craft industries receive significant attention, as they reflect creativity inspired by people's daily needs (Alhawamdeh et al., 2023; Al-Jezawi et al., 2024; Rababah et al., 2023; Yassien et al., 2023). Furthermore, discussions around traditional and craft industries reveal various perspectives on how to approach these industries. Some view them from a heritage perspective, advocating for preserving their traditional and primitive forms. Others align with modern industrial development, while a third group sees them as heritage and a source of employment, subject to market demands and tourism trends (Alsayyed & Randall, 2023; Harara et al., 2024; Khdeir, 2024).

Traditional industries remain a constant presence and serve as a cultural and traditional heritage defining the Levant region. However, they suffer from marginalization by specialists in the field. To revive traditional industries, creativity must be activated to develop them in line with technological advancements, as modern industries increasingly encroach upon the space occupied by traditional crafts. Globalization has contributed to the marginalization of local cultures and the decline of traditional crafts (Al-Habies et al., 2024; Al-Tal, 2006; Rababa'h et al., 2024; Wolor et al., 2024). Perhaps the most prominent element in traditional industries is the rural woman, who has played a key role in bearing the burdens of daily life and contributing effectively to agricultural development in rural areas. Jordan places great emphasis on integrating rural people into all aspects of life. Additionally, their pioneering role in achieving development and ensuring food self-sufficiency cannot be overlooked (Al-Gayam et al., 2025; Hassan, 2020; Shehabat et al., 2025).

With the rise of industrial machinery, new generations have developed a limited understanding of the human and spiritual values embedded in these crafts. To preserve traditional and craft industries, it is essential to take pride in the aesthetic and artistic value of these traditional crafts, and to raise awareness of their cultural significance by promoting national cultural pride and preserving national identity (Al-Ani, 2020; El-Ebiary et al., 2024; Wolor et al., 2023).

Few studies specifically address the role of Jordanians in heritage crafts, and there is limited documentation of these crafts. Al-Khatib (2004) discussed the use of the environment from an Islamic economic perspective, emphasizing the importance of modern scientific techniques for pollution control and environmental preservation. The study warned that globalization, driven by financial incentives, could lead to environmental degradation. Tobazah (2013) documented commonly utilised traditional crafts in Jordan, including labour force, knowledge transmission techniques, materials, procurement sources, production procedures, and geographical distribution of crafts. The research emphasised the importance of traditional popular crafts as a component of cultural heritage, arguing that societal indifference and a lack of official attention were major difficulties.

The study recommended marketing, education, and training to revive these trades. The current study seeks to answer the question: What role do Jordanians play in the survival and growth of traditional industries? The significance of the study lies in highlighting the role of Jordanians in preserving the nation's material heritage. It also aims to document the traditional crafts produced by Jordanians, expanding our understanding of the elements and techniques involved in creating various crafts. This study underscores the importance of Jordanians in providing for their families over the past few decades.

METHODS

The research employs a historical-descriptive methodology to explain and characterize the evolution of Jordanians' production of traditional crafts. This approach seeks to determine the existence, history, and development of these crafts, offering a comprehensive description and documentation. The methodology involves:

• Providing an accurate technical description of these industries, showcasing their everyday use through tools, and clarifying the relationship between popular industries and available raw materials. This is crucial, as the existence of crafts and industries depends on local raw materials.

• Categorizing and documenting these tools, including their well-known brand names and images, while also explaining their industrial quality.

Crafts, like folk traditions, are analyzed using the historical-descriptive methodology. This includes the craft's name, the tools and machinery used—both old and new—the workforce involved, the production cycle, previous experience, development stages, and raw material processing. Additionally, the historical phases the craft has undergone are addressed, alongside a technical and aesthetic evaluation of folk art, which is essential for both marketing and satisfying consumers' aesthetic and practical needs. The initial step involves exploring the historical roots of folk industries and their relationship to art and beliefs, from Mesopotamian civilizations in Iraq to ancient Egyptian civilizations like the Pharaohs. The research involves investigating museums, individual folklore collections, heritage centers, and marketplaces. After establishing these historical foundations, the study shifts focus to modern folk industries. The process includes reviewing written materials, conducting observations, interviewing craftsmen in-depth, recording their responses, and cataloging and photographing their creations to compare traditional crafts from the past and present.

Population and Sample of the Study

The study population consists of persons from Jordan. The sample includes 59 persons who were specifically selected from the general population. The criteria for selection include direct involvement in the production of traditional handicrafts and the necessary expertise to make them. The participants provided oral and direct consent for the interviews, ensuring ethical conduct.

The study primarily relies on in-depth, face-to-face interviews with these 59 persons, who are actively engaged in the creation of traditional crafts and the preservation of Jordanian heritage. The ages of the participants range from 60 to 90 years. Of them, 54% are illiterate, 29% have completed the seventh grade, and only 16% hold a bachelor's degree.

Tools

The study predominantly used in-depth interviews. The researchers conducted face-to-face interviews with 59 elderly persons from villages in Jordan, which continue to maintain their heritage and produce traditional crafts.

Data Collection

The following steps provide a general overview of the procedures followed to understand the evolution of traditional Jordanian crafts and the importance of the local environment and experience in shaping these crafts.

Phase 1: Gathering Historical Information

- Examining the historical roots of folk industries.
- Studying Mesopotamian civilizations (Iraq) and ancient Egyptian civilizations (Pharaohs).

Investigating museums, individual folklore collections, heritage centers, and markets.

Phase 2: Technical Description

- Providing an accurate technical description of traditional industries.
- Highlighting the use of everyday tools in these crafts.
- Clarifying the relationship between available raw materials and folk industries.

Phase 3: Classification of Tools

- Classifying the tools used in crafts.
- Recording the well-known brand names and pictures of the tools.
- Explaining the industrial grade of each tool.

Phase 4: Technical and Aesthetic Evaluation

- Analyzing the technical and aesthetic aspects of folk crafts.
- Determining the importance of these crafts for marketing and fulfilling aesthetic and practical needs.

Phase 5: Comparison between Past and Present

- Reading written materials and observing tangible objects.
- Conducting in-depth interviews with craftsmen to gather information on past experiences.
- Indexing and photographing craft creations.
- Comparing folk crafts from the past with modern crafts.

Phase 6: Final Analysis

- Studying and documenting the development of traditional crafts over time.
- Analyzing the results of interviews and collected information on how the environment and experiences have influenced the evolution of crafts.

FINDINGS AND DISCUSSION

Clay Crafts

Pottery is made by moulding and sculpting clay into various forms and objects, which are then dried and fired in a kiln. This process changes the clay's structure and colour, transforming it into a solid substance with new features and characteristics. Pottery is differentiated by its texture and porosity due to the complete drying of water combined with clay before to shaping. The colour of the completed pottery changes according on the mineral content of the clay. Higher mineral concentration frequently yields black pottery, whereas lesser mineral content yields red pottery (Eramo, 2020).

Pottery is one of the oldest traditional crafts known to humanity, with numerous important archaeological artefacts left by ancient civilisations. It is the technique of converting soft clay into solid material by heating it in specialised kilns. Pottery has a variety of applications, including food preservation and plant culture. It helps to keep soil wet and drains excess water. Pottery is also known for its beautiful decorations and variety of colors. Red clay, which must be well-saturated with rainwater, is commonly used. The clay is sourced from areas untouched by humans, animals, or vehicles, where rain turns the soil into small clay lumps that dry over time. Historically, regions like North Africa, the Levant, and the Arabian Peninsula became renowned for their pottery production (Otte & Priestman, 2022).

Clay Ovens

Clay is a thick soil that is soft when wet and hard when dry. It is used to make bricks and containers. Clay consists of minerals, plant and animal remains (components found in soil), rocks, mineral bodies, and individual particles that are difficult to see, as well as larger particles filtered from rocks and sand. Clay ovens are crafted from a specific type of clay prepared for this purpose (Figure 1).

Figure 1. Clay Ovens (Source: Collected by authors, 2024)

Participant 2 described the steps of pottery making: We start by beating the clay with a beater to soften it, aiding the sieving process. Then, we place baskets of red, white, and green clay into a circular pool, add water, and leave it for a few hours. After that, we mix the water and clay, using a sieve to remove impurities. The clay is then transferred from the circular pool into other pools through a strainer and left until it solidifies. Finally, the pottery is shaped as desired.

Participant 3 explained that: Clay is the primary material in pottery making, so it is crucial to obtain high-quality soil to ensure the production of high-quality pottery. Materials like sand and old pottery fragments may be added to the clay to prevent cracking. The preparation involves beating the soil with a stick to soften it. Good clay paste is made from fine soil. A circular hole and three rectangular holes connected by openings are dug. Red, white, and green soil is placed in the circular hole, water is added, and it is left for two hours. The mixture is then stirred, impurities are removed, and the clay is distributed to the rectangular holes to solidify.

Participant 16 added: To increase the durability of clay ovens, the clay is mixed with sand, straw, and sometimes goat hair in specific proportions. The type of clay used for making clay ovens varies by period, location, and even village. The ovens are built in stages, starting from the bottom and building upwards by placing strips of clay shaped like ropes on top of each other. These are pressed by hand to ensure they adhere well together, and then the inner and outer surfaces are smoothed using stone tools. Once complete, the ovens are left to dry under indirect sunlight before being installed and fired using fuel like wood, straw, and animal waste.

Participant 23 shared that: The clay oven is one of the most traditional methods used in the past for baking bread, pastries, and cooking. These ovens come in various sizes, from large to small, and are often built in the backyard of homes. Bread baked in a clay oven has an irresistible flavor and a delicious aroma. The oven is fired using wood, and in many Arab cultures, the clay oven is considered an integral part of local heritage. Despite modern advancements, the use of clay ovens continues in some areas to this day.

Participant 20 detailed the process of building a clay oven: We gather regular stones from farmland or home gardens and arrange them in a semicircular shape. Dry grass or straw is placed over the stones, creating a separation between the clay and the stones, which is removed once the clay dries. The clay is mixed with water and kneaded using a shovel or other tools. The clay is applied over the stones and grass, spread in a circular shape, with the main opening left at the front for the oven door. Small openings are also made on the sides and top of the oven to allow air to flow in and intensify the fire. When baking, these openings, except for the main door, are closed with a wet cloth, which doesn't burn in the fire and prevents dust from entering during the baking process.

Participant 20 also added: We let the oven dry for a day or two. In the winter, drying may take longer due to the lack of sunlight. Afterward, the stones are carefully removed from the oven using a small shovel through the oven door. A fire is lit inside the oven to burn off the remaining grass. A metal sheet or suitable metal piece is placed inside the oven, serving as the surface for the dough. Some people leave an opening in the metal sheet to allow flames to rise to the inner surface of the oven, giving the bread a smoky, wood-fired flavor, making it even more appetizing when eaten fresh from the oven.

The Taboon

The Taboon is an open-roofed earthen oven designed for baking bread. It is made from limestone soil mixed with straw and water. After drying in the sun, it is covered with ash and dry animal dung (*zibl*) and topped with a special metal cover. Inside, smooth stones are heated to a sufficient temperature for baking. The temperature is maintained by adding dung daily. The Taboon was also used for heating by burning dry wood buried in the dung until it turned into glowing coals, which were then removed and placed in a metal stove (Figure 2a and 2b). The Taboon is a traditional oven built using clay and natural materials from local environments, used for baking and cooking food. It provides a stable and balanced heat for long periods, making it ideal for use in rural and traditional communities.

Participant 8 explained that: Choosing the right location for building the Taboon is crucial for its efficiency and long-term sustainability. The site should be level to ensure stability and a dry ground to prevent the clay from absorbing excess moisture. A slightly elevated area is preferred to avoid water accumulation around the Taboon during rainfall. Participant

11 explained that: Since the Taboon operates using fire and high heat, it is essential to keep it away from dry wood, straw, or any flammable materials to avoid accidental fires. The Taboon should be erected in an open space or well-ventilated location to provide optimal smoke and heat ventilation, increase fuel combustion efficiency, and limit user health risks.

Figure 2a. Al-Taboon (Source: Collected by authors, 2024)

Figure 2b. Al-Taboon, (Source: Collected by authors, 2024)

Participant 12 said that the Taboon's base must be strong enough to sustain high temperatures for an extended duration. Natural stones or clay bricks can be utilised to build a strong foundation that won't fracture over time. Once the stones or bricks are in place, the surface is coated with a layer of clay mixed with straw, which reinforces the clay and keeps it from splitting when exposed to high temperatures. This layer also offers extra insulation, allowing heat to be retained within the Taboon for extended periods of time when cooking.

Participant 14 indicated that the base should be raised to make it easier to handle, decrease strain when cooking, and protect the Taboon from ground wetness. Straw or hay is used to improve thermal insulation, which reduces heat exchange with the outside environment and allows food within the dome to cook more evenly. This helps to reduce energy consumption and save time since the residual heat inside the dome may endure longer, eliminating the need for numerous fire ignitions.

Participant 8 indicated that during the drying period, the dome is covered with a mixture of clay and other natural minerals such as lime or volcanic ash to improve the structure's water resistance and sustainability. In certain situations, the construction is strengthened with layers of clay mixed with gravel or sand, which considerably enhances thermal insulation and works as a moisture barrier.

Participant 33 indicated that: To increase the structure's endurance and protect it from changing weather conditions, the dome's outside surface can be covered with waterproofing material. Materials such as lime, treated clay, or natural oils are utilised to provide a protective coating that shields the structure from moisture absorption and minimises the likelihood of cracking caused by environmental factors.

Participant 19 explained that: After the Taboon is built, it is left to dry completely before starting to use it to ensure its cohesion and readiness to withstand harsh conditions during use. Users light a small fire inside the Taboon as part of the initial testing process to check the structure's ability to withstand high heat generated during cooking. When the heat reaches the required level, the remaining embers are removed from the Taboon using a long tool, leaving some small embers in the corners to maintain the heat. When cooking inside the Taboon, food or dough can be placed directly on the Taboon's inner walls or in cooking vessels, allowing it to cook slowly, imparting a unique flavor to the dishes.

Participant 8 explained that: The "taboon" is a type of clay oven, made by mixing clay with straw, sand, goat hair, and other materials. The "taboon" has a dome-like structure designed to retain heat for extended periods. The taboon has two openings: a top one for placing and removing bread, and a smaller side opening for inserting fuel and removing ash. The top cover may be made of clay or metal and usually has a handle.

Participant 35 explained that: After the oven's construction is completed, it is left to dry. They then prepare more clay (a mixture of loam, straw, and water) and use it to reinforce the oven's nozzle and door from the bottom, smoothing them until they become solid. A circular cover is created, often protruding in the middle to make it easier to handle, or it may be made of tin. The oven is then left untouched for two months to dry completely. After drying, it is moved to its final position for baking, known as the "home oven." Once set on fire, the oven should not be moved, as doing so would cause it to break. After the oven is installed in its final place, they collect red soil from limestone, grind it finely, and mix it with water to form a smooth, thick mixture. This is then poured onto the oven's floor, making it ready for use. Besides baking bread, the oven is also used for heating water and cooking many dishes.

Al-Tannoor

Archaeological evidence suggests that al-tannoor was known in the region in earlier times, with examples found at sites like Tall Irbid from the Late Bronze Age (Lenzen & McQuitty, 1984). Tandoors come in various sizes, with larger ones used for commercial purposes and smaller ones for home use. They are typically installed in a corner or placed side

by side in bakeries. The spaces between the tandoors are filled to form a platform where dough can be rolled before being placed inside and stuck to the tandoor's walls. Al-tannoor is heated using wood, date pits, or even oil stoves that operate with air pressure (Figure 3). Participant 44 said: Like the taboon, Al-tannoor is built from the bottom up but differs in shape, resembling a large, wide-mouthed jar. Al-tannoor ovens are placed on a stone base, elevated above ground level, and have a small opening at the bottom for ash removal. Once installed, Al-tannoor ovens are surrounded by a protective wall made of clay and stones to maintain heat during use.

Participant 36 said: Bread is baked by sticking the dough to the inner walls of the tannoor, unlike the taboon, where the bread is placed at the base. Additionally, the tannoor does not require constant heating, as the taboon does. It can be heated just before use, with fuel like wood or solid materials ignited at the base. Bread can be baked while the fuel is still burning. Modern Al-tannoor ovens can also use fuel like oil or gas, especially in bakeries and restaurants today.

Regarding the construction of the tannoor, Participant 45 reported: The tannoor is made from pure clay (slate), which is prepared by mixing and fermenting the clay. The clay is then shaped into rings with a diameter of about 1 meter, a height of about 30 cm, and a thickness of about 5 cm. These rings are left to dry and are later assembled to form the full structure of the tannoor, which stands at a total height of 1.5 meters. The rings are placed on top of each other to form the final shape of the tannoor, which is then left to dry under the sun.

Figure 3. Al-Tanoor (Source: Collected by authors, 2024)

Straw Crafting or "Badi"

Straw crafting, also known as "badi," is a traditional rural craft in Jordan. It is a manual, artisanal practice typically carried out by women in rural areas to create straw plates and baskets for various household needs, including food storage, clothing, and decorative items (Figures 4). This craft is part of traditional domestic activities, typically performed in rural areas where the necessary raw materials are readily available. The craft relies primarily on wheat stalks, supplemented by barley stalks, reed stalks, and bamboo skins. Additionally, straw from wild plants such as bulrushes (sedge) found in marshes, reed plants along riverbanks, or seaweed is used. Straw crafting involves making baskets and dishes from wheat straw, a handicraft mastered by most Jordanian women in past decades.

Participant 45 reported: Straw crafting is one of the most important crafts that women used to employ with great skill to provide their homes with straw baskets and dishes at the lowest cost, using raw materials available in their environment. During the harvest season, they would collect wheat straws, bundle them, and store them for processing during the long winter nights when their participation in agricultural work with their husbands is paused. This shows how people managed their time and made optimal use of it, especially since agricultural seasons occur mostly in summer when the days are filled with work and the nights are short, leaving little time for other activities. During the long winter nights, Jordanians would make baskets and straw dishes. The manufacturing process begins with soaking the straws collected during the wheat harvest season in water for an hour until they become soft and easy to shape without breaking.

Participant 41 reported: Wheat straw is collected after the wheat harvest and used as the primary raw material for handicrafts. The straw must be flexible and of suitable length to be shaped without breaking. Impurity-free straw is preferred to ensure high-quality products. After collection, the straw is spread in shaded areas or dry air, away from direct sunlight, to prevent damage and maintain its flexibility. Drying is a highly precise process that ensures all parts are evenly dried.

The straw is then prepared for weaving or crafting items such as baskets and plates. In some cases, additional processing is required after drying to make the straw suitable for crafting, such as soaking it in water or adding other softening agents to enhance flexibility. These treatments facilitate the handling of raw materials during weaving or knitting, allowing for the creation of intricate and delicate designs. After drying, the straw undergoes cleaning and processing to ensure its quality for further manufacturing. Cleaning removes dirt and impurities, improves flexibility, and enhances its ability to be shaped into complex designs. The first step in cleaning involves removing dirt and foreign materials accumulated during harvesting and drying. In some cases, a more thorough cleaning process using compressed air or specialized machines may be necessary to eliminate hidden dust trapped between straw fibres.

Participant 35 observed that soaking the straw in water for a brief length of time improves its flexibility and makes it simpler to shape. The period varies according to the straw kind and hardness. After soaking, the surplus water is drained by hanging the straw in the air or gently pressing it against a cloth to absorb moisture. Participant 22 stated that the straw may be aesthetically enhanced by dyeing it with natural dyes derived from plants and minerals, giving it an artistic and visually pleasing appearance. Straw hues provide you a broad variety of design and pattern options. Natural dyes produced from plants such as tomatoes and saffron are often utilised and provide warm, natural hues. Mineral-based dyes can also be employed to create more vibrant and long-lasting hues. In addition to dyeing and soaking, straw may be treated using various techniques such as inlaying or engraving, which adds another layer of beauty and originality to straw goods. In certain circumstances, chopped straw is filled to improve the strength and longevity of the material used in crafts.

Participant 24 stated that treatments contribute to the great quality of straw products. When straw is properly washed, soaked, and coloured, it becomes more flexible, making it simpler to form into intricate and attractive pieces. Further use of these treatments extends the lifespan of straw goods, making them more suited for everyday use. Participant 31 reported: The "shaping" step is one of the most intricate and important stages in straw handicrafts, when raw materials are changed into a variety of goods such as baskets, plates, hats, and other exquisitely produced objects. This step entails precise and sophisticated processes that need significant expertise, ranging from simply weaving strands of straw together to including ornamental arts that improve the product's appearance.

Participant 26 observed that weaving threads or straw into one other in intricate ways produces rich ornamental designs that can be abstract or influenced by nature, such as floral or geometric shapes. Interlaced forms enhance the items, increasing their longevity and aesthetic appeal. Artisans may incorporate geometric designs like triangles or circles into baskets or dishes, giving levels of beauty and intricacy. This form of braiding necessitates very skilled craftsmanship, since the straw is precisely organised to ensure that the ornamental design remains consistent throughout the weaving process.

Participant 29 stated that, in addition to processing procedures, straw is often wrapped over metal or wooden frames to create larger and more sophisticated constructions such as shelves or ornate decorations. This process is essential when the final product requires additional support for stability, such as large baskets or multi-dimensional structures. In making a large basket, an artisan may start by forming a wooden or metal frame as the main structure, then wrap the straw around it using strong threads or ropes to secure the elements together, ensuring stability and durability.

Participant 45 indicated that raw craftsmanship necessitates the application of complicated processes that need understanding of geometric and mathematical principles in order to maintain the structural integrity of the finished product. During the braiding process, tools such as rulers or scales are utilised to correctly evaluate distances and angles, assisting in the creation of straw products that strike a balance between aesthetic appeal and practicality.

Participant 11 reported: Other product cohesion using braiding and shaping techniques includes artistic decorations such as hanging wall art or artificial flowers. These artistic crafts often incorporate fine decorative details, ranging from small floral motifs to complex, nature-inspired embellishments. Decorative embellishments also include various types of threads and colors, adding a special color diversity to straw products.

Participant 37 reported: The braiding subcultures is considered one of the most challenging phases in straw craftsmanship, requiring significant time and skill to shape the final product correctly. Artisans sometimes struggle to maintain the cohesion and flexibility of the straw during braiding, especially when the raw material is damaged, too light, or uneven. Artiuneven.t continuously monitors the braiding process to ensure that the products retain their high quality in terms of durability and aesthetics. After decoration, the finishing stage ensures that the product is ready for use or display. This involves a meticulous inspection to verify that all parts of the piece have been properly treated and that decorations have been carefully applied without leaving any undesirable marks on the surface.

Participant 39 stated: The atmosphere during badi is one of happiness and intimacy. Women gather in a wonderful social setting, chatting and exchanging conversations while making baskets and dishes according to their needs. Participant 36 added: The practice of badi begins by braiding three wheat straws and knotting them. The woman then inserts additional straw with an awl into the braid's loops, twisting and winding it down. She re-inserts it the same way, alternating between top and bottom until the entire piece of straw is incorporated into the braid. This process continues until the dish takes the desired shape and size. If a woman wanted to make a basket made from straw, she would bend the straws inward with her hands while clamping them together in each row until it takes the hollow shape of the basket, as illustrated in Figure 4.

In the beginning, most women were accustomed to using the natural color of straw to form bowls and dishes. However, in more recent and advanced stages, some women began using dyed wheat stalks before forming them to introduce different colors into the dishes and baskets. They would obtain special dyes in various colors. The dye is a powder that is dissolved in water in a deep iron bucket.

Participant 10 explained: The dye powder is dissolved in water, which is then placed on a fire until the solution boils. The wheat stalks are placed into the solution and boiled briefly. Afterward, the stalks are removed and spread out. Once they are slightly dry but still moist enough to prevent breakage during formation, they are ready for use. They are formed in the same manner as undyed stalks, but in this case, geometric patterns are crafted on the baskets and dishes in a beautiful, artistic way. These patterns, as Participant 1 explained, these decorated dishes were used to hold food plates during meals and to spread dough and bread, while baskets were used to collect grains, vegetables, and other items (Figure 4). Participant 46 described the method of making straw plates: After harvesting wheat and stacking it on threshing floors, women gather wheat stalks, selecting those of good quality, and medium thickness. They remove the ears and husks, cut them, bundle them, and hang them until winter, when they have ample free time to work on them.

Figure 4a. Straw crafting (Source: Collected by authors, 2024)

Figure 4b. Straw plates (Source: Collected by authors, 2024)

Participant 41 reported that: If a decorated plate is desired, dyes are dissolved in boiling water. Each bundle is immersed in a different color for some hours, then dried in the sun to ensure the dye adheres well to the stalks. Before crafting, the straw is soaked in cold water for about an hour to soften it for weaving.

Participant 31 explained that: The process begins with selecting some undyed straw stalks and braiding them into a base. This braid is coiled into a circular shape, forming the foundational knot, which is essential for the plate's durability. The soft straw is then wrapped around this knot, with additional coils secured by weaving straw through the loops to hold each layer together. A small triangle is created at the top for hanging the plate, and excess straw is trimmed and wrapped with fabric to secure it.

Participant 37 noted that: Straw crafting is one of the most beautiful traditional crafts passed down through generations in rural Jordan. Women are keen to teach their daughters this craft, which not only provides essential household items but also helps protect against poverty. The practice has a social aspect, with women and girls gathering in one home, especially in the winter, to work on their straw items while sharing stories and competing to finish their crafts.

Participant 39 highlighted the importance of straw tools in daily rural Jordanian life. It is customary to teach these skills to young girls, much like other domestic handcrafts, as a way to demonstrate their readiness for marital responsibilities. The income generated from this craft is significant for the family and is considered a valuable part of the cultural heritage, showing how people have adapted their environment to meet their needs.

Participant 24 discussed straw crafting as a cherished tradition among rural Jordanian women. The process starts in summer when women and girls gather at threshing floors to sort and arrange wheat stalks, selecting the most suitable parts for crafting. The ideal stalk is from the base of the ear to the first knot. Women bundle these selected stalks until they have enough for crafting. In addition to this type of straw, they also set aside unprocessed straw without ears, known as "filler," for crafting. The second phase involves preparing the materials, including obtaining dyes for colorful items.

Participant 34 explained that: The straw is softened by soaking it in water for a sufficient amount of time, just like the filler straw. When ready to craft, women typically gather in winter, each bringing her own tools and materials. They sit together, working on their crafts while discussing village matters.

Participant 36 explained that the process begins with knotting four to five straw stalks into a circle about 1 cm in diameter. Some women finalize the plate by securing the outer layer with a small piece of fabric, sometimes decorating the entire plate with fabric to preserve it longer. A small triangle, about 3 cm high, is formed on the last layer to serve as a hook for hanging it on the wall. Large, colorful plates are typically used for serving food to guests or on special occasions, while smaller, uncolored plates are made for regular household use.

Participant 45 reported: We also make small plates. Women often decorate these plates and attach a handle for ease of use. Sometimes, a small mirror, about 10 cm in diameter, is embedded in the center for personal use, such as applying makeup. We also make baskets from straw, which are often wrapped with goat leather on the outside to protect them and extend their lifespan. However, declining demand for handmade straw plates and baskets, due to competition from modern products, changing lifestyles, and lower financial returns, has led to a reduced interest among young women in learning the craft. This has resulted in fewer experts and a weaker labor force. Despite this, straw plates and baskets hold a special appeal and evoke a sense of nostalgia for nature. Many modern homes, clinics, malls, hair salons, and large shops display straw items as part of their decor, encouraging a revival and evolution of this craft."

CONCLUSION

The Jordanians have proven their ability to contribute in work and production in all areas of life. They are fully capable of mastering various crafts that elevate their status and that of their family. Despite the fact that most of these people did not receive formal education, with many being illiterate or having only a basic level of schooling, they possessed a high degree of knowledge and awareness.

The participants in the study sample demonstrated self-motivation and a sense of responsibility, producing many necessary household items. Despite their numerous work and domestic duties, Jordanians did not neglect their personal

adornment or that of their families. Their active participation in the production of various items reflects their significant role in preserving Jordan's tangible heritage. In this way, the Jordanians have made a great contribution to the components of Jordan's cultural heritage. A considerable portion of Jordan's heritage items were crafted by the participants, confirming their vital role in the economic life of their communities. In fact, Jordanians often excelled in creating many essential household crafts, driven by their own initiative and sense of responsibility.

Limitations

Some of the main limitations that this study may face are as follows:

- Limited education: Most of the participants who participated in the study were illiterate or had a low level of education, which may affect their full understanding of certain technical or scientific aspects related to the crafts they practice, hindering their ability to develop these crafts in a scientific manner.
- Limited sample: The study may have relied on a specific group of participants, which may not reflect the experiences of all Jordanians across different regions or socio-economic contexts within Jordan.
- Impact of social and economic factors: The study may not sufficiently take into account the varying impacts of social and economic factors on female artisans, such as access to raw materials or markets, which could affect the accuracy of the results.
- Cultural bias: There may be a focus on participants who participated in traditional crafts only, without considering others working in other fields or non-traditional crafts, which could limit the inclusivity of the study.

Author Contributions: Conceptualization, Y.M.A. and F.A.Z.; methodology, Y.M.A. and F.A.Z. and O.I.A; software, K.S. and B.B.K.; validation, K.S. and B.B.K.; formal analysis, H.A.E.E. and K.S.A.; investigation, H.A.E.E. and K.S.A.; data curation, H.A.E.E. and K.S.A.; writing - original draft preparation, M.A.I.R. and M.G.B.H.; writing - review and editing, M.A.I.R. and M.G.B.H. and H.A.E.E. and K.S.A.; visualization, M.A.I.R. and M.G.B.H. and O.I.A; supervision, M.A.I.R. and M.G.B.H.; project administration, H.A.E.E. and K.S.A. All authors have read and agreed to the published version of the manuscript.

Funding: Not applicable.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgments: The research undertaken was made possible by the equal scientific involvement of all the authors concerned.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

Al-Abdulrazaq, M., Khaled Al-Jezawi, H., Alzoubi, M., & Rababah, M. (2024). Unveiling gender dynamics: A feminist voice in Chaucer's "The Wife of Bath's Prologue and Tale". *Journal of Literary Studies*, *40*, 1-19. https://doi.org/10.25159/1753-5387/15288

Al-Ani, M. Q. A. G. (2020). Mechanisms of safeguarding urban heritage at risk: Mosul heritage as a case study. *Periodicals of Engineering and Natural Sciences (PEN)*, *8*(4), 2459–2470. https://doi.org/10.21533/pen.v8i4.1742

Al-Gayam, I. M., Al-Rawashdeh, B. A., Essa, A. H., & Rababah, M. A. (2025). Psychological suggestive connotations in Fahd Al-Askar's poetry:" Woman and Wine" poem as a model. *Journal of Language Teaching and Research*, *16*(1), 107-117. https://doi.org/10.17507/jltr.1601.12

Al-Habies, F. A. A. H. F., Yaseen, S. Y. R. H. S., & Rababah, M. (2024). Obstacles to marriage for Jordanian persons with visual or hearing disabilities from their perspectives. *FWU Journal of Social Sciences*, *18*(2). http://121.52.146.40/fwu-journal/index.php/ojss/article/view/3032

Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A. S., Ahmad, A. Y., & Ayasrah, F. T. M. (2023). The role of energy management practices in sustainable tourism development: a case study of Jerash, Jordan. *International Journal of Energy Economics and Policy*, *13*(6), 321-333.https://doi.org/10.32479/ijeep.14724

Aljedayah, K. S., Rababa'h, S. Y., Alrababah, O. F., Bani-Khair, B. M., Rababah, M. A. I., Al-Shloul, K. A. F., & Hani, M. G. B. (2024). Intangible heritage: An analysis of Jordanian customs signifying societal interdependence and social solidarity. *Journal of Islamic Thought and Civilization*, *14*(2), 159-177. https://doi.org/10.32350/jitc.142.10

Al-Jezawi, H. K., Al-Abdulrazaq, M. A., Rababah, M. A., & Aldoory, A. H. (2023). Art voicing peaceful protest: Hip-hop and rap in the American and Arabic cultures. *International Journal of Arabic-English Studies*, *24*(1), 1-16. https://doi.org/10.33806/ijaes.v24i1.555

Al-Khatib, A. T. (2004). Utilizing the environment from an Islamic economic perspective. *Mutah for Research and Studies*, *19*(4), 33–49. https://doi.org/10.17853/1994-5639-2024-4-148-168

Al-Rawashdeh, B. A., Issa, A. H. B., & Rababah, M. A. (2024). Substitution in Arabic: Lisan Al-Arab Dictionary as a model. *Theory and Practice in Language Studies*, *14*(1), 116-124. https://doi.org/10.17507/tpls.1401.13

Al-Rousan, M. A., Al Azzam, T. M., Rababah, L. M., Bani-Khair, B., Al-Hawamdeh, B. M., Al-Thunebat, S. A., Abu Zetun, N. A., Alatoom, N. A., & Rababah, M. A. (2025). Religious minorities in Iran: The Jews as a model. *Этнография / Etnografia,* 1(27), 56–73. https://doi.org/10.31250/2618-8600-2025-1(27)-56-73

Alsayyed, N. M., & Randall, J. (2023). Feminist emergence in a traditionally male industry: A case from Jordan—The Jordanian banking industry. *Administrative Sciences*, *13*(2), 39. https://doi.org/10.3390/admsci13020039

Al-Tal, G. (2006). *The Jordanian society.* Jordan: The Modern World of Books.

El-Ebiary, Y. A., Mjlae, S. A., Ahmad, H., Rababa'h, S. Y., Rababah, M. A., & Arabiat, O. G. (2024). IR4.0 and Internet of Things: Future directions towards enhanced connectivity, automation, and sustainable innovation. *Telkomnika Telecommunication Computer Electronics Control*, *22*(6), 1469–1477. https://doi.org/10.12928/telkomnika.v22i6.25487

Eramo, G. (2020). Ceramic technology: how to recognize clay processing. *Archaeological and Anthropological Sciences*, *12*(8), 164-188. https://link.springer.com/article/10.1007/s12520-020-01132-z

Harara, N. M., Al Najdawi, B. M., Rababah, M. A., & Haniyi, A. A. (2024). Jordanian tour guides' communication competency. *Journal of Language Teaching and Research*, *15*(3), 873-883. https://doi.org/10.17507/jltr.1503.20

Hassan, F. (2020). Tangible heritage in archaeology. *Encyclopedia of global archaeology*, 10489-10492. https://link.springer.com/content/pdf/10.1007/978-3-030-30018-0_1141.pdf

Hernes, H. M. (2018). Women and the welfare state: The transition from private to public dependence. In H. M. Hernes (Ed.), *Women and the state*, 72–92, Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780429401602-3/women-welfare-state-transition-private-public-dependence-helga-maria-hernes

International Center for the Study of the Preservation and Restoration of Cultural Property. (n.d.). Website. https://www.iccrom.org/ar/section/lm-altrath

Jordan Cultural Heritage Journal, Jordanian Ministry of Culture. (n.d.). Website. http://www.ich.gov.jo/node/collected27

Khdeir, A. M. F. M. K. (2024). *The image of Jordan as a local tourism destination: An exploratory study on Jordanian tourists* (Master's thesis, İzmir Ekonomi Üniversitesi). https://gcris.ieu.edu.tr/handle/20.500.14365/5264

Lenzen, C. J., & McQuitty, A. M. (1984). Tell Irbid. *Annual of the Department of Antiquities of Jordan/Hashemite Kingdom of Jordan*, *28*, 297-297. https://ixtheo.de/Record/1650095163

Newisar, M., Selim, G., & Li, M. (2024). Place-Based Perspectives on Understanding the Value of Sustainable Heritage-Inspired Arts and Crafts in Jordan. *Sustainability*, *16*(17), 7547. https://doi.org/10.3390/su16177547

Otte, J. P., & Priestman, S. M. (2022). European trade ceramics on the Arabian Peninsula 1800–1960. *Arabian Archaeology and Epigraphy*, *33*(1), 248-293. https://doi.org/10.1111/aae.12217

Qiu, L., Rahman, A. R. A., & Dolah, M. S. B. (2024). The Role of Souvenirs in Enhancing Local Cultural Sustainability: A Systematic Literature Review. *Sustainability*, *16*(10), 3893. https://doi.org/10.3390/su16103893

Rababa'h, S. Y., Rababah, L. M., Rababah, M. A., Bany Hani, M. G., Alorani, O. I., & Al-Habies, F. A. (2024). Teachers' perceptions of the barriers of employing educational technology skills in teaching. *The Education and Science Journal*, *26*(9), 74–97. https://doi.org/10.17853/1994-5639-2024-9-74-97

Shehabat, A., Shureteh, H., Al Ahmad, M. H., Rababah, M. A. I., Bani-Khair, B. M., Alnawaiseh, A., & Alsoud, T. J. (2025). Jealousy in Willa Cather's *Sapphira and the Slave Girl* (1940): Nancy and Henry's relationship. *Journal of Language Teaching and Research*, *16*(2), 649-654. https://doi.org/10.17507/jltr.1602.31

Tobazah, T. (2013). Environmental conditions and their impact on traditional folk crafts in Jordan: An analytical study. *Jordanian Journal of Arts*, *6*(3), 362-378. https://jja.yu.edu.jo/index.php/jja/article/view/317.

United Nations Educational, Scientific and Cultural Organization. (n.d.). Website. https://www.unesco.org/ar

Wolor, C. H., Datu Eranza, D. R., Rababah, M. A., & Nurkhin, A. (2023). Relationship of work-family conflict, work-life imbalance, and work-related stress with employee performance of married women in Indonesia: A cross-sectional study (in Persian). *Iranian Journal of Psychiatry and Clinical Psychology*, *29*(3), 350-369. https://doi.org/10.32598/ijpcp.29.3.4713.1

Wolor, C. W., Eranza, D. R. D., Rababah, M. A., Nurkhin, A., & Hoo, W. C. (2024). The impact of interpersonal trust development on maintaining business sustainability: A case study of Aceh Gayo coffee from Sumatera, Indonesia. *Journal of Infrastructure, Policy and Development*, *8*(6), 1-12. https://doi.org/10.24294/jipd.v8i6.3947

Wolor, C. W., Eranza, D. R., Rababah, M. A., Hoo, W. C., Nurkhin, A., Richard, Y. F., & Rahman, A. (2024). Increasing the competency of prospective coffee entrepreneurs through experiential training in coffee tourism villages: A case study of young entrepreneurs in Indonesia. *International Journal of Sustainable Development & Planning*, *19*(5), 1683–1689. https://doi.org/10.18280/ijsdp.190506

Wolor, C. W., Madli, F., Rababah, M. A., Mukhibad, H., & Hoo, W. C. (2024). Examining the impact of knowledge management use and innovation on business performance of MSMEs in the digital age: Case study MSMEs in Indonesia. *Journal of Sustainability Research*, *4*(1), 1–18. https://doi.org/10.20900/jsr20240070

Wolor, C. W., Wibawa, E. A., Rababah, M. A., & Eranza, D. R. (2023). Economic acceleration after the COVID-19 pandemic through improving the quality of human resources in rural communities: A case study of Bawuran Tourism Village, Indonesia. *Southern African Journal of Social Work and Social Development*, *35*(2), 20–32. https://hdl.handle.net/10520/ejc-socwork1_v35_n2_a8

Yassien, B. B. M. B., Albadarneh, M. M. T., Alazzam, A. A. A. M., & Rababah, M. A. (2023). Relationship between organisational trust and decision-making participation. *Journal of Higher Education Theory and Practice*, *23*(7), 169-177. https://doi.org/10.33423/jhetp.v23i7.6021

Article history: Received: 24.08.2024 Revised: 11.01.2025 Accepted: 26.02.2025 Available online: 26.03.2025