

Challenges Facing Agricultural Buildings Case Study Al-Muntar And Al-Sira In Palestine

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Abstract

This paper examines a distinctive agricultural structure in Palestine known as “Al-Muntar” and “Al-Sira” sometimes called “Agrarian Palace”. These agricultural structures are a significant part of traditional Palestinian heritage and are considered architectural landmarks in the country. Al-Muntar are found in various regions of Palestine and are a part of the rural heritage that embodies cultural and historical value. These architectural structures suffer from neglect, the threat of demolition and replacement, and a lack of awareness regarding their significance, leading to both deliberate and accidental destruction by their owners. Protecting and preserving Al-Muntar is an essential part of ongoing efforts to safeguard Palestinian heritage and enhance the cultural identity of the Palestinian people. The study delves into adapting these structures in the context of urban development and growth in the twenty-first century. It also explores the challenges and obstacles affecting these traditional architectural wonders, which are integral to the Palestinian rural landscape and traditional heritage. Due to a lack of relevant sources, the research relies on field surveys, interviews, and the documentation of samples through photography and computer software. The study categorizes agricultural buildings into two primary types. The first type is classified based on their architectural form and construction materials, while the second type is categorized based on their structural condition and the extent of preservation. Furthermore, the paper traces the evolution of these structures and examines the different names based on their geographical locations and construction materials. Finally, it presents a compelling model for revitalizing heritage in Salbit. The findings underscore the imminent threat to this specific architectural typology and advocate for measures to reuse, develop, and preserve Al-Muntar and Al-Sira as distinctive hallmarks of Palestinian vernacular architecture.

Keywords *Al-Muntar; Preservation; Re-use; Tangible Heritage; Re-modeling*

1.1 Introduction

Definition of "Muntar": The summer house, known as "Muntar" in Palestine, is a stone-built structure (Araf, 1985, p.16). It takes various forms, including the "Muntar" in Palestine, also known as the "Agrarian Palace." These summer houses are an important part of Palestinian traditional heritage. Muntar is among the prominent architectural elements in the country, symbolizing Palestinian identity and local heritage. These houses are renowned for their unique design, reflecting the simplicity of rural life and harking back to ancient times. The construction (and rebuilding) of terraced walls is believed to have spanned many periods. Walls may have originally appeared in the Iron Age (1200-332 BCE), increased during the Byzantine period (332-627 AD), and flourished at the beginning of the Ottoman period (1516 AD) (Ghadban, 2015). Muntar and Sira houses can be found in several regions in Palestine, including Nablus, Ramallah, and Bethlehem. These houses are part of the old city's cultural and heritage landmarks. The Hebron region alone contains more than 10,000 units, although their use has decreased in recent times (Araf, 1985, p.33). Muntar houses

hold significant cultural and historical value. However, some of these houses are at risk of disappearing due to various challenges facing Palestine, including the Israeli-Palestinian conflict, demolition operations, and settlement expansion (Ghadban, 2015). The preservation and conservation of these types of constructions are part of ongoing efforts to safeguard Palestinian heritage and enhance the cultural identity of the Palestinian people. Several local and international organizations and institutions are working on restoring and maintaining these old houses to preserve their beauty.



Figure 1. The summer house, "Al-Muntar" in Palestine. Ola Moukaddi. Salfit 27-9-2020 Wafa Reviving Agricultural Terraces: An Initiative to Protect the Land <https://www.wafa.ps>

1.2 Problem statement

The a lack of official laws to protect this type of architectural heritage, as it is located outside of cities and not covered by world heritage laws.

Changes in construction patterns and a shift towards cement houses, which are easier and faster to build than traditional old structures.

1.3 Methodology

This research follows an analytical and documentary scientific methodology. It involves reviewing literature, materials, books, and scientific research. It also includes studying and analyzing several models in Palestine, gathering information through interviews, and conducting a survey to collect sufficient data for analysis and results extraction.

1.4 Research Objectives

The research aims to analyze the characteristics and importance of Muntar and Sira houses as a model of tangible cultural heritage at risk of extinction due to various factors, including:

Changing social life systems and the population's livelihood methods, with agriculture no longer being the sole source of income.

The expansion of the demographic area and the population's transition to living in what was formerly called "Sira" houses for residential purposes.

2-Construction of traditional "Al-Muntar" and "Al-Sira"

The Evolution and Diversity of Traditional Agricultural Dwellings in Palestine Styles of agricultural structures exhibit variations influenced by their location, construction materials, and intended use. The simplest structures, crafted from wood and tree branches, are known as "Al-Orsh" and "Al-Orzal." "Al-Orsh" is a square-shaped agricultural building constructed from tree branches, oak, and twigs on flat terrains (A'miri & Rahhal, 2003). On the other hand, "Al-Orzal" is a two-story agricultural edifice made of wood and tree branches, also on level ground. The ground floor is designated for storage and cooking, while the first floor serves as a nighttime shelter, featuring tree branches for protection against cold nights and the daytime sun's heat (Araf, 1985, p.16).

Another category is "Al-Muntar," a type of summer house crafted from natural stone. These circular houses are situated amidst vineyards in mountainous regions, typically featuring one or two stories.

Then there's the "Agrarian Palace," which is square or rectangular, renowned for its expansive size, and often spotted on the hillsides of Ramallah, Jerusalem, and Hebron mountains (Araf, 1985, p.16).

Also worth noting is "Al-Sira," an agricultural dwelling prevalent in Hebron, primarily used in vineyard settings (A'miri & Rahhal, 2003). "Al-Sira" bears similarities to "Al-Ezba," commonly found in northern areas such as Salfit.

Two main types of the "Muntar" (Agrarian palace) were found in the Palestinian territories:

The very earliest round structure with a very simple form composed of stones of various sizes. These stones were mostly gathered from the site itself during land preparation for agriculture and stacked in heaps (Arabic: Rojoun).

The corbelled stone hut, a More complex circular form with multiple rooms and stories was also observed. Some of them are surrounded by curved enclosure walls and have more than one staircase connecting their spaces. These structures were more intricate in terms of structure and characterized by a greater focus on architectural details. Additionally, a conical-shaped dry-stone hut is also very common, featuring a single large room, a conical corbelled dome inside, and a flat roof accessed via an internal staircase used for various activities. (Ghadban, 2015). The methods of constructing traditional houses typically encompass various elements, from the materials used to the overall structure-building materials that played a crucial role in structuring the houses in Palestine.

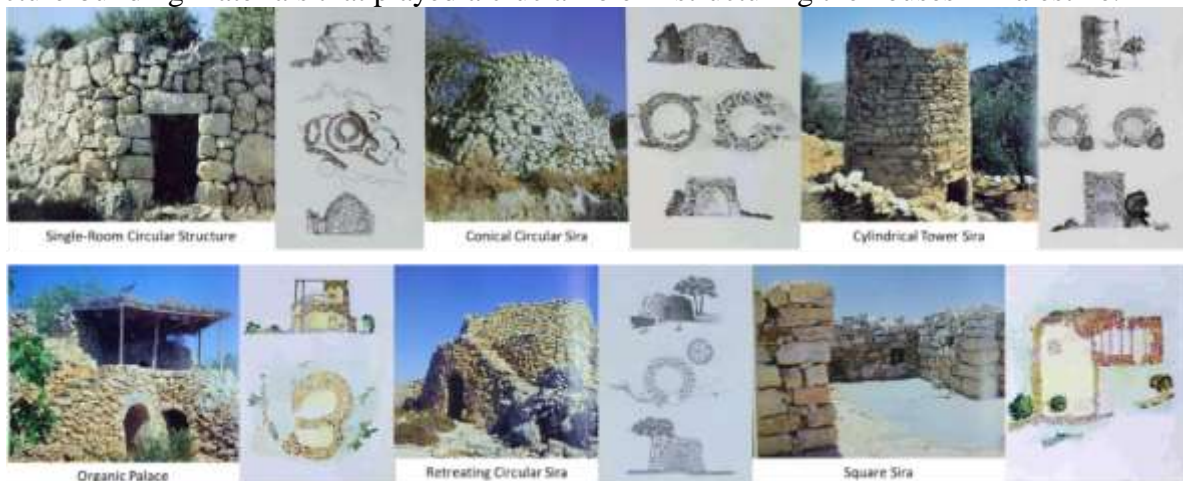


Figure 2. The construction of "Al-Muntar" and "Al-Sira". Source (A'miri & Rahhal, 2003)

Construction Materials Used in Traditional "Muntar" Buildings:

The "Muntar" is a structure used in agricultural activities and for protecting grapevines. It is considered a simple traditional dwelling (Sarghan, 1989). The "Muntar" is also known as "Agrarian palaces" and was built in elevated areas using natural stones collected from fields. These palaces were constructed in circular or square shapes and could be divided into single rooms or multiple rooms for various purposes, usually related to agricultural activities (Muqaddi, 2020).

The construction of the "Muntar" typically involves selecting a rocky area as the foundation to create an elevated and rocky location (Sarghan, 1989). This was done to ensure a strong foundation and to preserve agricultural lands without using mud or adhesive materials. Weathered stones affected by natural erosion, weather conditions, and stone diseases were used in construction, often collected from fields and cleaned (A'miri & Rahhal, 2003). In many cases, "Muntar" construction was integrated with natural rocks to reduce stone usage and make use of natural terrain, minimizing construction efforts (Muqaddi, 2020).

The construction process generally follows these steps:

- Begin by leveling and cleaning the ground and defining the complete "Muntar" area (Muqaddi, 2020).

- Excavate the foundation based on the desired "Muntar" shape, whether circular, square, or other, and place large stones to form sturdy corners (Sarghan, 1989). Then, lay a foundation of large stones (Muqaddi, 2020).
- Level the foundation with the ground surface (Muqaddi, 2020). Then, place the "Mudmaks" at ground level, covering the inner face with stones and the outer face with small stones to enhance building cohesion (Sarghan, 1989). The walls were constructed using "Mudamik" made of limestone (Muqaddi, 2020).
- The first "Tauf" is laid and moved inward, and this process is repeated with the second and subsequent "Taufs" until a strong, conical, pillar-less roof is built (Sarghan, 1989). Each "Medmak" consists of two rows of stones, with an internal space called "Al-Bata" between them, where the outer wall is built from "Al-Battain" and "Al-Rakah" (Muqaddi, 2020).
- Typically, the "Muntar" starts in a circular shape with a base diameter of about four meters and gradually narrows as it ascends in a tilted circular shape inward (Muqaddi, 2020). The loads are distributed on the summit's stone area (Sarghan, 1989).
- Small openings are often added to the outer wall for lighting and ventilation (Muqaddi, 2020). A ventilation or viewing hole is left toward the vineyard (Sarghan, 1989).
- An internal staircase is built between "Al-Battain" using durable stones (Muqaddi, 2020) to ascend to the "Muntar" roof (Sarghan, 1989).
- At the base, there is usually a 1.5-meter-high barrier called "Al-Jedlah" around the outer wall, where the staircase is constructed (Muqaddi, 2020).
- The "Muntar" roof is covered with an "Arish" made from tree branches. In general, the "Muntar" has a height ranging from 3 to 5 meters, a lower base diameter of 3 to 4 meters, and an upper diameter that decreases to about 1.5 meters. A grapevine, often a "Dalieh" grapevine, is planted to provide shade for the arish (Sarghan, 1989).



Figure 3. The construction process generally follows these steps. Source Muqaddi, Ala. (27-9-2020)

2.2. Classifying 'Muntar' Structures in Palestine: A Study of Styles and Preservation:

The Muntar (sira) can be classified into two categories. To understand these structures better, they can be categorized based on shape and material, revealing unique patterns and features that set them apart. This study aims to delve into these structures, focusing primarily on their architectural and structural attributes, and examining their historical and contemporary definitions. Muntar (sira), These patterns can be classified according to:

- Shape and material:

The Muntar (sira) can be classified into two categories. These patterns are characterized by the following:

• Circular Sira Structures: There are various types within this category:

- a) **Single-Room Circular Structure:** This type has evolved from al-Rajm and consists of a simple room with fieldstone walls, open at the top (Ameri, 2003, p. 40). Figure 3
- b) **Cylindrical Tower Sira:** This style comprises a high tower with a lower room and an upper room accessible by an internal staircase. It is made of finely cut natural stones arranged in patterns (Ameri, 2003, p. 42). Figure 4. is more advanced than the previous ones. Initially, it was constructed as a single-story circular structure using irregular stones, but with more prominent masonry patterns. Later, an additional floor was added, made of brick walls covered with a layer of coarse plaster. This upper room features wide openings on opposite sides
- c) **Conical Circular Sira:** This style features a single central room with a distinctive conical shape and inward-sloping walls. It has an internal staircase leading to a roof with an arbor made of branches and tree leaves. The construction materials include paved stones (Ameri, 2003).
- d) **Retreating Circular Sira:** This type consists of two floors, with the first floor being smaller than the ground floor. Access to the first floor is through an external stone staircase built next to the wall. It is made of polished stones with more regular masonry (Ameri, 2003).
- e) **Organic Palace:** This is an advanced form of the Muntar, featuring several semi-circular rooms with cone-shaped domes. These organic models are constructed from irregular natural stones, and the staircase is external, leading from the ground floor to the first floor.



Figure 4. Al Rehan Area/ Ramallah City Al-Muntar in this region varied in shape. The simplest one is circular and has one floor and was built of random stones. Source author 2023



Figure 5. represented advanced a single-story circular structure using irregular stones. Source author 2023

- **Square Palaces and Sira Structures:**

- a) Cut Pyramid Palace: In this style, the four walls slightly slope inward from the square base. The palace is constructed using irregularly laid natural stones without the use of lime mortar, and the roof consists of a cross vault overlapping rows. This type that emerged is characterized by a square horizontal plan, as seen in Figure 5. The stone used became more refined and neatly arranged in patterns, while the interior had a domed ceiling. Access to the roof was provided through an internal staircase. However, due to disuse and neglect, a significant portion of it has deteriorated or collapsed
- b) Square Single-Room Palace: Typically having two or three stories, this type is built from natural stones without refining or the use of mortar. Figure 6
- c) Residential Square Palace: This style features multiple rooms and is closer in appearance to residential houses. It is usually constructed from stone and clay instead of chain stones, with a square or rectangular shape. An example from the Ramallah region is a sira consisting of two stories. Its horizontal plan is square, and it was initially constructed with regular stones, reaching a height of 18 m adaq. Later on, a room was added to this sira, indicating the influence of modern architecture, with changes in the size of openings that differ from the original sira. However, this sira has been neglected and left unused for a long period, making it susceptible to demolition and removal, especially if urban expansion reaches it. Refer to Figure 7.



Figure 6. An example from the Ramallah emerged is characterized by a square horizontal plan. Source author 2023



Figure 7. An example of Sira is from the village of Halhul, belonging to the city of Hebron. Source author 2023



Figure 8. Another example from the Ramallah region is a sira consisting of two stories. Source author 2023

- **The "Muntar" classification in terms of preservation:**

Their various patterns" (Agrarian Palace) and architectural structures have differed based on their preservation. The following classification is based on the current status of the building, which is a classification that this research focuses on due to its importance in the conservation process. It reflects the real problem addressed by the research regarding the lack of attention to these structures at times, leading to their collapse despite the possibility of preservation, as illustrated in the following examples.

- The first category consists of "Muntar" and "Sira" structures that have been well-preserved, restored, and are still in excellent use.
- The second category includes models that have been somewhat retained and used as storage or for other purposes but have been neglected.
- The third category comprises those that have been abandoned and left to deteriorate, resulting in partial or complete collapse.
- The fourth category involves some structures that have been completely demolished and replaced with modern buildings.

The first category Naaman Al-Janidi, Location of the Jneidi Palace:

The Jneidi Palace is located in the Abu Dujana Valley within the Hebron region, renowned for its grapevine fields. It was constructed in three stages, beginning in the early 20th century as a small dwelling nestled among the vineyards. This initial structure comprised two vaulted rooms, an open courtyard, and a small room serving as a bathroom adjacent to the two rooms. The dwelling was single-story at that time (according to Mr. Naaman Hamed Jneidi, the current owner, who traced its history back to his grandfather and then his father, as reported in an interview with the researcher in 2009). The Jneidi Palace in Hebron is considered one of the preserved models of Vineyard Dwellings (known as "Bait Dar" or "Grapevine House"). This particular model stands out not only for its preservation but also for its reuse, development, and conservation. The Jneidi family serves as an exemplary case of preserving their ancestral heritage. Currently, after the restoration of the Vineyard

Dwelling, old belongings have been placed and arranged, creating something akin to a living museum of folk heritage.



Figure 9. Naaman Al-Janidi, Location of the Jneidi Palace. Source author 2023

The second category Beit Salah Al-Qawasmi The true historical timeline of Beit al-Muntar, also known as "Al-Sira," is not known. As mentioned by Hajjah Um Issam, who currently resides in her home and uses the old Al-Sira as a storage space, she struggles to care for the historical structure but does her best to maintain it simply. Al-Sira house consists of two adjacent rooms with two entrances, a water well, and a front courtyard (yard) that was used for daily activities. According to Hajjah Um Issam, her mother-in-law used to live in Al-Sira with her family throughout the summer season. They processed grapes and other grape products there. When winter came, the family would move back to their home in the old town of Hebron. The provided diagram illustrates the summer setup of Al-Sira, where the family made use of the house for storing agricultural products and for activities like making grape molasses and cooking.



Figure 10. Beit Salah Al-Qawasmi. Source author 2023

The third category comprises those that have been abandoned and left to deteriorate, resulting in partial or complete collapse. In the third model, This Beit al-Muntar, also known as "Al-Sira belongs to the Al-Qawasmi family, who, as it seems, used to own this land. As is well known in the city of Al-Khalil, most families reside in contiguous demographic areas, and these areas are often referred to by the name of the families that inhabit them the biography of the Al-Qawasmi family from Al-Khalil represents a family that migrated from the area 20 years ago to live in Jerusalem. This was due to the death of the grandmother and the difficulty of the children and grandchildren commuting and reaching the house that was built next to the old biography. It was rented for some time, and now it is completely ruined. The condition of the Al-Sira is poor due to weather factors, misuse, and abandonment. In this model, which consists of two adjacent rooms with The stone staircase next to one of the rooms, the roof appears to be used for sitting and drying crops. The construction date of this Al-Sira is unknown, but the history of the area indicates a flourishing of Al-Sira house construction in the region, as this area used to be vineyards in

addition to several fruit-bearing trees. During our visit to the place, we enjoyed the large mulberry tree that is abundant near every Al-Sira house.

Description of the house from the inside: The Al-Sira house from the inside contains a large number of openings that were used in the past to store the needs of the inhabitants of this biography. The door opening appears relatively small, with a niche for windows.

(Interview with the neighbors of the house, Sonna Al-Qawasmi and Um Ma'mar, June 2023), also indicated the presence of a well in the front yard overlooking the Al-Sira.

Construction materials: The building is characterized by its clear simplicity in construction and its distance from ornamentation. Most of the stones used are uncut fieldstones. There are no traces of the existing flooring, which is believed to have been an earthen bench. The Al-Sira building is currently suffering from partial roof collapse, and if neglect continues, it may eventually collapse.



Figure 11. Illustrating the similarity in building style and stone type. Source author 2023

Another example of the third category

Kifl Haris village/ Salfit City

They are called palaces and were used to guard the land and protect the crops from birds and from anyone who might trespass on the property. Its back is used to dry figs and make raisins from grapes. She is not less than 150 years old. The area in which the Muntar is located is called "Al-Marajim" which means piles of stones. There were about 7 Muntars in that area, one of which was close to it was demolished. (Interview with Mr. Abd Alraheem Bozieh, June 2023)



Figure 12. Illustrating the Kifl Haris village/ Salfit City palaces. Source author 2023

The fourth category involves some structures that have been completely demolished and replaced with modern buildings in the next two models, we find that the biography houses have suffered complete roof collapse, with only the remaining walls still standing. These walls are continuously exposed to collapse due to several factors, including natural weather conditions and deliberate demolition efforts. We learned from the neighbors overlooking these buildings that the land and the "Al-Sira" houses were sold to a merchant. These historical houses are set to be demolished by the end of 2023 to make way for the construction of a villa in their place. The Beit, also known as "Al-Sira (locally known as " al-Muntar " or Bait Jidar) is not a unique case, especially since the surrounding residents do

not see any value in preserving them. As for the architectural description, the biography model of the Al-Qawasmi family is similar to the building style characterized by simplicity, with two rooms and architectural openings used for storage, as mentioned earlier. The Al-Sira house belonging to the Jouhans family has a similar condition to its counterparts in terms of building style and the type of stones used. A diagram illustrates this.



Figure 13. The biography model of the Al-Qawasmi family is similar to the building style characterized by simplicity. Location: Wadi Abu Katila. Source author 2023

3. Survey Results

This part of the study deals with a statistical study of the questionnaires. To achieve the objectives of the study and verify its hypotheses, various statistical methods were used. The questionnaire consists of three parts, the first part contains three objective questions, the second part consists of five questions and answers to them with approval or disagreement, and the third part consists of five multiple-answer questions. To obtain as accurate results as possible, the SPSS statistical program, which refers to the Statistical Package for Social Sciences, was used. Description of the resolution. The study samples were selected based on several criteria, including Academic qualification and the place of living to study and understand, which contains cities from North to South Palestine, such as Salfit, Nablus, Ramallah, Bethlehem, and Hebron. The study sample included 100 people who answered the questionnaire. A large proportion of them is educated with 78% Bachelor's degrees and 12% Master's degrees. Figure. The first part of the questionnaire includes the qualifications of the study sample.

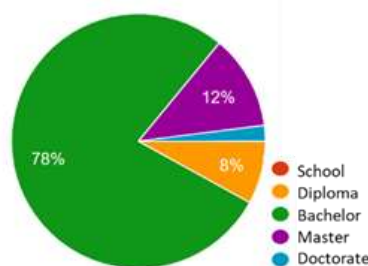


Figure 14. Qualifications of the study sample. Source author 2023

As a part of this paper, a questionnaire was distributed, focusing on the following questions:

- Have you ever heard of or seen a Muntar (Agrarian Palace) or Sira?
- Have you ever lived in or visited Al-Muntar or Al-Sira and if so, how would you describe its architectural features and the materials used in its construction?
- Are you noticing a trend where the population is expanding and moving to live in modern cement houses instead of traditional structures like mantar or sira?
- Have you seen a change in building patterns in your area, with more people choosing faster and easier construction methods using cement rather than traditional masonry

structures?

In addition, it explains the challenges and impediments impacting this type of housing, the most important reasons for neglecting it, and things that are used to preserve this distinctive architectural and cultural heritage in Palestine, and how achieves sustainability.

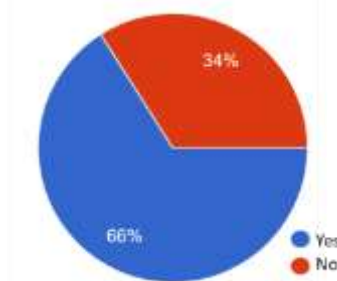


Figure 15. Have you ever heard of or seen a Muntar (Agrarian Palace) or Sira? Source author 2023

The second part consists of five questions to be answered with either agreement or disagreement. The highest response rate was strongly agreed for each of the following questions as per the attached Figure 15:

1. The existence of local and international efforts and initiatives for the preservation and maintenance of this type of building.
2. The " Muntar " (Agrarian Palace) holds cultural and historical significance in the context of Palestinian heritage and identity.
3. Increasing awareness of the value of these types of agricultural buildings is important for the preservation of Palestinian heritage.
4. As for the question about the demolition and removal of these buildings to build modern ones, the highest percentage strongly disagreed.
5. The question regarding lifestyle change and reduced reliance on agriculture as a primary source of income had answers ranging from agree to neutral to disagree.

This leads us to a general summary of these responses as follows:

The necessity of local and international initiatives for the maintenance and preservation of these types of agricultural buildings, such as the " Muntar " and "Sira."

Awareness should be raised about the value of these buildings as they represent Palestinian culture and history, and they constitute landmarks of Palestinian heritage and identity.

These buildings should be preserved from deliberate demolition and removal.

Agriculture is considered one of the most important sources of income for a large segment of the population. Therefore, these types of agricultural buildings are found within lands classified as "agricultural lands," and they should be preserved by not converting the classification of these lands to industrial, commercial, or other categories in the urban master plan, which allows for the construction of commercial or residential buildings. This would lead to their abandonment in favor of increasing income and giving up agriculture and agricultural lands.

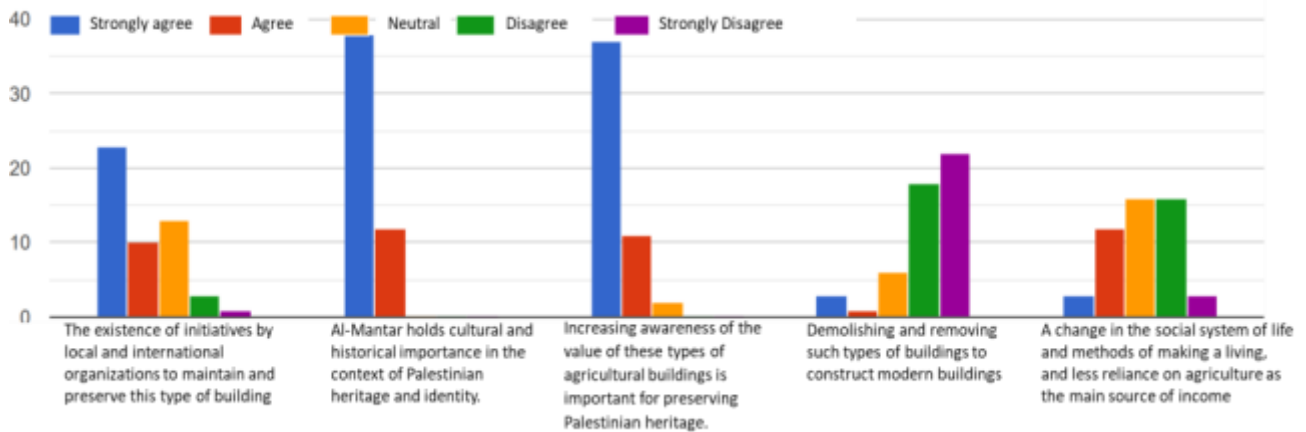


Figure 16. The second part consists of five questions to be answered with either agreement or disagreement. Source author 2023

The response percentages of the study sample to the question "What are the challenges facing traditional building structures such as the " Muntar " (Agrarian Palace) and 'Sira'?" were distributed as follows in Figure 16.

The greatest challenge lies in the absence of laws and systems that protect this type of building, in addition to neglect due to lack of use, at a rate of 66% for each. The lowest percentage was 24%, attributed to its geographical location and distance from residential centers. This could be attributed to rapid urban expansion, which now encompasses large areas of land. The " Muntar " (Agrarian Palace) or 'Sira,' which used to be far from residential settlements, is now close to or part of them.

Demolition and removal operations accounted for 62%, while the risk of weather and natural factors such as earthquakes accounted for 40%.

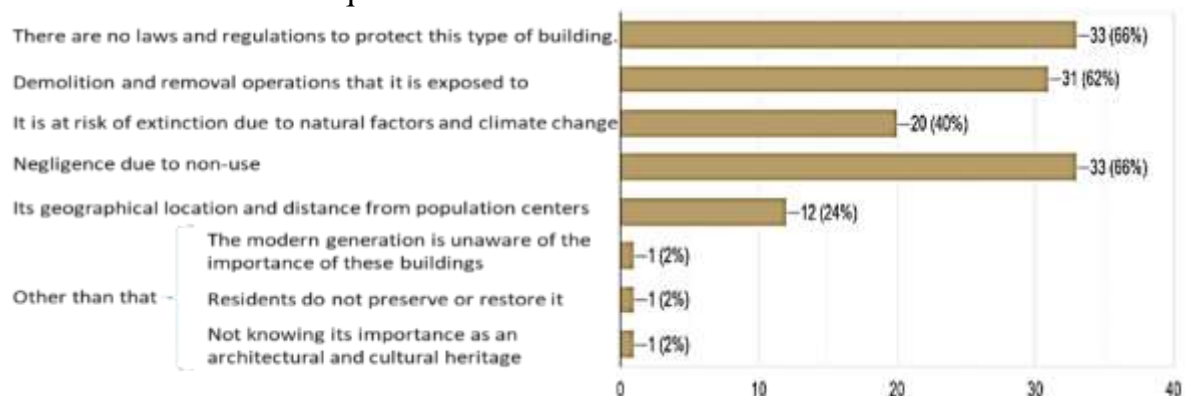


Figure 17. The response percentages of the study sample to the question "What are the challenges facing traditional building structures such as the " Muntar"? Source author 2023

4. Discussion

Various forms and patterns of dwellings, known as "Al-Sira" (Vineyard Dwellings), have emerged in the city of Hebron. This development resulted from increased security in the region, leading the residents of the old town to construct homes in areas distant from the old town and close to grapevine fields, farms scattered in the mountains, and fruit trees. Consequently, these simple dwellings became widespread. Some individuals chose to reside in these vineyard dwellings, distancing themselves from their old town residences. These types of dwellings are characterized by simplicity in terms of construction materials and design. Later on, inhabitants started to settle in these vineyard dwellings, modifying them by expanding their area or constructing multi-story residences for family habitation.

Over time, these dwellings evolved into what could be likened to villa-style homes with front and rear courtyards, enclosed by cement or stone walls. The designs of these dwellings varied from simple to intricate, drawing inspiration from Western architectural styles. Key features include:

Location: These homes were situated outside the boundaries of the old town, typically amidst orchards and vineyards. Considering the circumstances in Palestinian territories, much of the cultural heritage and traditional architecture face the risk of disappearing. The future looks uncertain, especially with the continuous threats to cultural heritage such as the "Muntar." Some factors contributing to this include the emergence of cement-based construction methods Figure 18, changes in residents' lifestyles leading to a shift away from traditional agriculture, and challenges farmers face in accessing and residing in their lands due to the threat of Israeli settlers. Additionally, the ease of transportation to agricultural lands and crop transport without the need for residence in rural areas plays a role in this shift.



Figure 18. "Examples of terraced houses in the rural areas of Palestine, especially in the Hebron region, Surif town. The evolution in terraced house construction is represented by the emergence of concrete-structured terraces, with the presence of water tanks. Source author 2023.

In response to this imminent threat to such agricultural structures, initiatives have emerged that, if adopted, can serve as a means of preserving cultural heritage and utilizing it in various ways, including:

Firstly, the "On the Ground Initiative ":

Launched on September 27, 2020, by businessman Bashar Al-Masri, the "On the Ground" initiative aims to revive the "Muntar" agricultural structures in Palestine. These structures are part of Palestinian heritage and represent traditional architecture used by farmers to protect their lands and crops. The initiative seeks to build "Muntar" in areas threatened by confiscation and theft by settlers, encouraging farmers to cultivate and protect their lands from settlement activities. Proposed benefits of the "Muntar" include providing a safe place for farmers, using solar energy, and collecting rainwater. The initiative is seen to revive

Palestinian farming traditions and encourage youth to stay in rural areas and invest in agriculture.

In conclusion, the "Muntar" agricultural structures are an important part of Palestinian cultural heritage, and efforts to preserve and utilize them can help safeguard this heritage while also addressing contemporary challenges in agriculture and land protection. Initiatives like "On the Ground" demonstrate the potential for revitalizing traditional structures and practices to benefit both cultural preservation and sustainable agriculture.



Figure 19. The "On the Ground Initiative" https://3alard.ps/initiatives_album

Secondly, the "Preservation of Muntar Initiative" by artist Suleiman Mansour:

The "Preservation of Muntar Initiative," in collaboration with Palestinian visual artist Suleiman Mansour, focuses on constructing traditional Palestinian "Muntar" or "stone palaces" in the Palestinian Museum Garden in the town of Birzeit in the West Bank. This initiative aims to preserve this traditional Palestinian cultural and architectural heritage, which has witnessed a decline due to urban development and a disconnect between generations in its execution. The Muntar was built as part of the "Approaching Horizons" exhibition at the Palestinian Museum, which highlights artistic transformations in the Palestinian landscape and aims to transform it into an educational tool for school students and architecture students at Palestinian universities. Artist Suleiman Mansour and his initiative seek to revive this cultural heritage, raise awareness among young generations about its significance, and encourage them to work in the field while maintaining a connection with the land.



Figure 20. "Preservation of Muntar Initiative" by artist Suleiman Mansour Source Sadeq Mervat - A Artistic Invitation to Return to the Field. (2019/6/25).

In this initiative, we find the latest builder of Muntar, known as the artist Suleiman Mansour, the builder of the museum's Muntar (Hassan Odeh), who is one of the last builders of Muntar in Palestine. Odeh says he learned how to build them from his father and built one on his land in the village of Aarura, north of Ramallah, more than thirty years ago. His family used it as a summer residence until October when winter began, storing wheat, and barley, and using its roof to grow fruits, vegetables, and dried grains. He adds, "Despite not using cement in its construction, it is more resilient to natural impacts like earthquakes compared to cement houses, due to its reliance on the stones' mutual support." Odeh used the traditional method in constructing the Palestinian Museum's Muntar, relying on building a rocky base in the ground and erecting thick stone walls that support each other.

◦. Conclusions and Recommendations

The study of traditional building Based on the information and analysis provided regarding the study of the "Muntar" (summer house), here are some possible results and recommendations related to Muntar research that could be beneficial:

Cultural and Historical Significance of Muntars: Emphasize the importance of Muntars as part of Palestinian cultural and historical heritage. Considered symbols of Palestinian identity, these structures should be preserved, especially in light of current challenges.

Social and Economic Impacts: Investigate the social and economic effects of replacing traditional Muntars with modern homes. Does the change in housing and lifestyle affect the social and economic aspects of the population?

Used Techniques and Sustainability: The study may point out the techniques and materials traditionally used in constructing Muntars and compare them with modern construction methods. Are these techniques sustainable and durable?

Preservation of Cultural Heritage: Recommendations should focus on the need to preserve Muntars as part of Palestinian cultural heritage. Measures should be taken to safeguard these structures and restore them with the assistance of local and international organizations.

Further Studies: Encourage further research and studies on Muntars to better understand their impact on the social, economic, and cultural aspects of local communities.

Awareness and Education: It is essential to raise awareness about the importance of Muntars among the public, local authorities, and national institutions. Educational campaigns can be organized to promote awareness and encourage interest in preserving this heritage.

Legislation and Policies: Recommendations may include support for legislation and policies that protect Muntars and enhance their role in preserving cultural heritage.

In Conclusion

The "Muntar" agricultural structures are an essential component of Palestinian cultural heritage. Efforts to preserve and make use of them can play a crucial role in safeguarding this heritage while also addressing contemporary agricultural challenges and land protection needs. Initiatives like "On the Ground" demonstrate the potential for revitalizing traditional structures and practices, benefiting both cultural preservation and sustainable agriculture.

Future Prospects:

Despite the challenges, initiatives like "On the Ground" offer hope for the preservation of cultural heritage in Palestine. These efforts can inspire further projects aimed at reviving traditional architecture, fostering a deeper connection to Palestinian heritage, and supporting the agricultural sector. By combining cultural preservation with modern sustainability practices, there is an opportunity to create a more resilient and culturally rich future for Palestinian communities.

It's important to acknowledge that preserving cultural heritage is not just a matter of historical significance but also a means of fostering identity, resilience, and sustainable development in the face of adversity. The "Muntar" structures, with their unique history and practical applications, symbolize the potential to bridge the past with the present and pave the way for a more culturally vibrant and agriculturally sustainable future in Palestine.

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Interviews:

Eng. Halmi Murqah from the Hebron Rehabilitation Committee. (May 2023).
Mrs. Um Issam Al-Qawasmi - June 2023.
Mr. Ibrahim Al-Houry Sawriq - June 2023
Mr. Abd Alraheem Omar Bozieh - June 2023
Mrs. Nada Al-Qawasmi in the summer of June 2023"
Mr. Ali Abu Znieid - June 2023

Glossary

Al-Rojoum (الرُّجُم): Stones stacked in heaps after being gathered from the site itself during land preparation for agriculture.

Al-Orzal (الْعُرْزَال): It is an agricultural structure consisting of two floors, built of wood and tree branches in the plain lands.

Al-Arish (الْعَرِيش): An agricultural structure of square shape built from tree branches, oak, and twigs in the plain lands.

Al-Muntar (الْمِنْطَار): It is a common name for the Agrarian Palace and is mainly used for surveillance.

Palace (القصر): An agricultural structure built of natural stone for observation, storage, and housing purposes.

Al-Izbah (الْإِزْبَة): It is a common name for a palace and is mainly used for residence and residence in the vineyards.

Al-Sira (السيرة): It is an agricultural facility spread in Hebron for vineyards.

Al-Kharboush (الْخَرْبُوش): An agricultural structure that resembles conical tents and is covered with burlap.

Al-Khos (الْخَصَن): The smallest agricultural facility, a square-shaped wooden structure covered with wormwood.

Wall House (بيت الجدار): One of the less common names for Agrarian Palace and or Al-Sira.

Al-Bunyah (الْبُنْيَة): "Al-Bunyah" in Arabic means a diminutive form of a building. In common usage, it refers to a small house typically used on farms.