

# Reading and Documentation of Traditional Rural Olive Oil Mills in Cyprus

## Geleneksel Kırsal Zeytinyağı Değirmenlerinin İncelenme ve Belgelenmesi

Cemaliye Eken, Gökhan Varol

### Abstract

*Many industrial buildings are valuable heritage buildings that should be conserved as well as the historic buildings since the conservation of these traditional values in the architectural context represents the sense and continuity of the culture of a particular society. Cyprus has been mostly described as an agricultural Island throughout the history due to geological and climatic factors. Olive is one of the most cultivated products of the Island. Therefore, there are many historical olive oil mills and factories in many villages around island. In general, traditional olive oil mills replaced with contemporary olive oil mills or they faced with functional obsolescence due to changing technology. Most of them are abandoned and left over with their original or ruined structures in the context. The lack of conservation investigations in Cyprus was fastened the abandonment process of these traditional olive oil mills within their context. However, there are some of them that are re-used with a new function. In this respect, aim of the present study is to identify and document the current situation of the historical rural olive oil mills in rural regions of Cyprus. Moreover, the study examines identification of common and different characteristics of the traditional rural olive oil mills and highlights the importance that they have to be adopted and maintained after documentation.*

**Keywords:** industrial heritage, rural, agriculture, olive oil mill, documentation, Cyprus

### Özet

*Endüstri binaları, toplumun geleneksel kültürel değerlerinin hissedilebildiği tarihi binalardan bir tanesidir ve bu yüzden günümüzde korunması gereken önemli kültürel miras yapılarından. Kıbrıs, gerek coğrafi, gerek iklimsel özelliklerinden dolayı tarih boyunca tarım odaklı gelişim gösteren bir ada olma niteliğini taşımaktadır. Fakat genel anlamda teknolojinin hızla gelişmesi sonucunda bir çok geleneksel zeytin yağı değirmeni fonksiyonel özelliklerini yitirerek yerini çağdaş zeytin yağı değirmenlerine bırakmıştır. Ancak Kıbrıs'ta, koruma kavramı altında yeterli tetkiklerin ve irdelemelerin yapılmaması bu binaların atıl duruma gelmesini hızlandırmıştır. Buna rağmen, fonksiyonel anlamda yeni kullanım kazandırılmış bazı tarihi zeytin yağı değirmenleri de bulunmaktadır. Bu bağlamda, çalışmanın ana amacı, kırsal kesimdeki tarihi zeytin yağı değirmenlerinin dokümantasyonu ile güncel durumlarının mimari yapıları üzerinden okunması üzerine kurgulanmıştır. Buna ek olarak, çalışma bağlamında yer alan tarihi kırsal zeytin yağı değirmenlerinin ortak ve farklılaşan özellikleri incelenmiş ve genel bağlamda dokümantasyon işleminden sonra söz konusu yapıların adaptasyonu ve devamlılığı ile ilgili önemli noktalara değinilmiştir.*

**Anahtar Kelimeler:** endüstri mirası, kırsal, tarım, zeytin yağı değirmeni, dokümantasyon, Kıbrıs

## Introduction

The built existing environment embraces with extensively significant historical buildings as well as novel built structures. These historical buildings could demonstrate a structure where they are less important in their time; but drawing a significant character and identity of their context and area where provides individuals to recognize their history among their tangible and intangible attributes (Orbaşlı, 2009). The rapid development process poses pressure in the density of built context. Therefore, conservation of these buildings conveys an important essence that provides a broad range of opportunity to changing and reusing already existing historical building stock instead of demolishment (Prokhorov, 1982). In deed; demolishment of those buildings affects sustaining and preserving the signs of the past that represents environmental, socio-cultural, socio-economic and political origins of a particular society where historical buildings assist a tangible link with the past (Quantrill, 1995). However, maintaining and reusing the existing historical buildings provide intangible advantages among determining socio-cultural identity and measurable advantages from economical and environmental point of view. Therefore, conserving the historical buildings is on agenda since many decades with the aim of providing diversity and sustainability (through social, cultural, economical, environmental and political dynamics) among densely development of lands.

Industrial areas, buildings and their mechanical denotations are monumental for public structure of a society (Cengizhan, 2002). In this respect, industrial heritage fundamentally represents the technological and socio-economical structure of a particular society through a manifestation of a capitalist social and political relationship (Alfery, 1992). In particular, industrial buildings are well suited to the adaptive reuse due to their size, construction material, buildings systems, structural integrity and space layout (Heath, 2001). Distinctive schematic studies for each historical industrial structure should be done to propose an appropriate

function during decision process of adaptive reuse (Altınoluk, 2000). Therefore, it is essential to make identification and classification of these buildings before application process of new function.

Since ancient times, food processing industry in rural areas mainly played an important role in poverty alleviation and sustainable development in many countries on the world. The processing in most of the countries was generally based on agricultural products. In this manner, food industries depend domestically on available agricultural raw materials. With the integration of the way of having food and the industrial technology in several times, food industries has been spread and influenced the arisen of industrial sites. Nowadays, sites referring to the industrial heritage are the most significant representation of the tangible and intangible values of the food industry and technology in our built environment and landscape (Heritage Council Victoria). In particular, food industry is more rational in the rural contexts besides urban areas. Coherently, rural industrial heritage that is fundamentally developed based on the food industry in rural areas perform as a bridge which links the past with the present and provides a certain data for futures of rural environments (TICCIH, 2003).

Cyprus is a small Island in Mediterranean Sea that refers to a rich historical heritage due to resolving of different civilizations of different periods of times. The Island also embraces with several historical industrial buildings that are mostly abandoned and must be conserved. The industrialization started with the period of British colony in the Island and affected socio-economic development of the community structure. Most of the modern technological facilities were brought by British colonization to effectively use resources in Cyprus. Therefore, numerous industrial buildings were constructed to embrace with different production of different products such as mine, textile factories, food processing factories such as tobacco, carob, wine and olive oil mills. However, global rapid changes in technology also negatively affected the industrial activities in Cyprus. Most of

these buildings faced with functional obsolescence and abandoned due to variable economical and technological reasons.

Since, the industrialization is mainly constituted on agriculture in the Island. The olive is one of the most important products that have a very contributive role on the development of economic field of the Island. Therefore, there are many olive mills that are generally located to rural villages to import agricultural production where they symbolize the unique cultural socio-economic activities in daily life rituals. Hence, most of the olive oil mills in the villages are abandoned and left over with the context due to changes of olive oil processing in the North Cyprus. Moreover, parallel to changing technology traditional olive oil mills replaced with contemporary olive oil mills. The lack of conservation investigations in the North Cyprus and listing these historical industrial buildings as a significant part of the industrial heritage also fasten the demolishment or abandonment of traditional olive oil mills within their context during in time.

However, these olive oil mills must be conserved to preserve the history and hints of industrial improvement of the island and regain them to the context as part of living rituals. Therefore, the conservation of these olive oil mills must be start with firstly listing/ documenting them and creating investigative conservation approaches for transmitting their unique historical values to next generations.

### Rural Agricultural Life and Olive Oil in Cyprus

Cyprus has a vital potential for the agriculture especially due to its ecological characteristics. Rural agricultural life in Cyprus provides the rural employment where village life is maintained and urban crowding is relieved. The socio-economic rituals of the Cyprus are fundamentally developed based on agriculture and agricultural activities. However, it could be notified that the agricultural life constitutes the structure of social, cultural and

economical dynamics within the physical built environment where the continuation of a particular community is signified. In particular, olive, carob and citrus trees structures the diversity in agriculture and supplies efficiency for rural economy. However, agriculture in the Cyprus could be categorized under two classifications:

1. Precipitation based agriculture (olive, carob, grape for wine, barley, tobacco, almond etc.)
2. Irrigation based agriculture (citrus, potato, vegetable, grape for dining, banana etc.)

Mediterranean countries navigate agriculture especially based on olive that is one of the most significant cultivation. According to the scientific researches, there are about more than 750 million industrious olive trees among the world wide where % 97 percentages of the olive and olive oil production takes place in the Mediterranean countries (Lopez-Villalta, 1998). In a broader sense, olive tree is admired as the oldest cultivated tree all over the world wide (Liphshitz, et al., 1991). There are different assimilations related with the history of the olive tree. On one hand, there are a number of reaches that is referring the preliminary history of olive tree before 4000 B.C. where Syria is assumed as the main land of olive tree and trading facilities of the time is adjusted as main tool to the transmitting of the olive tree to the Mediterranean countries (Kaplan, & Arihan, 2011) On the other hand, according to the other researches olive trees were initially generated in the Eastern part of the Mediterranean, 5000 B.C through the regulations of the Roman Period (Boskou, 1996). In addition to this, it was transmitted to region corresponding to ancient Persia and Mesopotamia and from there it spread to Syria and Palestine (Kiritsakis, 1998; Di Giovacchino, 2000).

In Cyprus, the olive has a significant character within the cultural agriculture. There are more than 1.5 million olive trees that take place in the Northern part of the Cyprus. Olive and olive oil particularly maintain the cultural socio-economic life, especially in rural regions of the Cyprus. Historically, the

cultivation of the olive trees in Cyprus is referring back to the ancient times, Neolithic period (6th millennium BC). It could be notified that the olive tree has affected many civilizations through history and it became the most significant cultural and socio-economic representation of them. Moreover it demonstrated a significant role of the spread of different cultures due to its economic value and significance in daily life. Therefore, the olive tree mainly influenced and provided a wide range of economical development opportunity for all Mediterranean regions such as Cyprus There are many olive trees existing in the Island that are almost over 800 years old. Therefore, they also represent the historical value as a significant part of the historical heritage besides their economical value. In this manner olive trees in Cyprus have been taken under conservation with the decision of governmental bodies (Olive and other Crops (Presevation) Law, 1938). In particular, Cyprus has a significant diversification for olive. The olive oil embodied a unique quality among the advanced or traditional methods for production. Moreover, the production based on the olive oil is not merely overlapped within the rural areas, also in sub-urban or urban areas are highly corresponsive in Cyprus for olive production for personal or local use. In this manner, the production of olive and olive oil has enriched the architectural environment through increasing the spread of industrial buildings either in rural or urban scale.

### Classification of Olive Oil Production Systems in Cyprus

According to Yorgancıoğlu; there are numerous sign of the development of olive oil industry in the Cyprus since the Bronze Age till today (Yorgancıoğlu, 1999). Therefore, there is a series of investigated production system during the development of olive oil industry where the traditional olive oil production is occurred among crushing, pressing; and separation. The olive oil mills can be categorized under four classes according to their production systems (Golmakani,

2011). They are:

1. Olive Oil Processing Using Traditional Methods with no Machines: usign human power with stone or wood basin
2. Olive Oil Processing Using Donkey/Man Power with the Machines; animal power with circular crushing basin
3. Olive Oil Processing Using Machine Power : press machine
4. Olive Oil Processing Using Contemporary Machines

Since olive oil mills represent the important part of the development of the industry in the Island. Olive oil mills structure the unique cultural life rituals and cultural heritage of Cyprus among their historical, economical, architectural and technological exclusive values. Therefore, it is important to identify the place of the olive oil mills as a significant part of the industrial heritage in Cyprus.

### Method of the Study

Industrial heritage has socio-cultural value as a part of the life of an ordinary men/ women and technology and science that they represent their history of manufacturing, engineering, construction and also could have the value for the quality of architectural design. Therefore, industrial remains must be identified, recorded and protected to preserve and transmit them for future generations (TICCIC, 2003). Under such circumstances, turning these buildings into living assets is possible with reusing and assigning a new function to them (Günçe and Hoşkara, 2009). Adaptive reuse of historic buildings is one of the most important aspects to achieve sustainability in the context (Aydin and Okuyucu, 2009). Therefore, adaptive reuse must have minimum affects on the heritage significance of the building and its setting for assessing a better readability to historic built environment.

The rural industrial heritage has a significant role within the cultural heritage of Cyprus. Since, industrial buildings contribute to transmitting social, cultural, economical and technological

values between generations; they must be conserved in the cases of abandonment. Hence, they are densely appropriate to be reused with a new function among using the opportunities of their architectural and structural characteristics.

Since, conservation approach of industrial buildings demonstrates particular intensity where documentation is the base for the process. Documentation process particularly occurs based on developed inventory forms. In general, these inventory forms demonstrate differentiations according to the regulations of their states, countries, regions, cities or etc.

Therefore, the method of the study is fundamentally developed on an empirical study besides literature survey. The study is mainly formed on documenting the current physical situation of the olive oil mills rather than determining their values and suggesting new functions. Therefore, architectural space characteristics (size, space layout, openings), building material, structural system and production systems (equipments) of the olive oil mills is tried to be determined through a developed inventory form. The documentation inventory form in this study is prepared by basing on particular references extracted from the six different inventory forms. They are:

1. Logan, G. M., Heritage Review, DCPs and Development Guidelines, Christmas Island, Volume 3: Heritage Inventory including Heritage List, Heritage Inventory Forms and Recommended Entries in the Register of National Estate, Prepared for Department of Transport and Regional Development, November 1998,
2. United States National Register of Historical Places Inventory-Nomination Form,
3. Council of Europe, Architectural heritage: Inventory and Documentation methods in Europe, 1992, Cultural heritage, No. 28,
4. Alberta Culture and Community Spirit Historic Resources Management, Traditional Use Site Inventory Form,
5. Historical Archeology Site Form, New Hampshire Division of Historical Resources, New Hampshire State Preservation Office.
6. Hamond, F., 2005. Mills Of Co Laois: A

Industrial Heritage Survey Part 2: Site Inventory, Laois County Council.

According to the defined problem and data survey that is structured in previous sections, main aim of the study is constituted on to identify and document the current situation of the historical rural olive oil mills in North Cyprus. Moreover, the study examines identification of common and different characteristics of the traditional rural olive oil mills for investigating the values and opportunities of the traditional rural olive oil mills within the framework of conservation and adaptive reuse of the industrial heritage.

### Recorded Olive Oil Mills in Cyprus

The research study is evolved with documentation of traditional rural olive oil mills that are able to be conducted or reachable in the rural contexts. On this basis, rural olive oil mills in Beylerbeyi, Ozanköy, Çatalköy, Yeniceköy, Ergenekon and Gönendere villages are documented with the improved inventory forms (Fig. 1). Initially, the case studies are separately analyzed in following sections and findings are read within the framework of identifying their similar and dissimilar characteristics for identifying the importance of adopting a new/same function after documentation.

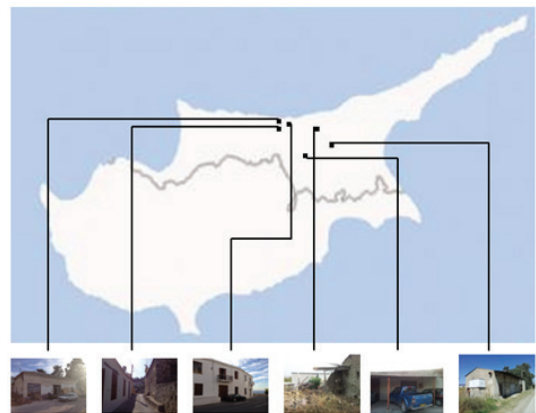


Figure 1. Showing Recorded Olive Oil Mills on the Map



## Beylerbeyi Olive Oil Mill

Beylerbeyi Village is located at the foot of the Five Finger Mountain Range. In a broader sense, the village has a unique Mediterranean Village typology within its natural environment. The olive, lemon and pomegranate trees are the most significant agricultural constituents in the village. However, most of the trees do not exist anymore due to the rapid construction activities in the village are expanded with the increasing amount of the tourist as settlers to the region. Therefore, the olive oil production is disappeared in the village.

There are two olive oil mills in the village that are located very close to the village center. They are facing with each other among the street (Fig. 2), but that they differ from each other among their production systems. However, both of the olive oil mills used to belong to the same private ownerships (Greek Cypriot) before the 1974 war in the Island. With the effect of internal migration after 1974 war the ownerships of the olive oil mills resided to governmental institution, which was called Kooperatif. After internal war the olive oil mills lost their functions due to deterioration of agricultural activities in the land. Therefore, the olive oil mills stayed as abandoned in the village context for a while. The firstly constructed olive oil mill is rented for 10 years to a private business by Kooperatif during 1990s and it has been used as storage during this period. However, between 2010/2012 the firstly constructed olive oil mill is renovated and turned into a small museum representing its own unique character.

Historically, the first olive oil mill was constructed at the beginning of the 19th century and the second one is constructed at the end of the 19th century. The first olive oil mill that is constructed at the beginning of the 19th century was functioning as olive oil mill and flour mill the same time. The second one merely functioned with producing olive oil mill.

The space is divided in two segments (approximately 30 m<sup>2</sup> in total) where main segment was used for producing olive oil mill and the small

segment was used for producing flour. The production system of the first olive mill was based on animal/man power. Lately, with the improvement of the technology the owner of the olive oil mill constructed the second olive oil mill that its production system works based on using machine power (press machine). The second olive oil mill generally demonstrates the same architectural characteristics with the first one. The construction system of the both of the olive oil mills occur from masonry. The roof structure of the old one responds to the wooden rafters. The second one responds to 2D truss system where roof is covered with aluminum.



Figure 2. Current situation of Beylerbeyi Olive oil Mills (First one is on the right side; Second one is on the left side) (Eken and Varol, 2014)

Currently, both of the olive oil mills physically exist in the village context. However, the first olive oil mill is well-protected (Fig. 3) with its production equipments and the second one is abandoned with its all production equipments (Fig. 4). However, according to the information that is gained from the Muhtar of the Beylerbeyi village Ersen Tatlisulu is noted that there is a new project that is evolved with re-functioning the second olive oil mill with its original function for representing (exhibiting) the traditional olive oil production to the local and foreign tourists.



Figure 3. Current situation of Beylerbeyi Olive oil mill (First one) (Eken and Varol, 2014)

at the beginning of the village boarders. Historically, the olive oil mill is constructed in 1950s as the biggest olive oil mill in the rural region of Kyrenia (approximately 60 m<sup>2</sup>). However, the olive oil mill is lost its original function at the end of the 1980s due to increasing of the olive oil (ready) trade form the Turkey to the Island. Therefore, the olive oil mill is left over with its existing equipments as an abandoned for a long time. The ownership of the olive oil mill belongs to government- Evkaf where mill is rented to a private business (Halil Avukat) since 10 years. However, after mill is rented to a private business, it has been started to be used as carpenter (Fig 5).



Figure 4. Current situation of Beylerbeyi Olive oil mill (Second one) (Eken and Varol, 2014)



Figure 5. Ozanköy Olive oil mill, which currently works as carpenter (Eken and Varol, 2014)

### Ozanköy Olive Oil Mill (Değirmen Mobilya)

Ozanköy is located on the low coastal of the Five Fingers Mountains (Besparmak) where lower boarder of the Beylerbeyi village is ended. The village is one of the most spectacular villages in the Northern Cyprus. The socio-economic structure of the village is mainly developed on agriculture and stockbreeding. There are a lot of citrus, carob and olive trees existing in the village. However, the village has been explored by several foreign tourists and it has become an imposing settlement for them. Therefore, during in time the traditional socio-cultural and socio-economic structure of the village rapidly was transformed. The olive oil mill is located

In current situation, the olive oil mill works with another function but physically it has been damaged a lot. There are new additions that are done by aluminum by the current renter of the mill. Due to the olive oil mill represents the late modern of the traditional olive oil production, the architectural spatial characteristics of the mill is more integrated with supportive functions such as services and offices. The spatial organization of the mill is formed by a main production space where service and office spaces are interfaced with this main space. The construction material of the mill is refers to the reinforced concrete and the structural systems is formed through 2D truss

system. The production equipments that their usage system responds to machine power (press machine) are kept in the space as it. However, they are currently in bad condition due to unconscious usage of the space (Fig. 6).



Figure 6. Current situation of production equipments of Ozanköy Olive oil mill (Eken and Varol, 2014)

### Çatalköy Olive Oil Mill

Çatalköy is located on high coastal of the Beşparmak (Five Fingers) Mountain and it is very close to the east of central Kyrenia. The socio-economic life of the village is fundamentally refers to an agricultural village. However, with the rapid development of the tourism in Kyrenia and its close region, the village is mainly transformed into a tourism destination point (which is preferred to settle there by foreign and local settlers) from being a traditional rural agricultural village.

The historical olive oil mill takes place in the village center. The historical past of the olive oil mill refers back to the 19th century. According to the research done in the field, most of the inhabitants and workers in municipality could not refer to the exact construction date of the mill, but the date is approximately noted as early 19th century. The olive oil mill, which was belonging to a private ownership before internal war in the Island, is currently under the control of Çatalköy Municipality. The regular maintenance of the mill is done by Municipality. Therefore, the mill is fundamentally protected quite well after it has lost its original function. According to the interviews that are

done with the Muhtar, the mill has lost its function due to decreasing of agricultural activities in the region and decreasing of the demand to the olive oil. However, the mill is not currently responding to its original function, it is returned to a small cultural and art center where traditional olive oil production life in the village is represented during some significant days like festivals. In general, apart from festivals and other significant days in the village, the mill is closed.

The spatial character of the mill is occurred form one small segment where divisions are identified with arches. The mill is constructed with stone and timber rafters. As different as the other mills that are analyzed within the framework of the study, there is a big backyard where the early production of the olive oil used to be carried out with the usage of the human/man power (Fig. 7). With the development of the technology, the olive oil mill is moved to the built space and new equipments that are work by machine power are donated. Unfortunately, the production system that works by using animal/human power does not exist anymore and it is not clearly known what happened to them. On the other hand, the other equipments that work with machine power have been kept. In general, the current situation of the mill is well-protected, although the mill still does not regularly work with its novel function as well (Fig. 8).



Figure 7. Olive oil production in Çatalköy Olive Oil Mill by using the human/man power, 1938





Figure 8. Çatalköy Olive Oil Mill (Eken and Varol, 2014)



Figure 9. Equipments of Yeniceköy Olive Oil Mill (Eken and Varol, 2014)

### Yeniceköy Olive Oil Mill

Yeniceköy is located on the lower central region of Northern Cyprus. The socio-economic structure of the village is fundamentally developed based on agricultural activities. Although the socio-economic structure based on agriculture of the village has been changed during in time due to variable factors. Most of the local elderly inhabitants are still dealing with agricultural activities in the village. Therefore, there is an olive oil mill within the village context.

The building of olive oil mill is located very close to village center where it is also located on one of the main road. It was constructed 1960 by Burhan Bardak, who is the owner of the mill. According to the information gained during the study, old machines were brought from the Greek side of the Cyprus. Olive oil mill continued with its original function until the end of 1999. After 1999, depending on the rapid development of technology, the owner of the mill brought new machines and the activity of old mill was stopped.

Mill includes only one segment, which is approximately 35-40 m<sup>2</sup>, in terms of spatial organization. It was constructed next to the living unit of the owner. There is an empty space in front of the mill and olives were taken to the inside of the building from there (Fig. 9). Mill was built with mud brick and covered with cluster. The roof of the building structured with steel I-beam and covered

with aluminum. The production system is responding to machine power in this olive oil mill. All equipments that are belonging to the mill are protected in the building, although they are currently out of function.

### Ergenekon Olive Oil Mill

Ergenekon is located on the South skirt of the Five Fingers Mountain (Beşparmak) of North Cyprus. Village is known as one of the old settled region on the island. Same as with other neighbor rural villages in the region, olive was the most cultivated product in this village as well. It always had an effective role on the socio-economic structure of the village. Therefore, there is one historic olive mill, which is located in Ergenekon and it is known one of the oldest olive oil mill that is constructed in North Cyprus.

The olive oil mill is located at the center of the village, next to the main road. According to the information gained from current owner (Raşit Mehmet), production systems (machines) were brought to Ergenekon from another village, which is namely Bahçeli (Gallurga), around 100 years ago. Olive oil mill continued actively with its original function until the end of 1950s. Mill was built with local stone and mud-brick, which is a traditional construction method of masonry walls. The roof of the building was structured with wooden lintels and was covered with local bamboos. Mill includes only

one segment, which is approximately 15 m<sup>2</sup>, in terms of spatial size. It was constructed next to the living space of the first owner's house.

The production system of the Ergenekon olive mill works with man/animal power. The most important equipment of the production system was the circular crushing basin, which makes it possible to use animal power for the first time. They put olive in the crushing basin with mass amount of olives; a donkey rounded the mill stone for crushing them. After this process, olive oil was produced by pressing machine.

Currently, it is still possible to observe the original machines at their original places in the mill. However, the olive oil mill is in a very bad condition. Walls and roof of the building were ruined and particular parts of the machines are damaged (Fig. 10).



Figure 10. Current situation of Ergenekon Olive Oil Mill (Eken and Varol, 2014)

### Gönendere Olive Oil Mill

Gönendere is another village, which is located in the Mesaorian Region (lower central) of North Cyprus. Like other Mesaorian villages, the socio-economic situation of the village is based on agricultural activities. Most of the local people are dealing with agricultural activities in Gönendere and there is one olive oil mill in this village as well.

The building of the mill is located on the main

entrance road of the village and it is very close to the village center. Its owner (Hasan Mustafa Kahveci) died in 1998. Along with the information supplied by the Nazife Kahveci (wife of Hasan Mustafa Kahveci), mill was constructed in 1969 and it continued with its original function until the end of 2000. She mentioned that, her sons tried to keep it in an active position after Hasan Mustafa Kahveci died, but they could manage it until 2000. She also stated that, the equipments of mill were bought from the Tirmen village, which is located at the South skirt of the Five Fingers Mountain (Beşparmak).

Mill includes only one segment, which is approximately 25-30 m<sup>2</sup>, in terms of spatial organization. There is a semi-open space in front of it and olives were taken into the building from there. Apart from the other cases that are analyzed within the framework of the study, this mill was constructed with brick and covered with plaster. The roof of the building was constructed with 2D truss system and covered with aluminum. The production system of the Gönendere mill is very similar to the Yeniceköy's production system. The production system occurs with the usage of machine power and all equipments belonging to the mill are protected in the building, but they are out of functioning same as Yeniceköy (Fig. 11).



Figure 11. Production equipments of Gönendere Olive Oil Mill (Eken and Varol, 2014)



Figure 11. Production equipments of Gönendere Olive Oil Mill (Eken and Varol, 2014)

### Reading Olive Oil Mills in Cyprus

According to the results of the documentation of the recorded olive oil mills in the study, there is not an immense difference obtained through their architectural, industrial, technological, historical characteristics within their contexts. In a broader sense, all cases demonstrate similar properties according to their spatial organizations, structural systems, building materials, production systems, location within the context, reasons behind losing their main functions etc.; although their geographical locations are different (Beylerbeyi, Ozanköy and Çatalköy Olive Oil Mills: Kyrenia region, highland coastal; Yeniceköy, Ergenekon and Gönendere Olive Oil Mills: Mesaorian region, low and highland central).

In general, the historically Beylerbeyi, Ozanköy and Çatalköy Olive Oil Mills refer to the 19th century; Yeniceköy, Ergenekon and Gönendere Olive Oil Mills refer to the 20th century. According to it their production systems demonstrate dissimilarities between this two centuries. In order to obtain the better understanding of the role of the industrial mills within the context their locations are compared and it is obtained that most of them are located in the village center or very close to the village center except Çatalköy Olive Oil Mill. On the other hand, it is obtained that the ownerships of the mills in Kyrenia region particularly belong to the government or public bodies (Municipality) and the ownerships of the mills in Mesaorian region belong to the private. Along with architectural characteristics of the analyzed mills; spatial organization of the all the mills occur from

one space except Ozanköy Olive Oil Mill. Furthermore, construction materials of all mills were chosen from available local materials in their own regions. Only two of them that are constructed in 20th century were built with concrete and brick. In terms of technological characteristics, production systems of Beylerbeyi Olive Oil Mill (First mill), Çatalköy Olive Oil Mill (early years of the mill) and Ergenekon Olive Oil Mill work with using animal/man power. The production systems of the rest of the cases work with using machine (pressing) power.

Comparing current situations of the mills; merely three of the cases (Beylerbeyi, Ozanköy and Çatalköy Olive Oil Mills) are adopted with new functions to their contexts. The rest of the cases (Yeniceköy, Ergenekon and Gönendere Olive Oil Mills) are abandoned. However, in Çatalköy it is observed that the given function to the mill does not work regularly, it is open only in festivals in the village. The physical conditions of the Beylerbeyi and Çatalköy Olive Oil Mills are well-protected (with the support of adaptive re-use project sponsored by Turkish Republic Embassy for Beylerbeyi Olive Oil Mill and regular maintenance that is done by Municipality of Çatalköy for the Ozanköy Olive Oil Mill). Moreover, due to having private ownerships, Yeniceköy and Gönendere Olive Oil Mills are protected rather than Ergenekon Olive Oil Mill. The equipments of the all cases still exist and kept well. Only in Çatalköy Olive Oil Mill the machines that work with animal/man power do not exist anymore.

As a result of the documentation process within the study, it is observed that these olive oil mills constitute a significant part of their contexts as well as cultural industrial heritage. However, there is a lack of appropriate investigation related with their conservations that must be handled by governmental institutions. Therefore, there is not enough awareness for their conservations both in society and government. On this basis, the cases that are analyzed and documented within the framework of the study are going to be disappeared. In this stage, conservation investigations must be done through considering appropriate function after finalizing documentation process for these mills.

Table 1 Characteristics of recorded olive oil mills (Eken and Varol, 2014)

		Beylerbeyi Olive Oil Mill	Ozanköy Olive Oil Mill	Çatalköy Olive Oil Mill	Yeniceköy Olive Oil Mill	Ergenekon Olive Oil Mill	Gönendere Olive Oil Mill
Const. date	19th century	•		•		•	
	20th century		•		•		•
	Other						
Location	Lower coastal		•				
	Lower central				•		•
	Highland central					•	
	Highland coastal	•		•			
Position of the building within the context	At the village center			•		•	
	Out of the village		•				
	Close to the village center	•			•		•
	Other						
Ownership	Public/ government	•		•			
	Private				•	•	•
	Both		•				
Status	Works in original progress						
	Works with a new function	• (1 <sup>st</sup> one)	•	•			
	Abandoned	• (2 <sup>nd</sup> one)			•	•	•
Significance of the Area	Archeology-Prehistoric		•				
	Agriculture	•	•	•	•	•	•
	Architecture	•			•	•	•
	Residential	•	•	•	•	•	•
	Industry						
	Other	•					

Architectural Features	Current Condition of the Building	Well-protected	● (1 <sup>st</sup> one)		●					
		Protected				●		●		
		Damaged	● (2 <sup>nd</sup> one)	●						
		Ruined						●		
	Construction Material	Mud-brick					●	●		
		Stone	●		●					
		Concrete		●						
		Brick							●	
	Structural System	Other	2D truss							
			Timber rafter	●	●	●			●	
			Other					●		
		Wall	Masonry					●		
			Post & Beam	●		●	●	●		
			Other		●					●
	Spatial Features	Space is Divided into segments								
		Space is Not divided into any segments		●						
		Between 10-20 m <sup>2</sup>	●		●	●	●	●		
		Between 20-40 m <sup>2</sup>						●		
		More than 40 m <sup>2</sup>	●		●	●			●	
	Production System	Type of Production	No Machine		●					
Animal/man power										
Machine power			● (1 <sup>st</sup> one)		●					
Contemporary machines			● (2 <sup>nd</sup> one)	●	●	●			●	
Current Situation of the Production Equipments		Does exist								
		Does not exist	●	●			●		●	
		Some of them does exist			●					



## Conclusion

Industrial heritage sites are much diversified in terms of their purpose, design and evolution over. Human activities among industrial production can embrace with a great diversity of sites, structures, complexes, cities, settlements and landscapes. However, there are many places and spaces that are still regard to the sense of place of historical continuity of an industrial process, engineering, architecture or town-context. Industrial buildings as a part of the heritage responds to a specific production process with a specific technological system of a particular dilemma. They evolve more than housing a set of industrial activities. Those spaces also reflect the skills, memories and social life of the society of that period besides tangible dimension. In particular, they became a significant part of their heritage of a particular community during in time and embody with machinery representing the process of production, landscapes, traces of culture, aesthetics etc.

However, industrial activities and sites are in direct interaction with change of development. The impact of change brought the essence of adaptation of industrial buildings to the context. On this basis, adaptive reuse draws a significant implementation for giving contemporary life to the industrial buildings with keeping the architectural characteristics, memories and technological knowledge for further generations. Industrial buildings are especially well suited to adaptive reuse due to their large, open spaces. Many industrial buildings are significant primarily for their architecture, as vernacular relics from the industrial age, and may be less so for their association with prominent people and events (Cantell, 2005).

Reusing of historic industrial buildings with adopting novel functions for the contemporary uses must be evolved with the needs of communities for providing novel narratives and distinctiveness. Consequently for integrating industrial buildings back to the context of a particular region, it is important to improve the awareness of the industrial buildings, mills, railways as a part of the heritage by reviewing their contextual relation, values of the building, material

and building elements by means of representation of its technological era, functional use value etc. In this respect, conservation of these buildings must be significantly done through considering every phase of the conservation method.

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- Mediterranean University . Degree holder of Ms in Architecture with the thesis “Integration of Cultural Sustainability in Rural Aghirda (Ağırdağ) Houses”. Phd candidate in architecture on rural spatial morphology. Lectureship as teaching assistant at university in Cyprus– Eastern Mediterranean University, Faculty of Architecture. Architect / Research Assistant / Phd. candidate, Faculty of Architecture, Eastern Mediterranean University, Famagusta T.R. North Cyprus via Mersin 10-Turkey. E-Mail: [cemaliyeken@gmail.com](mailto:cemaliyeken@gmail.com), [cemaliye.eken@cc.emu.edu.tr](mailto:cemaliye.eken@cc.emu.edu.tr)
- Gökhan Varol** was born in 1988, Cyprus. Graduated from Faculty of Architecture, Eastern Mediterranean University. Degree holder of Ms in Architecture with the thesis “Identification of Bungalow Houses in North Cyprus”. Phd candidate in British colonial architecture in rural areas in Cyprus. Lectureship as teaching assistant at university in Cyprus– Eastern Mediterranean University, Faculty of Architecture. Architect / Research Assistant / Phd. candidate, Faculty of Architecture, Eastern Mediterranean University, Famagusta T.R. North Cyprus via Mersin 10-Turkey. E-Mail: [gokhan.varol@cc.emu.edu.tr](mailto:gokhan.varol@cc.emu.edu.tr)

### Otobiyografik Öz

**Cemaliye Eken** 1987 yılında Kıbrıs'ta doğdu. Doğu Akdeniz Üniversitesi, Mimarlık Fakültesi'nden mezun olduktan sonra yine aynı kurumda tezli yüksek lisans programını “Integration of Cultural Sustainability in Rural Aghirda (Ağırdağ) Houses” adı altında yazmış olduğu tez ile tamamladı. Doğu Akdeniz Üniversitesi, Mimarlık Bölümü'nde doktora eğitimini kırsal alanların mekansal morfolojisi üzerine sürdürmekte olup, araştırma görevlisi olarak görev almaktadır. Mimar, Araştırma Görevlisi, Doktora öğrencisi, Mimarlık Fakültesi, Doğu Akdeniz Üniversitesi, Gazi Mağusa, Kuzey Kıbrıs Türk Cumhuriyeti, Mersin 10-Türkiye. E-Mail: [cemaliyeken@gmail.com](mailto:cemaliyeken@gmail.com), [cemaliye.eken@cc.emu.edu.tr](mailto:cemaliye.eken@cc.emu.edu.tr)

### Biographic Sketch

**Cemaliye Eken** was born in 1987, Cyprus. Graduated from Faculty of Architecture, Eastern

**Gökhan Varol** 1988 yılında Kıbrıs'ta doğdu. Doğu Akdeniz Üniversitesi, Mimarlık Fakültesi'nden mezun olduktan sonra yine aynı kurumda tezli yüksek lisans programını "Identification of Bungalow Houses in North Cyprus" adı altında yazmış olduğu tez ile tamamladı. Doğu Akdeniz Üniversitesi, Mimarlık Bölümü'nde doktora eğitimini kırsal alanlarda İngiliz koloni mimarisi üzerine sürdürmekte olup, araştırma görevlisi olarak görev almaktadır. Mimar / Araştırma Görevlisi / Doktora öğrencisi, Mimarlık Fakültesi, Doğu Akdeniz Üniversitesi, Gazi Mağusa, Kuzey Kıbrıs Türk Cumhuriyeti, Mersin 10-Türkiye. E-Mail: gokhan.varol@cc.emu.edu.tr