Abstract. Municipality of Rahovec is one of the Kosovo municipalities, known as a wine growing place since ancient times, with an area of 278.1 km² and a total of 71,522 inhabitants. Viticulture in Rahovec is relatively well developed. There are two main wine cellars for grape processing and vine production. i) Stone Castle found in 1975 and, ii) Bodrumi i Vjeter (Old Cellar) build in 1953. Also, it is important to mention here that there are dozens of small wine cellars which were established since 1999.

“Bodrumi i Vjeter” have a production capacity of 5,000,000 million L, and it used to be a social enterprise, however, since 2006 was privatized and belongs to NTP Haxhijaha. This paper is using “Bodrumi i Vjeter” as a case study.

The aim of this paper is to present an alternative design of the wine cellar i.e. an idea how a wine cellar nowadays should look and be designed. “Bodrumi i Vjeter” have a Hungarian architecture style; build with stone walls and suitable bricks. After being purchased / privatized in 2006 by Haxhijaha family, the owner is interested in renovating the original building with the latest design trends. Therefore, the above mentioned building will be used as a case study.

By renovating this traditional wine cellar which was industrial and closed to the public, we aim to make it accessible to the public, therefore, there is a potential to encourage visitors/tourists to visit Rahovec not only for buying the wine but also visit the vineyards where they can taste the grape, visit the winery where they can see/witness wine processing (during the season) and, finally wine tasting complemented with traditional food. In addition, “Bodrumi i Vjeter” will provide accommodation for visitors within the area, as well as, day tours depending on what the visitors want to see/experience during their stay.

We believe that this project will particularly increase the economic development of this business, as well as, the whole economy in general. The combination of wine industry and the experience of daily life of Rahovec citizen (through recreation and relaxation) will create the special feeling to the visitor, this combination will also facilitate the change of the whole approach of this activity and, it would enable the businesses of this particular field to develop according to the world trends.

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1. INTRODUCTION

2.1 Objectives

This study tends to realize a new approach of designing wine-cellar specifically "Bodrumi i Vjeter" in Rahovec. Through the renovation and reconstruction of the existing wine-cellar, it is intended to achieve a composition between the space for technical production and aesthetic-relaxing space for visitors. The owner of the cellar expressed the importance of the production structure based on inputs and outputs which should fulfil his own defined requirements but, at the same time also, it is important the hospitality through reception which should be unique in the sense that maximise the number of visitors, their needs and experience.

2.2 Background

Rahovec one of the municipalities of Kosovo, located in Anadrini region. Anadrinia is known as a vineyard and winery region. At the administrative level Anadrinia lies in the municipality of Rahovec with 35 settlements/villages. (See Figure 1) This is a region known since medieval time that lies near the central flow of Drini I Bardhe River.

It has an area of 275, 5 square meters, with 35 settlements and with 71,000 inhabitants. There are 34 rural settlements, while only one settlement is urban. Above sea level elevation of these settlements varies of 310m (Krusha e Madhe and the new part of settlement, specifically settlements lying on the eastern bank of the river "Drini i Bardhe"), up to 920 m above sea level elevation is Zatriq village. Based on the above sea level elevation these settlements are divided in valleys, plain fields, hills and mountains.

Cultivation of wine, grape and wine production in the territory of Albania dates since ancient times. This activity was performed by Ilirians, Romans, Greeks, etc.

Between First World War and Second World War, Phylloxera disease was spread all over the territory which destroyed vineyards with European grape wine (soft grape wine). For this reason vineyards were uprooted and regenerated with grafted grape wine (seedlings).

In order to regenerate vineyards, in 1932 the first modern vineyards plantations were established in Rahovec, (see figure 2). Subsequently, in 1948 in Landovice near Prizren a second significant vineyard plantation was created. In 1956-57 began the intensive development of wine-cellars. The first modern wine-cellar was built in 1952 in Landovice, as well as in Rahovec. In 1953 Rahovec wine-cellar was fully operational.

Between 1970 -1989 Kosovo viticulture and winery marked a rapid growth, so that every year vineyard plantations expanded and the production of grape and wine increased constantly. During this time the wine was exported to foreign markets.

Locations in Kosovo that cultivated grape wine and produced wine were in Rahovec, Suharek (Therande), Malisheve, Gjakove, Prizren and Istog, also in these places the wine cellars were built as well.

85 Plani zhvillimor komunal Rahovec (Municipal development plane Rahovec), p 18
86 MAFRD-Ministry of Agriculture, forestry and rural development
The vineyard zone of Rahovec for grape processing and wine production consists of 11 private companies licensed by the MAFRD\textsuperscript{87} as well as several small family cellars. However, the biggest two cellars are:

1. "Bodrumi i Vjetër - Old Cellar" in Rahovec was constructed in 1953 with the capacity of 4,200,000 million or 420 vans now as a property of NTP “Haxhijaha”.

2. Wine Cellar “Brnjaka I” the property of “Stone Castle” constructed on 1975 with capacities of 1,740 vans or 17,400,000 million liters.

3. Wine Cellar “Brnjaka II” property of “Stone Castle” near to the facility “Brnjaka I” which is being used since 1982 with capacity of 2,630 vans or 26,300,000 million liters.\textsuperscript{88}

2. NEW WINE ARCHITECTURE IN RAHOVEC

“Wine and architecture have a long history together. If architecture is frozen music, then wine is liquid weather. Each transmutes something into a whole greater than the sum of its parts. But beyond this metaphorical kinship, wine has often inspired (and funded) the creation of grand architecture, and vice versa.”\textsuperscript{89}

The old cellar is a plant of technical – production and service space.  

3.1 “Bodrumi i Vjetër”  
"Bodrumi i Vjetër” was built in 1953 - the same year it started production as well. The building has a special and characteristic architecture which belongs to the Hungarian architecture style, and it is one of the oldest wine cool storage cellars in Kosovo. Ground floor surfaces are above 3,100m² and 800m² which are in the basement. The capacities of the wine cool storage are 50,000hl.

The” Bodrumi i Vjetër” until June 2006 was a component part of the winery of Rahovec called NBI “Rahoveci” in Rahovec. Since then it was privatized and is now a private property, renamed to the “Bodrumi i Vjetër” – Rahovec, and it is a working unit under the NTP “Haxhijaha” – Rahovec.

\textsuperscript{87} Data from Institute of wine in Rahovec  
\textsuperscript{89} Assistant Professor – International University of Struga
“Bodrumi i Vjetër” continues to be inheritress line or continuation of tradition and of the ancient and on the other hand, it indicates the self-ancient of grape, wine and brandy production in these territories. The genesis of grape cultivation and wine production in these territories doesn’t start on 1953, but dates back since the time of Illyrians, 2000 years ago. There are evidences of this, such as: statements done by many archeological relics of different times, written resources, oral data and other things which today are protected in the museum of Kosovo and other countries as well. All those evidences were found in (Teqja e Madhe) in – Rahovec.

Dimension of vineyard – “Bodrumi i Vjetër” does not own the vineyards (only 5ha family property) therefore, it is supplied by private individual grape producers, and it’s normally done in the form of cooperation. Currently the cool storage cellar the old cellar cooperates with 450 producers of regular grape. There are certainly plans for the near future to established about 200 ha new vineyards.

Variety of grapes supplied – Vineyard zone of Rahovec cultivates the following variety:

Red:
- Culminant kaberne sovinjon, merlot, pino noire, kaberne franc.
- Qualitative vranç, simple game, frankovk, game colour etc.
- Masovik prokupc, zhametna.

White:
- Culminate chardony, less traminer, sovinjon, white pino, ashen pino.
- Qualitative rizling italıan, rizling rajne, sermiçon, zhillavka etc.
- Masovike smederevka, rrkacitel, zhuplanka etc.

Table cultivars:
- Muskat hamburg, kardinal, antigona, muskat itali, afus ali, demir kapi etc.

Production process and production quality
- Production variety of culminate wines: 6 up to 7 tone / ha  22-24% sugar
- Production variety of wines qualitative: 7 up to 10 tone / ha  20-22 % sugar
- Production variety of masovic wines 10 up to 12 tone / ha  18-20 % sugar

Figure 3. Photo on the left shows Bodrumi i Vjetër in 1954 (source: http://kk.rks.gov.net/rahovec/City-guide/Galery/Test-Album.aspx) photo on the right shows the state of Bodrumi i Vjetër today (source: http://www.rahovectourism.com/web/media/rokgallery/9/93148caf-4659-47a5-b55f-1da5e90dc4afec17c7bd-9a27-4fa2-eeef-b8f1a2c73873.jpg )
Technology and production capacity of wine, brandy - In 2006 when the cool storage cellar the “Bodrumi I Vjetër” was privatized it received and processed about 2000 t. Grapes were supplied by private farmers. The cool storage cellar possesses modern technology (see figure 5):
- Digital weighing – machine.
- Two reception places, one for white grape and one for red grape
- Ferment technology with a different size - the latest technology from INOX which has equipment for directed fermentation
- Vessel of inox material for the wine reserve
- Winepress production of 2006 year
- Complete link for stabilization
- Cooling refrigerator,
- Filter for filtration of wine
- Line for filling
- Distillatory for distillation of wine as well as other equipment’s.

Figure 5. Facilities for storing the wine (source: data from “Hashijaha”)

Exploitation capacity currently is about 60%. It possesses a laboratory.

Type of production – Cool storage cellar of the” Bodrumi I Vjetër” - at the moment produces 8 different types of wines, with packages of: 0,25 lit, 0,75 lit, 1,00 lit

“Bodrumi I Vjetër” under the NPT Hashijaha meets European standard for wine making, staring from the bottle, label, bottle tap, etc.

3. METHODOLOGY

The” Bodrumi I Vjetër” is located in urban zone at the central part of the city of Rahovec, near to the city park, and sports hall (see figure 6).

At the time when the building was built (60 years ago) this location was in the suburb of the city of Rahovec, as it can be seen in the photo of 1954(see figure 3, left), and there were no other facilities in the area except the
agriculture fields such as vineyards etc. Now days, however, it is an urban area with no vineyards at the sight. (see figure 6).

**Figure 6.** Ortofoto of location “Bodrumı I vjeter” *(source: data from “Haxhijaha”)*

During the field research, I managed to talk to the owners of the cellar, the experts of the winery field as well as I managed to visit the facility. Seeing the facility from outside gives you an impression that is a modest space with some alcoves, however, by entering the building simultaneously will change the opinion. From the outside the cellar gives an impression that the building is rather small, however, it changes the impression completely once you enter the facility. The cellar provides the opportunity to taste the experience of wine making as the process of grape harvest, fermentation, filling, packaging up to the wine tasting - it is all there in the same building.

Therefore, this projection attempts to develop a unique experience for the visitor from begging of the process of grape harvest to fermentation, filling and packaging to wine tasting as well as, visitor would be directly included in all activities that the wine brings with modern culture of our life.

**Figure 7.** New proposal: Line for visitors
Figure 8. Details adapted from projects shown in internet used as inspiration for reconstruction of “Bodrumi i Vjeter” (source: http://www.arquideas.es/en/arquideas_architecture_competition/information/4/73.html)
Plan of the cellar with a new solution (alternative plan) would enable the facility to have the movement line (see Figure 7) for the visitor inside the cellar, visiting all processes of wine making; starting from visit the vineyard, grape harvest, process of crush out, elimination of residues, vessel filling, and fermentation up to degustation. The restaurant would have the exit in the yard – atrium surrounded by four sides of high walls facing the stones, which would create relaxing ambiance for the visitors whereby they can taste different wines combined with delicious traditional food such as: wheat wafer, cheese, flija (traditional pie), tomato, pepper etc. (see Figure 8) Due to the space of location, the cellar is not large and there are no vineyards in that location, this is plausible by planting vine trees in the free spaces that the location already has which would provide the experience of the vineyards for the visitor (see figure 8, right down corner). This would complement the experience of the visitor for wine making whereby it would feel as they are visiting the vineyard in the rural area i.e. the first phase of wine making, and then walk through the cellar where they would witness the rest of the follow up phases of wine making, starting with grape harvest to grape processing etc.

Figure 9. Proposed details for interior (source: photo from Teuta Jaha done in Razma Resort, Shkoder, Albania)
In the entrance of the facility which has pre entrance with the pillars colonns linked with half arches - on its left it is intended to create a wide terrace as a meeting place for the visitors. The terrace is connected with the restaurant and then with integral garden.

Internal garden is a closed space which would create a feeling of closeness and calmness for a total relaxation, a small waterfall could be built which would make the impression that one is far away from the suburb, a space where there are no inhabitation, since the building in question is in the urban zone of the city.
The whole essence of the renovation and reconstruction is to get the opening of the facility for public and the connection of the facility with the nature (landscape) since, the current location does not allow this – geographical location of the cellar is within the city, surrounded with constructions, concrete and asphalt. Within the yard it is intended to build 4 little houses which would be for the use of visitors. This would enable the visitors to stay for more than a day visit if they wish to stay where they can disconnect themselves from the daily work stress and relax with the rest of their families, friends and work colleagues. Also, a building with many potential goals can be reached through building an annex of cellar but which is linked with the facility. This space is projected to be used as an art gallery for conferences, seminars, workshops, events and different celebrations.

The interventions in the facility, extensions, additional spaces and the facilities – small houses for the accommodation are intended to be with P + 1 floor with special entries. Their construction would be built by using natural domestic material and even that of stone, brick and wood in order to be well incorporated and to be in the composition with existed facility which also is enclosed with suitable brick and in some parts clothed with facade by natural stones.

4. CONCLUSION

Existing wine cellars of classic systems shouldn’t remain according to the old model of the construction they should be reconstructed according to new trends of the cellar projections. Even though “Budrumi i Vjetër” is not surrounded with vineyards, because it is located in the central part of the city, with a limited space, it is possible to develop an incorporated cellar in the nature, though renovation and reconstruction, whereby it would run not only as an industry but as a place for the meetings, relaxation and recreation. A place where one can experience the satisfaction of wine creation through visits in the vineyards, grape harvest, fermentation and filling up to the wine tasting. I believe that this experience will become an unforgettable satisfaction which after the first visit would make the visitor to come back again in the “Budrumi i Vjetër”

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