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RESEARCH ARTICLE

INVESTIGATION OF ARCHITECTURAL DIMENSIONS IN NATURE-MOUNTAIN TOURISM - KAÇKAR MOUNTAIN (ALTIPARMAK, KEMERLI, VERÇENIK, KAVRON SUMMIT ROUTE)

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ABSTRACT

Kaçkar Mountains is a mountain visited by mountaineers and tourists every year, with glaciers, lakes, forests, rivers, plants, animals, highland architecture and summit that can be observed throughout the year. The highest peaks are Altiparmak (3482 m), Kemerli (3562 m), Kavron (3932 m) And Verçenik (3713 m). The Kaçkar mountains have many trails and peak routes for trekking and hiking, and with the unique architectural structures in the road, it is important with the plateau culture. Recreation, livestock, health for many reasons such as the people who are migrating to the highlands during the summer around here, the architecture developed and offered. Within the scope of the study, the peaks of Altıparmak, Kemerli, Verçenik and Kavron mountains from the Kaçkar Mountains and architectural and natural values on the route are explained. As a result, the architectural characteristics of the plateau houses and their functioning without disturbing their landscaping and bringing them to tourism, if necessary, reveals what needs to be done to help increase tourism potential.

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INTRODUCTION

Light green areas; abundant sun, fresh air and free movements, they have positive, refreshing and beneficial effects on human health and play an active role in the formation and development of a healthy society. Compressed into geometric architectural constructions, people gradually reduce their relations with nature and imprison them in the dirty loud and sunless atmosphere of the cities. Nature-mountain areas where recreational activities and activities are held increasingly important for such people to maintain their relations with nature. Plateaus and mountain tourism are very important in terms of working and resting in the gardens, walking in the light green area or playing sports, admiring the beauty of nature, providing intellectual relief, making use of "happy living conditions". "Nature-mountain tourism", in other words, the benefits of highland tourism can be summarized as follows:

- In a country where rural areas have a lot of space, the idea of spreading tourism to these regions by saving from the dominance of coastal tourism is an important opportunity to be evaluated.
- Touristic tourism is an additional source of income for farmers working in rural areas.
- Natural tourism has relieved the burden of traditional resorts that have reached the saturation point and thus have lost their restfulness in terms of tourism.
- Natural tourism provides balanced distribution of tourist movements within the space.
- Rural areas have proved to be calmer and more restful than the sea shores.
- The cost of touristic activities in rural areas is low. For this reason, a large number of tourists are able to participate in tourist movements.
- Social and physical life privileges between the urban and rural areas are significantly reduced.
- It helps revive localities that are suffering from loss of population due to inadequate tourism, agriculture and industrial activities and keep them in the locality where the local population is located and prevent migration movements towards big cities, (Olalı, 1990; Özdemir, 1996).

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Two main objectives have been identified in the direction of planning decisions to be taken into consideration in the development of mountain tourism;

- In order to increase diversity in the already existing plateau tourism, mountain and winter tourism potential to develop
- Planning within the scope of the natural values of existing vegetation, topography, and preserved with the silhouette effect, it has put in place measures to ensure the continuation of traditional building style, (Var, 1992).

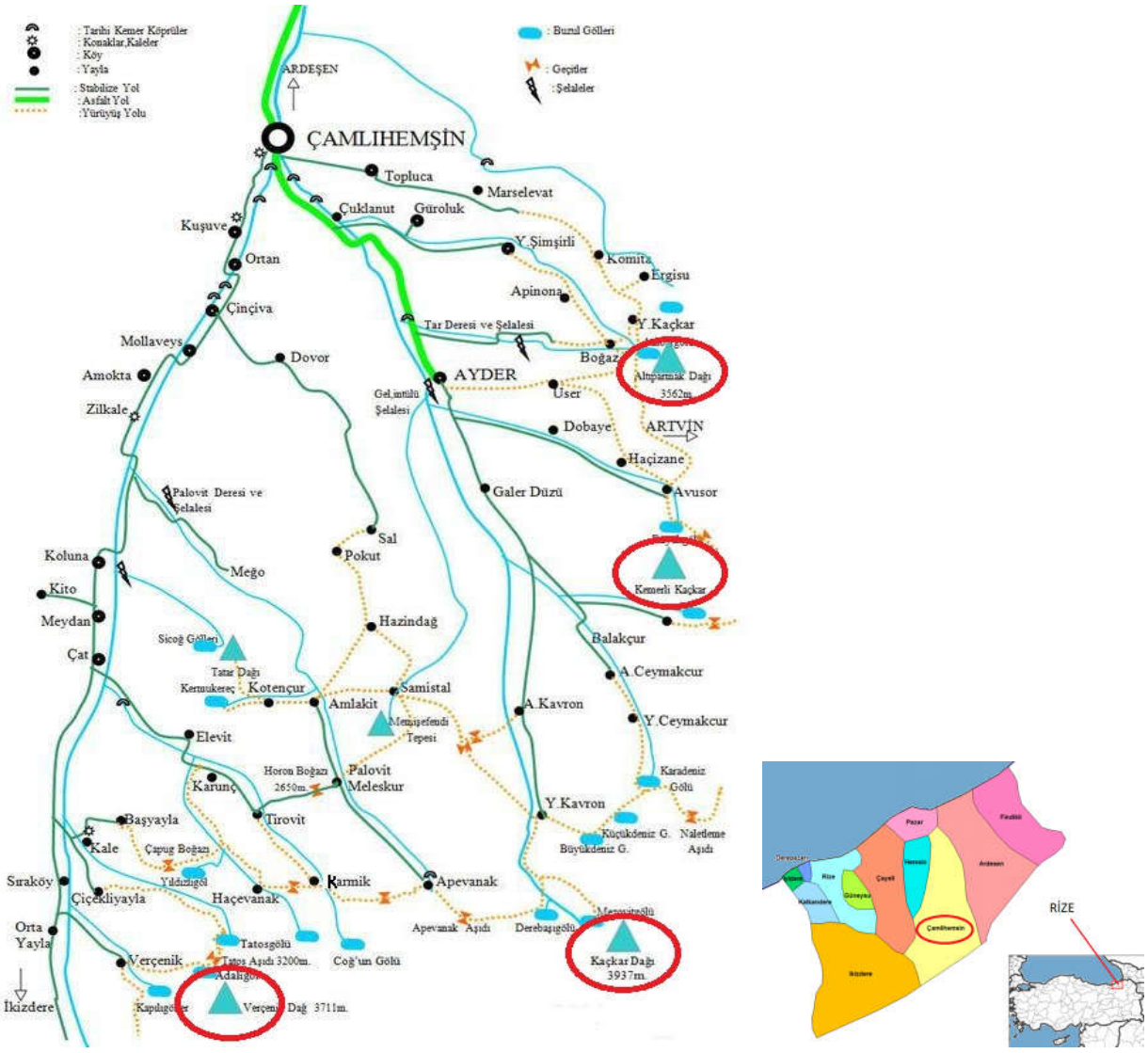
METHODS

Field of work - Sample selection

Selection of Working Area;

- Interview technique (in consultation with local people),
- External observation technique (field study aiming to go and see),
- Various journals, books, province years, thesis etc. Detection based on publications

A mountain range along the Eastern Black Sea coast in northern Turkey, Kaçkar Mountains forming the east part of North Anatolian mountains as the study area was chosen. Kavron, Verçenik, Kemerli (Kuşaklı), Altiparmak peak climbing roots and Yukarı Kavrun, Avusor Plateau and Verçenik Plateau on this route were investigated in the plateau culture architectural direction in Rize İli Kaçkar Mountains. Kavrun, Verçenik, Kemerli, Altiparmak peaked out by Rize to the roots; It is going through the district of Çamlıhemşin (Figure 1). Çamlıhemşin; It is a province with high and uneven terrain in the province of Rize in the Eastern Black Sea Region, which has no sea boundaries. The south of the province is surrounded by "Kaçkar Mountaıns", which have an elevation of 2000-4000 meters, curving in the east-west direction and parallel to the sea. There are many small crater lakes (Büyük Deniz Lake, Meterez Lake, Yıldız Lake, Dönen Lake, Serincef Lake, Kara Lake v.s.) that have formed as a result of geomorphological events on the Kaçkar Mountains. It is also called "Fırtına Valley" because of the Fırtına Brook passing through the district center. The climate is rainy at all seasons. The temperature decreases to -7 degrees in winter and increases to 25 degrees in summer (http://www.karalahana.com/karadeniz/rize_camlihemsin.htm).



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http://www.tatilyerleri1.com/wp-content/uploads/2010/rize/rize-harita.png

Figure 1. Working Area

MATERİALS AND METHODS

In this study, the Kavrun, Verçenik, Kemerli, Altıparmak summit route taken in the study and the highlands on the top; to determine the current situation; observation, examination, data collection, analysis, evaluation and suggestions; a method based on visual and formal examination with the help of photographs was used. In the planning of the rural settlement areas, preserving the existing natural values with the effect of vegetation, topography and silhouette contributes to the maintenance of cultural continuity by carrying out studies to maintain the traditional style of construction. The buildings to be rebuilt are constructed in accordance with the local architecture, and the existing architectural features of the existing buildings are revealed and the necessities to be made in order to make the landscapes remain untouched and to provide tourism if necessary and to help increase the tourism potential.

Determination Studies on the Study Area; After the work area has been determined, the determination of the work area characteristics has been carried out in two stages.

- Field study aiming to see in place for analysis; A detection form for recording photos, slides, relays and data relating to the area,
- Includes a literature review of information on the site

RESULTS

At the beginning of the plateau period, the high sections of the mountains are still covered with snow when they leave the peasants. In such a case, it is not possible to reach the foothills from the villagers in a short time. This forces people to stop at various elevations during the plateau period, stay and wait for a certain period of time. This coercion has led to the birth of other settlements besides the villagers in the region, which are known as mezraa, up and down highlands. The formation of the plateau, which is called up and down, and located at different elevations, makes it possible to keep the snow cover at different times during the spring months. Another reason for the gradual growth of the plateau is the need to meet the need for fresh herbs at close distances.

There is a close relationship between the size and duration of the plateau and the elevation they are founded on. The plateau that are usually set up in places without elevations are larger and crowded. One of the factors that makes the plateau larger than the others is the number of the villages that use it. This quality naturally increases the number of residences in the plateau (Tunçel, Gürgen, Çiçek ve Doğu, 2004). Traditional settlements in rural areas are dominated by scattered settlements. The settlements are usually formed perpendicular to the slope of the appropriate slopes. The reasons for scattered settlements are as follows:

- The Black Sea topography is too thick to allow mass settlement.
- The Black Sea has to be close to the family to protect and monitor the field where they grow vegetables and grains that they have to deal with every season.
- One reason for the scattered settlement is the different personality of the Black Sea people. The impulse of "being a whole in itself, living without needing anybody, acquiring individual personality" has driven the houses away from each other (Ertürk and Sumerkan, 1987). There are also some differences among scattered settlement types:
- Very disorganized settlements; The houses are scattered far from one another, not connected to a certain primitive.
- Dispersed settlements; Although there are significant distances between houses, it is observed that the houses constitute a few marriage groups. It is the most common settlement type. Houses are surrounded by divisive elements by their owners. They usually have gardens in them.
- Settling in groups; Houses show a grouping of factors such as maximizing arable land, approaching the state of the road, and being close to the source.
- Array placement; It is a form of settlement which is used to take advantage of a very old road or to be able to distinguish between suitable land scavenging on a ridge line, (Figure 2) (Ertürk and Sümerkan, 1987).

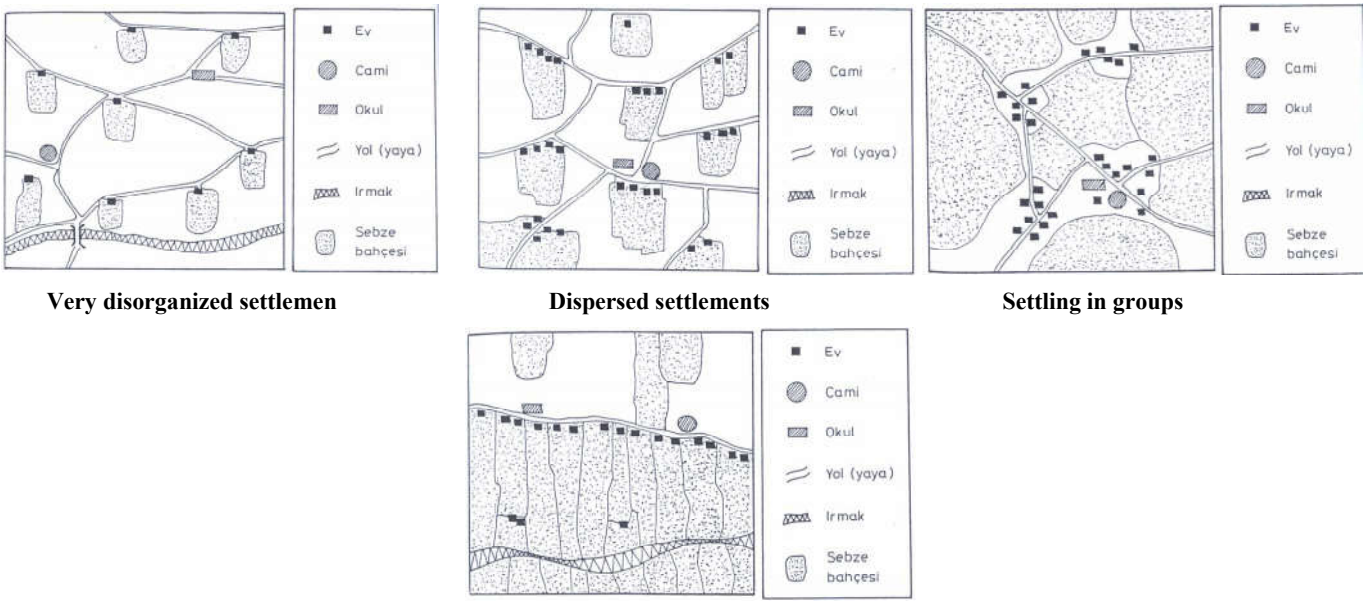


Figure 2. Settlements in rural areas (Ertürk and Sümerkan, 1987)

Settlement

Kavrun, Verçenik, Kemerli, Altıparmak climbing route located in the Avusor, Verçenik and Yukarı kavrun plateau houses are generally scattered settlement is seen. Dispersed settlements; It is seen as very disorganized settlements, dispersed settlements and settling in groups on the distance of the houses. The settlements of the houses are positioned perpendicular to a plane and a slope sprinkled on the ground. It can be said that the reasons for such settlements depend on the topographical structure and climatic conditions. It also has some effect on the landscape. There is a large or small outdoor area in the immediate vicinity of each house. This area includes sections for sitting-resting, eating, playing children, and grazing animals. There are also laundry facilities, stalls, wc, fountain-well and other garden items. The form of settlement is free, there is no geometry and symmetry. A natural development is dominated by texture and silhouette.

Use of Floors

The most important factor in the planning of houses is the traditional life. The number of floors in houses is 1 and 2. In two floor houses, the lower floor is used as a barn floor and the upper floor is used as living.

Stable floor: in sloped terraced houses, by taking advantage of the elevation caused by the slope. The walls of the barns, whose back wall is buried in the ground, are made of rubble and rough stone. The ground is usually clay and wood flooring. The height of the barn floor is kept small.

Living floor: the place where everyday life passes. This floor is made of wood and stone material. There are many activities such as living, cooking, dining, guest hospitality.

Construction

There are Solid masonry system and Timber frame system in the houses. Solid masonry system; where the loads are transmitted to the foundation and the ground via walls. In this system, the main task of the wall is carriage. In the highlands; Solid masonry system and Timber frame system. In the solid masonry system, which is usually used on the stables, rubble or coarse stones are placed on top of each other and the gaps between them are filled with mortar, and the stone is pressed between the mortars. In the Timber frame system which is generally used on the ground floor; the wooden building materials were horizontally superimposed on each other and the walls were built without using the dikes. Weight; each timber is passed to the floor through a subordinate element. Generally, they are formed by stacking trees that are 20-30 cm in thickness and close to a rectangular prism. Combinations of logs were made with "Throat Passing Technique". In other words, the ends of the woods; After passing point, it is extended by 15-20cm and it has been given a unique aesthetic of the masonry structure. The tree varieties that constitute the predominant construction of the house are being used from the durable tree species that grow in the forests around. Timber frame system; It is a system in which the building loads are transferred to the floor through wooden standings and beams on the wall. In the studied plateau, a wooden stuffing system was observed from the Timber frame system. Wood is used as a filling element between the carrier dikes. In recent years, briquettes and bricks have been used as building materials in a few floors and reinforced concrete dwellings, especially in plateau with easy access by car, due to the fact that the settlement period has been changed day by day and due to the fact that the economic loss is left for summer vacation.

Roof

The roof houses are quite simple. Roof forms; two, three and four sides inclined. Hartama, corrugated sheet and flat plates (tinplate) are used as roof coverings in the plateau houses. Hartama is a wooden material. Stone weight is placed on the wheels so that they do not fly with wind.

Window

The windows are wooden and wooden shutters. It is usually two vertical divisions.

Altıparmak Mountain Route-3482m (Rize-Çamlıhemşin-Ayder-Avusor Plateau-Dadala Valley-Summit)

After the province of Çamlıhemşin from Rize to Ayder, approximately 1000m above sea level with tourist and natural beauty is reached and reached to Avusur Plateau. Ayder; Being on the road route for Kaçkar mountain, natural beauty, traditional architecture is important. The number of tourists has increased because of the fact that restaurants, hotels and pensions have been put into service on Ayder plateau and regular transportation services have been provided. Thanks to the close proximity to the forest and the ease of transportation, the maiden was widely used in the construction of dwellings. The use of wood increased the size of the residence and the number of storeys. The dwellings are two-storey. The lower floor used as a barn was made of stone, and the second floor was made entirely of wood (Figure 3).

Figure 3. Plateau houses, Ayder

Avusur Plateau: The Avusor Plateau is the sub-settlement of Kemerli Kaçkar Mountain and is also famous for its Lake Avusor (Great Lake). The Avusor Plateau is 2500m above sea level. The settlements located on the lower part of the Avusor plateau are generally two storeys and made of wood and stone material. Stone material is used on the stables and wooden materials are used on the upper floor. Wooden shutters are used in the Windows (Figure 4). It is noteworthy that as you move up the Avusor plateau, they change in the residential building materials. The use of timber is gradually diminished in the settlements located in this surrounding settlement. Because of the relative distance from the forest, it is seen that almost all of them are made of stone except roof cover, and a significant part of them are made in "pak" style. Houses outside Pak are small houses with one or two rooms, including kitchen warehouses.

Figure 4. Plateau houses, Avusur Plateau

The very simple structures are pavilions built by stacking nearby stones on top of each other and covered with a plastic cover or a material like a canvas and covered with soil over some of them. The inside height of the room is about 160-200 cm. When the window is not found at all, the lighting of the room is provided either by the light entering from the door or by the opening of the roof covering over the corner which is used as the hearth. The floors of the pak are soil and the areas of use in the pak are not separated by walls (Figure 5).

Figure 5. Plateau houses, Avusur Plateau

Dadala Valley: A three-hour walk from the Avusor highway leads to the valley of Dadala, at an altitude of 2600m, on the edge of the Altıparmak Mountains. This valley is the campground preferred by mountain climbers who climb the summit. There are mule transportation between Avusor and Dadala valley. There is a pension for 24 people in the camping area. Kaçkar Lake, Ambar Lake, Ergis Lake, Liber Lake offers alternative routes for hikers. The valley has many flower patterns. Below are some of the plant varieties seen in the valley (Figure 6,7).

Figure 6. Dadala Valley and Dadala Pension

Summit climbing: Rising from the grassy side of the valley, the chimney climb, which is composed of mountain rocks, arrives in the Red lane. From here you can see the Liber Lake on the south side of Barhal. Horizontal crossings can be made near the bottom of the snowdrops. The summit of 3482m is reached with a short rock climbing. The summit climb and turn around takes about 6 hours in total (Figure 8).

Figure 7. Plant varieties, high altitude

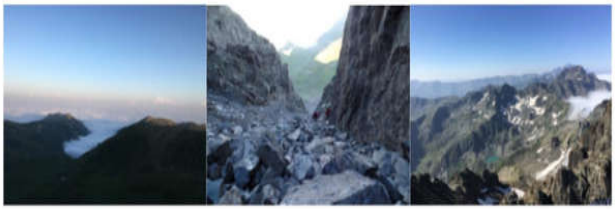


Figure 8. Summit climbing, Altıparmak Mauntain

Kemerli Mountain Route-3562m (Rize-Çamlıhemşin-Ayder-Avusor Plateau-Great Lake-Summit)

From Rize to Çamlıhemşin district, then from Ayder to Avusor highland. The Great Lake camping area at 2650m can be reached by a 1.5 hour walk. Climbing from the rocks beneath the summit with the chimney climbing and mooring passes from the side of the lake, the peak summit is 3562m. The summit climb and return takes about 9 hours in total (Figure 9).

Figure 9. Avusor Plateau, Great Lake and Summit, Kemerli Mauntain

Verçenik Mountain Route-3713m (Rize-Çamlıhemşin-Çat valley-Verçenik Plateau- Kapulu Lakes-Summit)

After the province of Çamlıhemşin from Rize, Çat valley passes to Verçenik highland. There is a historic Zil Castle on the way to Çat valley. The 13th century was made by the Commons. The dome is composed of outer walls, central walls and inner walls. The tower consists of 4 cattles and has arched windows and loopholes. Stone bridges are visible along the way. The two-storey plateau houses where wood and stone materials are used heavily are also dominant in the surrounding areas (Figure 10).

Verçenik Plateau: Verçenik Plateau is the lower settlement of Verçenik Mountain and is famous for Kapulu Lakes. The Verçenic Plateau is 2650m above sea level.

Figure 10. Zil Castle, stone bridge, and plateau houses, Çat Valley

In the lower part of this plateau houses of the plateau where two-storey wood and stone material are used are seen. The settlement in which the most beautiful examples of wooden materials are found, is going to lose its identity with the proliferation of buildings made of concrete and briquette materials in recent years. It is noteworthy that as you move up to the upper part of the Verçenik plateau, they change in the building materials. The use of timber in residences in these settlements is reduced. "Pak" style constructions are visible (Figure 11).

Figure 11. Verçenik Plateau and plateau houses

Kapulu Lake: It is a three hour walk from Verçenik highland to the Kapulu Lake camp area. It consists of 6 small lakes, which are lined up one after the other, and the red speckled trout lives in the lakes at 2980m altitude. There are many glacial lakes outside of the Covered Lakes (Figure 12).

Figure 12. Camp area, Kapulu Lake

Summit Climb: Turkey's most technical climb is the mountain. It ascends from the Kapulu Lakes, passing through the bedrock rocks and passing the traverse (horizontal rock passage). With a simple safety, the thread is transferred to the bottom of the chimney. After that, the 100m very steep rocky chimney climbing is taken again with rope safety and the rope climb is made and the peak of 3713m is reached. Here you have the opportunity to see all of the lakes in the region. Summit climb and turn around takes about 12 hours in total (Figure 13,14).

Figure 13. Chimney climb

Figure 14. Summit, Verçenik Mountain

Kavrun Mountain Route-3932m (Rize-Çamlıhemşin-Ayder-Galerdüzü-Lower kavrun plateau-Yukaru Kavrun plateau-Öküz yatağ –Summit)

Rize province, Çamlıhemşin district is reached. Then, Ayder, Galerdüzü, Lower Kavrun Plateau is passed to the Upper Kavrun highland. There is a two-storey structure on the Lower Kavrun Plateau. Stone and wood are used.

Upper Kavrun Plateau: Upper Kavrun Plateau is the lower campus of Kavrun Mountain and the camp site is 7 km away from Öküz Yatağı. Upper Kavrun Plateau is at an altitude of 2550m. The pension and restaurant management has developed on the plateau. Kavrun is the preferred accommodation area for mountaineers who come to the summit before Öküz yatağı camp site. It is also a tourist choice because it is easy to get there. For this reason, over the past few years there has been over-residential construction, and construction is continuing at a rapid pace. She is opposed to losing her plateau identity. Plateau is usually composed of two-storey stone and wooden materials. The "Pak" style is seen in this plateau. With recent constructions, the use of concrete and briquette has become widespread (Figure 15).

Figure 15. Upper Kavrun Plateau

Öküz Yatağı Campground: Following a 3,5-hour walk, you can follow the Kaçkar course and reach the camp site at 2900m Öküz Yatağı. Right next to the campground are the Öküz Yatağı Lake and Glaciers. Small and large glaciers are observed to decrease every year (Figure 16).

Summit Climb: Turkey's fourth highest and most difficult climb is the mountain. It rises from the Öküz Çayırı, passes over the large and small glaciers, and reaches the gate at 3500 m.

Table 1. Summit Routes

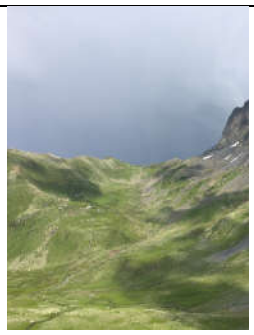
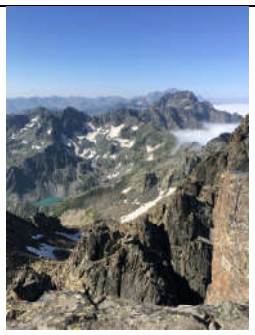
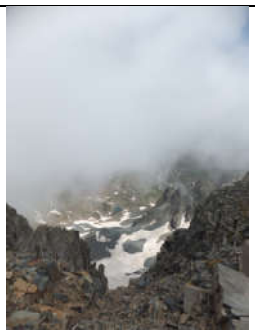
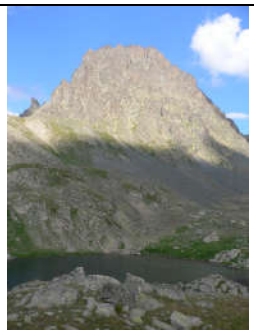
Altıparmak mountain summit route-3482m (Rize-Çamlıhemşin-Ayder-Avusor Plateau-Dadala Valley-Summit)		
 1		
Kemer Mountain summit route-3562m (Rize-Çamlıhemşin-Ayder-Avusor Plateau-Great Lake-Summit)		
 1		
Verçenik Mountain summit route-3713m (Rize-Çamlıhemşin-Çat Valley-Verçenik Plateau-Kapulu Lake-Summit)		
 1		
Kavrun Mountain summit route-3932m (Rize-Çamlıhemşin-Ayder-Galerdüzü-Aşağı, Yukaru Kavrun plateau-Öküz yatağı-Summit)		
 1		

Figure 16. Öküz Yatağı Campground

After the gate, you can reach the Kaçkar Summit with 3932m altitude by following the red marked route and the baba (stone pavilions) from very steep rocks. It has the opportunity to see the sea at the summit, the Mezovit lakes, and other lakes. Summit climbing and turning takes about 11 hours in total. Kaçkar Mountain has the possibility of climbing from big glacier and small glacier (Figure 17, Figure 18).

Figure 17. Summit climb,the gate and Kavrun Mauntain Summit

Figure 18. Plant varieties, high altitude

DISCUSSION

The natural, cultural values existing in the summit route of the Altıparmak, Kemerli, Verçenik and Kavrun mountains taken into consideration are explained. These mountains are given below with the peak exit route, the camp site and the summit photos (Table 1). The construction that emerges as a result of the conversion of the plateau to the use for tourism purposes, will continue with the current speed and will lead to hard destructions to be repaired in the local plateau. In settlements where transportation is easy, incompatible constructions with plateau architecture are constantly increasing. Almost entirely in the national park, it is absolutely necessary to avoid this unplanned and locally incompatible construction. The existing traditional plateau houses need to be used without disturbing their originality in terms of the residential-residential neighborhood and settlement texture.

The preservation of the texture of the gardens can be helped to ensure the preservation of the cultural heritage. For this purpose it is necessary to repair and improve the houses. In particular, infrastructure, installation, sewage, etc., where large deficiencies are observed, should be improved. It is important that the establishment of family businesses and further improvement of the service standards of those who are established. The existing houses in the plateau need to be renovated, repaired or built in the same way as the plateau house architecture. For this reason, they should prepare "original architectural projects" suitable for the local area. It is necessary to encourage and support the improvement of the existing situation and the transformation of the local architecture into a suitable one. It is necessary to evaluate the area which is very suitable for activities such as nature surveys, nature walks, photography, river sports, scouting, camping, mountaineering, high altitude. The present state of the plateau houses examined should be modernized without any relief and radical changes. Strengthening structural value should ensure continuity in durability and social cohesion. In terms of material and technique it is necessary to ensure that the balance and harmony between old-original sections and new additions can respond to certain principles. In order to bring the constructions to today's comfort conditions, it is necessary to improve the substructure, to clean up the parts of the structure which breaks the originality of the structure afterwards, to renew the lost function of the original function. In addition to preserving and restoring cultural values, they must be protected by integrating them with the strengthening of the region by providing an intensive function and realizing the structural and structural changes required by the new function, expanding and upgrading the new serving dimensions and adding new parts and fittings.

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