The preservation of the uniqueness of the cultural landscape in farmsteads of Zemgale

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Abstract. Knowing that the diversity and quality of the European landscapes are an essential resource for ensuring people's quality of life, strengthening the identity of areas and activation of the economic activity, in Florence, on October 20, 2000, the Member States of the Council of Europe adopted the European Landscape Convention, the main objective of which is to promote the protection, management, and planning of the European landscape. To this end, the Convention provides that the States should establish and implement their landscape policies through taking specific measures set out in the Convention: identification and assessment of the landscape, identifying the targets of the landscape quality, training of professionals and raising the public awareness of the value of the landscapes [12]. Thanks to the strictly specific target of the Convention, within the framework of the Latvian domestic policy it is possible to carry out a range of tasks to address the problems related to the preservation of the heritage of the cultural landscape and passing it on to future generations.

Key words: farmstead, uniqueness of the landscape, picturesqueness, field landscape, agro-load, sight lines, scale, transformation processes, form creation.

Introduction

The base of Zemgale is built on the agricultural area of the national significance and the rural area with a mosaic-type structure of the landscape. Intensive agriculture has been developed in the agricultural areas of the national significance and nearby, the area is dominated by an open landscape with arable land which in some places is stopped by forest clusters, serving for reducing the load of the wind erosion and restricting the dust flow. In turn, in the rural areas of the eastern part of the Zemgale region, the arable land intersperses with forest areas which are identified by the relief, the development [6].

The planning of the cultural heritage and protection of the rural landscape in Latvia is more focused on the maintenance of manor ensembles, alleys, and parks, as well as the countryside churches. In turn, the rapid financing in agriculture has contributed to a slow disappearance of the historical image of individual farmsteads. In the rural landscape, individual farmsteads lay a great impact on the landscape aesthetics which maintains the identity and scale of the rural landscape in Latvia. Therefore, in order to implement what is laid down in the Convention the distancing and the architectural form creation of the protective zones, the proportion of landscape spaces and the new agricultural building should be carefully assessed that plays an important role in preserving regional features. Particularly markedly it is attributable to the landscape of the Zemgale Plain which is characterized by long sight lines and panoramas. Based on the above situation, it is important to keep the historical proportion of the expression language of the elements of the composition.

The individual farmstead of Zemgale as a part of the rural landscape space begins to rapidly lose its significance and expressiveness. It is promoted by intensification of the agricultural load at the start of the 21st century that applies to the growth of the areas of cereals, the increase of the load of the agricultural industrialization and the slow disappearance of farmsteads in the landscape space. Therefore, long-term solutions for the Latvian landscape policy have been moved forward in the Latvian Sustainable Development Strategy “Latvia 2030” (adopted by the Saeima on June 10, 2010), which states that in order to maintain the typical Latvia’s unique natural and cultural landscape which constitutes prerequisites for the quality of people’s living environment:

1. Public support should be ensured for multifunctional and productive rural areas, for the preservation and creation of the cultural landscape;
2. The typical and unique landscapes in Latvia should be identified, their inventory should be carried out and proposals for the landscape management and monitoring of processes should be developed;
3. The society should be educated and involved in the landscape management;
4. The requirements and conditions for the spatial plans which provide protection of the locations of landscape interest should be specified [12].
The contemporary Latvian landscape is a man-made cultural heritage with preserved cultural and historical elements. Currently, the decisions of the State and the local government, as well as each landowner with their decisions and actions change the rural landscape and its quality. The principles and objectives of the rural sustainable development are based on the solutions for the adoption of appropriate legal, economic, and political decisions related to the environmental protection and the preservation of its identity in the rural areas.

**The aim of the research** is related to the study of the landscape space of Zemgale farmsteads and the assessment of the agro-load on an individual farmstead.

**The assignments of the research** are related to summarizing a number of factors, so proving that the farmstead is the most important part of the cultural heritage of the rural landscape and to getting recommendations on the establishment of the protective zone around them.

**Materials and Methods**

Thanks to the unique fertility of the soil of the Zemgale Plain, it is not typical to have virgin lands in this region. At the start of the 21st century, the EU funding has contributed to the growth of agro-load where for the purpose of profit making, lands with individual farmsteads are purchased, hen dismantled, bulldozed, and plowed up.

According to the reclamation and land-use planning regulations, it is important to determine the optimal size of the fields. In the Zemgale sandy loam, loam, and loamy areas, the area of the arable land may not exceed 60-80 ha to prevent the wind erosion load [9].

In the research, the **comparative method** is used – collecting map materials, historical research, expedition materials and photos. The **graphical -analytical method** is based on the presentation of the research data in the graphical material, thus visualizing the collected information in a number of sketches.

At the start of the 21st century, through entering of the European aid funding in agriculture, the productivity of fields is intensified. The Zemgale loamy soils are with the highest yield rate in the country and they are focused around Bauska, Dobele, and Jelgava municipalities. To the present day, the fertility of the natural base and its legacy constitute a very significant contribution to the managers of this land and the national economy. During the human farming, the Zemgale clay fertility has historically been reflected in the rich design of manor building complexes and the shape of farmsteads. Such use of the uniqueness of the natural base has contributed to the creation of picturesque landscape spaces in Zemgale. The scale of the historical building and brittleness of the forms are attributed not only to the centers of the manor building but also to the farmsteads around them.

The historic farmstead building is characterized by 2 periods:
- the establishment of old farms in the 70–90s of the 19th century when a rapid buyout of lands from manors started in the area of the governorate of Kurzeme;
- construction of new farms in the 20s-30s of the 20th century – as a result of the agrarian land reform the manor land was redivided.

Both of these periods have marked a substantial change in the structure of the rural landscape:

- **The 80s of the 19th century – the driveway and creating tree lines or alleys along them, so bringing a new scale in the rural landscape:**
  a) In sandier places, tree lines or windbreaks were planted for roads to protect them from snowstorms. It brought a new accent in the rural landscape.
  b) The roads built in the loamy soil were mainly without tree plantations to ensure drying of the road by the wind in springs and the sunlight for its faster drying.
  c) The yard of the individual farmstead with the size of 40х50 m is acceptable as a conventional point of the center which consists of the yard with the circumferential building and the household zone enriched by the architectural form creation, coloring, scale, transparency, shelter from the wind, smells. The exploitable land consisted of around 0.2–1 ha where crop rotation was changed, fallows created, plowing them up anew. Such land management formed a mosaic “canvas” of the landscape space which was based on the color change of seasons. It was accompanied by the winding character of the countryside roads that “repeated” the nature of the natural base - bents of the small rivers and forest edges, shrubland.
  d) The building scales of the farmstead building of the 19th century are different from the building of the 20s–30s of the 20th century. The scales of the dwelling house, the stockyard, hay barns are larger. It is based on the fact that for the management of the large areas of old farm lands (60–120 ha), farm laborers were needed for the accommodation of whom additional dwellings were built. Beside larger buildings, a larger yard and a vegetable garden were started.

**In the 80s of the 19th century up to 30s of the 20th century, the so-called new farms are created under the impact of the agrarian land reform and by dividing the land new homes were built:**

  a) On the western side of the farmstead for screening the western winds, windbreaks were planted both line-type and cluster-type ones;
Fig. 1. Identity of the rural landscape of Zemgale [Source: authors scheme, 2016]
b) Compositionally, the windbreaks were the highest point of the building location of the farmstead, creating a shaded area that was used as a small grazing area for the flock in the backyard area;

c) Like with the old farms, also in the new farms the dwelling and household buildings were located around the backyard.

Historically, the arable land is located in a ring around the farmstead which over the centuries has changed its scale. With the development of the technical capabilities, the dimensions of the exploitable land are evolving. The economic boom and the technology up to the start of the 20th century have changed not only the visual appearance of the farmsteads but also have created landscape mosaics around them. It is characterized by several interconnections of an economic significance and creating the transformation of the landscape space:

Shrubs or the so-called fine firewood that served for stove and oven heating with the highest heat transfer. In the 70s–80s of the 20th century, in the farmsteads, with the refusal from ovens and linking them to heating networks of solid fuel, shrubs in the farmstead disappeared, they were cut down for the arable land.

For the maintenance of subsistence farms even in the 50s–60s of the 20th century, the main crops were cabbage, potatoes, fodder, and sugar beets which on the field scale were the largest in terms of cultivation areas for vegetable growing. With the centralization of the production of food, such nature of plantations already disappeared in the 80s of the 20th century.

The start of the continuous amelioration in the 60s of the 20th century, the construction of a new ditch system, cutting out of multiple tree groups and shrubs slowly contributed to the development of the large farming.

Disappearing of small countryside roads, road straightening and widening from the 70s of the 20th century to provide the access of the heavy-duty agricultural machinery to the arable land.

The wave of construction of big farms in the 70s–80s of the 20th century which brought a strange scale;

The arrival of the EU investments in the turn of the 20th/21st centuries promotes the development of the large farming which is attributable to livestock farming and grain cultivation, especially after winding up sugar refineries.

The attraction of the EU investments for the construction of biofuel stations to promote the development of clean technology at the start of the 21st century.

The development and boom of the above agricultural farming slowly began to reduce the historically functional significance of farmsteads. From the 80s of the 20th century, in the Zemgale Plain, there are dominating areas of arable land with far, broad sight lines that miles away are not hidden by tree clusters, houses, forest compartments. With the start of the intensive continuous amelioration and the creation of giant fields in the 60s–70s of the 20th century, farmsteads were dismantled which allowed creating fields where technical resource consumption was reduced at the expense of maneuvering and bypassing.

**Results and Discussion**

The cultural heritage – in the spatially broader sense – the cultural and historical landscape – creates an accumulated totality of resources, received as the heritage from the past and set apart from the property ownership is a value for the whole society.
The strategy of the sustainable development of the Zemgale Planning Region lays down the main guidelines for preserving, protecting and developing the natural, cultural, and historical heritage:

- to promote conservation, restoration, and recultivation of the natural landscape, to preserve the biological diversity;
- to promote conservation of the landscape, cultural, and natural heritage and sustainable use for the development of tourism;
- to promote the accessibility of the cultural heritage, to promote traditional materials, traditions, ecological values;
- to promote the accessibility of information on the value of the natural landscape and heritage, their economic importance, conservation, and improvement opportunities;
- to create and develop new cultural and historical values;
- to document the intangible cultural heritage [6].

Having considered the information referred to in the document and on its basis, the research looks at the issue in depth in order to achieve the desired results, mentioned above.

Guidelines for sustainable rural development:

- to contribute to community development and strengthening of the local identity;
- to enhance local initiatives and employment in the countryside, diversifying the agricultural production, developing fruit growing, organic farming, fishing, rural tourism, etc., and strengthening and developing craft traditions, promoting the development of the business environment in the rural areas;
- to contribute to the availability of services for rural residents;
- to contribute to the preservation of the structure characteristic for the settlements (farmsteads, villages) of Zemgale;
- to provide conditions for the preservation of the rural identity and characteristic features of the building;
- to ensure the availability of public rivers and lakes for recreation and tourism purposes, including the necessary improvement measures;
- to prevent declining of the landscape diversity and aesthetic quality in areas of landscape interest or in territories, including – the loss of good panoramic views due to afforestation of agricultural lands;
- without reasonable needs not to plan transformations of agricultural and forest lands to other ways of land use;
- to promote afforestation of the unused or low-value agricultural lands in areas where the forest is required for environmental reasons and after years will carry out the functions of environmental protection [6].

The change of the political and economic situation in the country is best read in the individual farmsteads where each type of farming has left its mark on the building architecture and landscape. Most notably it applies to the architectural language where the application of building materials, form creation of buildings, roof slopes, building dimensions, distancing, etc., are readable.

One of the objectives of “Latvia 2030” [5] spatial development perspective is to maintain the originality of Latvia – the diverse natural and cultural heritage, typical and unique landscapes. To that end, as one of the areas of the national interests which require complex solutions and targeted state policy, areas of outstanding natural, landscape, and historic sites are defined that need to be identified, preserved, wisely managed, and efficiently used. “Latvia 2030” states that the landscape quality is a prerequisite for the quality of people's living environment and an important potential of the sector of the national tourism, so for preserving the landscape, the State aid is required [12].
A small part of the Zemgale individual farmsteads still retain the construction traditions of the 30s of the 20th century where a number of conditions of functional significance are clearly defined. The southern part of the individual farm was built coloristically most colorful, the expression of which was highlighted by: the construction volume of the dwelling house with a colorful front garden of planted flowers, so compositionally forming the lowest point not to reduce the sunlight. Flowers in the flower garden were picked for summer cemetery festivals and family honors.

- Nearby, the vegetable garden. Placement of the kitchen windows was to be directed towards the side of the road to see who was coming, so this side was chosen for a vegetable garden because it was possible to see over it.

- On the eastern side, a stockyard was usually built so that the prevailing westerly winds could bring the cattle-shed smells away from the yard. An apple orchard started behind the cattle-shed, so providing a comfortable taking of manure to the fruit garden. In addition, the “heat” of the vapor often protected apple trees from frost during the blossoming period. On the northern side of the stockyard, fields started and in springs during the manure cleanup, for carts it was the shortest way between the cattle-shed and the field. The manure cleanup smells were not taken into the yard by the prevailing westerly winds.
On the western side, windbreaks were planted to protect the yard from the wind force of the Zemgale Plain. Linden trees were most frequently planted as windbreaks which were also good for those farmers who kept beehives. Since the linden trees were shaded on the side of the evening sun, on hot summer days it was possible to find a good shade for pasturing the flock. At the start of the 20s of the 20th century, threshing machines were started to be used in farms for grain threshing. At the end of July, the harvested cereals should have had to dry in the wind before the autumn. Therefore, cereal barns were built which were located at roadsides, sometimes even at a distance from the individual farm. It was a reliable guarantee that in autumn it would be possible to get to the barn through the wet loamy roads with the threshing machine as it was popularly called. Such a big, gray clapboard barn architecture made the landscape of Zemgale particularly romantic which reaffirmed the fact of the land fertility and the high yields. Today, the beautiful grain barns with gates of logs on both sides of the barn – only rarely are met. The gray clapboard barns with a pitched shingle roof were a peculiar symbol of wealth and pride for the Latvian peasants. It was already noticed at a distance from the road.
Fig. 14. Buildings of the large-scale production at the 21st century in the yard of farmstead Platone Parish [Source: photo by author, 2016]

Fig. 15. The wooden heritage of the farmstead Platone start of Parish [Source: photo by author, 2016]

Fig. 16. Grain barn by the roadside Vircava Parish [Source: photo by author, 2016]

Fig. 17. The building of the historical individual farm in the 30s of the 20th century and at the start of the 21st century. Along with the yard – the arable land [Source: photo by author, 2016]

Fig. 18. Nearby the individual farmstead of the new farm, the agricultural production of the start of the 21st century has grown with an exaggerated scale of buildings and roads, Jaunsvirlauka Parish [Source: author scheme and google material, 2016]

If in the 60s–70s of the 20th century in the scenic compositional construction of Zemgale’s individual farmsteads, the traditions of the historical creation of the individual farm were still readable, then in the turn of the 20th/21st centuries the retained scale of the form creation of the wooden or brick architecture and the game of individual elements are noticeable only rudimentary. The same is true for the fruit garden, flower garden, berry places and the old well where all the elements together formed multifacetedness and coloring. Surveying the individual farmsteads of Lestene, Jaunsvirlauka, Platone, Vircava Parishes, it is possible to mark several character points of changes in the individual farms:

- The individual farmsteads have retained their historical appearance, they are not rebuilt but as a result of mismanagement the constructive condition of the building is critical, the orchard has gone extinct. The historic compositional structure of the farmstead is clear and understandable;
- The building of the individual farmstead has undergone reconstruction or alteration without sacrificing the context of the architectural and landscape space. The historical scale of the yard and the orchard are retained;
- Alterations of the building have been carried out for the individual farmstead, new construction volumes are brought in, the orchard is gone with the arable land breaking into instead and reducing the historical distancing between the home and the fields.
- The introduction of a new building scale next to the historic scale of the individual farmstead, constructing hangar type warehouses with a wide parking lot and a driveway for the agricultural machinery.
- The windbreak and orchard abandoning, creating an accurate linear hedge lines around the building, so visually acquiring a dotted conifer group with the roof of the dwelling house a little over it.
Conclusions

In the countryside landscape of Latvia, a thorough monitoring of the respect of the protective zones of the manor ensemble areas is successfully started, so slowly regaining a small portion of the expressiveness of the historical landscape space. The next step is to be taken in the field of conservation of the unique individual farmsteads in the conditions of the modern big industrial farming. This task is more difficult because the scale is more subtle and more sensitive than for manor ensembles surrounded by the park area, ponds, a greater historical building area, the driveway and the front yard. The elements referred to in the manor building create a definite character of the compositional structure. In turn, the compositional structure of the farmstead is created by the circumferential building of houses of different functional significance. It can be denser or thinner together with the apple orchard, vegetable garden, bee apiary, etc.. The individual farm - as an important component of the cultural heritage of the rural landscape space requires a thorough survey and research work, as well as preparing of the project documentation. As one of the key considerations is public awareness and education. At the start of the 21st century, the above beliefs, customs, and symbols have faded in the education. At the start of the 21st century, the a

References


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Latvijas lauku ainavas kultūrmantojuma un aizsardzības plānojumi ir vairāk vērsti uz muižu ansamblu, to aleju un parku, kā arī lauku dievnamu teritoriju uzturēšanu. Starptautiskā finansējuma ienākšana lauksaimniecībā ir veicinājusi lauku arhitektūras saglabāšanu. Lai šīs izmantojumai noteiktu, ir likumdošanās, kā arī kartografiķu līdzekļu veidojumi, kā arī dzīvesvienādības pieredze. Lai izveidotu konkrētās muižas, kuģa un parka, to aleju un parku, lauku dievnamu teritoriju uzturēšanu, ir jākonstatē, ka ir jāveic galvenokārt laugu viensētas izmaiņas, kurās ir jāatceras krāsu un attīstības kārtas izmantošana. Tāpēc ilgtermiņa risinājumi Latvijas lauku ainavas politikai ir noderīgi turpināt un veicināt latviešu kultūrā riskētu lauku viensētas izmantojumu.

Zemgales līdzenumā ainavu, kurai ir raksturīgs tikai arhitektūras saglabāšana, kurā ir jāatceras laugu viensētas izmaiņas. Tāpēc ilgtermiņa risinājumi Latvijas lauku ainavas politikai ir jāatceras laugu viensētas izmaiņas, kurā ir jāatceras arhitektūras saglabāšana. Tāpēc ilgtermiņa risinājumi Latvijas lauku ainavas politikai ir jāatceras laugu viensētas izmaiņas, kurā ir jāatceras arhitektūras saglabāšana.