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THE GIURGEU DEPRESSION. SUSTAINING RELATIONS WITH THE MOUNTAINOUS AREAS

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Abstract. Throughout history, between the Giurgeu Depression and the surrounding mountainous area, a series of relations got established, which in time developed with the demographic and economic growth of the region. These relations consist mainly of economic and commercial activities paired with the demographic growth and the recreational activities which gradually developed as a natural demand of the increasing population. The recreational activities are extremely important in the long term economic development of the Depression.

Keywords: sustaining relations, depression, surrounding mountainous area.

Introduction

Considering the depression in a physical-geographic point of view, it is a complex element of the relief, with variable dimensions, which is located at a lower level than the surrounding environment, and being well defined by specific geologic and geomorphologic factors. In most of the cases these boundaries do not coincide with the economical-geographic limits, the later ones being defined by economic and demographic elements, being in close relations with the surrounding landscape.

The present day boundaries of the administrative units within the depression are the economical geographic limits of the settlements which varied in time with the demographic increase and the economic factors. Landscape management and forest area management was and is an important factor considering the needs of an ever growing population, for living space and agricultural land, and pushing its boundaries up to the drainage divides.

In this area we can notice very strong economical and spiritual bindings between the local population and the surrounding wooded mountainous areas. As a result, any territorial planning in the future needs to take into consideration these connections, and must not diminish them by any means. The necessity to study the relation between the settlements and the surrounding mountainous areas is based on the following elements:

- The mountainous area represented throughout history the economic base for all settlements in the depression through forest economy, agro-pastoral activities and tourism.

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- The spiritual connections between the residents of the area and the surrounding wooded mountains which is rooted in history, shapes and molds the lifestyle of the population having a determining factor in defining the regional identity of the population.
- The surrounding mountainous areas possess a remarkable natural touristic potential, which can have a decisive role in eventual economic restructuring within the depression.
- Economic and geographic studies elaborated within the depression all considered the surrounding mountainous areas as well. The borders of the region can be set to the limits where we can still trace exchanging relations of mass, energy and information with the settlements from the depression.

In the following we will deal with those relations between the settlements and the surrounding mountains which include: economic, commercial, demographic and recreational relations. We can also mention cultural relations between the settlements and the surrounding environment. We will not deal with affectionate relationships between the resident population and the mountainous areas, because these studies would involve much more profound psycho-social researches.

Economic and commercial relations

Between all the relations that were formed between the depression and the mountainous area, with a decisive impact on all other types of relations, are the economic and commercial relations. On one hand they are supported by the forestry economy with a considerable history and the pastoral economy together with the pasture management within the mountainous areas. Besides these two major relations there are several other ones as well like the marketing of forest fruits, medical plants, resources of the soil, game and fishing, utilizing the power of the mountain streams, etc.

The forest as a basic element of the relations with the mountainous area

As it was previously pointed out, the Giurgeu Depression was and still is an area where the civilization development was strictly favored by the presence of the forests. A solid proof is that all household constructions are based on timber and logs, are found in the economy and occupation of the local communities. In the past, parts of the forests were cut down to make place for the settlements, for pastures, meadows etc. Tarisznyas M. (1982) says, that the history of the depression is mainly about the struggle of humanity with the forest areas. Once with the development of the infrastructure, the building of new and modern roads, and using the Mures River for transporting the logs, the economic and commercial relations with the surrounding areas intensify significantly. By these relations of the human community with the depression, the forests and the mountainous areas reached a new phase, which continues up to our days: "The fight with the forest" entered a decisive phase, the forests are loosing ground daily, the question remains: who will become the winner?

The data regarding the forest economy, the exploitation of the forests we gathered from the Forestry Department from Gheorgheni and from the Compossessorates which function in the depression. We need to emphasize the fact that the provided data sometimes seems controversial, and is not reflected in the field, proof of the disorders in the organizing and management of these areas. Regarding the quantity of wood exploited from the privately owned forests the data is even more unrealistic, the ordered quantity is every time exceeded sometimes even by several times.

The provided data about the forest areas surrounding the depression still allow us to form a couple of conclusions regarding the intensity of the harvested wood flow from the mountainous area. According to official data, the areas covered by forests decreased within the micro regions between 1990 and 2010 with approximately 3400 ha (about 7% of the total forest areas within the micro region) these summing up the exploited areas, the areas affected by wind knockdowns, or wildfires. This means an annual decrease of 267 ha (official local data and calculated data at a micro regional level show a significantly lower figure, 186 ha/year). The average productivity of the forest is calculated to be of 700 m³/ha, meaning that from the mountainous area a total amount of 130,000 m³ of wood is harvested from official documents, which in reality are around 190,000 m³.

The difference between the two values obviously represents the illegally exploited wooden mass. Approximately a third of the wood mass is of inferior quality and is used mainly for heating or for miscellaneous use around the household. Over 100,000 m³ represent timber of quality, from which in a first phase there are produced planks, beams, two by fours and other preliminary products. At up to date prices a m³ of wood values 160 lei, this meaning, that the settlements within the depression benefit on average from the mountains wood valuing around 16 million lei, and together with the wood for heating 23.2 million RON yearly. This value exceeds twice the value of all taxes gathered in a year by all the twelve administrative units in the depression (9 million RON). A significant part of the harvested wood is commercialized as logs and heating wood or preliminary products, and more then half is sold as primary resource for companies from the timber industry. In order to increase the incomes, the log marketing should be significantly reduced, because the prices from the primary products are almost double then of the heating logs, and as finite quality wooden products it multiplies by 3 to 5 times.

The role of the agro-pastoral mountain areas

Animal breeding and farming represented and still is one of the leading occupations for the local communities within the Giurgeu Depression, and is the proof of sustained relations between the locals and the surrounding mountainous areas. For not too long ago the forest exploitations and animal farming were evolving proportionally, with the forest cuttings new pastures and meadows were gained which were used for animal grazing and for collecting hay.

Historic documents talk about several disputes for these pastoral lands, competition which took place until the middle of the 20th century, and reappeared in the last two decades with a higher intensity then before. The fait of many mountain pastures represent the cases or long fought disputes even in the justice courts. Between 1950 and 1990 we can notice a decrease in the relations between agro-pastoral activities and the mountainous areas, during this time valuable pastures were taken over by Mother Nature and turned into forestry areas, by this making the land retribution even more difficult in our days. As such, by todays standards, the flux of mass and energy generated by the agro-pastoral activities gains significant ground when compared with the forestry economy.

Considering that approximately 80% of the cattle population, 99% of the sheep population and just more than 10% of the pig population spends more than 5 months yearly on the pastures and meadows of the mountainous areas the quality of the resulted products is significantly improved. From the total of the yearly milk production of prox. 300,000 hl/year more than a third (135,000 hl) is harvested on the mountainous areas in the warm seasons of the year. From this quantity more than a third (aprox. 50,000 hl) are transported to collecting units at the base of the mountains, and approximately 75-80,000 hl of milk is turned into

specific dairy products like: cheese (14,000 kg), urda (4,000 kg), and the remaining dairy products are used to feed the pigs from the farms. Beside the dairy products the sheep cots produce a significant amount of meat products (veal and beef), wool and skins, the last two having less importance due to the lack of demand on the market.

In the year 2010 there were established 125 sheep cots in the mountainous areas, with an effective animal count of 34,990 (cattle, sheep and pigs) representing 68% of the total number of animals registered in the depression. Organizing and managing the sheep cots begins in early winter with recruiting personal and preparing the necessary materials and goods before the migration.

Table nr. 1. The situation of the sheep cots within the micro region (in 2010) (source: authors)

Nr. Crt.	Town * / parish	Number of sheep cots	Animal count	Sheep cot dimension (nr. Animals / cot)
1	Gheorgheni *	7	2450	350
2	Toplița *	9	4400	488
3	Ciumani	5	1550	310
4	Ditrău	21	3120	148
5	Gălăuș	4	1050	263
6	Joseni	12	4620	385
7	Lăzarea	7	2250	321
8	Remetea	18	3400	189
9	Sărmaș	11	4300	390
10	Subcetate	14	2650	189
11	Suseni	10	3600	360
12	Voșlobeni	7	1600	228
	Total	125	34990	280

The majority of the animal cots are stationary, during the season they cannot change location. In the last decades the number of homogeneous cots decreased, now almost all of the animal cots are mixed, dominated by sheep. The sheep folds are formed at St. George's Day (April 24th) and after 2-3 weeks they proceed to the measuring of the milk production, and the main owner of the fold determines the amount of fold products for each contributor for every one animal. The herds climb up into the mountains in the second decade of May, and stay there until late September. If the weather conditions are appropriate in the course of October mobile folds are established on lower meadows and pastures in the vicinity of the settlements. During this period all animal fold products belong to the main owner and the head shepherd. Most animal folds are broken down by the end of October.

The dimensions of the animal folds varies, and can be influenced by the effective number of animals, the number of folds within an area, the areas offered for grazing and the degree of collaboration between the owners, etc. The average size of a fold numbers 280 animals. There are only six cases when this number was exceeded in 2003, like Toplița (488 animals), Sărmaș (390), Joseni (385) and Suseni (360 animals) and the lowest numbers were produced by the parishes of Ditrău (148), Remetea (189), and Subcetate (189 animals). Within the small folds the number of sheep and cattle are very close, in the cases of Ditrău and Remetea, the cattle dominate, and their milk is exclusively bought by the Powdered Milk Factory from Remetea. The average number of people hired for one average sized animal fold is 6-7 people: the head shepherd, the "baci" responsible with the preparation of the dairy

products, the assistant shepherd (he helps with the milking and complementary activities around the fold), and 3-4 shepherds (for milking and supervision of the herd). The marketing of the sheep fold products is done locally, on local markets or directly from the folds. These products (dairy and meat) play a significant role in the everyday life of the local population, most of the products are consumed fresh and some are seasoned, smoked or frozen and can be used at any time of the year. For viewing pastoral habits please consult Figure 1. Based on our information gathered from our field studies more than half of the total amount of hay necessary for the winter season originates from the meadows located at the foot of the mountains. According to local customs, the harvesting of hay in the mountainous areas should be done before St. Ana's day (26th of July), after this date the grass does not possess high nutritive quality, and is only usable for feeding sheep or rarely cattle.

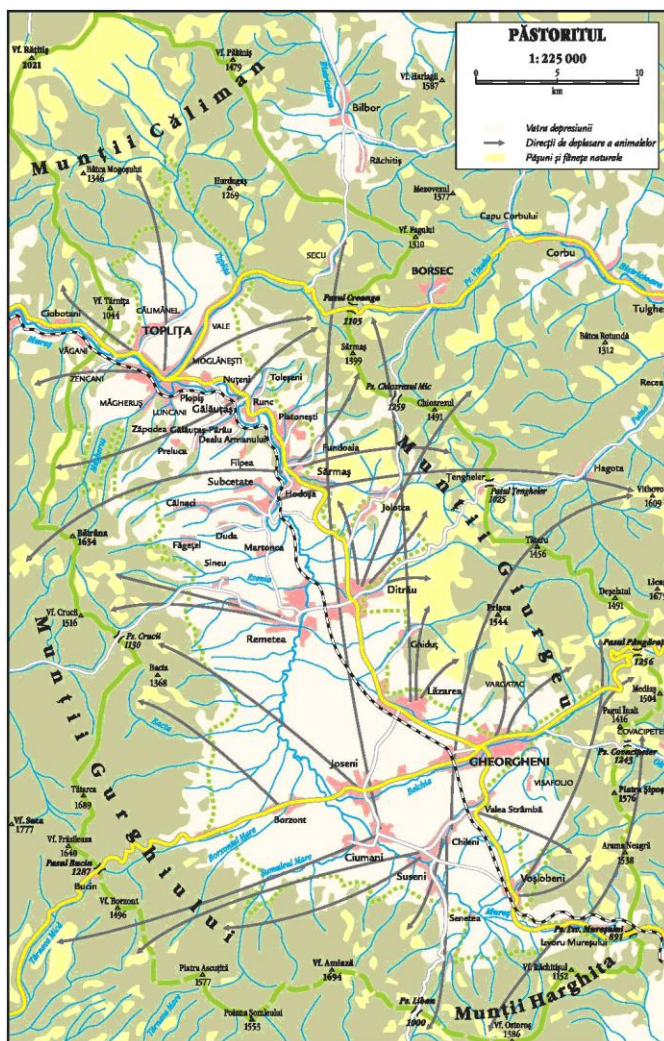


Fig. 1. Map showing the pastoral routes in the Giurgeu Depression

Other relations with economic character

Beside the two main relations mentioned above, there are other well rooted and old habits which establish another relation, with less economic impact but in every aspect as important as the others and it is connected to the gathering habit of any human. Picking the forest fruits, mushrooms, medicinal and aromatic plants represents a tradition for the locals. Beside these we need to mention the use of the mountain streams force, mining activities, fishing and hunting as well. Collecting the eatable mushrooms and picking forest fruits are traditional activities, and due to the increasing demand for these delicious products, many families with low incomes during the picking seasons focus mainly on these activities.

Within the depression the collection station's number increases yearly. For example in 2002 when the mushroom abundance in the forests was exceptionally good, only in Gheorgheni there were 17 collection stations, in comparison with 2010, when only 8 existed. The buying price varies according to the quality and quantity of goods, but on average, the incomes that can be generated after these activities can allow a person to sustain a family of three during the warm season of the year. More than half of the eatable mushrooms are used in the catering industry, by this providing a series of culinary specialties based on these products. A significant part of the mushrooms, such as the king bolete (*Boletus edulis*) or the chanterelle (*Cantharellus cibarius*) are collected, refrigerated and shipped to Italy, Austria, Germany and Belgium.

In 2010, the two collection centers from Gheorgheni and Toplita which mainly collected the forest fruits: raspberries and blueberries, together bought 581 tons of fruits, which were froze and shipped to western European countries. We consider that approximately three times more fruits are gathered by the local population, which are prepared according to local recipes, these food products representing a base element of everyday dishes. Both fruits and mushrooms play an important role in the local economy, although their amount varies in each year, but the collection centers increase their acquisitions yearly (110 tons in 2010).

Beginning with the 17th century, for nearly three centuries on some of the mountain streams that supply the Mures River there were constructed a number of establishments, which were powered by the power of the running waters (mills, saws, wool washers, etc). the majority of these establishments were located at the foot of the mountains, and only some saw houses were located upstream like in Liban, Senetea, or Jolotca. Some of the water-saws were even constructed close to the mountain passes of those times. The use of the water mills and saws peaked in the second half of the 18th century and the first half of the 19th century. In the second part of the 19th century there is a considerable decline in the number of mills and saws. This led to an almost total disappearance in the first two decades of the 20th century with the appearance of the steam powered engines. In 1847 existed in the mountainous areas 68 water saws and 47 water mills, with some of them showing considerable performance, due to the fact that they were manufactured in the Czech Republic, Bavaria or Italy. Around the saws and the mills houses were constructed, to further work with the wooden products, employing carpenters, craftsmen. These establishments, temporary settlements or got joined with the neighboring settlements or disappeared together with mills or saws that were finally closed.

Open pit mines for different rocks used in constructions, extractions of rocks and sand from the riverbeds have a long history with the settlements in the depression, establishing a firm economic relation between the depression and the mountainous areas. Cleaning and maintaining the riverbeds was somewhat mandatory to keep the water mills and saws working and to prevent flash-floods. The rocks and sand gathered from the brook beds was used in road constructions or maintenance. The most important open pit mines and exploitations were founded in Voşlobeni, Chileni, Suseni, Valea Şumuleului – Ciurani, Lăzarea, Jolotca,

Remetea – Eseniu, Sărmaș – Runc, Toplița, etc. All of these still have a local importance, but the open pit mine of andesite from Suseni-Liban is of regional importance.

Starting from the 1960's in the Sienitic Mountains surrounding Ditrau, geologic studies revealed the existence of some very rare metals and radioactive rock formations. The mining activity got intensified on the valleys of Belcina and Jolotca, employing a significant number of people, but mining was abandoned after 1990.

The secular forests gave shelter to a rich and varied wildlife, and the streams were rich in trout and freshwater shellfish. All these represented an important food source for the population of the depression. Nowadays due to the forest exploitations and the increase of suspended debris in the mountain brooks, we can notice a significant reduction in the trout population. We consider these to have a significant impact on the eco-balance but do not influence the economic relations between the depression and the surrounding mountainous areas.

Demographic relations

We cannot talk about demographic relations between the depression and the mountainous areas. There have not been movements of population from the depression into the mountainous areas or vice versa, although there always have been significant movement of population between the two steps of the relief. These movements although very insignificant number wise; have an important aspect regarding the economic development of the depression. The everyday or seasonal population movement between the depression and the mountainous areas shows intensity variations during history. The demographic relations were very scarce before the 10th century, and started to increase together with the economic relations (exploitations, foraging) peaking in our era, when the population besides the economic relations need recreational activities, cultural activities or scientific activities to carry out.

The majority of the moving population has economic reasons for moving. We are talking about the labor force hired in the forest exploitation or animal grazing, and these movements can be daily or seasonal. Regarding the forest exploitation for example in 2002 there were hired 1,400 people for daily or seasonal work in logging and replanting activities. Seasonal movements are generated by animal farming. In the warm season several temporary homes are established to serve the pastoral and animal grazing activities, or during the cutting and collecting hay. There are yearly around 900 people hired to work in the animal farming industry, and at least 2-3 individuals per animal folds, employed for transporting the goods and products from the mountain area to the collection centers or marketplaces.

The number of people who travel for cutting the grass and collecting hay into the mountainous areas between July and the first part of August is approximately 1,500 individuals. Their return into the settlements means the transport of hay is done as well. Another group of people, around 10,000 wonder regularly in the mountains in the warm seasons for recreational purposes, for foraging for forest fruits and aromatic and medicinal plants. On the other hand around 20,000 people are said to make trips into the mountains but just occasionally due to lack of free time or means of transport. As a conclusion we can say that more than half of the population of the depression is benefiting from the demographic relations between the depression and the mountainous areas.

Recreational relations

Combining the pleasant and the useful represented even from ancient times a form of lifestyle for the indigenous population of the depression, the mountainous area representing a

source of health, healing, balance and recreational area for any human being. Recreational relations in this form existed from the very beginning, and in an organized manner they became fashionable only recently. The need for recreation is a basic characteristic for the modern man, thus the development of recreational areas completing the other economic activities in the micro region becomes more and more necessary.

Recently serious contemplations are going on regarding the putting to a good use the huge potential of the surrounding mountainous are at the level of local administrations together with civic organizations, and unfortunately only recently was formed a competent strategy and plan for the putting in value the huge potential of the landscape. Due to the lack of potent investors the only sustainable way of increasing the recreational relations could be the agro tourism. Here we can mention specific activities like guided walks into the mountains, horse driven carriage rides, hunting or fishing parties, visiting animal folds, collecting forest fruits, mushrooms or medicinal and aromatic plants, etc) could be a way of putting to good use the remarkable amount of resources of the mountainous areas.

The surrounding mountains are webbed by a well-marked network of tourism trails, although the tourism infrastructure is still in development. Mountain cabins and tourism points which serve the mountain tracking tourism are scarce, and they can be found in the vicinity of Sicaș Pass in the west, in the Feceterez Massif above the Izvoru Muresului resort, on the tourism trail which connects the Pângărati pass to the Calului and Hășmașul Mare Massifs in the east, with other accommodation possibilities at the TV antenna from the Țengheller Pass above Borsec resort and the two tourism chalets that exist on the southern slopes of the Călimani Mountains. The tourism flow is more sustained over the Bucin Pass tourism complex, which has a motel, a camping ground, several cabins and chalets and a catering unit. There are several rental houses and pensions which belong partially to individuals from the depression or to people from the Praid region.

Lacu-Roșu resort has a unique natural potential for tourism and recreational activities, but it cannot manage at this moment efficiently an activity which could determine through the tourism flow its re-launching and sustained development as an exemplary resort. To improve the existing situation which involve local infrastructural management, making the visited environment more eco-friendly, solving the problem of the increasing amount of waste and residual waters, improving the quality of services, diversifying them, reducing or stopping the silting of the Red Lake, diversifying the tourism activities in the area, there were elaborated several P.U.Z. and P.U.D. plans, but so far without visible improvements in the resort and surrounding areas. Under the present conditions a more or less transitory tourism is practices in the area, or just weekend brakes, and the resorts barely manage to generate profit.

References

1. Ciangă, N., Dezsi, Șt., (2002), *Riscuri si impact în amenajarea turistică a spațiului montan*, în revista: Riscuri și catastrofe, Editor Sorocovschi, V., Editura: Casa cărții de știință, Cluj-Napoca.
2. Surd, V., (2002), *Introducere în geografia spațiului rural*, Editura: Presa Universitară Clujeană, Cluj-Napoca.
3. Seer, M., (2004), *Așezările și organizarea spațiului geographic în Depresiunea Giurgeului*, Teză de doctorat, manuscris.
4. Peteley, A., (2014), *Adaptabilitatea la riscul geografic a stațiunilor turistice din județul Harghita*, Teză de doctorat, manuscris.