



**LOCAL
ECOLOGY
ACTION PLAN
FOENI COMMUNE
2008 – 2012**

METHODOLOGY

What is the Local Ecology Action Plan (LEAP)?

The Local Ecology Action Plan is a strategic programme document underlining environmental protection.

The Local Ecology Action Plan is a process comprising all the measures which result from the REAP methodology and require implementation.

The main reasons for elaborating the Local Ecology Action Plan are:

- An overview on the state of environment in the region
- Drawing up a comprehensive list of priority problems and their causes
- Establishing the LEAP objectives
- Identifying the precise activities and necessary measures to reach the objectives
- Involving the public and the stakeholders in the elaboration process
- Creating the necessary conditions to apply to other funding sources.

LEAP includes:

- Establishing a community vision
- Evaluating the state of the environment
- Identifying the priorities
- Identifying the most appropriate strategies to solve the most important problems
- Realising the actions that conduct to real improvement of environment state and human life.

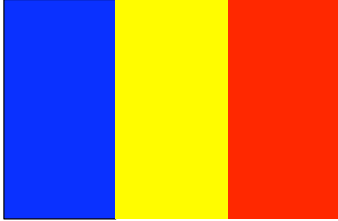
Why elaborate LEAP?

LEAP clusters the following objectives:

- To improve the state of environment
- To promote public awareness and responsibility for environmental problems and raise the public involvement
- To develop the abilities of local administrations and non-governmental organisations to deal with ecological issues
- To promote cooperation among citizens, local community representatives, non-governmental organisations, scientists and businessmen
- To acknowledge, evaluate and identify the ecological action priorities based on environmental values and scientific data
- To realise a LEAP that comprises special actions for solving the problems and promotion of community visions

To correspond to the national criteria for elaboration of Ecology Action Plan.

GENERAL INFORMATION – FOENI COMMUNE



The territory of the small border commune Foeni lies in the plain of the South-West part of Timiș County, 30 km away from Timișoara city. It lies on an area of 6405.87 ha and comprises two settlements: Foeni (the central settlement in the commune) and Cruceni.

Foeni commune is a border commune and borders on the West side with Serbia, while the other neighbours are other communes in Timiș County: Uivar to the North, Giulvăz and Ciacova to the East and Giera to the South.

Foeni commune is linked with the neighbouring communes through the infrastructure of roads and railroads, but it is isolated from Serbia – there are no infrastructure links with the neighbouring state. A road from Foeni to the border point with Serbia is being projected, as well as talks about opening the border point. The realisation of the latter would bring economic prosperity to this small border commune in the future.

The relief is largely plain, with fertile soil on most of the territory, which represents the most important natural resource of the commune. The agricultural soil covers an area of 5817.26 ha.

Of the water resources, the most important one is Timiș River, flowing on the territory of Foeni commune on a length of 6.5 km from North to South. The emergence of the first civilisation elements here (proved by much historical and archaeological data) is related to this water flow, and their evolution is also owed to Timiș River. Other water resources are Little Bega and the network of irrigation canals.

Other important resources are underground natural gas resources, and researches also showed the presence of mineral and thermal waters.

According to the 2005 census, in the two settlements of the commune live 1725 inhabitants, a density of 30 inhabitants/ha, which corresponds to the regional average.

Geography and climate

Foeni commune is situated in the South-West part of the Timiș County on the border with Serbia. The relief is mainly plain, characteristic to most of the settlements in the Banat region. The altitude varies between 75 and 85 m. As part of the Panonic Depression, in this space there is a continental climate, characterised by warm summers and cold winters, and the average annual temperature is around 11 °C.

Temperature

The measurements of temperature over the years in this space show that the maximum temperature is recorded in July and the minimum temperature is recorded in January. January is the coldest month, with an average annual temperature of approx. 1.5 °C and an absolute minimum of -30 °C. The warmest month is July with average annual values of approx. 21.5 °C and absolute maximum of 40 °C.

There are a medium of 90-100 frost days a year. The average daily temperature of over 0 °C, good for crops, is recorded in the period between April and the end of October.

Precipitation and overcast

As a climate element, overcast impacts the intensity of Sun radiation (and its duration), which also determines air temperature. In turn, the air temperature directly influences the agricultural production and crops. The 10-hours-of-sunshine days are in the period from June to September.

Precipitations, on whose intensity agricultural crops and vegetation growth depend, range from 500 and 600 mm on m². The average number of precipitation days ranges between 130 and 150, most of them being rainy days (120-130 days per year). Rain falls especially in the period May-June and snow falls in the periods October-November and January-February.

Wind

Foeni commune territory is part of a windy space, especially because of flat land and lack of protecting forest belts. The wind regime is similar to the rest of the plain areas in Banat region. The Western winds blow in spring and autumn, while in summer the South-Eastern wind is stringer.

Hydrology

Surface water

The establishment of first civilisation elements is related to the river flows. Timiș River, the largest and most important in Timiș County, has a 6.5 km long flow on the Foeni commune territory. Besides Timiș, the river network is filled in by the Little Bega. The

Timiș River doesn't flow right next to the two settlements, but close to Cruceni, which is located 2 km North from Timiș River flow. Besides these two river flows there is also the network of irrigation canals. The canal under the old brick bridge is very important for this area. The canal links Little Bega and Timiș rivers and it is approximately 25 km long. The highest water flow is recorded in April-May, when Timiș River is supplied by snow melting in the Carpathians; it overflows its banks and threatens with flooding the nearby fields. There is no other surface water on the Foeni commune territory (lakes, fishing ponds or others of the kind), therefore the Timiș River is the most important water resource in this area.



Image 1 – Timiș River, the most important water resource in the commune

Underground Water

The terrain relief configuration corresponds to the geological and palaeographical forms of the area. Rock and clay layers are to be found deep underground, while towards the surface one can find sand and gravel layers, as remains of the Pannonian Lake, which contain underground water reserves and belong to the Timiș-Bega passage terraces. Geologically, Foeni commune territory is enclosed in the Timiș Plain, which is in its turn enclosed in the Great Pannonian Depression, where sand, gravel and clay layers prevail. Underground waters can be found at medium depth (25-100 m) and even at greater depths, as water infiltrates in clay soil or fine sand layers.

Wild life

Taking into account the territorial relation between Sečanj municipality and Foeni commune, one can conclude that their wild life is identical.

The obvious effects of anthropogenic factors and unsustainable exploitation have largely degraded the environment and have disturbed habitats. Foeni commune is mainly agricultural in nature, as it has agricultural soil on most of its territory. The most frequent single-crops are corn, wheat, sunflower and sugar beet.

Pastures and meadows cover an area of 1,088 ha, where specific vegetation for these areas can be found. Wild vegetation grows on smaller areas along canals, roads, rivers. The hydrological network of Foeni commune is composed of rivers Timiș and Little Bega and a network of canals. The coastal areas of Timiș River valley are the only places to find forest vegetation in the entire commune. The forest areas occupy 2.72 ha or 0.042% of the total territory of Foeni commune. Lack of forests does not affect Foeni commune's resemblance to Sečanj municipality as to where wild life is concerned; only the numbers are smaller in Foeni commune.

On Foeni commune territory there are no protected natural goods but future protection should refer to improving and preserving the existing habitats.

Terrain

The villages in Foeni commune are located on a relatively plain terrain, characteristic to settlements in the western Banat region. The altitude ranges from 75 to 85 m. The layer structure corresponds to the relief and palaeography in the area. Soil layers are clayey. These features of the soil are favourable to high fertility requiring low irrigation; therefore the land is fit for agriculture. Depending upon environmental indicators and layers (physical, chemical, hydrographical), the quality of agricultural soil is expressed through quality classes. The quality of soil on the Foeni commune territory varies between class II and class III.

According to cadastral information, there are approx. 27 ha of degraded terrain and 42.62 ha of unfertile soil, especially along the Timiș valley. Agricultural soil covers an area of 5,817.26 ha, of which 4,722.2 ha of cultivable soil. Forest areas on the territory of Foeni commune are very small: 2.72 ha.

Information about areas covered by certain categories of soil varies according to the source (town hall or cadastre). The territorial distribution of the total area of the commune – 6,405.87 ha according to official data from the cadastre (OCAOTA) for the year 2005 – is presented in the table below:

TERRAIN CATEGORIES (ha)					
Agricultural soil	Forests	Waters and puddles	Roads	Yards and buildings	Unproductive soil
5810,5	2,72	194	139,4	216	43

Table 1 – Areas covered by certain terrain categories

In its turn, agricultural soil has the following structure:

AGRICULTURAL SOIL (ha)

Cultivable soil	Vineyards	Orchards	Pastures and hayfields
4722,2	0,3	6	1082

Table 2 – Areas covered by certain agricultural soil categories

Most of the territory of the commune is private property. According to statistical data (OCAOTA), the property on the territory of Foeni commune looks like this:

Public domain	133.84 ha
Private domain of the state	1,217.56 ha
Private ownership	4,954.48 ha

Table 3 – Distribution of total area according to forms of property

Of these, the space within the built-up areas comprises:

Public domain	165.00 ha
Private domain of the state	75.00 ha
Private ownership	59.00 ha

Table 4 – Distribution of total spaces within the built-up areas according to forms of property

The total built-up area (yards, buildings and streets) in the two settlements is of approx. 280 ha, of which 151.88 ha in Foeni and 129.62 ha in Cruceni, which means 4 % of the total area of the commune.

The whole territory of the commune can be considered a natural risk zone, as it is located mostly along the Timiș valley, whose rise in flow during the year represents a flood threat.



Image 2 – Cadastre plan of Foeni commune

Population

Foeni commune has two settlements, Foeni and Cruceni. According to the last 2005 census, the number of inhabitants in the commune is 1725, of which 1182 in Foeni and 543 in Cruceni.

The special qualities of land in this area contributed to early population of these spaces, and archaeological sources are there to confirm it. Remains of roman buildings from antiquity are also present. Nevertheless, the first written documents certifying the existence of these settlements are mentioned in the middle ages. The historical development of these two settlements, beginning with the middle ages, is presented in the table below:

FOENI	CRUCENI
<ul style="list-style-type: none"> - 1289 – first documentary mention sent to king Ladislau III, - centuries XIII-XV - there was an early-medieval fortification, - 1400 – the village is the property of Csaky family, - 1523 – first Serbian colonisation, lead by Patriarch Arsenie III, - 1552-1717 – Ottoman occupation, when the village gets depopulated, - 1600 – there are two parishes, a Serbian one and a Romanian one, - at the end of XVIII century – the village is systematised and becomes the property of Mocioni family, - 1807 – the Mocioni castle is being built, - 1839 – statistics record 2026 orthodox inhabitants, - at the end of XIX century the Romanian Orthodox Church is being built, - 1890 – statistics record 2098 inhabitants, most of them Romanians (1428) and Serbians (512) and the rest Hungarians and Germans. 	<ul style="list-style-type: none"> - the medieval village was located a few miles away from the current settlement, towards Timiș River, - 1868 – the year of establishment of the current village; 75 Hungarian families are settled here; each family receives approx. 7 acres of cultivable soil, - 1890 – statistics record 618 inhabitants, most of them Hungarians (576), - 1894 – the school is built, - 1895 – the year of a new colonisation wave - another 74 colonists arrive, each family receives approx. 4.5 acres of cultivable soil, - 1912 - last colonisation – another 25 Hungarian families arrive, they receive houses for free, - 1914 – the Catholic Church is built.

As in the case of terrain distribution, the information from the town hall and those from the county council do not coincide. The recent demographical evolution, as recorded by censuses, looks like this:

YEAR	NUMBER OF INHABITANTS
1839	2026
1890	2716
1930	2963
1998	1841
2001	1742
2005	1725

Table 5 – Demographical evolution from 1839 to 2005

Population density in the commune is approximately 30 inhabitants per hectare, which corresponds to the average value in the region. The average mortality rate is of approx. 12 deaths a year and the average birth rate is approx. 14 births a year. In the first decades of the last century a progressive growing population rate was recorded. A demographical

decrease was then recorded, and afterwards, in the last years, the number of inhabitants was stabilised. As a contribution to the increase in number of inhabitants, even though floating, one can count people from the city who have bought houses in Foeni commune settlements and they use them for the weekend activities.

The population structure, according to age groups, looks like this:

0-18 years	approx. 400
19-45 years	approx. 1025
Over 45 years	approx. 300

Table 6 – Population structure according to age groups

Directly related to economic stagnation, typical for Romanian villages, the above mentioned data prove a stagnant demography.

Most of the Foeni commune inhabitants are Romanians (1108), and according to ethnicity, they are followed by Hungarians (465), then Serbians (125). The last census also recorded 25 Roma and 2 Germans.





Image 3 – The Serbian Orthodox Church and the Romanian Orthodox Church in Foeni

According to religion, the population structure is presented in the following table:

Orthodox	approx. 1211
Catholic	approx. 489
Neo-protestant	approx. 25

Table 7 – Population structure according to religion

According to official data (county council and Foeni town hall) the employment is rather high. Statistics record 1133 employees and 26 unemployed persons. According to settlements distribution, there are 756 employees in Foeni and 377 in Cruceni. 389 people travel to their workplaces outside the commune; they are hired in fields like education, exploitation industry, commerce, transport.

Economy

In the commune's economy the most important branches are agriculture, the small processing industry, as well as services and transport. According to statistics from the county council, there are 20 economic agents with geo-industrial activities, of which 18 with private capital, 1 cooperative and 1 with other forms of capital. According to town hall data, there are 10 limited liability companies, of which 7 in Foeni and 3 in Cruceni. There are a gas station and a pumping station which ensures for sending the natural gas towards Timișoara. Despite the solid potential (Timiș River), tourism is weak and does not generate incomes yet. Agro tourism, one of the real development chances for areas which lack industry or other profitable activities, is also missing in Foeni. In the economic field, the main shortage is the weak industrial activity in the sphere of processing raw material or agricultural products. Of the industrial field, only agro industry is present (two bakeries), while light industry is missing.

Agriculture is the main activity in this region. The most important agricultural companies are: Fratelli Benfenati, which holds approx. 1,000 ha of terrain and a silo for cereal deposit, and Agrofoeni, which holds approximately 200 ha of terrain and a silo for cereal deposit. The most frequent cereal crops are wheat, rye and corn, and other important cultures are potatoes, vegetables and industrial plants. Large areas are also used for breeding cattle and sheep, generally in individual system. There are a few larger animal breeders (5 in Foeni and 2 in Cruceni). According to 2005 statistics, there are approximately 150 cattle heads, 1120 porcine heads, 5500 sheep heads and approximately 5000 birds.



Image 4 – The railway station in Cruceni

Transportation relates to roads infrastructure and Foeni commune's connections with other settlements. The commune's villages are connected to DN 59 B road (13.7 km). The connection to Timișoara is realised through DJ 693 road (3 km). There are also communal roads (DC 207 A and DC 207 B), of which 8 km are laid with asphalt and 7 km are covered with gravel. There is also a railway which connects Cruceni with the main city in the county, Timișoara, transporting travellers and freight. Through this transport system, the commune's settlements participate in the economic and commercial relations of the region. The roads are property of the Ministry of Transportations. The streets within the built-up areas are approx. 17 km long (approx. 9.5 km in Foeni and 7.5 km in Cruceni). Modernising the road from Timișoara to the border through Foeni, which is in the documenting phase, would re-activate the whole region, now in stagnation.



Image 5 – Town Hall and health centre in Foeni

The building of the Town hall is located in Foeni. Other important buildings are:

- Two health centres for humans (one in Foeni and a dentistry one in Cruceni)
- One veterinary health centre (in Cruceni)
- Three schools (two in Foeni – one with grades 1 to 4 and one with grades 1 to 8, and one in Cruceni – with grades 1 to 4)
- Two kindergartens (one in Foeni, with 40 children, and one in Cruceni, with 23 children)
- A cultural centre and a library in Foeni (in the Mocioni building)
- A post office, automatic telephone exchange (in Foeni)
- Two Orthodox churches in Foeni and a Catholic church in Cruceni
- Football club in Foeni
- Hunters' association

There are graveyards in both settlements, and in the Foeni graveyard one can find the Mocioni family mausoleum from 1900, present on the list of protected architectural monuments.



Image 6 – The Mocioni building, now a cultural centre and a library, and the Mocioni family mausoleum, both on the list of protected architectural objectives

According to data from year 2001, there are 606 houses, 404 in Foeni and 202 in Cruceni. Most of them have one floor and are built from cob brick. Because of the recent floods in the commune, approx. 410 houses (315 in Foeni and 95 in Cruceni) have been affected. Most of the buildings have been repaired and approx. 300 new houses were built.



Image 7 – Recently built house after the floods

The communal infrastructure only partly satisfies the inhabitants' needs. The water network is present in both settlements (19 km aqueduct – 10.5 km in Foeni and 3 km in Cruceni) and accessed by 625 users (395 in Foeni and 230 in Cruceni). Regarding the capacity, there are eight drilled wells for water supply (5 in Foeni and 3 in Cruceni). Besides the main water supply network, there are also approx. 40 private dug wells.

There is no sewerage system, but the residual waters are discharged in ditches and gutters. A filter sewerage system was designed, which would serve approx. 80% of Foeni and 40% of Cruceni, but funds are expected for its realisation. In the villages in Foeni commune there are no planned waste tips. Waste is deposited in inappropriate places which are not correspondingly equipped. The water and the expenses for collecting the waste are not paid directly by the citizens, but are financed through local taxes raised by the town hall.

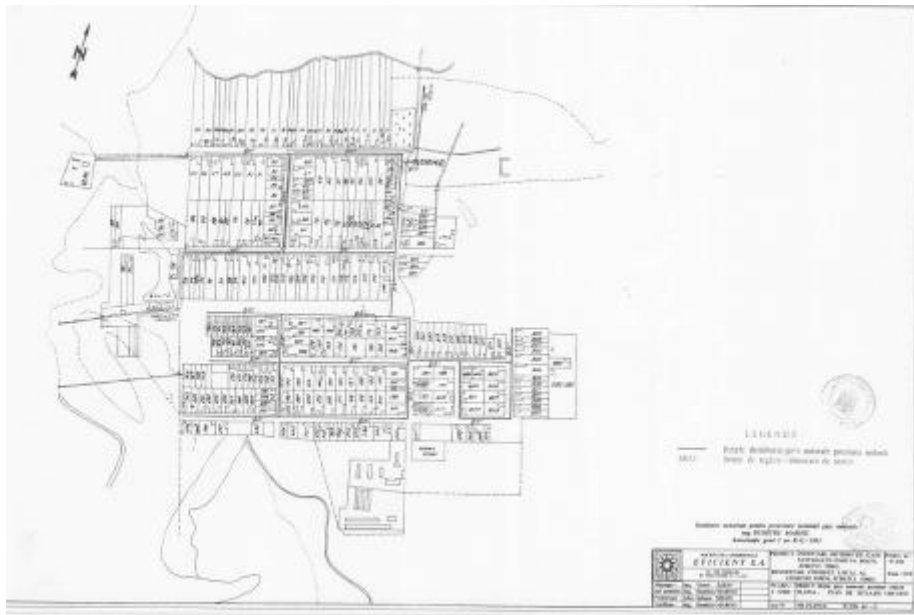


Image 8 – Schemes of the gas distribution networks in Foeni and Cruceni, from the connection to gas network project

Foeni commune is not connected to the gas distribution network which comes to the settlement's entry point. There is a project for natural gas connection of both settlements. The achievement of this project would solve the heating problem and gas could also be used in industry. For now, heating is realised exclusively individually, with solid fuel stoves.

In Foeni commune there are four architectural monuments present on the list for protected architectural monuments:

- The Mocioni building (castle) – now a cultural centre,
- House number 427,

- The brick bridge,
- The Mocioni family mausoleum.

The house number 427 was very damaged by the floods; one is waiting for its reconstruction. The old brick bridge was also much damaged.



Image 9 – The old brick bridge, present on the list of protected monuments