



Capitalization of Ornamental Rocks and Rural Development in Maramureş and Sălaj Districts

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In the present economical context, exploitation and capitalization of ornamental rocks can cover a wide range of usabilities and necessities, having a special importance, all the more so as in the world, ornamental rocks processing represents a specific branch in the economical structure of the countries.

The bowl of districts Maramureş and Sălaj is rich in different mineral resources which include many kinds of ornamental rocks represented by various petrographic types of magmatic, sedimentary and metamorphic origin (fig. 1).

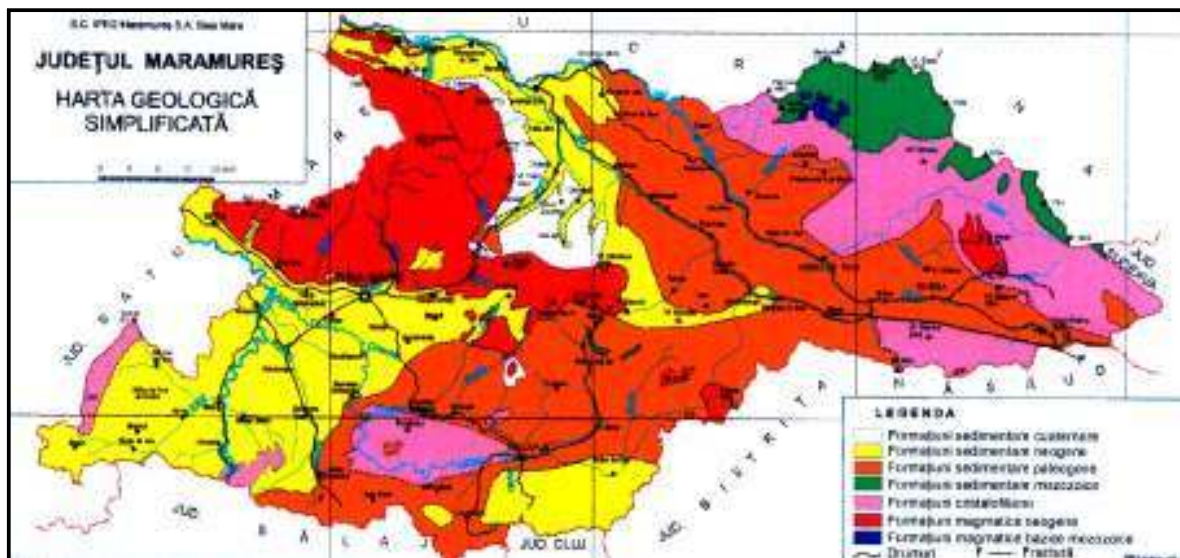


Figure 1. The Maramureş County. Simplified geological map.

Magmatic origin rocks belong, in majority of cases, to different types of andesites and in only one case to some mesozoic basic rocks.

Black andesites are the final products of neogene vulcanic activity, disposed in regions which were not affected by post vulcanic actions, being known under the name of Nero Dracula or Nero Zimbabwe.

Among the sedimentary origin rocks, limestones represent a category of great interest for the two districts due to the fact that they have a large chromatic spectrum and an important amount of useful rock.

Ornamental rocks of metamorphic origin are represented by crystalline dolomitic limestones from Preluca and amphibolitic bursts from Prislop and Chilința. Buteasa deposit accomplish all the geological and mining conditions for exploitation, processing and capitalization as ornamental rock.

On the other grounds of Preluca are also possibilities to continue geological research and begin experimental exploitations in order to extract blocks.

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For achieving this goal, the Preluca infrastructure has to be built, with priority over the approach roads and electrification. Without any doubt, Maramureș and Sălaj districts have a special natural potential in the ornamental rocks field, but yet barely capitalized.

Exploitation, processing and capitalization of ornamental rocks could become an important element in Maramureș and Sălaj districts development by implication of small and average companies in research and capitalization of the above mentioned grounds (fig. 2).

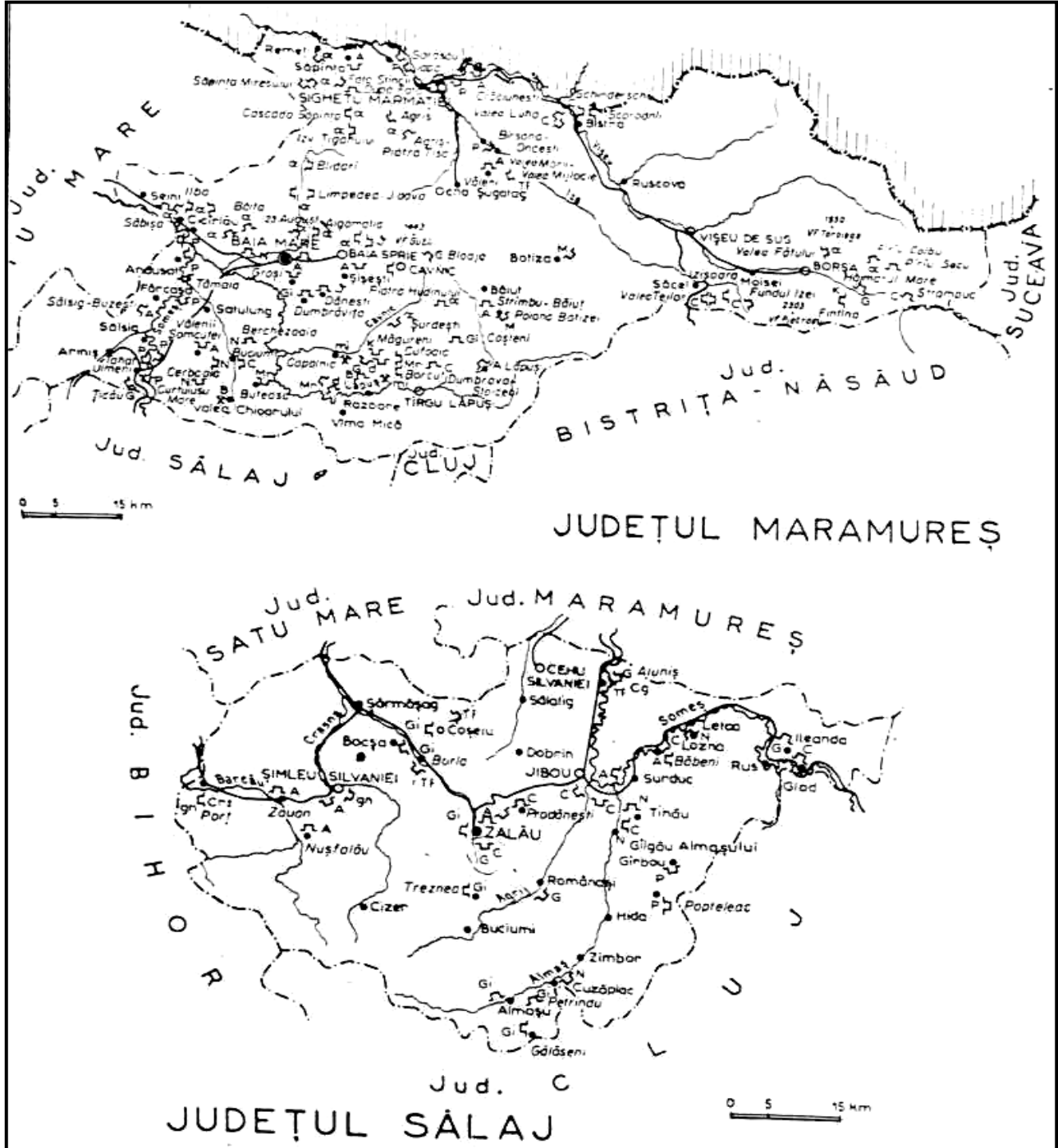


Figure 2. Exploitation, processing and capitalization of ornamental rocks could become an important element in Maramureș and Sălaj districts.

These actions would lead also to reactivation of available labour from mining sector, qualified miners from rural surroundings.

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Ornamental Rocks Use of the Maramureş and Sălaj Territory

Maramureş and Sălaj district to billeting in their basement numerous deposits of utils minerals substance variety and a rich assortment of ornamental rocks.

Decorative nature of this category of rocks its given of cromatic aspects, completing of different arrangement textural component of elements. Near this grade of cementary and slit, mecanical and physics characteristics, the final product quality etc. completed one domain with one well defined specific, in construvtions materials industry. Variety petrographic types, to belong to of this category of roks is big, and for that will presents in continuation, grouped, after petrogenetic criterion like:

- ornamentals rocks of magmatial origins;
- ornamentals rocks sedimentar origins;
- ornamentals rocks metamorphyc origins;

Ornamental Rocks of Magmatical Origins

Maramureş district representing one of the important volcanic area of Romania. In Sălaj district volcanic activity it was modest and is representate just dacide and tuffs.

Old Volcanic Rocks

a). Perimeter superior of field at Ruscova Valley (Glade under mountains it occupied of the volcanic complex in throughout appearance: basalts, diabases and dolerits.

b). Debricel-Inău (Târgu Lăpuş) perimeter is carrier of metaserpentins of green-grey colour and reticular structure.

Piroxenic Andesits Basaltoid Aspects

In Maramureş district the magmatic activity product is well presenting of basaltoid piroxenic andezites of black colour.

Black andezites its final product of neogen volcanic activity dispose in unaffected area of post volcanic proces and presents like as lava fields, doms, necks, flows, sills etc.

Rocks are known like comercial name, Nero Dracula, and has been very solicited, so plaque from different size and such colums, monuments etc. One product very similar existent on the world market is "Nero Assoluto", to proceed from South Africa Republic or "Nero Zimbabwe". Between perimeter deposits or by large possibilities to identification some of the structures valorificable as ornamental rocks of andezite piroxenic, we mention: Cavnice – Şurdeşti – Plopiş, Arcer – Țibleş, Grohote – Budeşti, Pereşti – Remeţi, Huta Vârf, Faţa Stâncii, Tăul Roşu – Paltin, Vârful Văratecului, Cioncaş – Cicărlău, Bolchiş, Valea Rea – Borşa, Oanţa – Budeşti.

Andesites with Amfibols and Biolit, Dacite

In Maramureş district: Dăneşti, Road Măriuţei – Ridge Cocoşului, Vârful Breze with 700 thousands tone. In Sălaj district: Moigrad and Mirşid with 250 thousands tone.

Piroclastic Products (Grit Stone and Volcanic Tuffs)

In Maramureş district: Bobocilor Valley – Seini, Bârsana, Şieu, Berchezoaia, Remeţi, Iadăra.

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In Sălaj district: Benesat in Horvat Valley and deposits Chilioara from Coșei village.

Ornamental Rocks of Sedimentar Origins

This groups are makes of variety of epiclastics rocks, disperead in different area associated like with alpin zone, such as platforms.

Limestone Sedimentar Rocks

Betwen ornamental rocks of sedimentar origin, from Maramureș and Sălaj districts the limestone represent a different cattegy of big interss, because of variet collors and important volume of useful rocks.

In Maramureș district is very important recifale limestone from the Mesteacăn, Curtuiușul Mare, Frânceni Hill from Frâncenii Borului; Mașca Hill from Răzoare – Târgu Lăpuș.

In Sălaj district eocen recifal limestone from the Răstoci and organogens limestone from the Letca, Cuciulat and Prodănești reprezent an big richness of underground the Someșani Platform, the volume of resources all owed to organising an efficient exploatation in every perimeter.

Detritic Sedimentar Rocks

In Maramureș district are represented as silicous from Trestia – Bloaja and limestone gritstone from the Fântâni Valley – Buciumi, Tabla Tăieturii and Vălenii Șomcutei; Moșuțului Hill and Pielor Coast – Curcuiușul Mare; Idirea Valley – Remeți.

In Sălaj district we mention limestone grit deposits Aluniș – Benesat and future zone Ciumârna – Românași and Zalău.

Ornamental Rocks of Metamorphyc Origins

They are situated in Maramureș district and they are represented as cristalin dolomitic limestone from the Preluca Massive and amphybolit perimeter from Curmăturii Valley – Prislop and Ingustului Valley – Chilința.

Carbonatic Metamorphyc Rocks

Crystalin dolomitic limestone to develop betwen west Buteasa and Grădinarilor (Inău) Hill at east and shape a continous structure with NE – SW direction.

As carbonatic metamorphyc rocks which has surely quality ornamental and another points of the deposits geo-miner view to carry out conditions to has been exploryng in blocks of size enough big for to be process industrial, we mention marble from the Buteasa perimeter.

From the cristalin dolomitic limestone category from the Preluca Massive who presents for the future are some of the Aspra – Lacului Valley perimeter; Custura Vimii – Hijului Bridge; Afinișului Valley – Pietrii Hill; Bridges Vimii, Borcut, Cornilor Hill (Inău); Răzoare.

Amphybolitic Metamorphyc Rocks

Amphybolitic rocks presents special ornamental quality. In Maramureș district forming modest absorbing in Curmăturii Valley – Prislop and Ingustului Valley – Chilința.

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Conclusions

In the actuality economic context exploring and utilization deposits ornamental rocks and cover a large domain utilization necessary, to present special importance as more as global plan processing ornamental rocks to outlining as to disting branches in economical structure of contries. At first Italy, Spain, Greece developed with great benefits this domain, as today big countries like India, Chines, Brasil and others obtain spectaculary rezults in increasing national income, trough expointation and processing ornamental rocks. All ready exist a world market of ornamental rocks well structurated, with centre in Verona and Nürnberg.

In world production the leader is Italy, having from 23 % percent of total production.

In figure 1 preseting the countryses with high percent from 0,5 % of total production.

Romania its a rich country in mineral resource it lays hardly at the beginning of descovery and utilization reserves of ornamental rocks, they production in extract processing industry, representing just 0,0035 % of world production of year 2000, unsignificantly for remember in the internationale current statisticts.

Underground of Maramureş and Sălaj districts is rich in variety mineral resources suchas and a rich sortiment of ornamental rocks representing from petrographycs types variated, of volcanic origin, sedimentar and metamorphycs.

The magmatycs origin of rocks they are in mostly cases different types of andezite and some of a singular case some mezozoic basics rocks. Andezites, dacites and piroclastic products is located in bundle with neogen volcanic rocks, respective in west part of Gutâi Massive, while bazalts and dolerits, in bundle with intrusion some basics magma in superior field of Ruscova River.

Black Andezite are final product of neogen volcanism ready in unaffected zone of manifestation of the post volcanic processing, the rock known under comercial name Nero Dracula and Nero Zimbabwe, requising such as the plaque forms as like for columns, monuments etc.

Dacites, piroclastic gritstone and volcanic tuffs of the basement of Maramureş and Sălaj districts, could be extracting and utilisation economic.

Between ornamental rocks of sedimentar origin, limestone represents a very large interest and a category for the both districts, because of large cromatic and an important volume of useful rock.

Ornamental rocks of metamorphyc origin are reprezented of crystalin dolomitic limestone from the Preluca Massive appearance of amphybolit from the Prislop and Chilința. Deposits Buteasa to carry out all condition geo-miner to be exploatated proccesing as ornamental rock.

In other perimeter from Preluca Massive are possibilites, with to continuing geological researching and begining some experimental exploatation and to extracting industrial blocks. For reach this in Preluca zone must be building infrastructure, which priority acces roads and electrification.

Is no doubt the Maramureş and Sălaj district has a natural potential specially in ornamental rocks domain, bat still very little valorificated.

Geological research in the last fifty year to centred specialy on research potential of minerals, coals, oil and some mineral substance useful unmetallic, necessary for the big industry. Resource of ornamental rocks has been incomplet research and superficial now feel to reevaluation existing resources and to continue the geological research.

With the all difficult situation in with they are economy the process of the structure of research activity and utilisation ornamental rocks with distinct branch in country economy it begins. The big small and middle companies appear in last years to keep step in intern competition and to become competitive in world market.

An important components in rural developing a Maramureş and Sălaj districts could be becoming exploatation, processing and utilisation ornamental rocks, with in value of small and middle companies in research activities and to make in value a this deposits.

This actions leading to created new jobs for miner and for the qualiflicated workers from rural environment.