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**"A VISION OF SUSTAINABLE - MOUNTAIN - DEVELOPMENT FOCUSED ON THE
VALORIZATION OF QUALITY "MOUNTAIN PRODUCTS". THE INCREASING
IMPORTANCE OF MOUNTAIN AREAS IN THE POST-COVID-19 CONJECTURE"**



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PART I:

The ADVANTAGES of the MOUNTAIN AREAS and AGRI-FOOD “MOUNTAIN PRODUCTS” - for MITIGATING/COMBATING the EFFECTS of the COVID-19 PANDEMIC - on the POPULATION’S HEALTH.

• MAJOR CONTRIBUTIONS, for PREVENTING the EXPANSION and APPARITION of NEW VIRAL FORMS – with SIMILAR EFFECTS – through:

1. Territorial location of farms/households, mountain villages/settlements.

• The increased spread, with increasing altitude, isolation and a (partial) economic independence, **significantly reduce** the chances of infection and spread of COVID and other diseases.

2. The unpolluted air in the mountains is a supporting factor for the health of the inhabitants and the urban population who travel, periodically, to the mountains (unlike urban agglomerations, exposed to pollution).

3. Drinking water: unpolluted, good quality, for PEOPLE and ANIMALS. It includes mineral and flat waters, with rich resources in the Romanian Carpathians.

4. The ozone layer and solar radiation, with static or harmful bacterio/virus effects.

5. The aerosols from coniferous and deciduous forests, which help treat and prevent respiratory diseases (associated with COVID) and maintain human health.

6. Agri-food “mountain products”, in **ZERO-CHEMIZATION** conditions.

It is a factor of the greatest significance, for supporting the combating/mitigation of the effects of pandemic/endemic aggressions, current and future - by preserving/improving health for the people in mountain areas (farmers, communities), with major contributions for the urban population as well.

CONCLUSIONS

The “**mountain product**” represents a **NOVELTY at EU and world level** (with a Romanian contribution) and a **new OPPORTUNITY/CHANCE to SAFEGUARD a large socio-economic segment of Romania** (> 30% of the territory/20% of the population), **marginalized** for the last 30 years¹.

¹ R. Rey – The books “Future in the Carpathians” (1979), “Mountain Civilization” (1985), “The mountains and the 21st Century. Comparative study of European strategies on mountain areas, with special reference to the area of the Romanian Carpathians. M1-SEE plan” (2011/2014 – reissue).

• **The COVID-19 pandemic highlighted the considerable importance of the mountain area, in the economic and social ensemble of Romania and the European Union.**

The “mountain product”, according to EU/EC Regulations 1151 and 665 and the current Romanian legislation, represents **an agri-food product of the highest quality** (dairy, meat, vegetables), achievable exclusively in the natural conditions of the mountain area;

- is obtained in conditions of **ZERO CHEMIZATION** through the **polymorphic flora of the natural mountain meadows** (multivitamins, mineral salts, the intake of medicinal plants). Animals are raised “free-range” (elimination of toxins through perspiration, with clean water, without stress...). **The products obtained do not contain preservatives, dyes, E-s, etc.,** with cumulative effects that are unsafe for health.

At the National Mountain Area Agency (NMAA) is evolving the **“Registry of Mountain Products”, certified (>1,100 mountain farms/July, 2020).**

• Mountain products are **more difficult** to obtain, with **lower** yields and in **harder** working conditions for mountain farmers, an aspect that justifies **the need for a satisfactory MOTIVATION for producers,** essential for the young generation.

The organization of the production, collection, transformation and capitalization of “mountain products” is **A GREAT OPPORTUNITY for a SUSTAINABLE FUTURE for the mountain areas - AMPLIFIED by the COVID PANDEMIC.**

The first beneficiaries of the “mountain products”: all those **IN THE FRONT LINE:**

- COVID patients.
- medical and adjacent staff involved in combating/preventing the pandemic (today and for the future).
- MIA staff (police, gendarmerie).
- the military personnel involved.
- children.
- people with great responsibilities in leading the country (good health, ensures resistance to stress and an **optimistic** attitude).

Organizing a **warehouse(s) of “mountain products”,** with distribution **dedicated** especially to **CORONAVIRUS patients and the medical and adjacent staff, from the front line. State support for motivating producers (farmers) of “mountain products”, through compensatory, attractive prices, provided when receiving products in warehouses (contracts).**

CONTRIBUTIONS of the RESEARCHERS from CE-MONT/INCE; SCIENTIFIC PERSONALITIES and SPECIALISTS “ASSOCIATED” with CE-MONT.

- **Representative factors in the mountain area: mayors; GAL; entrepreneurs; NGO – for**

**MITIGATION of the EFFECTS of the COVID-19 (PANDEMIC) EPIDEMIC and for the RECOVERY of the POST-COVID-19 MOUNTAIN ECONOMY
Selections – IDEAS – PROPOSALS**

- Outlets, specialized in “mountain products”, in supermarkets and markets (separate spaces, easily identifiable).
 - Online digital platforms for promoting and selling “mountain products”.
 - The involvement of courier companies to operate in hard-to-reach mountain areas.
 - Sustainable regeneration projects, with the production of masses of raw materials (e.g. fruit growing, arboriculture).
 - Attracting **motivating** investment funds for the return to the country of young mountain farmers.
 - Preparation of human resources for specializations/vocations, administration - with application in mountain areas.
 - Mobile shops for “mountain products”.
 - No taxation - during the production processes of “mountain products”.
 - No taxation of mountain farms, which are part of a cooperative, for 10 years.
 - A diet specific to the period of isolation (current - insufficient).
 - The concept of “GLOCALIZATION” – “pioneering” through government policies.
 - Priority: safe foods to boost immune function.
 - New research: foods with antiviral potential (tannins, “concentrated” residues/extracts).
 - **COVID highlighted the high value of small mountain households/farms - as a mechanism of economic security and social protection.**
 - Research results: **1 cubic meter** of air (**mountain**), includes up to **5,500 microbial germs**; in a hospital - over 10,000; in houses - up to 20,000; in a crowded office - up to 5,000,000; in a **hypermarket** - up to **9 million (!)**.
 - Elaboration of a digital GUIDE for continuous protection, monitoring - of the health of the environment, in the context of COVID-19.
 - “Pilot” project – “**smart mountain areas/smart mountain villages**”.
- Digitization of socio-economic activities in rural areas.
- New innovative renewable energy systems.

- Training a new generation of scientists, entrepreneurs, specialists, for the mountain area - involvement in the knowledge transfer.

• Strengthening the decision-making capacity of state authorities - through access to a geographical-medical database: an interactive, online ATLAS.

“Associated” CE-MONT factors.

• **Type II diabetes** - frequently associated with COVID-19 (~2 million patients in Romania). Restoration of beta-pancreatic cells via active substances in **nature** (creatinine). **Patented drug (new)** – “INSUVEG” and INSUVEG-FORTE (O. Bojor).

• Environmentally friendly agricultural technologies. Specialized breeds for the mountain area: cattle, sheep, goats.

• The online market avoids “working in vain” (better prices for “mountain products”).

• Organic crops: blueberries, raspberries, lavender, vegetables.

• The mountain household/family farm **is a holy, miraculous institution.**

• **Measures:** creation of a program on the SME-Invest model - for 500,000 mountain households (starting capital - for “mountain products”).

- Tax facilities - associations, mountain cooperatives, which capitalize on “mountain products”.

- “Border” agricultural roads and electrical networks, for the **new farms, outside the inhabited areas.**

- Models of **circular bioeconomy** (capitalization of all resources - grass, forest, water, stone, clay - jobs, stability, well-being).

- Scholarships and facilities for young people in villages.

- The “key” to local development = the mountain household/farm.

• **“Inter-ministerial group”** for managing the **food crisis** – that will follow post-COVID (UN).

• The mountain = **recognition as “national heritage”**. The mountain's resources are scattered in **“disarray” (MEWF), and NMAA is an “orphan” at MARD.**

• **Necessary:** a single Ministry of Mountains, Waters and Forests.

• Intelligent **habitable** infrastructures.

• Long-term **storage and preservation network.**

• **Air mobility** facilities.

• **The state - co-partner.**

• **State tax relief: closed circuit.**

- **Research proposals:** “Treatment and profitability of **wastewater** from **households/farms in the mountain area.**”
 - Adapted agricultural machinery - **subsidized.**
 - Strengthening the concept of MOUNTAIN “**GLOCALIZATION**”; “**Mountain product**” brand;
 - Creation of **financial support programs for family farms in the mountain area** (eg 50,000 euro/farm, according to EC decisions - 2020) and their organization into **cooperative associations.**
 - **Development of the “Investment Fund for Mountain Farms” initiative.**
 - **State guarantees** and financial support from the European Investment Bank.
 - Allocation, from the National Environmental Fund (AFM), of 20% for investments in the mountain area with an impact on the environment.

PART II:

INTRODUCTION to the ISSUES of the MOUNTAIN AREAS. The MOUNTAINS - in EUROPE and the WORLD

Globally, the mountains cover more than 25% of the earth's surface, inhabited by more than 12% of the world's population (about 720 million inhabitants, of which 270 million, mostly rural, are vulnerable to food insecurity, and about 135 million are in conditions of chronic starvation).

Mountain ecosystems are reservoirs of biodiversity, an essential source that provides the **water** necessary for life, most minerals, wood and building materials, high quality agri-food products obtained through intense human physical effort, a source of recyclable energy, vegetation being a great filter for carbon dioxide, and a major food source, as well as an exceptional cultural diversity and a remarkable capacity for innovation for the - essentially rural - local population.

At the same time, the mountain regions have geo-climatic-economic, traditional-cultural conditions, etc. of great diversity, and are among the most exposed to climate change, erosion and other forms of environmental degradation, and the populations produce their food with difficulty, on poorly fertile lands, being often engaged in conflicts.

- The United Nations Conference on Environment and Development in Rio de Janeiro (June 1992) addressed **sustainable mountain development,**

for the first time in human history, in a distinct way, on a global scale (Agenda 21. Chapter 13 - Mountains). It was agreed that by the year 2000, plans would be drawn up for land use and the management of mountain basins, **creating opportunities for mountain dwellers to ensure their livelihoods** using local resources, and **governments** were going to take on responsibilities: to provide mountain people with **incentives** for resource conservation and the use of environmentally friendly technologies, to help them understand the phenomena of sustainable mountain development through involvement in resource management, especially renewable ones (forests, grass, animals, human food producers - farmers); to provide information on ways to earn a living through plant resources, animal husbandry, beekeeping, fruit growing, tourism, rural industries, etc; to create training and information centers on mountain ecosystems - generating **skills** on viable agro-animal husbandry; to create protected areas, etc.

One consequence was the creation of the **first World Mountain Forum**, organized under the auspices of the UN-UNESCO-FAO-UNDP-World Bank-European Commission, with over 800 representatives, **including from Romania**.

The inaugural speech of the President of the French Republic, **Jaques Chirac**, had the theme "**The international community and the mountain**", and was aimed at **mobilizing the means for the profit of mountain countries and territories, the Forum being meant to prevent and combat the marginalization of the mountain:**

- **politically**, recognizing the **difficulties** endured by mountain populations and highlighting the **advantages** of the mountains;

- **economically**, to take into account the **particularities of the mountains** and the harmonization of a **type of liberalism** that **does not generate destructive effects**;

- culturally and humanely - to **preserve cultures** and allow mountain communities to express themselves;

- regarding the **environment - mandatory protection for flora, fauna, water, correlated with the needs of mountain populations.**

Mountain farming and shepherding are indispensable for all other economic developments in the mountains.

In Europe, in places where agriculture has disappeared, NOTHING else developed.

- **Scientific research** has discovered in the mountains a new place to focus on and develop. Productivity in mountain agro-animal husbandry represents **approx. 30% compared to the plains**, and **mountain farmers cannot be held responsible for the difficulties they have to endure.**

- Mountain areas need to **have control over their environment and natural resource management**, remaining aware of the need for management not only for their own needs, but on behalf of the national and global community.

The World Mountain Forum marked **the start of a global movement in favor of mountains and mountain populations, with clear messages to governments**, the final goal being a **“mountain policy” at the global, continental and state levels**.

- At the **World Summit on Sustainable Development, Johannesburg - 2002 - the policy framework for the mountains** was recognized **through the Implementation Plan (Chapter 13, Agenda 21 - “Sustainable Mountain Development”)**.

- **Quinto 2002 - World Association of Mountain People (WAMP)**: a global reflection on the future of the mountain - the adoption of the **World Charter of Mountain People**.

- **In the EU**, the non-governmental organizations **“Euromontana”** and the **European Association of Elected Representatives from Mountain Regions**, have worked hard for the people and the mountain environment.

The UN initiative, through the International Year of the Mountain - 2002, intensely celebrated in Romania too, was completed by the creation of the **“Mountain Partnership”** -international, with the secretariat at FAO-Rome. Romania became the 33rd member country in the MP. The Council of Europe/CLRAE, initiated the **“European Charter of Mountains”**, and **Romania (NMAA) was selected to carry out a sustainable mountain development project for the Carpathian Mountains chain** (awarded - author R. Rey), a support for the **“Carpathian Convention”**.

The **European Parliament** generated the **“Ebner Report”** on mountain areas in the EU and the **Jitova Report (2016)** - now the **EP Resolution, calling on the EU Council and the European Commission - to start a separate EU mountain policy with an implementation Agenda**. **Decisive is the interruption of the exodus of young mountain farmers, an extremely serious phenomenon in the East**, where it is necessary to create **specific institutions and laws**, through which to make a **“mountain policy”** at **national level** together with the **mountain farmers** (Joseph Präll - Federal Minister for Agriculture - Austria).

Vigilance is needed especially in the new Eastern countries, which have poor economic and infrastructure development” (Herwig Van Staa, Governor of Tyrol and President of the CLRAE).

- **“The need for the continuation of mountain farming and the existence of mountain populations is indisputable”.**

● **“In order to not destroy what we have, we need flexibility and a lot of respect”** (President of the Farmers' Association of Vorlberg - Austria, **E. Schwarzer**).

A successful initiative of “Euromontana” is the **“European Charter for Quality Mountain Food Products”**, to which **Romania has contributed (NMAA/RMF)**.

The Charter specifies the need for viable mountain economic activities to be based on a **VIABLE MODEL** of MOUNTAIN AGRICULTURE.

Mountain areas in Europe²

● **Brief analysis (in comparable terms):** Austria, Belgium, Bulgaria, Czech Republic, Switzerland, France, Finland, Germany, Greece, Italy, United Kingdom, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Ukraine;

The following were taken into account, comparatively: spatial size, proportions of mountain areas, some national findings, the mountain population and its proportion in each country as a whole, and aspects that reflect the importance of mountain areas.

Map with the main European mountain ranges



² 2008

**Table no. 1: Mountain population in some European countries
(ranking by proportion of mountain population)**

No. crt.	Country	Total population (no. of inhabitants)	Mountain population (no. of inhabitants)	Proportion of mountain population to total (%)
1	Italy	56,095,135	18,267,183	32.6
2	Spain	40,738,016	15,684,136	38.5
3	Germany	81,944,737	8,254,700	10.1
4	France ^{xx}	58,255,213	7,633,595	13.1
5	Switzerland	7,287,145	6,132,208	84.2
6	Romania ^{xxx}	22,236,918	5,535,706 ^{xx}	24.9 ^{xx}
7	Greece	10,817,789	5,365,931	49.6
8	Austria	8,024,449	3,993,337	49.8
9	Bulgaria	7,973,671	3,637,787	45.6
10	Norway	4,503,436	2,854,051	63.4
11	Portugal	10,356,116	2,741,590	26.5
12	Slovakia	5,401,316	2,624,492	48.6
13	United Kingdom (UK)	58,051,191	2,475,935	4.3
14	Czech Republic	10,215,299	2,385,905	23.4
15	Poland	38,632,453	2,255,261	5.84
16	Ukraine	49,588,000	1,980,000	4.0
17	Slovenia	1,992,035	1,293,298	64.9
18	Hungary	10,246,939	709,239	6.9
19	Finland	5,194,902	624,184	12.0
20	Sweden	8,901,038	615,343	6.9
21	Ireland	3,917,203	101,903	2.6
22	Cyprus	690,253	98,995	14.3
23	Belgium	10,263,414	83,256	0.8
24	Luxembourg	439,539	6,787	1.5
TOTAL POPULATION – including Switzerland		511.678.207	94,049,746	Average: 18.5

(Source: EUROSTAT NewCronos data 2000)

Table no. 2: Area of EU mountain areas, including Switzerland (ranking by mountain size)

No.crt.	Country	Mountain area surface (thousand km ²)	Proportion of the total area of the country (%)
1.	Norway	295.86	91.3
2.	Spain	281.61	55.7
3.	Sweden	227.70	50.6
4.	Italy	180.78	60.1
5.	Finland	166.08	50.8
6.	France*	138.64	27.0
7.	Greece	102.98	77.9

^{xx} Exclusively DOM

^{xxx} After the official delimitation of the mountain area, in acc. with EC criteria – Rez.1257/99, rev., Romania has 3.6 mil. mountain inhabitants – representing 15.4% of the total population (2004).

* Exclusively DOM

No.crt.	Country	Mountain area surface (thousand km ²)	Proportion of the total area of the country (%)
8.	Romania** Romania***	90.24 74.00	37.9 32.7
9.	United Kingdom	62.56	25.5
10.	Austria	61.51	73.4
11.	Bulgaria	54.80	53.3
12.	Germany	52.59	14.7
13.	Switzerland	37.46	90.7
14.	Portugal	36.14	39.1
15.	Slovakia	30.37	62.0
16.	Czech Republic	25.41	32.3
17.	Ukraine	22.10	3.7
18.	Poland	16.18	5.2
19.	Slovenia	15.81	78.0
20.	Ireland	7.44	10.6
21.	Cyprus	4.40	47.6
22.	Hungary	4.37	4.7
23.	Belgium	1.29	4.2
24.	Luxembourg	0.11	4.4

Table no. 3: Areas and mountain populations in the countries newly acceded to the European Union (EU-27)³

No. crt.	New EU member state	AREA			POPULAȚIE		
		Total area (thousand km ²)	Mountain area (thousand km ²)	Proportion of the mountain area to total (%)	Total population (no. of inhabitants)	Total mountain population (no. of inhabitants)	Proportion of mountain population to total (%)
1	Romania*	238.40	90.24	37,9	22,236,918	5,535,706	24.9
2	Bulgaria	101.74	54.80	53,3	7,973,671	3,637,787	45.6
3	Slovakia	48.99	30.37	62,0	5,401,316	2,624,492	48.6
4	Czech Republic	78.79	25.40	32,3	10,215,299	2,385,905	23.4
5	Poland	311.44	16.80	5,2	38,632,453	2,255,261	5.8
6	Slovenia	20.27	15.81	78,0	1,992,035	1,293,298	64.9
7	Cyprus	9.23	4.40	47,6	690,253	98,995	14.3
8	Hungary	92.48	4.37	4,7	10,246,939	706,239	6.9
9	Estonia	0	0	0	0	0	0
10	Letonia	0	0	0	0	0	0
11	Lithuania	0	0	0	0	0	0
12	Malta	0	0	0	0	0	0
TOTAL		901.24	142.09	36.11	97.388.884	18,537,683	19.03

** According to the official delimitation of the mountain area - EC criteria - 1257/99, rev. (2004).

*** According to the study of the European Commission/NordRegio

³ Source: Radu Rey - The book "The mountains and the 21st Century. Comparative study of European strategies on mountain areas, with special reference to the area of the Romanian Carpathians. M1-SEE plan", "Electra" Press - 2014.

There are common elements that give the mountain specificity in general, but which fragment into multiple forms of local specificity.

For example:

Austria - with 73% mountain territory, it has developed its own national policy, with the regional policies of the Länder having a lot of autonomy and in addition a good subregional organization of district type (bezirkuri/ districts) which facilitated, including at political level, the **expression of local specificity** - the results being recognized in the exceptional evolution in cattle breeding and agrotourism/rural-mountain tourism, in the mountain demographic and agricultural stability.

France (with about 33% mountain areas, similar to Romania) - has evolved in the mountains along the lines of **professional organizations, cooperatives** and **small processing industries** (cheese, sausages, fruits) depending on areas and traditions, under the protection and encouragement a **Mountain Law** (1985), but also by **adapting to local mountain conditions**, very different in the Maritime Alps, the Central Massif, Ceveni, Pyrenees, Vosges or Jura. **Special** programs have been implemented in areas with special difficulties, e.g. in Morvan. **The National Mountain Council** - led by the **Prime Minister and regional councils** - ensured the much-needed **authority and continuity**, and a “**mountain massif**” **regional policy** made an important contribution.

- **Knowledge of and taking into consideration the elements of mountain specificity is an absolute necessity** for establishing local realities that make permanent and consolidate viable economic and social systems. Thus, **it becomes extremely important especially for the countries with mountains in South-Eastern Europe** that, firstly, **the scientific montanological research studies and decides on viable solutions**, which take into account regional or local particularities and which can generate **decisions with added value**.

- **A policy in which decisions for the mountains are made outside the mountains becomes risky**, especially in EU countries with insufficiently consolidated economies.

- **Economic development** is another component of intermountain **differentiation**.

A first differentiation of the level of economic development in the mountains is found **among the Western European countries much more advanced than the visibly left behind Central and Eastern European ones**, especially in the field of **agriculture and basic infrastructures**. In mountain agriculture - the democratic West has built for half a century the **consolidation of peasant households** while the totalitarian East practiced policies to **systematically weaken** them, with historical consequences.

• **Romania** - with the largest mountain range in Europe found inside a country - did not support collectivization in the mountains, but was left with a very low level of technology in peasant households. Post-1990 economic phenomena, including excessive liberalism, with ridiculous prices for mountain products, milk and meat, raw materials, the collapse of the price of wool, outside the protective control of the state and intensely polarized economic interests, other conjunctural elements (focus exclusively on the large-scale agricultural area, ecological exaggerations accompanied by unrestricted and uncompensated restrictive measures for livestock farmers, industrial and job dissolution, or objectives (ignorance, lack of expertise in the field, lack of specialists, of research, of specific institutions, the lack of organization of farmers, their distrust, the absence of models, as well as the size of the mountain territory and the financial austerity of the moment, the weak awareness and insufficient political will, etc.). All these and many others have amplified the state of poverty, caused the discouragement of the young generation and, once borders were open for free travel, a phenomenon of rural mountain exodus was installed, accentuated after Romania's accession to the European Union.

The efforts that have been made, however, in the fields of specific institutional creation, of training the young mountain farmers and agricultural specialists, of scientific research, as well as the creation of the specific legal framework, the realization of pilot stations and some weak measures of differentiated mountain policy in agro-animal husbandry and environmental protection measures, etc., a favorable evolution in agrotourism, are to be taken into account, but they were punctual, completely insufficient for counteracting or at least slowing down the exodus of rural mountain youth.

• Multiple interests have intervened brutally, discouraging fragile development initiatives.

• The differences in technological equipment in mountain agriculture are especially evident between the EU15 and the East (left far behind).

• After 1990 - some efforts to modernize and adapt to the specifics of the mountains began - but inconsistently and unevenly.

The Phare and SAPARD programs of the World Bank, bilateral support initiatives (Germany, France, Switzerland, etc.) have created pilot stations and some forms with reproducible value but the tendency to marginalize mountain agriculture remains strong (at the Ministry of Agriculture and in general) and the multiplication of good models is delayed.

• Newly joined countries with mountains and with a low and very low level of mountain development have primary stage requirements of the mountain development process, in many ways: basic infrastructure,

modernization of agri-food structures, specific education; the creation/consolidation of specific institutional and non-governmental organizational structures, of a favorable legal framework, awareness of the political and civil society potential, etc. Romania, with a vast mountain area and agricultural traditions, is facing **a massive and growing exodus of mountain rural youth and agricultural abandonment**, simultaneously with the **aging** of the active agricultural population, the requirements being targeted at **safeguarding interventions** that are not possible without **targeted and consistent community support**.

EU-27 and the mountains

The accession of the 12 countries to the EU-15 meant **an increase of approx. 18.5 million people in mountain areas, with unavoidable impacts**.

Undoubtedly, from this mountain area came **new values and opportunities, as well as new challenges**.

For mountain populations, with priority for the ones rurally and agriculturally active, the changes generated by the “transition” period and after EU accession were both beneficial and dramatic, with great socio-economic complications.

A common trend for EU-27 countries is **the more and more insistent demands** from the EC for the development of a **strategy on mountain areas in the European Union** and the pursuit of a **common mountain policy**, focused on **financial support and compensation** in an active growth process, agricultural policies playing a major role in this.

A EUROPEAN MOUNTAIN STRATEGY / Other aspects of interest

A flexible community mountain strategy, adaptable to diversity, on the principle of subsidiarity and with adaptations to local contexts for socio-economic cohesion, with effective support for countries with emerging economies left too far behind, is what is being “awaited” during the coming decades (Horizon 2021 - 2040).

The foundation for the whole chain of mountain economic and social factors is represented by the **conditions of production and decent incomes** - which **target people's lives directly**.

- **The harsh mountain conditions, with the slope, the low soil fertility, the climate - condemned the inhabitants of the mountains to a modest, hard-earned existence, but their daily work also contributed to the conservation of a wide variety of landscapes.** Mountain **agriculture** not **only** plays **an economic role** but is also the **basis** for **many sectors** that use mountain resources, of vital importance, directly or indirectly.

Agriculture will remain the “**engine**” of rural mountain life, there being no need to separate traditions, and in the new CAP reform **financial compensation and assistance** for **high quality** products, as well as appropriate legislation, are required to be **included, amplified**.

SOME TRENDS regarding the mountain area in Romania - with significance for other mountain areas in South-Eastern Europe*

The path of the last 20 years (1990-2010) to build a concept that would be the basis of a strategy for the sustainable development of the mountain area and concrete applied mountain policies - was faced with **unpredictable and often insurmountable difficulties** in conditions **specific to Romania** after the fall of communism.

The **National Mountain Area Commission**, established in 1990 within the Ministry of Agriculture, represented not only a conquest of the “Revolution” of 1989 but a **pioneering structure**, unprecedented in the history of Romania. A specific structure, in a society devoid of any exercise in this field, avant-garde of private property (mountain areas being uncollectivized) thrown into the “wasp hive” of a ministry and a county network of agriculture full of technical specialists and politicians trained and practiced for the great socialist agriculture of the plain and hilly areas, collectivized, and for the state agricultural enterprises.

A capitalist-excessive practice, which continued even after Romania's accession to the European Union, was enhanced by its **monopolistic** character, with the **elimination of any competition** (e.g. it reached the price of 0.40 lei - 0.50 lei for a liter of milk - the equivalent of more than 10 l of milk for 1 Euro - in 2009/2010).

Also worth noting are **the block towards the approach of the western associative-cooperative system as well as the absence of energetic protection measures** from the only entity that would have had the intervention levers - **the Romanian state**. This created a **cumulative situation** - whose **first victim became the animal breeding farmers**, from the mountain area, and **their response of great political significance** was not a mountain uprising but **the agricultural ABANDONMENT and the massive migration of young people from mountain villages to cities and abroad**.

● Since 1990, the value of the initiative in favor of the mountain areas in Romania has been understood in several European countries, thus the **Romanian Mountain Area Commission** has entered into **useful relationships**

* The author of this paper was the first President of the Romanian Mountain Area Commission and later the general director of the National Mountain Area Agency (1990-2002).

with governmental and non-governmental structures in Western Europe: **France, Switzerland, Germany, Austria**, etc. - but also with **international** bodies such as **the Council of Europe, the European Commission (Phare), the World Bank**, respectively with **large European mountain organizations** such as **Euromontana** and the European Association of Elected Representatives from Mountain Regions (**EAERM**) or with national organizations (**SAB-Switzerland, UNCEM-Italy, FFEM- France, or with the French Ministry of Agriculture and Forests, the German Ministry of Economy (GTZ), the Council of Europe - CLRAE**, etc.), with which it cooperated, and with whose professional, moral and financial support, received and used with enthusiasm by the first specialists of the mountain rural economy, it implemented mountain development projects, with vocation of **pilot stations**, some storing **multiplication values**.

Both theoretically and practically, a real leap has been made in the construction of a system close to those in the countries with mountains of the European Union.

The multiple political changes that took place in Romania **were not favorable to the mountain**. In each **new government**, the new ministers or state secretaries of agriculture, without competences in the very specific and complex issue of the mountain, **continued to marginalize, especially the mountain agro-animal husbandry**, did not take into account the recommendations of non-governmental organizations and scientific structures - so there has been a **real crisis in the mountain agro-rural economy, including an institutional one** - the serious effects being **the radical reduction of cattle and sheep numbers and organic fertilizers, the degradation of mountain natural meadows and especially the massive exodus of the rural mountain population with the permanent abandonment of agricultural activities**.

THE MOUNTAINS AND THE 21ST CENTURY. Romanian Carpathians reflections and realities

At an increase in sea level, due to climate change, **approx. 600 million people will have to flee the waters - inland**. But where? In the cities already so crowded? In the plains undergoing an increasingly intense chemization race - for the production of cereals and other vegetables essential for feeding large masses of people? How long can industrial agricultural solutions be extended without directly impacting the environment? According to the existing reports, it is shown that in the last 7 of the last 8 years, cereal production has failed to cope with consumption and cereal reserves are about to reach an all-time low... At this point, a new connection is made with **A NEW**

ROLE OF THE MOUNTAINS, including **the great Carpathian mountain massif** characterized geoclimatically by **the ability to provide food and space for human habitat**.

But things are intrinsically linked to **the exponential demographic evolution, with 9 billion certain inhabitants at the horizon of the 2050s** - a fact that brings to the fore and above all, **the great problem of human food**. The current focus is on **renewable energies** and the mountains are a wellspring of such energies: **water** – by using gravity, **grass, wind, forests** - with their multiple role, but also the **human and animal energies** which are also renewable.

As new areas of human habitat, the mountains are a “**reserve**”, but it must be understood that urban or rural populations in the plains **are not fit or have a weak capacity to practice a specific mountain agriculture based on extensive animal husbandry** - at the level that native mountain populations, which have a higher amount of hemoglobin in the blood due to the scarcity of oxygen with altitude, a **condition for resistance to prolonged exertion**, can have - as well as the ability to mentally resist the states of isolation impending in mountain life and, of course, a certain training and a certain development of muscle groups, etc.

Among other things, the indigenous mountain populations have high value traditional knowledge and practices, from the category that’s called “**good practices**” nowadays - which ensures a balanced attitude towards the environment and the condition of sustainability.

It follows that **priority is given to preserving indigenous mountain populations and preserving good traditions**, with careful selection of the introduction of modernization elements and new achievements of science as well as accepting a certain slowness (**conservative and protective**) of their entry into practice, as an improvement factor for the secular traditions, a determining role returning here to **an adapted and pragmatized school and to the specialists - trainers**.

- Forests maintain their ecological, economic role as a carbon absorber (a role that meadows also play) and as a provider of money - but these benefits should not be exaggerated until they affect **the other large mountain economy** – producing food - **agro-animal husbandry**, in annual sustainable and recyclable technical solutions, with the most reasonable and bearable investments.

The imbalance that has been created between the **forest** and the **mountain agriculture** in the last 20 years, in the Romanian Carpathians - **will have to be restored**, through a complex of measures, including a certain type of tolerance, consciously bearable and accepted by both sectors.

In conclusion, mountain areas where there is still the natural capacity for sustainable human food production need to be preserved with great care, **governments having the responsibility to take a complex of measures to avoid/combat the exodus of young generations and the abandonment of the practice of mountain agriculture**. European practice (e.g. France, etc.) clearly shows that rural populations that have abandoned mountain agriculture/animal husbandry **can no longer be brought back** to animal husbandry, so **the only effective measures are those that prevent the phenomenon**.

The capacity of zootechnical tolerability of the Carpathian mountain area in Romania can be appreciated according to the numbers of cattle and sheep existing in 1990 - when the mountains provided agri-food and adjacent products - which provided most of the food for approx. 4 million inhabitants, including from the 84 small mountain towns, with important availabilities for cities outside the mountains or even for export (animals, cheeses, fruits and berries, honey, as well as medicinal plants, etc.).

Every meter of mountain land that can produce food will have to be managed to produce food sustainably - a new “**grass civilization**” is expected to be built, using the vast and good traditional experience - where it has not yet disappeared. **Herbaceous vegetation is itself a CO₂ absorber, so that the role of green mountains, with forests and meadows - perennial - becomes a constant balanced both to mitigate global warming and climate change and to fight hunger on the planet.**

Worse, the MONOPOLIST system installed in mountain areas proved to have the most harmful effects, by the practicing of an excessive liberalism on the part of the new owners of the dairy and meat industries, who through large profit margins and **absolutely ridiculous prices for the main raw materials - milk and meat** - made animal husbandry profoundly unprofitable, a **vital existential occupation** of a large population **lacking economic alternatives** for which the only renewable resource is the **multifloral, good forage quality grass** of pastures and mountain meadows, a creation of a **millennial** economic collaboration between mountain people and mountain nature.

The effect was that of an “**economic tsunami**”, generating **agro-zootechnical abandonment, the massive exodus of rural mountain youth** - deep processes of **degradation of excellent mountain meadows** with a selected and maintained fodder flora - through organic fertilizers and the titanic work of many generations of animal breeders - **a great wealth not only of Romania but also of the European Union and of humanity**.

This system of monopolistic capitalism, which has been installed with authority and through multiple “unorthodox” methods, **has systematically**

prevented and continues to prevent any initiative that could have led to the construction of a Western associative-cooperative system, like those in France, Italy, Switzerland, Norway, Sweden, Great Britain, etc. - a system in which more than **13 million agricultural producers** are integrated in Europe today and through which **the only viable alternative for the creation of the fair competitive factor could be reached, which would ensure an essential function of a European democracy** - even if the process itself would require 20-30 years of sustained effort.

In fact, the solution of the professional organizations of mountain farmers and cooperative associations, with the microindustrialization of mountain agri-food products in a cooperative economic system - opposable to the excessive capitalist one, given the reality of small, rarely medium and very rarely larger mountain farms - seems to be **the only alternative that can still save, at least in part, the mountain agro-rural economy from an irrecoverable dissolution.**

This accompanied by a **complex of attractive and guaranteed measures**, which **can no longer be palliative** (lacking credibility in front of a youth for whom better alternatives have become numerous) and a **vast educational process, adapted to the specificity and realities of mountain villages.**

In any - somewhat economically thought out - concept, **a mountain farmer, even part-time, becomes preferable to another urban unemployed person** exposed to an unproductive life and its psycho-social degradation.

A radical and urgent change of attitude in this large economic and social segment represented by the mountain areas of Romania imposes itself as an objective, priority and urgent necessity aiming at a state of normality, of stable and sustainable economic-social balance. The COVID pandemic, the intense need to prevent/mitigate the effects of the economic crisis, especially the food and health crisis, brings mountain areas in a position of great interest, as a safeguarding opportunity.

**CE-MONT/INCE RESEARCH (summary)
AN UPDATED ANALYSIS OF THE MOUNTAIN AREA IN ROMANIA
ACTIVITIES WITHIN THE "CE-MONT"
CENTRE FOR MOUNTAIN ECONOMY**

Scientific research entity **NEWLY CREATED** by the Romanian Academy within the National Institute for Economic Research "Costin C. Kiritescu"/INCE/RA

● POSCCE project (structural funds) - won through competition (6.8 million euros / 17% Romanian government).

Stage I: Construction and technical-administrative endowment of the new headquarters of CE-MONT in the mountain municipality - Vatra Dornei, Suceava County. **Completion, on time and official inauguration on 5 December, 2015.**



- SYNTHESIS – SCIENTIFIC, ADVERTISING and NATIONAL and INTERNATIONAL VISIBILITY ACTIVITIES (2016-2019)

- Scientific papers/ISI Articles/Thomson = 33. • Scientific articles BDI = 40. • Published books = 7+3 chapters. • Reports of great national interest = 5.

- National cooperation agreements = 14 (12 universities, 2 R&D institutes – National Mountain Area Agency/Gov./MARD, Romanian Mountain Forum/member of the International Mountain Partnership (UN) and “Euromontana”).

- International collaboration protocols: Eastern Norway Research Institute, Mountain European research initiative, NEMOR.

- Creation of a **CE-MONT magazine, “Revista de Montanologie/ Journal of Montanology”**, vol. I-XII (Romanian+English). • Published scientific papers = ~150. • Researchers' citations (2018-2019) = 184. • National scientific conferences (Vatra Dornei and Bucharest/INCE, RA, ASAS), CE-MONT/INCE = **organizer** and co-organizer = 20.

- International conferences (V. Dornei) = 4. • Participation of researchers in conferences (2018-2019) = 12. • CE-MONT/INCE national projects = 12. • Projects won through competition (CE-MONT 2019) = 4. • Visitors from abroad = 14 (World Bank, Euromontana, Carpathian Convention, University – Holland, Norway Research Institute, Mountain Peasants' Association – Switzerland). • National awards (books) = 3. • CE-MONT scientific caravans (in collaboration with NMAA și RMF) = 14.

ACHIEVEMENTS of EXCELLENCE

1. "Sustainable mountain development strategy" (MDRAP/2017).
2. **Major** contributions to the elaboration of the draft for "**Mountain Law**" no. 197/2018.
3. Contributions to the elaboration of the "**National Strategic Guidelines for the Sustainable Development of the Carpathians**" Memorandum (2014-2020/Government).
4. **Contributions for the elaboration of GDs regarding the organization and functioning of the National Mountain Area Agency (MARD), the creation of the Massif Committees and the National Mountain Council** and a (partial) contribution to the elaboration of **5 laws subsequent to the "Mountain Law"**, regarding investments in the rural mountain area and lobbying activity for the **adaptation of the educational system in the rural mountain area to the mountain economic-social and environmental specificity.**
 - On 12 December, 2019 - **the General Assembly of the Romanian Academy** approved the transformation of CE-MONT (without legal personality) into a scientific entity "**with legal personality**", organized in 2020.
 - From CE-MONT/INCE, researchers were requested in positions of "Advisers to Ministers" (2/MARD - 2014-16) and at the Government's GCS (1).
 - CE-MONT **frequently collaborated with state authorities and national and local non-governmental organizations** (MARD, MDRAP, MMAP, MEN, NMAA, Prefectures and County Councils, universities, town halls, LAGs, schools and NGOs) from the mountain area.

"POSSIBILITIES TO INCREASE THE INCOMES OF SMALL AND MEDIUM FAMILY FARMS THROUGH THE HIGH CAPITALIZATION OF "MOUNTAIN PRODUCTS", IN AN ASSOCIATIVE-COOPERATIVE AND PRIVATE SYSTEM. EXAMPLES OF "GOOD PRACTICES" AND OPTIMISTIC RESULTS IN THE ROMANIAN MOUNTAINS IN 2019.

● A VISION OF PERSPECTIVE."⁴

● **Some CE-MONT RESEARCH RESULTS - with multiplication value;**

The research took place in 2016-2019 in the mountain area of the Northern Carpathians of Romania, in the counties of Bistrița-Năsăud and Suceava, and focused on creating, selecting, assisting and encouraging forms of organization of mountain agricultural producers to achieve and capitalize on authentic "**mountain products**" and obtain satisfactory benefits, able to ensure the condition of improving the family incomes of mountain farmers, and

⁴ Prof.univ.dr., CS 1, Radu Rey and colab. – Centre for Mountain economy/"Costin C. Kirițescu" National Institute for Economic Research/Romanian Academy

the conservation of the valuable biodiversity of mountain meadows. There were multiple discussions with farmers, entrepreneurs, specialists of the National Mountain Area Agency/MARD, local officials, consulting upon request.

WORK METHODOLOGY

It was based on the study of research results in the mountain area and multiple direct contacts with agricultural producers, entrepreneurs, specialists, practitioners and researchers, local officials. Observation and selection of initiatives, analyzes and guidance and encouragement efforts, in different forms of specific activities.

• **4 categories of successful “good practice” situations** with multiplication value were selected:

I. A first **mountain agricultural cooperative (Sângiorz-Băi)**, focused on capitalizing on the “mountain product” by applying Regulation no. 665/2014 of the EC and the Decision of the Romanian Government no. 506/2016, (intense involvement of CE-MONT for the orientation and encouragement of the transition to the organization activity (statute, conferences with farmers, encouragement, participation in exhibitions promoting “mountain products”, collaborations with NMAA and RMF Bistrița-Năsăud Branch, etc.).

II. **An association/group of medium mountain farmers, and an entrepreneur with agrotourism activity, all successful.**

III. **An individual entrepreneur (II)**, with a **small industry** focused on “mountain product” **superior cheeses, in collaboration with a group of small farmers.**

IV. **Mountain family farms (IF):**

1. **A farmer with a medium farm** and an authorized workshop for milk processing and agrotourism.

2. **A small farmer, in isolated conditions**, focused on a type of **superior cheese.**

3. **Mountain family farm, specializing in beef cattle, with slaughterhouse and butchery point.**

<p>Description of “successful” solutions based on capitalizing on “mountain products”:</p>

I. Mountain agricultural cooperative – Sângiorz-Băi, Bistrița-Năsăud county.

Preparatory phase:

It included overcoming the intense resistance of mountain farmers to the idea of a cooperative (reminiscent of the communist regime). Since 2016,

through the collaboration between the CE-MONT Centre for Mountain Economy (Romanian Academy/INCE), the Romanian Mountain Forum and the RMF Bistrița-Năsăud Branch, SC Silvania Internațional - Lunca Ilvei, (civil society) and the National Mountain Area Agency/Ministry of Agriculture and Rural Development. Several information and encouragement meetings were organized, where the main element was the clarification that the idea of cooperative aims to capitalize on “mountain products” and supply, without interference in private property. **The second step** was the careful selection of **leaders** who showed the **courage to take on the implicit responsibilities**. After this (strictly necessary) preliminary training, from the first steps **380 small farmers** joined the cooperative, with a total of **940 cows** owned, including **132 cows** belonging to the cooperative. Participation with “merchandise milk” is variable, depending on the potential of the farm. In 2008, the cooperative created a **small industry** to transform milk into **8 varieties of finished products**: hard cheese, caș, telemea, urdă, butter, kneaded cheese, sour cream, and the resulting whey is used in pig feed. **The capitalization** of these “mountain products” is done **directly** by the cooperative, without intermediaries, using the “**short chain**” system, through its own store in the town of Sângiorz-Băi and participation in fairs.

Under these conditions, **the price of “raw material” milk gradually increased from 0.80 lei/l to 1.30 lei/l in 2018, and in 2019 (Oct.) to 1.50 lei/l**, with the objective to **reach 2 lei/l in 2020**, a part of the benefit being subsequently **reinvested** for the development of the cooperative.

- For the **summer**, the animals are moved for grazing at approx. 1500 m. alt., at the **traditional sheepfold** on Mount Putredu/Rodna Mountains (20 May - 14 September).

Through local support and its own efforts, the **agro-tourist arrangement of the sheepfold** with an **educational** role for students was succeeded, as a “**pedagogical sheepfold**” (accommodation capacity, 30-40 young people).

- The dairy products obtained in guaranteed mountain conditions met the condition for **registration in the “Mountain Product Registry”** managed by the National Mountain Area Agency, a general directorate within the Ministry of Agriculture and Rural Development. The cooperative was invited to participate in the agri-food exhibitions in Cluj and Bucharest and in the food fair organized at MARD (with exceptional success).

- **Conclusions:** The organization of small and medium farmers in the solution of **the mountain agricultural cooperative focused and organized for the capitalization of the “mountain product”** is given a **special significance** by the fact that it **generates the increase of the incomes of a large mass of small farmers**.

The optimistic experience of this “**pilot**” mountain agricultural cooperative gives it **multiplication value** in other mountain areas, in similar conditions (other attempts to organize several small cooperatives in the same localities did not evolve favorably).

II. An association/group of medium mountain farmers and a successful entrepreneur with initiatives in meat processing and mountain agrotourism.

The association of 30 medium mountain farmers and a private entrepreneur from Fundu Moldovei commune, Suceava county, which owns a small slaughterhouse, 3 own shops in 3 cities and an excellent agrotourism pension, with the official name “**Association of small producers of traditional peasant products from Bucovina**”, has started.

The farmers own, on average, 10 dairy cows each, for a total of **approx. 300 cows**, as well as a small **workshop, authorized**, for transforming milk, **on the farm**, into traditional, **finished** dairy products (hard cheese, caș, urdă, telemea, cream, butter; the resulting whey is used in pig feed).

The entrepreneur **takes over weekly**, on a fixed day, the entire cheese production made by the **30 farmers** and ensures the **supply of stores** in the cities of Vatra Dornei, Câmpulung Moldovenesc and Bucharest. All farmers pay close attention to the **quality** of the cheeses, which are **authentic “mountain products”**, obtained by feeding animals with grass and mountain hay, in the absence of chemicalization. The entrepreneur also participates in national and international fairs and exhibitions, including with “**mountain**” meat products.

The results, obtained for 3 consecutive years: farmers constantly obtain **approx. 3-3.5 lei/liter of milk (compared to 0.80 lei/l until the organization**, the demand exceeding the supply; **the entrepreneur makes a profit**, and **the informed consumers are constantly growing**. In this way, **all “actors” – the farmers, the entrepreneur and the consumers** - declare themselves “**satisfied**” and **interested in this system evolving**.

Conclusions: the **production** segment (associated farmers) must obtain **finished, marketable “mountain products”**, with **strict observance of the quality and the sanitary-veterinary rules of food hygiene**;

- The “**distribution**” segment takes over all the tasks and risks of marketing the “mountain products” provided by the farmers;

- The two segments **work together** in strict compliance with the rules;

- It is **an optimal solution to separate the two segments: “production” and “capitalization”**, with strict observance of statutory and contractual provisions on the prices of “mountain products” at the level of farmers and taking over the distribution tasks by the entrepreneur, to the constant advantage of both parties and of urban consumers.

III. Individual entrepreneur: small family industry, specializing in **superior cheeses: Cristi Țăranu** –Șarul Dornei parish (in the “Dorna basin”, Suceava/Bucovina county).

History: after approx. 10 years since the construction of a modern farm with 30 dairy cows, fully equipped (stable with hygiene and comfort for animals, mechanical milking, complete equipment with mechanization for technology for the collection and use of organic fertilizers and obtaining a quality hay, various annexes, in the conditions of a **discouraging** price offer/l. milk, of about 0.80 lei, without alternatives (local monopoly), in 2019 - the farm can no longer find to hire two workers, necessary for the exploitation of cattle. The result is **the bankruptcy of a farm considered as a “gold standard” for the Dornel basin and the sale of cows**, etc.

The innovative idea that saved the economic situation of the Țăranu family was an investment in **a workshop for transforming milk into superior cheeses**. Initially into **Emmenthal** cheese, employing a knowledgeable cheesemonger, “Țara Dornelor” being the only place in Romania where Emmenthal cheese was produced **for over 100 years, an economy abandoned after 2000**. The family, made up of the farmer, his wife and his son (with studies in Denmark), also **tries and succeeds** to produce the famous, superior **Raclette and Gruer** cheeses.

A **“niche”** production for **“niche” consumers** with prices that ensure a **return on investment**. The daily quantity of milk, raw material, is on average **500 l**, coming from **a group of approx. 20 small farmers** – located nearby, based on affinity between neighbors.

The motivation of the farmers came from **the “jump” from 0.80 lei/l milk to 1.50 lei/l**, an encouraging starting price, with the **tendency to increase towards 2 lei/l milk** while providing a niche market with constantly interested consumers.

The results of 2019 are **encouraging, both for the entrepreneur and for the dairy farmers**, as the demand has exceeded the supply. The cheeses listed are guaranteed “mountain products”.

IV. Family farm, profile: dairy cows

Farmer David Gliga, Fundul Moldovei commune: **40 dairy cows**, modern stable, mechanization, small workshop for transforming milk into cheese and other traditional products, sanitary-veterinary authorization (hard cheese, caș, telemea, melted cheese, urdă, cream, butter - guaranteed “mountain products”).

Workforce: the farmer and his wife (4 children) and **2-3 employees** (a cheesemaker and 1-2 farmhands for the animals and specific works).

Capitalization: at the farm gate and online orders. The clientele is assured by the fact that the city of Câmpulung Moldovenesc (Suceava/Bucovina county) is only 5 km away.

For periods of milk overproduction, the farmer cooperates with the “Association of small producers of peasant products in Bucovina” from the neighborhood. The price/l of milk, through processing and direct sale in a “short chain” system, covers expenses and brings profit. The farm also developed through the necessary arrangements for agro-tourism (12 accommodation spots and a small restaurant, with 50 seats, for family events), with excellent conditions.

Under these conditions, the continuity (sustainability) of the farm is ensured, both the family and the loyal consumers declaring themselves very satisfied.

For the environment: the farm ensures the conservation of valuable biodiversity, avoids affecting the groundwater, does not generate pollution and maintains a valuable tradition, producing high quality protein food (manure platform, manure collection basin, specific mechanization for uniform spreading on the hayfield).

V. Mountain farmer, Mihai Cornişag (family farm), beef cow breeder (a novelty in Romania), with **slaughterhouse and butchery point on the farm**, sanitary-veterinary authorized (Pojorâta, Suceava county).

Altitude: approx. 1000 m.

The family consists of the farmer and his wife with their 3 children (two sons, agricultural engineers and a daughter - an economist).

He owns >30 ha. hayfield + pasture, sloping ~15% and 60 Charolais beef cattle (imported from a mountainous area in France), which have adapted satisfactorily to the conditions of cold and humid climate and feeding in the area. Automated slaughter point.

The farmer and his wife specialize in meat processing and make traditional, highly sought-after “mountain products”. Occasionally he performs services, for example for the preparation of a pig for the Christmas holidays, to order.

The farm has a modern stable, with the necessary hygiene and comfort for animals and humans, with a platform for manure and a pool for collecting purine.

Organic fertilizers are used in full, on hayfields and pasture, the farmer having the necessary mechanization. He does not use chemical fertilizers or pesticides. Meat and meat preparations fulfill the conditions for inclusion in “mountain products”, with the use of only natural, traditional ingredients and salt, without preservatives, dyes, etc.

The capitalization is made “at the farm gate” and through orders, the demand far exceeding the supply, as the interest for a healthy diet is obviously increasing.

The farm's income is encouraging and at least one of the family's youth is determined to stay on the farm with their parents and develop **an agro-tourist boarding house**, the location of the farm also benefiting from an exceptional landscape.

VI. Small mountain family farmer – isolated:

The family of farmer Țarcă Simion (husband + wife), who own a small, traditional farm of their own, in an isolated setting in the Călimani Mountain Massif, at over 1000 m altitude, with **6 dairy cows** for milk and calves, and with a hayfield and pasture surface satisfying for the needs of the farm (20 ha.). The hamlet “Gura Haiti” is a group of approx. 10 small farms, in advanced danger of depopulation due to the departure of young people and adults abroad. On the farms (houses, haylofts, stables, hayfields, abandoned) remained the elderly, who no longer raise animals to their full potential – being left with 1-2 cows and small animals.

A factor of great discouragement was the price of only 0.80 lei/l milk, offered by the dairy industry that appeared in the area after 1990, under “monopoly” conditions.

The Țarcă Simion farm was almost **the only one in the hamlet that did not give up** and looked for solutions to break the deadlock, given that it has its own new, well organized house, the old house, there is a reasonable car access road, electricity, etc.

The innovative idea was found in the giving up of handing over the milk to the industrial collector and making the transition to the processing of milk on the farm into a type of superior cheese, “**Raclette**”, which also falls into the “mountain product” category, obtained under authorized sanitary-veterinary conditions. A small production of cream and butter is also obtained, which is occasionally sold, with the whey being used in pig feed.

The advantageous capitalization of this assortment of superior cheese, in round form, of 2.4 kg/piece and with a maturation period of approx. 100 days, is made “at the farm gate” and through orders, the demand exceeding the supply.

The essential thing is that, through this economic solution, **the price of a liter of milk** increased from **0.80 lei** (industry offer) to **4 lei**, which made the breeding of cows profitable and encouraged the family to continue the traditional activity of raising cows for milk, **a multiplier effect** being expected. In the same commune, Șaru Dornei, in 2019, was established **the first mountain agricultural cooperative, “CAȘCA-ȘAR”**, with approx. 200 members, with over 1000 owned cows, with a launch price of 1.40-1.50 lei/l milk and growth prospect **after the completion of the investment** in a small dairy industry, approved project - under implementation. The farmer also lookst toward agro-tourism.

- **Concrete achievements - with multiplication value (with CE-MONT involvement - 2017-2019)**



AGRICULTURAL MOUNTAIN COOPERATIVE ("PILOT") SÂNGIORZ-BĂI (BISTRIȚA-NĂȘĂUD county) – AUGUST 2019



CHEESEMAKING WORKSHOP – CRISTI ȚĂRANU, ȘARU DORNEI (EMENTHAL – SWISS CHEESE) (PRIVATE) – AUGUST 2019



BUCOVINA (SV): AGRO-TOURISM BORDING HOUSE IOAN BACIU, FUNDU MOLDOVEI, 2019.



David Gliga – Agrotourism farm (Fundu Moldovei)



Family farm: Mihai Cornișag; slaughterhouse + meat processing point (Pojorâta, SV)



Țarcă Simion Isolated farm, Călimani Mountains Șaru Dornei (SV)

Stage conclusions

In this ensemble of worrying phenomena for the Romanian society, but also for the EU, to the EU/EC initiatives regarding the “mountain product” and the national, legislative and organizational efforts was added the constructive, **optimistic** attitude of some **farmers and entrepreneurs** from the mountain areas, which **bring concrete answers to the classic question “what to do?”**, in order not to lose a large economic activity that produces healthy food for millions of people.

The producers concerned (“mountain” peasants/households/farmers with small and medium properties, characteristic of the Romanian Carpathians), benefiting from competent guidance, were encouraged to act **to overcome mentalities and use opportunities, capitalizing on tangible and intangible assets**, respecting the technical-sanitary and commercial exigencies, learning “on the go” and managing to obtain “mountain products” and to enter “market niches”, **overcoming the existing reluctance towards associative forms**. The “**key**” segment where efforts are required is **that of promoting “mountain products” and capitalizing on cost-effective prices and obtaining attractive benefits**, aspects dependent on **good guidance and organization**, on ensuring quality conditions that create a segment of “niche” consumers **willing to pay a higher price for healthy, high quality products**, following the commercial rules: significant **volume, continuity** all year round, **quality assurance and health guarantees**. These conditions are imposed for accepting entry into the network of large stores.

ON THE “STATE OF THE MOUNTAIN” - in 2019

In the last 29 years (1990-2019), in the great Romanian Carpathian mountain area, at the same time as some important positive phenomena (infrastructures, tourism, subsidies, etc.), phenomena of significant degradation have also appeared, such as the unbalanced exploitation of forests, a general phenomenon of discouraging young agricultural producers, in particular by making livestock farming less profitable, **caused mainly by the ridiculous prices charged by the external or internal “processors” and intermediaries for the most significant products, milk and meat - raw materials (0.6 - 0.8 lei/l milk; 5-6 lei/kg live beef, etc.)**.

- **The accession to the European Union in 2007** opened for young people the possibilities for a better life abroad and **the first to choose this solution** were those who lived in the most difficult conditions: **mountain farmers, youth, a quality workforce, healthy and physically and mentally fit for change, also attracted by the mirage of the West**.

• **Two different worlds coexist** in Romanian agriculture: the **“large-scale agriculture”** in the plain/hill areas, based on crops, chemicalization and **intensive** agro-zootechnical systems, in conditions of high soil fertility, and the **“small mountain agriculture”** based on the **“grass civilization”** and **extensive systems for raising and exploiting ruminants**.

The mountain produces, out of the country total: **approx. 30% of milk; 20% of meat; 25% of fruit, and the inhabitants of mountain villages have a significant role in caring for landscapes, protecting the environment and perpetuating extremely valuable cultural traditions and agro-economic “good practices”**.

MAJOR RISKS

Accentuated depopulation of mountain villages, growing disinterest and agricultural abandonment by young generations, with the risk of losing the continuity of a traditional multiseccular economic activity.

• **Cattle herds - down 40-60%**, especially for **dairy cows**;
Sheep herds (on small and medium farms) - **a decrease of 80-90% compared to 1994**, accelerating after 2007 when MARD established subsidies for sheep **only from 50 heads upwards, eliminating the support for small farms** that traditionally owned **10-20 sheep** and provided **approx. 40-50% of the need for organic fertilizers, irreplaceable in the mountains, with a fundamental role in maintaining the qualitative structure of the natural flora of the mountain meadows**⁵;

1. Current population (active farmers)

It is **mostly aged, with a marked weakening of work capacity**, in a hostile environment **where physical effort is a condition for survival**. Statistics for measuring economic and social indicators in the mountain area based on “surveys” are no longer relevant enough or even missing. **Every year**,

⁵ Eg: in the Dornelor basin (12 ATUs), **famous for the production of milk and superior cheeses** (emmental), **in 1994** there were approx. **31,000 cattle and approx. 30,000 sheep** left.

In 2011, there were approx. **15,000 cattle** and only **6,700 sheep** left, and the herd declining process continued.

In 2016, the production of superior Emmental cheese **is abolished**, due to the detrimental influence of a newly formed food industry, of multinational type and the “support” of some local, interested and thoughtless factors. In July 2020, the multinational Lactaris withdrew from Țara Dornelor, abruptly closing the only dairy factory, leaving behind 158 skilled workers without jobs and, very dire, approx. 7,000 medium and smaller mountain farms with no secure prospects, in an area with no chances for agricultural crops and fruit growing, economically dependent on grass and raising dairy cattle. A clear demonstration of a compromise system that needs to be replaced by associative-cooperative solutions.

households, hamlets and even entire villages disappear, due to the lack of a replacement generation, with economic insidious consequences. The tendencies of the mountain youth are to **“leave”, not to “stay”** in the villages and continue the agro-zootechnical activities. **What does the perspective of the mountain agricultural economy become in the next 20-30 years and beyond?**

2. Environment and biodiversity

Organic fertilizers, without which an efficient and sustainable mountain agriculture can not exist, due to the decrease in the number of animals, are **less and less, manure platforms and purine collection pools are missing in the stables** and thus **a large resource of organic nitrogen is lost, also polluting groundwater** and thus maintaining a poor state of hygiene, which affects the health of animals and farmers and thus the milk and meat production. Hay collected in traditional haystacks is exposed to **mold**, with the **risk of aflatoxins appearing in milk**. **Haylofts on hayfields** as a good solution exist only in a few counties (Neamț, Suceava, Maramureș, rarely in other counties);

- The **absence/reduction** of organic fertilizers generates a **phenomenon specific to the mountain, of the highest gravity: the “return to the wild” of the no. 1 value of mountain meadows – the natural polyflora**, with a **valuable fodder structure** (biodiversity of high social value) – **a multiseccular creation of the mountain man**, in cooperation with nature - thanks to organic fertilizers from ruminants (sheep, goats, cattle), with considerable efforts in over 1,000 years of shepherding - **without annual interruptions**;

- It is **scientifically proven** that within **only 7-8 years of lack of continuity** in the **administration of organic fertilizers - valuable plants** (eg white and red clover, guide, etc.) **disappear** and the meadows are **invaded by species without economic value**, or of very poor quality (forest moss, nardets, thorns, weeds).

- It is a **risky phenomenon, which increases annually, insidiously**, which has been thoughtlessly ignored both by mountain farmers (deprived of agricultural schooling), and by the central and local professional sphere and, largely, by the political one, which does not notice the magnitude and irreversibility of the phenomenon - due to the same **lack of knowledge of the specificity of the agro-mountain economy**, an inherited and deeply damaging general situation.

It is the worst economic phenomenon in the last 25 years, because in the conditions of the 21st century it becomes historically irreversible. European and world experience has made it clear that mountain youth, once they have left mountain farming, can no longer be recovered and replaced except very rarely.

The result is the major risk for Romania of gradual but definitive loss of a large agri-food economy, which still feeds approx. 4 million people with quality protein food - based on renewable energy, this in the increasingly obvious conditions of the global food crisis (the jump from 7.6 billion inhabitants in 2017 to 9.5 billion in 2050...)

• In the “mountain agricultural policy” there are **4 fundamental factors directly related and mutually dependent:**

1. Man (the mountain farmer, the direct producer, as an essential irreplaceable factor);

2. Ruminants (cattle, sheep, goats/“mountain type” breeds);

3. Organic fertilizers (manure, urine) – **strictly necessary;**

4. Polymorphic natural flora - fodder (grass – with **valuable biodiversity**);

If Romania is left **without people in the mountains** (active agricultural producers, animal breeders) - **the other 3 factors collapse**. The consequence of **mountain depopulation** is the **endangerment of the food security** of a large segment of the population, **a strategic element which also includes national security, being at the same time a great loss for the European Union and even for humanity**. There are accumulations of research and knowledge, but **the specialists of the mountain agricultural economy are in very small numbers**. There are positive exceptions. There **are** farms and other “**pilot**” initiatives exist, representing the results of efforts over the past 28 years.

• An aspect of **great negative impact** is found in **the general state of low or even lack of competence** on the problems specific to the “**mountain-type**” agro-zootechnical economy, **at the level of decision makers from MARD and at other central and local levels**. The knowledge limits of mountain farmers, who are **not agriculturally educated**, are also known, based only on the traditional experience which is valuable, but which **is no longer sufficient for the competitive framework of the 21st century**.

During the last regime focused on the collectivist system in the plain/hill areas, the **education system** in the mountain areas **was not adapted** to the specificity and realities of the **mountain-private type** life. **The main cause was political, in order to not generate the development of mountain agriculture, respectively that of private property.**

UNCOMFORTABLE REALITIES

The graduates of the agricultural universities in Romania were and **continue** to be, after 1990, professionally trained **for the large-scale**

agriculture based on chemicalization, mechanization, industrial systems of breeding and exploitation of animals. Graduates reach management positions at central level or in counties, but **do not have knowledge of the type of mountain agriculture**, based on grass, organic fertilizers, in conditions of poor soil fertility and short periods of vegetation, with great mechanization limits on slopes, etc. **Other rules, other yields, other possible incomes per hectare, much inferior to the plain/hilly areas. MARD leads a mountain giant, with poor skills, with errors and finally with the marginalization of mountain agriculture and the moral wear and tear of the very few specialists - who strive to avoid the state of marginalization of the mountain.**

At the level of the Ministry of Agriculture and Rural Development, who is mainly responsible for mountain agriculture as well, **a concentration of support has been perpetuated in the last 27 years especially for the large farms** in plain and hilly areas, representing (cumulatively) **approx. 80% of Romania's agriculture.**

In this situation, the pressure exerted by the agriculture in the lowland areas is very high at the ministry level, to the detriment of small mountain agriculture - too little known and supported according to its specific needs by both decision makers and ministry officials, including for plain/hill areas.

The risk arises from the fact that this proportion of approx. 80%-20% will be maintained permanently in Romania, the mountains will always be a large part of the country and inevitably, without vigorous protection measures, there is a risk of maintaining the state of marginalization of the mountain and creating a large economic and social decline, and, in addition - irrecoverable.

Institutional instability, with the severe staff fluctuations within the MARD, has amply demonstrated, with regard to the mountain area, that **a new institutional and strategic solution is needed, efficient and stable, through which it is possible to preserve values and to intervene reparatively, as well as ensure stability and methods of protection and economic growth.**

"The sleep of reason gives birth to monsters"

WHAT TO DO?

● For all political and central and local administration factors, it must become clear that, for a reasonable future, it is vital that the country's mountains are well populated, with well managed farmers and animals.

As practice has proven that prevention, stability and progress in the mountains are **much slower than in the plains, and more time and adapted methods are needed, a Sustainable Development Strategy for the mountain**

area, applied consistently and with results, **can not be very short term**, but must be **medium and long term**, multiannual, with **periodic correction**.

The strategy must be followed by a multi-annual PROGRAM for the economic and social development of mountain areas in Romania, approved by law (eg: Mountain Law no. 197/2018) and funded by Government decisions applied consistently.

The experience of the last 30 years has shown that the elaboration and implementation of a **coherent Multiannual Program** for a vast mountain territory, marked by accentuated specificity, **implies the prior existence of a firm political decision, based on a multiparty agreement that allows a continuity not influenced by the political cycles, in line with the Community guidelines.**

The “target” objective that stood out, in the medium and long term, is represented by the “MOUNTAIN PRODUCT”, which in Romania is based on:

1. 1. Romanian Government Decision no. 506/2016 on the establishment of the institutional framework and measures for the implementation of Delegated Regulation (EU) no. 665/2014 of the Commission of 11 March 2014 supplementing Regulation (EU) no. 1,151/2012 (of the European Parliament and of the Council) regarding the conditions of use of the optional quality mention “mountain product”;

2. Order of the Minister of Agriculture and Rural Development (no. 52 / 3.03.2017) regarding the verification procedure for granting the optional quality mention “mountain product”.

• **Some essential continuity issues remain to be resolved**, which have been the subject of documented proposals aimed at consolidating the **organizational aspects**, among which:

- completing the staffing of the Regional Centers and Mountain Development Offices with specialists;

- the creation of a **permanent State Secretariat within MARD**, which would ensure the **avoidance of an artificial and unnatural conflict of interests between “large-scale agriculture”** in areas with high fertility (~80%) and “small mountain agriculture”, representing approx. 20% of Romania's agro-zootechnical production.

This balance must be carefully and permanently maintained. The mountain area needs **constant protection** and **compensatory** solutions for the direct producers – **the mountain farmers**.

• The complexity and **socio-economic, environmental and strategic importance** of the mountain area **can not be attributed only to the Ministry of Agriculture**, which has a significant, **but not exhaustive** role.

At least **9 ministries** operate independently in the mountain area, **with little or no cooperation, without creating a system capable of ensuring the development and implementation of strategies and coherent development programs in Romania's main mountain ranges. Coordinating the actions of several ministries can't possibly be done at the level of a single ministry** (there are some trends in this regard). **The only authority able to cope is the Government, with the authority of the Prime Minister (according to H.G. 332/2019).**

• An effective solution could be the creation, **at the level of the General Secretariat of the Government, of a Technical Department specialized in the mountain area, as a "working" tool for the Prime Minister** (who, according to the Mountain Law, **chairs the National Mountain Council**). There is a precedent in this regard, which gave appreciable results until 2016: **the Memorandum: "National strategic guidelines for the sustainable development of the Carpathians/2014-2020"**.

• For the mountain agri-food economy, with secure prospects, **"mountain products" become a safeguarding solution** (according to EU/EC Regulations and the national legislation in force).

• Through **analysis and long practice, it has emerged that small and medium-sized households (farms) characteristic of the Romanian mountains, cannot and will not be able to cope with the pressure of large food industries that impose unfair, discouraging prices for milk, meat and other valuable mountain raw materials, with the effect of more and more accentuated agricultural abandonment.**

• Only the solution of mountain agricultural cooperatives focused on capitalizing on "mountain products" can revive a hope for the great mass of mountain farmers through an attractive motivation for those who produce quality food for society. Associative forms and private initiatives are to be considered, but they are inevitably few in number.

The experience of the 2013-2019 period showed that the existence of **more than one cooperative with the same profile** at the level of a settlement **is not viable**, bringing about phenomena of **unfair competition and discord in the community** (to use a local expression, "our Romanianism...").

Still, the emergence of **the first "pilot" cooperatives focused on capitalizing on the "mountain product" in Sângiorz-Băi, Bistrița-Năsăud County and Șarul Dornei, Suceava County, with wide involvement from the Centre for Mountain Economy/INCE/Romanian Academy, the Romanian Mountain Forum and the National Mountain Area Agency, proves that "it is possible".**

Consideration should be thus given to **setting up a single ATU-level cooperative to collect raw materials, either to process and capitalize** them as “**mountain products**” (with the foreseeable difficulties in capitalization), or to **negotiate in a first phase prices** with the current transformers (offering large quantities), at least until the consolidation of their own processing and capitalization capacity.

As new INNOVATIVE ideas, what is aimed for is an association of the communal cooperatives in Mountain Agricultural Intercooperative Associations (in the traditional mountain “basins”), focused on capitalizing on “mountain products”, without interference in the property of farmers, with wide opening to export and advantageous prices, which could even become the relatively ideal solution for breaking the deadlock, with sustainability perspectives. At this intercooperative level, an investment policy (once only) would be justified, one that would allow capitalization at higher prices through export or in the country and create a reliable source of improving the income of producer families and the capitalization of medium and smaller mountain farms, fighting poverty, limiting, after a period of necessary investment, too burdensome compensatory efforts on the part of the state. Such a system is part of the mandatory trade rules, which require volume, continuity throughout the year, quality and health guarantees and could generate the effect of profitability and stability guarantees for a new generation of mountain farmers, a response to the need for sustainability.

• A supplement to the Law on agricultural cooperatives with the inclusion of mountain agricultural cooperatives focused on capitalizing on “mountain products”, through which to grant “start-up aid”, special tax facilities, gradual according to natural conditions (altitude, isolation, etc.) and “quality premiums”, with a compensatory role for the very difficult working conditions in the mountain animal husbandry, with possible production lower compared to the areas with high fertility lands.



The fertile soil layer (10-15 cm)



Organic fertilizer – managed wrongly (90%)



Proper use of organic fertilizer (manure)



The valuable mountain natural polyflora



Solution for ensuring the quality of hay
(HAYLOFT)



Cattle breeds – adapted to the mountain area
(eg. Pinzgau) – Vatra Dornei

**A “SCENARIO” FOR THE ORGANIZATION OF A MOUNTAIN “PILOT”
MICROAREA – FOR THE CAPITALIZATION OF “MOUNTAIN PRODUCTS”, IN
AN ASSOCIATIVE-COOPERATIVE SYSTEM
- PRINCIPLES -**

The preparatory phase includes: - The willingness to approach a “pilot project” of sustainable mountain development (at central and local level).

- **The existence of a concept** focused on knowledge and experience and setting the main objectives.

- **Financing a complex study** at the level of the **mountain micro-region considered** (Marketing, impact, technical - economic and social studies).

- The existence of legislative support and support mechanisms, at central, county and local level (Government/MARD, County and local administration).

- The assessment, through studies, **of the material and human costs and resources** that can guarantee at least moderate development.

- In the project budget it is necessary to provide a “safety margin” - for unpredictable issues that will require corrections along the way.

- The establishment of a **project management team** – which includes the **necessary experts in the fields**.

The “pilot” project also includes **the experimental research element**, which will highlight new aspects **that could not be foreseen in the design phase and that require corrections adapted** along the way and without affecting the background of the project.

The results to be obtained will be able to be **multiplied in other similar mountain micro-regions**, following the methodology used successfully in the experimental framework **while avoiding the repetition of some errors**.

- The project management team will create **contacts and exchanges of experience** with similar areas in advanced EU countries, with the “actors” directly involved in the project.

- The result of the **marketing study** will highlight the **progress direction**, regarding:

- **The types of “mountain products”** with real chances on the market (eg. hard cheeses, meat assortments, vegetable products) on both the external and internal markets (different policies) and **the best prices**;

- Reliable, assimilable elements of **technical know-how** (existing in the EU);

- **The specialization(s)** with a **sustainable perspective** necessary for the mountain microarea (basin) in question (training the qualified workforce during investments);

- **The rational sizing of investments**, correlated with **local reproducible resources**, related to the sustainable provision of food for ruminants and the **limits of a sustainable development**.

- The preparatory phase includes the **creation of agricultural cooperatives** in two versions to consider:

Option A: Grade I cooperatives (a single cooperative/ATU), with an (**incipient**) profile of collecting and **capitalizing** on raw material “**mountain products**” (through their own, limited possibilities), or through the current industrial “processors”, with the possibility of negotiating **better prices** (eg. for milk and live animals, with supply in **larger quantities**); **either** by searching and **finding market “niches”, with higher prices** than those offered by the industry, **the trend remaining a transition to the Grade II cooperative**, with its **own capacity to process** raw materials and **capitalize, with added value**. In this case, the key is still in ensuring a **constant “market niche”**. There is also **the option of setting up Grade II cooperatives “from the start”**, at the microregional level (traditional basin).

- The **general rules** of a successful and sustainable concept with market success are to be considered:
 - significant merchandise **volume** (interesting enough for the trading system);
 - **year round** merchandise;
 - the **guaranteed quality** desired by consumers;
 - **health guarantees**.

Starting from these reasonings, there is a **need to associate Grade II (or I) communal agricultural cooperatives at the level of mountain micro-regions (mountain basins) - in a "Mountain Agricultural Intercooperative Association" profiled on the superior capitalization of "mountain products", with local brand, able to carve out a place on the foreign market and the domestic market.**

Only the achievement of this goal could be the complete solution for a sustainable mountain rural development, through which farmers will be able to obtain fair prices for raw material "mountain products", which would meet the real needs of mountain farmers, small and medium par excellence, to increase their income based on renewable resources and increasing farm capitalization and investment capacity.

- **The necessary (hypothetical) investments:**

The first category of investments: for Grade I or II mountain agricultural cooperatives (**a single cooperative/ATU**) - there is a need for a **"start-up aid"** (essential in the start-up phase, to avoid a **"blockage" of the initiative**), with **"Specifications"** to establish the **rational use of funds**. The size of the "aid" becomes **variable**, depending on the **size of the cooperative**.

- **The second category of investments** aims to **organize the collection centers for raw materials** (milk, fruit, berries) and small local bases for taking over **live animals** - through the **cooperative's collection and procurement system**. For **milk and fruit** there is a need for a **central warehouse**, with the possibility of **refrigeration**.

- In the variant of creating some **Grade II cooperatives from the beginning (one/ATU)**, the investments target the raw material **collection centers, completed** with a processing unit to **turn them into semi-manufactured or even finished "mountain products", sellable, dependant on the communal agricultural cooperative providing a "niche market" (this objective being the most difficult one to achieve)**. The COVID pandemic has generated a **new way of capitalization** through **online commerce**, with satisfactory prices for farmers and **favorable health effects for consumers**.

- From the experience of recent years, it appears that some current solutions, through **small cooperatives in mountain villages, can not be guaranteed sustainable, as it is difficult for them to penetrate and hold their own on markets capable of constantly ensuring a higher payment for high quality goods.**

● **Third INVESTMENT category**

It is the **final solution** for organizing a mountain micro-region (**mountain basin, ~8-20 ATUs**), which involves the **association** of agricultural **cooperatives** from geographically close ATUs in the form of a **“Mountain Agricultural Intercooperative Association”**, with **approx. 4 investment objectives**:

1. **Dairy factory** (mainly focused on hard cheeses) with finishing section;
2. **Slaughterhouse with meat processing shop** and by-products processing workshop;
3. **Mountain plant products factory**;
4. **Central warehouse for “mountain products”**, with transport and maintenance services.

Within a **Mountain Agricultural Intercooperative Association** would operate **the commercial service**, which will ensure **the prospecting of external and internal markets, the promotion of “mountain products” under its own brand, the signing of contracts and commercial organization and the Technical and Sustainable Development Service**.

● For reasons of economic profitability and efficient administration, the 4 main objectives, mentioned would be the equivalent of a **“Mountain Eco-Industrial Park”**.

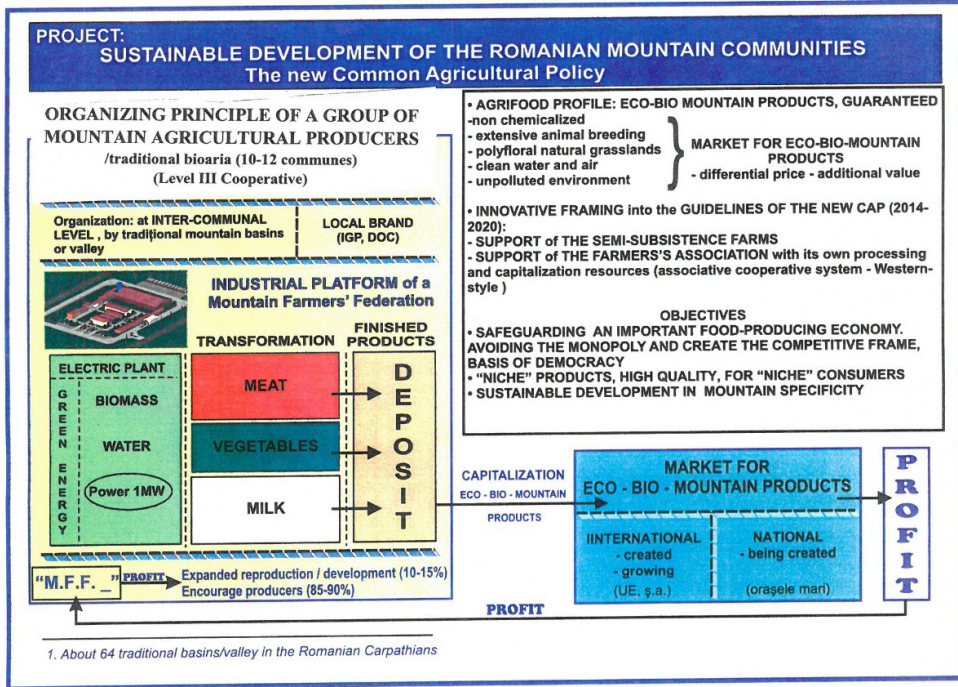
FINANCIAL RESOURCES

(Needed: Specialized study)

The financial sources for INVESTMENTS target **EU funds, state contributions** for the DISADVANTAGED mountain areas, **other sources**, essentially **non-reimbursable** and granted at the beginning, **a single time**. Post-1990 experience has shown that the method of using “co-financing” through “contributions” from farmers (generally poor, elderly, distrustful) **is not possible**.

Shorter version

Investments, from the beginning, in the 3 factories (milk, meat, vegetables) that become **LOCOMOTIVES** for the organization of the COOPERATIVE ASSOCIATION - at the microregion level (“mountain basin”). Mountain farmers today are more permissive toward accepting the idea of a cooperative. An intense training/persuasion activity, at the level of ATUs from the “mountain basin” (NMAA/MARD, RMF, CE-MONT, TV, press), will be able to mobilize farmers to join in this type of cooperative, which becomes **THEIR PROPERTY** (previous: in the “Dorna basin”, in 1994, 2,300 farmers were registered as contributing members in the Federation of Mountain Farmers - Dorna (active 1992-2020), an association preceding a large cooperative (Romanian-French-German cooperation - MARD/CZMR, MAP - France and GTZ - Germany).



(Presented work – Aula Magna – Romanian Academy, December 2013. In “Thematic sub-program for the mountain area” – available to MARD/R.R.)

PROPOSALS of MEASURES

1. The creation, within MARD, of a **State Secretariat** for the mountain area, with the **status of organizational, obligatory permanence, a structure that would not be influenced by the political cycles.**

Breakdown of a separate budget for the mountain area.

2. Applying, **quickly**, the provisions of the “**Mountain Law**” no. 197/2018 and subsequent laws.

The adoption of a “**National Strategy for the protection and sustainable development of the mountain area in Romania**”, through **political consensus** and of an **implementation Program staggered in the short and medium term.**

The continuation and acceleration of the organization of the **National Mountain Area Agency**, through the **Regional Centers and Mountain development offices**, at the level of traditional basins (GD. 1036/2018).

3. The short-term implementation of the provisions of **GD no. 332/2019** on the **Massif Committees and the National Mountain Council** - chaired by the Prime Minister.

4. **The creation of a permanent Office (working group), specialized in the mountain area**, at **Government level (SCG)**, to ensure the cooperation of ministries, etc., with activities in the mountain area and preparation of an **annual report** on the “state of the mountain” for the Prime Minister (there is a precedent).

5. Ensuring the financial resources for the implementation of the provisions of the laws subsequent to Mountain Law no. 197/2018, for investments in the mountain countryside (laws no.: 296, 330, 331, 332, 333, 334/2018).

6. Intensifying the activity of the National Mountain Area Agency to increase the number of producers who make certified “mountain products”.

7. Ensuring the **adaptation of rural education**, from mountain gymnasiums, to the specificity of the mountain agricultural economy and environment. Supporting the creation of **vocational schools for mountain agriculture**.

8. Creating a “**National Mountain Support Fund**” through the contributions of entities that use the resources of the mountain area and make a profit (wood, water, milk, meat, tourism, etc.).

9. **Insistent negotiations with the European Commission/DGAgri**, for the **motivating** support of **small and medium-sized farmers** in the mountain area and the **creation/development** of mountain agricultural **cooperatives** and **mountain agricultural inter-cooperative associations** - **at the level of traditional mountain basins/micro-regions**. Within the proposals for **PNS 2021-2027**, to present a **Mountain Agro-Rural Development Program** based on the **guidelines of the European Green Pact and the mountain legislation of Romania**. Inclusion in the EU/EC “**Vision**” for “**Agriculture and Rural Development**” - **Horizon 2040** - through the **European Green Plan** for “mountain agriculture” - **distinctly** focused on **capitalizing on “mountain products”**.

<p style="text-align: center;">A “VISION” for Romania’s mountain area - HORIZON 2040⁶. SUSTAINABLE EFFECTS</p>

1. **Romania - an important “actor” in the field of “mountain products”.**
2. **Approx. 500 agricultural-mountain cooperatives and 50 mountain intercooperative associations (basins/microregions).**
3. **Approx. 1,000,000 stable jobs (full and part time). Stopping/attenuating the exodus of mountain agricultural youth.**

⁶ R.R.

- **Reducing urban unemployment.**

4. Approx. 200,000 stable jobs in/for the mountain area.

5. Durable livelihoods for approx. **800,000 mountain families** (~3,000,000 people). **Decent** standard of living.

6. Utilization of **new latent, renewable resources. Fighting poverty/hunger.**

7. **Minimum consumption of conventional energy and oil. Renewable energies.**

8. **Healthy food** for approx. **6 million people** (in mountain and URBAN communities).

Economic and social cultural stability.

9. **Sustainable development - with the protection of nature and biodiversity.**

10. **THE MOUNTAIN AREA - an OASIS of PROTECTION against COVID-19 and NEW PANDEMIC and other FORMS OF HUMAN HEALTH AFFECTION.**

- **The forestry sector - MA:**

- European transport blockages for the export of wood products; seasonal forestry works (nurseries, afforestation) affected (day laborers).

- Demand for wood - declining: declining incomes.

- **Measures** (short term): Ensuring strictly necessary activities (guarding), windfalls, fire prevention. Avoidance of extreme measures (activity prohibitions). Building “early” stocks at processors: supporting economic agents (unemployment, technical unemployment), to stimulate the labor force.

Long term:

- support for private owners - works of regeneration and care of trees;
- promoting wooden products that can replace plastic, iron, concrete;
- stimulation of public and private wooden constructions (buildings, annexes).

Number of ATUs in the mountain area

According to the National Program for Rural Development - PNDR 2014-2020, a number of 658 ATUs are included in the mountain area, and according to the delimitation based on the Joint Order of the Minister of Agriculture and Rural Development no. 97/19.02.2019 and the Minister of Regional Development and Public Administration no. 1.332/14.03.2019 on the approval of the delimitation criteria and the list of localities in the mountain area, in the mountain area are included a number of 948 localities, according to the following table and graph:

Centralizator UAT-uri
(municipii, orașe, comune) din zona montană, repartizate pe județe

Nr.crt.	Județul	PNDR 2014 - 2020				Ordin comun al ministrului agriculturii și dezvoltării rurale nr. 97/19.02.2019 și ministrului dezvoltării regionale și administrației publice nr. 1.332/14.03.2019			
		Nr.UAT-uri	Municipii	Orașe	Comune	Nr.UAT-uri	Municipii	Orașe	Comune
1.	Alba	40	0	5	35	45	-	5	40
2.	Arad	8	0	0	8	25	-	-	25
3.	Argeș	24	1	0	23	41	2	-	39
4.	Bacău	16	0	4	12	23	1	4	18
5.	Bihor	19	0	3	16	36	-	4	32
6.	Bistrița-Năsăud	33	0	2	31	37	-	2	35
7.	Brașov	33	3	3	27	53	3	6	44
8.	Buzău	21	0	2	19	27	-	2	25
9.	Caras-Severin	38	1	3	34	55	1	5	49
10.	Cluj	24	0	0	24	40	-	1	39
11.	Covasna	35	0	2	33	45	2	3	40
12.	Dâmbovița	13	0	0	13	24	-	2	22
13.	Gorj	12	0	3	9	12	-	3	9
14.	Harghita	61	4	4	53	65	4	4	57
15.	Hunedoara	45	4	4	37	69	7	7	55
16.	Maramureș	44	1	7	36	53	2	8	43
17.	Mehedinți	11	0	1	10	18	1	1	16
18.	Mureș	20	0	2	18	31	1	2	28
19.	Neamț	23	1	1	21	28	1	1	26
20.	Prahova	28	0	5	23	45	1	7	37
21.	Sălaj	2	0	0	2	21	1	-	20
22.	Satu Mare	1	0	0	1	13	-	1	12
23.	Sibiu	25	0	4	21	42	1	7	34
24.	Suceava	38	2	4	32	45	2	4	39
25.	Timiș	3	0	0	3	5	-	-	5
26.	Tulcea	-	-	-	-	-	-	-	-
27.	Vâlcea	21	0	4	17	26	-	4	22
28.	Vrancea	20	0	0	20	24	-	-	24
TOTAL UAT-uri		658	17	63	578	948	30	83	835

The population of the mountain area:

1. According to PNDR 2014-2020, 15.01%
2. of the current population of Romania is registered in the mountain area:

Total population Romania - 2019	of which in the mountain area - 2019	
- number of people -	- number of people -	%
22,259,207	3,340,345	15.01

2. According to the Joint Order of the Minister of Agriculture and Rural Development no. 97/19.02.2019 and the Minister of Regional Development and Public Administration no. 1,332/14.03.2019 regarding the approval of the delimitation criteria and of the list of localities in the mountain area, in the mountain area there are **21.97%** of the total population of Romania:

Total population Romania - 2019	of which in the mountain area - 2019	
- number of people -	- number of people -	%
22,259,207	4,891,845	21.97

According to the PNDR 2014-2020 delimitation, the following situation exists regarding the livestock:

Livestock numbers at country/mountain level					
No.crt.		Cattle	Sheep	Goats	Pigs
0	Source	ANSVSA - 2019			
1	Country total	1,993,321	11,697,600	1,658,270	1,901,725
2	Mountain area	614,303	2,587,345	211,992	254,509
3	%	30.82	22.12	12.78	13.38

According to the delimitation from the Joint Order of the Minister of Agriculture and Rural Development no. 97/19.02.2019 and the Minister of Regional Development and Public Administration no. 1.332/14.03.2019 regarding the approval of the delimitation criteria and the list of settlements in the mountain area, there is the following situation:

Livestock numbers at country/mountain level					
No.crt.		Cattle	Sheep	Goats	Pigs
0	Source	ANSVSA - 2019			
1	Country total	1,993,321	11,697,600	1,658,270	1,901,725
2	Mountain area	789,308	3,908,464	313,585	403,220
3	%	39.60	33.41	18.91	21.20

Source: Data processing ANSVSA – 2019

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