## RESEARCH REGARDING THE AGRICULTURAL POTENTIAL OF THE ARIES-AREA

Prof. Univ. Dr. Vasile Burja Prof. Univ. Dr. Nicolae Todea "1Decembrie 1918" University, Alba Iulia

Abstract: The University "1 DECEMBRIE 1918" ALBA IULIA carried on a research study concerning the economic and social impact of ROSIA MONTANA mining project on the specific area proposed by the Trading Company Gold Corporation S.A. The impact area of the project is outlined by the fallowing communities: ROSIA MONTANA, ABRUD, BUCIUM, CIURULEASA, CIMPENI, MOGOS, LUPSA and BISTRA. One of the options for developing the ARIESENI area is stimulating the agriculture activities and in this context, the research team has analyzed the agricultural potential of this area, the research results being presented within the paper.

Agriculture represents one of the main activities that take place in communities from impact area, special in the villages. People who live here constantly endure restriction on economic and social side, lack of service and basic facilities combine with the economic situation of firms around area correlated with lack of work places, determinate many family's to return to a primer why of life based on agricultural work.

The agricultural potential of the area in his actually form of organization and exploitation is making difficult to develop agriculture with orientation to the market. There are no agricultural exploitations areas to define: Emergency Law Nr.108 from 27 June 2001, regarding the law a vegetal exploitation in the area must have a minimum of 25 hectares, cultivated with cereals and grass. For animal sector an agricultural exploitation must have a minimum of:

- a) Caws for milk 15 heads;
- b) Cattle's for fat 50 heads;
- c) Sheep's or gouts 300 heads;
- d) Pigs 100 heads;
- e) Other animals species 100 heads;
- f) Chicken for eggs 2000 heads;
- g) Birds for meat 5000 heads;
- h) Another birds species 1000 heads;
- i) Agriculture 50 families.

Agricultural exploitations under the limits presented upper in the page are named family's agricultural exploitations. This can be stimulated by the legislated act regarding the ecologic agriculture.

Table: nr.1. Agricultural use in the impact area in hectares

Surface in ha	Communities								
	Roşia Montana	Abrud	Cămpeni	Bistra	Bucium	Ciuruleasa	Lupsa	Mogos	
Total agricul- tural surface	2315	1891	4351	3573	2575	1233	5840	4327	
Arable surface	280	208	621	785	252	202	539	256	
Land	1098	292	1940	1939	1371	327	2932	2896	
Field for grass	937	754	1790	849	952	704	2369	1175	
% Arable surface	12	11	14	22	10	16	8	6	

Source: D.A.D.R. ALBA IULIA

Agricultural surface in the impact area immediately after the RMGC project is represented in the table nr.1.

We note that the arable surface is only a small part from the agricultural field. Witch offers us first information up on the agricultural potential of the impact zone that is good for animals can beneficiate of natural fields.

Reported to the households in communities from the impact area, that can be named individual exploitation, each one of them having a surface of land. Agricultural surface regarding the land that each household is having

Table: nr.2. Agricultural surface in the impact area that is in use express in hectares

Surface in ha	Communities										
Surface in na	Roșia Montana	Abrud	Cămpeni	Bistra	Bucium	Ciuruleasa	Lupsa	Mogos			
Total agricul- tural surface	2,10	1,44	3,59	2,39	3,29	2,46	4,49	6,66			
Arable surface	0,25	0,16	0,51	0,53	0,32	0,40	0,41	0,39			
Land	1,00	0,71	1,60	1,30	1,75	0,62	2,26	4,46			
Field for grass	0,85	0,58	1,48	0,57	1,22	1,40	1,82	1,81			
Number of Households	1100	1306	1212	1490	783	502	1300	650			

Sursa: Date calculate

We can see the small surface that a household has, witched doesn't permit only a small primary agriculture that goes with the specific of the area.

Sure there are variations to the land dimensions that each household have. For "CIURULEASA" witch we have dates the biggest part is taken by agricultural households that have between 1-2 hectares (30%), fallow by households with 1 hectare, (26%). households that have between 2 and 3 hectares (19%), and the households that have between 3-5 hectares (14%). Households that have in their possession 5 to 10 hectares represent (10%), from the total of households, and the ones that have proprieties over 10 hectares are just (1%) from the total of agricultural areas, there are only 6 households. The households with a big property of land usually are in surrounding of the villages.

The situation of CIURULEASA regarding the land surface from a household from the impact area is a characteristic of mountain zone. Agricultural vegetal production in the immediately area impacts are represented in table: 3.5.3.

Table nr.3 the dynamic of agricultural surface cultivated with vegetal production

COMUNIT	YE	CER			LEY	MA	MAIS		POTETOS		VEGETA	
IES	ARS	S		2.12						BELS		
		-	-	На-	-	-Ha-	-To-	-Ha-	- To-	На	_	
		На-	To-		То-					-	To-	
ABRUD	2004	-	-	6	5	4	5	130	1560	20	72	
	2005	3	3	5	5	-	-	90	1080	20	71	
	2006	3	3	5	5	ı	ı	90	990	20	59	
Câmpeni	2004	50	100	100	200	20	40	220	3520	20	300	
	2005	80	128	80	96	20	40	300	4200	20	245	
	2006	100	180	100	120	20	40	250	3500	30	340	
Bistra	2004	100	150	200	300	30	54	300	4200	20	151	
	2005	130	182	150	210	30	45	300	3600	25	180	
	2006	80	72	150	135	30	75	250	2750	25	89	
Roșia	2004	-	-	-	1	5	7	185	2220	20	77	
Montană	2005	2	2	3	3	-	-	135	1620	20	81	
	2006	2	2	3	3	-	-	135	1485	20	67	
Bucium	2004	-	-	-	-	10	10	208	2912	16	102	
	2005	-	-	-	-	10	10	200	2800	16	104	
	2006	-	•	10	8	16	10	201	2412	16	180	
Ciuruleasa	2004	-	-	-	-	-	-	80	960	5	19	
	2005	-	-	-	-	1	-	60	660	5	14	
	2006	-	1	ı	-	ı	ı	60	660	5	14	
Lupşa	2004	20	50	-	-	180	720	180	2880	4	55	
	2005	10	20	20	38	-	-	299	3588	5	58	
	2006	-	-	30	27	120	300	260	2860	9	30	
Mogoș	2004	-	-	20	16	3	15	100	1250	23	437	
	2005	-	-	20	16	-	-	80	640	25	350	
	2006	-	-	20	16	1	1	85	850	25	338	

Source : D.A.D.R. ALBA IULIA

We can see that the vegetal production is not good this make the animal production to be low also. Because of that her we can't talk about an agricultural zone. The results don't show us a good agriculture development they show us an agriculture that is inefficient .the cultures with potatoes can be taken in this zone.

Raze of animals remain the main source of income for the impact area. the animals effective grow in the communities from the impact zone after the RMGC project that has taken place in the last 3 years we can fallow that in the table 4.

**Table 4. Animal effective dynamiques** 

CATTELS   GOUTS AND   PIGS   BIRDS										
		CALLE	LS	SHIPS	5 AND	rigs		DIKDS		
COMUNITI	YEAR	Total	Vouna	Total	For	Total	For	Total	For aggs	
ES	ILAK	Total	Young	Total	reprodu	Total	reprodu	Total	For eggs	
					ction		ction			
	2006	830	500	215	149	280	23	5500	4600	
Abrud	2005	868	530	226	175	273	23	6100	5000	
	2004	890	550	230	185	304	30	6400	5000	
	2006	1900	900	346	277	600	40	10500	4000	
Câmpeni	2005	1980	1000	452	391	660	40	11700	4000	
	2004	1980	900	330	260	650	40	11000	4000	
	2006	1950	880	771	622	1198	25	6900	5000	
Bistra	2005	1983	1100	775	650	1800	25	7000	5000	
	2004	2350	1100	895	650	1800	25	7000	5000	
	2006	986	530	208	143	170	14	6000	5000	
Roșia	2005	1002	560	225	167	190	14	6485	5000	
Montană	2004	1070	600	249	192	254	16	6500	5000	
	2006	1250	540	200	180	130	10	3600	2000	
Bucium	2005	1310	590	208	190	120	10	3700	2000	
	2004	1420	660	342	260	470	10	9000	3000	
	2006	890	460	181	144	190	24	3400	2500	
Ciuruleasa	2005	910	530	196	154	203	24	3400	2500	
	2004	945	580	196	164	390	24	3400	2500	
	2006	1940	910	338	280	647	20	8000	5400	
Lupşa	2005	2300	1000	350	320	760	20	8200	5400	
	2004	2250	1000	350	320	750	20	8100	5400	
	2006	1450	700	1100	630	215	10	3650	2600	
Mogoş	2005	1520	800	1200	800	200	10	3600	2800	
	2004	1525	875	1300	750	195	10	6000	3000	

Sursa: D.A.D.R. ALBA IULIA

Reported to the number of households from the impact area the effective of animals is modest. The population grow in each household in general a caw, 1 or 2 pigs, and about 10 birds. This characteristic of primary agriculture can't be seen only as a why to complete other incomings. The agricultural productions from animals that grow in the households from the impact areas are represented in the next table 5.

Table 5.. The animal dynamics production

COMUNIT	YESR		MEET	, TO	MILK, H	WOLL KG		
IES	YESK	Cattels	Gouts +sheeps	pigs	birds	caws	Gouts+sh eeps	
	2006	133	7,3	37,5	11,3	14200	82	525
Abrud	2005	145	3,9	60,6	11,3	14300	87	560
	2004	106	6,2	85	18,3	14800	78	525
	2006	167	51	170	38	30000	715	460
Câmpeni	2005	163	12	207	42	27500	175	455
	2004	136	5,6	229	47	29000	80	460
	2006	272	21	150	45	27000	274	530
Bistra	2005	313	24	228,6	15	32000	320	650
	2004	248	20	222,5	21,6	30000	500	650
	2006	122	7	121	24	18180	70	240
Bucium	2005	71	7	130	20	17500	85	230
	2004	96	12,3	125	33	20000	120	350
	2006	127	7,9	36	12	15100	79	525
Roșia	2005	158	6	61,3	13	15000	83	530
Montană	2004	145	5,5	50	14,3	22000	69	530
	2006	110	7,2	42	11	13500	66	260
Ciuruleasa	2005	116	5,1	54	10	14250	64	275
	2004	119	5,3	62	10,2	16200	74	263
Lupşa	2006	226	14	79	33,5	26000	126	590
	2005	128	5	122	10	28000	150	626
	2004	165	6	161	12	26000	150	560
	2006	253	12	77	18	23650	355	324
Mogoş	2005	266	11	80	23,9	23600	385	340
	2004	247	13	69	24	25460	405	362

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The resultants that they are obtainingre not competitive. The medium production of milk is 3000 litters from one caw.

A difficult problem is also the valorification of the products that are made in a farm. Usually these products are use inside of the farm. Sometimes even is there is extra products, the farmers can't sell it because there are no organization to take care of this matter, and also because the transport is too expensive from the farmer to the milk company

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The primer character of the area is represented in the table 6.

Table 6. Tehnikal agricultural machine

Tuble of Terminal agricultural machine									
COMUNITIES	TRACTORS	TILLAGE MACHINE	CUT GRASS MACHINE	MILK MASHINEPLUGS					
Abrud	4	-	23	5					
Câmpeni	8	-	10	10					
Bistra	4	-	4	4					
Roșia	4	-	3	3					
Montană									
Bucium	2	-	5	5					
Ciuruleasa	2	-	8	8					
Lupșa	3	4	12	12					
Mogoş	1	-	6	6					

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The arable surface that a tractor must make is in some communities 100 hectares, this is impossible to work even if the land is coma sated and the tractor is working only of for vegetal production. Milk machine in rapport with the caws are almost invisible. This situation shows us that the agriculture is in a very low.

And the productions combine with the workers of land is extremely low. The tractors are most use in the wood exploitation.

Those aspects that we have mentioned up on the pages characterize the agricultural stage in the impact zone, that can be define as an primary, inefficient, and unconformity with the politics of community in agricultural side.

Some study recommends the practice of organics agriculture. But this is extreme precise and most of the farmers can't obtain the certificate that they have bio products that because of the why that they cultivate.

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