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WAYS OF CHOOSING SHEEP FARMING SYSTEMS ACCORDING TO FODDER RESOURCES

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Abstract: The control of social, physical, zootechnical, herd management, technological and productive factors highlight the power of farms to choose the most efficient system of raising sheep according to the existing resources in the exploitation area. The family production system represents still the primary sheep production system, characterized by being highly dependent on natural resources and susceptible to seasonal variations. The emerging production system is expanding more and more in the resource areas and may represent the future of sheep farms because the traditional system can intensify its management and migrate to the emerging system in the future. It is recommended to direct public policies to encourage efficient succession of workers in the sheep sector, adoption of technologies and training of know-how professionals. In the choice of sheep exploitation systems according to resources, a major issue in addition to the natural resources of food for sheep must be given to the degree of qualification of the human resource which must be a permanent concern for breeders. The establishment of alternative semi-intensive or intensive farms of sheep is suitable in all farming areas where better grazing on artificial pastures can be ensured and agricultural and agro-industrial by-products are available in large quantities for feeding sheep.

• Introduction

The choice of the most efficient sheep production system depends on a number of factors according to which the following systems are distinguished:

- cropping systems with rotational grazing, in which fodder crops must be included in the rotation program of cereals or commercial crops, being the practice of keeping uncultivated land with cereals and the use of crops fodder such as grain, millet, sorghum;
- rearing systems on pasture with shelter for lambs, characterized by) calving control, environment and behavioral management and parasites;
- rearing systems on pasture without shelter for lambs, characterized by calving in the first year of the ewe's life, feeding the lambs; on pasture and outdoors and behavior management;
- systems of growth on pasture with silvo-grazing, in which the establishment of silvicultural pastures improves the quality of available nutrients, ensuring its supply throughout the year;
- seasonal production systems that have many management alternatives: if spring pastures or fodder are not available, or if calving facilities are not available, there may be a demand for spring-bred ewes or ewes with young lambs; if pasture is not available for the ewes after calving, the lambs can be weaned early. It is a good way to market the feed produced on the farm and keep the work busy in the off-season being profitable if there is an abundance of pasture and crop residues that allow lamb grazing;
- the integrated crop/animal/tree production systems that should be developed to increase the production of small ruminants (sheep and goats) in the fragile ecology of dry areas;
- extensive systems, characterized by small inputs and outputs, are integrated with trees, shrubs, arable crops, grasses and require minimal investment in food, health care and housing.

• Material and method

As part of this scientific approach, the identification of the most efficient production systems was pursued according to the typology and characteristics of the farms:

- with young adult farmers, medium and livestock farms, intensive management, intermediate technological level and high meat production - emerging systems;
- with adult farmers, small farms, small herds, low technological level and low meat production - conventional systems;
- with mature farmers, large and effective farms, extensive management, low technological level and high meat production - traditional systems.

• Results and discussions

The emerging system is expanding and may represent the future of sheep farms because the traditional system can intensify its management and migrate to the emerging system in the future. It is recommended to direct public policies to encourage efficient succession of workers in the sheep sector, the adoption of technologies and the training of know-how professionals. The insertion of young farmers was considered a determining factor in the future of the sheep production system in the studied region rich in fodder resources. The culinary (food quality), economic, ecological and social benefits of sheep grazing for meat and milk production in mountain areas must also be considered. This system, which faces significant challenges (aging workforce, integration into global markets, low social respect, risk of economic bankruptcy, competitive land use), has four levels of analysis (Figure 1).

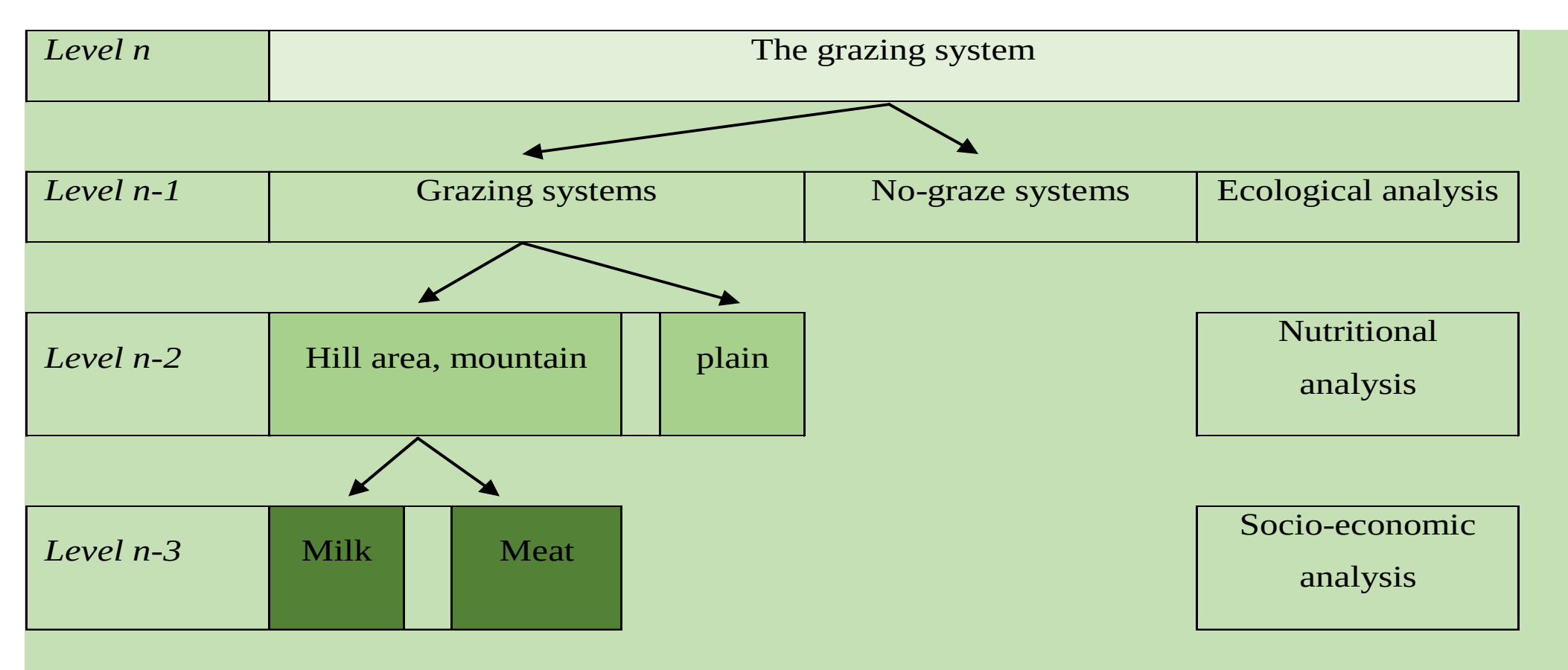


Figure 1. Grazing system levels for mixed milk-meat production

• Conclusions

The establishment of semi-intensive or intensive alternative sheep production farms can ensure good operating conditions and better grazing in areas with marginal or higher rainfall, if additional feed resources are provided in considerable quantities from the crop and other agro-industrial products. The access to extension services has increased the probability of sheep adaptation to climate change and the improvement of production will have a significant role in the selection of adaptation measures, the perception of breeders being important when they make decisions regarding programs for sheep production and plan adaptation programs and agropastoral activities.