

SMALL MECHANIZATION - AN ALTERNATIVE FOR INDIVIDUAL MOUNTAIN FARMS

Tudor Adrian ENE¹, Vasile MOCANU²

Abstract. *Regardless of the main concern of the inhabitants of the mountain area, the mechanization of the works from their own household has a special importance in the development and efficiency of the activity by achieving high working capacities, shortening execution times, reducing the necessary physical effort, diminishing the necessary labour force, promoting a modern ecological activity. Only mechanization allows the achievement of superior work capacities with a reduced consumption of labour and physical effort. In this paper are presented some new machines, designed and made for the mechanization of some technological links, in aggregate with low power tractors.*

Keywords: mechanization, grassland, individual mountain farms, management, technological solutions

1. Introduction

In the mountainous area, on the agricultural surfaces, a series of restrictive factors on the production act, such as: the slope and the deficient orography of the land with small and irregular surfaces; climate (due to high altitude); low fertility; skeleton and rock on the surface; surface erosion; deep erosion and landslides; high acidity; invasion with worthless vegetation. Due to the action of these limiting factors, the agricultural yields obtained are lower than those obtained in other more favorable areas of the lowland-plains regions.

From the surface of meadows in our country, approx. 4.9 million hectares, over 2.94 million hectares (60 %) are located in hilly and mountainous areas.

Concerning to conditions in which the farm is located, the mechanization of agricultural works is of particular importance for: high work capacity; reducing the necessary physical effort; decreasing the need for labor per production unit; and increasing the economic efficiency of the farm etc.

Today it is inconceivable that a farmer in the mountain area can live only on the income from his own activity without benefiting from a high degree of farming mechanization. Only mechanization allows for higher work efficiency with reduced labor and physical effort.

¹PhD, Eng., Junior Researcher, Research and Development Institute for Grassland Braşov, Romania, (e-mail: tudorene@yahoo.com).

²Prof., PhD, Eng., Senior Researcher, Research and Development Institute for Grassland Braşov, Romania, (e-mail: vasmocanu@yahoo.com).