

Mechanization planning to bridge the mechanization gap for different farm operations to meet fodder and crop production in region, Pusa, Bihar, India

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■ **ABSTRACT** : The present study deals with purpose mechanization planning to bridge the mechanization gap for different farm operations for sustainable farming in Pusa region. The results obtained from survey conducted to list out the machineries available as well as gap to the farm, the mechanization planning was suggested on the available field conditions to bridge this gap. Grassland-based cattle farms are highly dynamic systems that are difficult to manage, mostly because of their sensitivity to uncontrollable environmental factors such as weather. The results obtained from the survey conducted in the cattle farm of Dr. Rajendra Prasad Central Agricultural University situated in Samastipur was noticed 70 hp (~0.87 hp/ha) utilization of farm power in terms of available machinery for farm operations which was calculated lower than reported a value of power utilization as 1.5 hp/ha for successful farm operation through mechanization. Mechanization of agriculture to meet the growing demand of population, productivity of land has to be enhanced. This can be done by timely application of improved technology. For good retaining the quality as well as nutritional aspects of green fodder, it is essential to harvest fodder with taking minimum operational time. Nutritious green fodder is required to enhance the quality of milk in terms of vitamin A, D, E, and K. To enhance the productivity, to reduce seed losses and to facilitate interculturing activities, it is necessary to perform sowing operation properly. Maximum production of fodder is required to meet the fodder requirement production as well as to enhance the quality of milk. Mechanization is also essential to understand the importance of maintaining the health and to aware the different initiatives being undertaken by cattle farm farmers to protect and enhance the environment.

■ **KEY WORDS** : Farm mechanization, Farm power, Cattle farm, Status of farm, Milk quality, Mechanization planning

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