World Academy of Science, Engineering and Technology
International Journal of Agricultural and Biosystems Engineering
Vol:13, No:03, 2019

Assessment of Major Feed Resources and Its Utilization in Manaslu Conservation Area Nepal

Authors : Sabita Subedi, Bhojan Dhakal, Shankar Raj Pant, Naba Raj Devkota

Abstract : An assessment was made about the available feed resources, its utilization pattern, specifically, roughage and concentrate, produced from the Manaslu Conservation Area (MCA) of Nepal to formulate the appropriate strategies in satisfying the annual dietary requirements of the livestock covering its present production and management scenarios. A comparative study was done by employing a purposively conducted survey to deduct the distribution of forage sources in the area. Findings revealed that natural vegetation, seasonally available crop residues, and dried grasses were major feed resources, whereas their contribution to the total supply varied significantly ($p < 0.01$). The amount of feed obtained from various sources was calculated by standard conversion and using primary household data. Findings revealed that farmers practice significantly higher ($p < 0.01$) number of grazing days and hours per day for large ruminants such as Yak and Chauries as compared to small ruminants such as goats and sheep. The findings also indicated seasonal variations of feed supply, whereas January to March is the period of short supply ($p < 0.01$). It was relatively in good supply from June to September though average roughage and crude protein supplement for the animals was far below than optimum requirements. These scenarios suggest the need for immediate attention to improve the range productivity in the MCA as the deteriorating situations of the rangelands may raise questions on the sustainability of livestock herders.

Keywords : altitude, carrying capacity, dietary requirement, feed resources, rangeland, ruminant
Conference Title : ICAAS 2019 : International Conference on Agriculture and Animal Sciences
Conference Location : Miami, United States
Conference Dates : March 12-13, 2020