Planning and Management Options for Pastoral Resource: Case of Mecheria Region, Algeria

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Abstract : Pastoral crisis in Algeria has its origins in rangeland degradation which are the main factor in any activity in the steppe zones. Indeed, faced with the increasing human and animal population on a living space smaller and smaller, there is an overuse of what remains of the steppe range lands, consequently the not sustainability of biomass production. Knowing the amount of biomass available, the practice of grazing options, taking into account the use of "Use Factor" factor remains an essential method for managing pastoral resources. This factor has three options: at 40% Conservative pasture; at 60 % the beginning of overgrazing; at 80% destructive grazing. Accessibility on the pasture is based on our field observations of a type any flock along a grazing cycle. The main purpose of these observations is to highlight the speed of herd grazing situation. Several individuals from the herd were timed to arrive at an average duration of about 5 seconds to move between two tufts of grass, separated by a distance of one meter. This gives a rate of 5 s/m (0.72 km/h) flat. This speed varies depending on the angle of the slope. Knowing the speed and slope of each pixel of the study area, given by the digital elevation model of Spot Image (MNE) and whose pitch is 15 meters, a map of pasture according to the distances is generated. Knowing the stocking and biomass available, the examination of the common Mécheria at regular distances (8.64 km or 12 hours of grazing, 17.28 km or 24 hours of grazing and 25.92 Km or 36 hours of grazing), offers three different options (conservation grazing resource: utilization at 40%; overgrazing statements for use at 60% and grazing destructive for use by more than 80%) for each distance traveled by sheep from the starting point is the town of Mécheria.

Keywords: pastoral crisis, biomass, animal charge, use factor, Algeria

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