LAND AND SOIL CLASSIFICATION: A CASE STUDY FROM FAR WESTERN REGION OF NEPAL

L Kumar[4], S.R Shrestha[1], Mr. Devraj Chalise[1], Mr. Nabraj Subedi[2], Mr. Bikesh Twanabasu[3]
[1]Nepal Agricultural Research Council, [2]Ministry of Land Reform and Management, [3]Cube Info Company Pvt. Ltd., [4]University of New England

Soil and land classification is necessary to optimize agricultural productivity. Detailed soil survey to classify land of Far Western Nepal is necessary as soils of far western region are more prone to soil degradation due to imbalance nutrient use, unplanned land use and soil erosion. 137 soil samples from two Village Development Committees of Kailali district, Nepal were taken to study standard soil profile and various soil physical and chemical parameters at 1:10000 scale. Based on both soil physical and chemical parameters, soils were classified according to USDA soil taxonomy up to four categories namely order, suborder, great group and sub group. Major soil types found were typic durixerepts, typic haplapsamments, tyic haplaquepts, typic haplustolls, typic ustochrepts and typic ustorthents with typic haplaquepts covering almost half (45.53%) and typic durixerepts with minimum (0.13%) of the research area. A total of 12 land capability classes were observed with IAu/2 (18.76%), IAu/1 (18.44%), IIAu/2 (15.55%) and IVAu (13.65% dominating. Majority of land that used to be fertile is no more fertile today so proper soil and land management practices are utmost in obtaining better agricultural yield and increased profit.