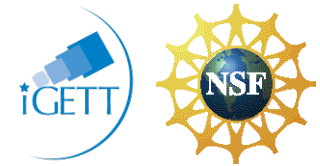


Using Soil Productivity to Assess Agricultural Land Values in North Dakota



Topic: Agriculture, natural resources

Problem Statement: Farming communities in Burke County, North Dakota are burdened by high taxes and seek a more equitable agricultural tax parcel assessment.

Level: Intermediate to Advanced

Software: ArcGIS, Soil Data Viewer Extension, ENVI, ArcIMS Web Soil Survey

Description: Students use GIS, a Landsat image, and soil surveys to find soil production values that can be compared, contrasted, and used for true and full fair agricultural tax parcel assessment.

Key words: Agricultural land parcel tax, high pass filters, low pass filters, NRCS, unsupervised classification, soil/crop productivity index, Burke County, North Dakota

