Potential Economic Outcomes of Integrating Livestock and Cover Crop Systems

Subject of Review: A literature review examined the profitability of integrating cover crop and livestock systems, the forage benefit of and livestock performance on cover crops, and the regional factors affecting adoption of cover crop and livestock systems. We use microdata and county-level data from the 2012 and 2017 Census of Agriculture to estimate cover crop adoption rates on livestock operations (with cattle) and to identify regions with potential for adoption of integrated cover crop and livestock systems. We use data from the Agricultural Resource Management Survey (ARMS) to estimate the prevalence of harvested vs. unharvested cover crops on livestock operations, as well as termination practices for cover crops. ARMS is a national survey of farming operations and production practices conducted by USDA’s National Agricultural Statistics Service (NASS) and Economic Research Service (ERS). Operation-level data on cover crop acreage are based on the Cost and Returns Report (Phase 3) ARMS from the 2018, 2019, and 2020 survey years, and field-level data on termination practices come from ARMS Production Practice and Cost (Phase 2) field-level data.

Purpose of Review: The purpose of the review is to ensure the high-quality of the economic analysis, transparent explanation of methods, objective interpretation of results, and effective communication to the intended audience.