Table 49. Renewable Energy: 2017 and 2012

[For meaning of abbreviations and symbols, see introductory text.]

Item	2017	2012	ltem	2017	2012
Renewable energy producing systemsfarms	3,029	1,239	Renewable energy producing systems - Con. Small hydro systems	21	24
Solar panelsfarms	1,879	763	Biodiesel production systems (see text)	21	24
Wind turbinesfarms	612	264	Ethanol production systems (see text)		
Methane digestersfarms	-	9	Other farms	2	44
Geothermal/geoexchange systems (see text)farms	680	198	Wind rights leased to others farms	1,604	735

Table 50. Institutional, Research, Experimental, and American Indian Reservation Farms: 2017 and 2012

[For meaning of abbreviations and symbols, see introductory text.]

Characteristics	2017	2012	Characteristics	2017	2012
Farms	73 74,640 1,022	60 70,411 1,174	Market value of agricultural products sold (see text) - Con. Crops, including nursery and greenhouse crops\$1,000 Livestock, poultry, and their products\$1,000	6,297 6,990	5,486 10,976
Estimated market value of land and buildings\$1,000 Average per farm	133,898 1,834,213 1,794	104,999 1,749,991 1.491	Total farm production expenses\$1,000 Average per farmdollars	16,841 230,692	19,492 324,873
Estimated market value of all machinery and equipment	24.965	18.390	Government payments 1 (see text) farms \$1,000 Average per farm dollars	20 493 24,630	25 212 8.467
Land in farms according to use:	24,000	10,000	Total income from farm-related sources	26 297	24 2.188
Total cropland farms acres Harvested cropland farms	62 24,584 58	53 20,485 39	Average per farm	11,410	91,174
Other pasture and grazing land that could have been used for crops without additional	17,486	15,263	Full owners	48 17 8	42 10 8
improvements	3 (D) 35	1 (D) 32	Farms by North American Industry Classification System:	24	0.4
Total woodlandfarms	(D) 16 4.397	(D)	Oilseed and grain farming (1111) Vegetable and melon farming (1112) Fruit and tree nut farming (1113)	31 1 2	24 2 1
Woodland pastured	3 314	3,765 3 (D)	Greenhouse, nursery, and floriculture production (1114)	6	2
Woodland not pasturedfarms acres	15 4,083	(D)	Other crop farming (1119) Tobacco farming (11191) Cotton farming (11192)	12 - -	15 - -
Permanent pasture and rangeland other than cropland and woodland pasturedfarms acres	30 39,894	24 42,289	Sugarcane farming, hay farming, and all other crop farming (11193, 11194, 11199)	12	15
Land in farmsteads, homes, buildings, livestock facilities, ponds, roads, wasteland, etcfarms acres	48 5,765	39 3,872	Beef cattle ranching and farming (112111) Cattle feedlots (112112) Dairy cattle and milk production (11212)	9 5 1	6 1 2
Irrigated landfarms acres	29 1,774	16 1,079	Hog and pig farming (1122)	-	-
Market value of agricultural products sold (see text)	13,286 182,006	16,462 274,365	Sheep and goat farming (1124) Aquaculture and other animal production (1125, 1129) (see text)	- 6	- 7

¹ Data for 2012 include loan deficiency payments, marketing loan gains, and net value of commodity certificates.