

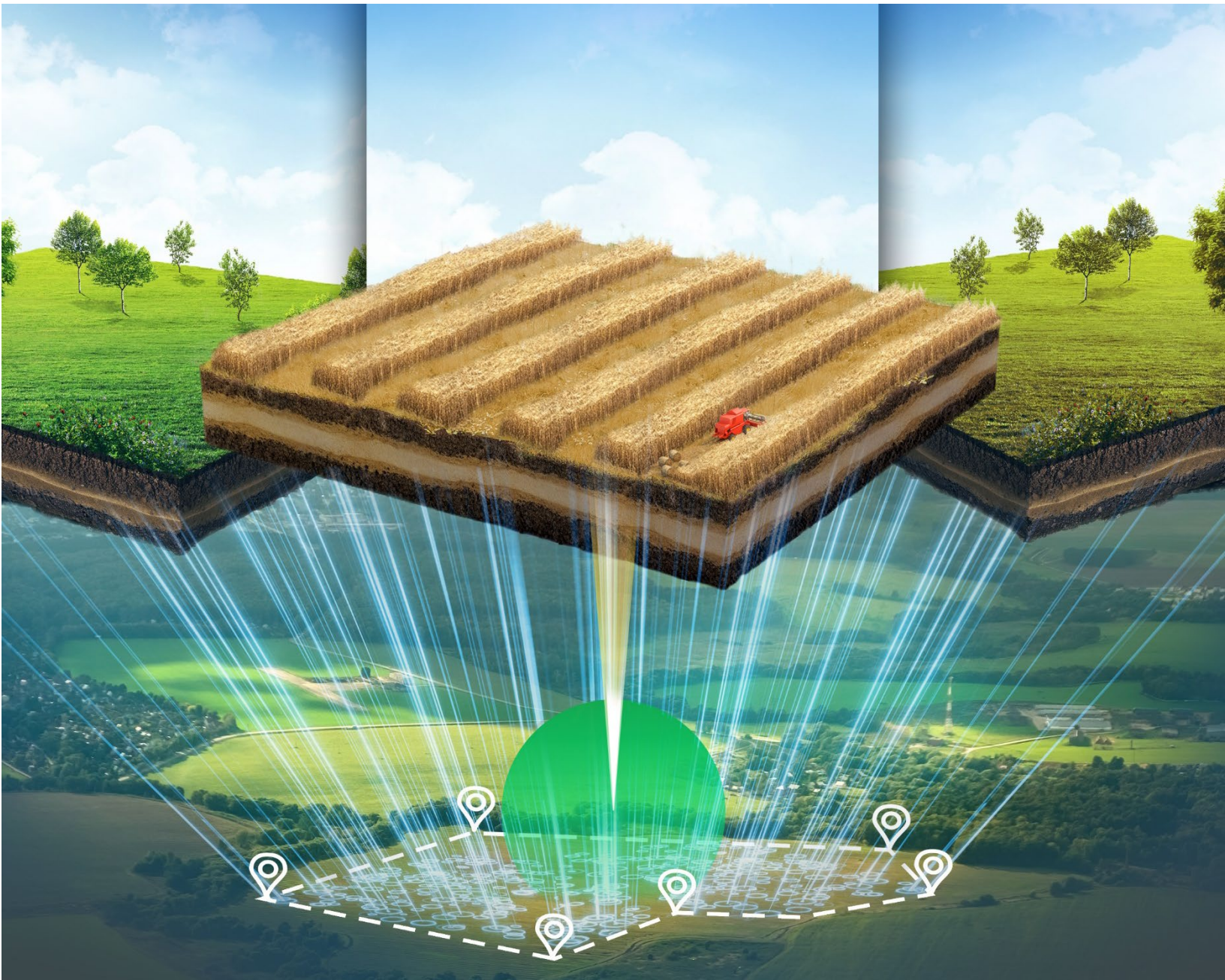


Economic
Information
Bulletin
Number 292

February 2026

Characterizing Foreign Investment in U.S. Agricultural Land, 2022

Noah Miller, Clayton Winters-Michaud, Bassmah Isa



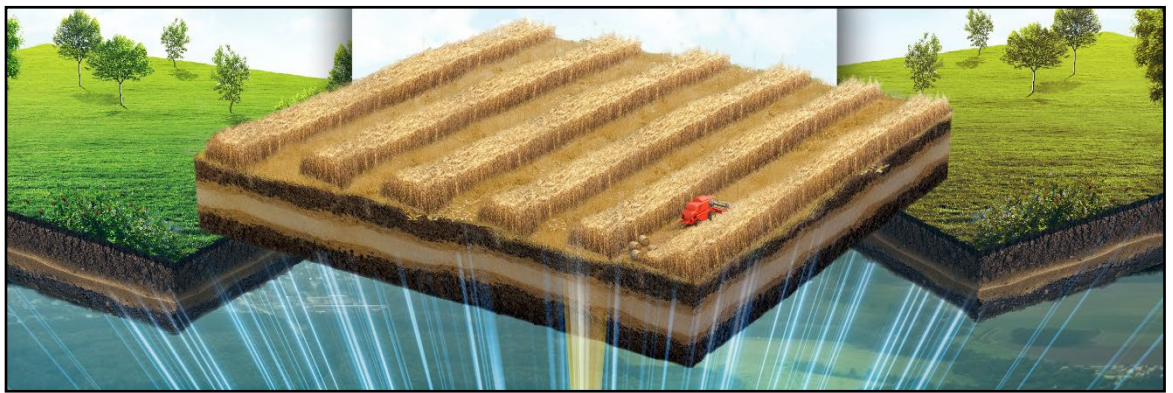


Economic Research Service

www.ers.usda.gov

Recommended citation format for this publication:

Miller, N., Winters-Michaud, C., & Isa, B. (2026). *Characterizing foreign investment in U.S. agricultural land, 2022* (Report No. EIB-292). U.S. Department of Agriculture, Economic Research Service.



Cover photo images from Getty Images.

Use of commercial and trade names does not imply approval or constitute endorsement by USDA.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the State or local Agency that administers the program or contact USDA through the Telecommunications Relay Service at 711 (voice and TTY). Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Mail Stop 9410, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.



Characterizing Foreign Investment in U.S. Agricultural Land, 2022

Noah Miller, Clayton Winters-Michaud, Bassmah Isa

Abstract

In 2022 foreign investors, including long-term leaseholders, held an interest in 43.4 million acres of U.S. agricultural land. This represents 3.4 percent of all privately held agricultural land and nearly 2 percent of all land in the United States. This report compares foreign-owned and long-term foreign-leased U.S. agricultural land held in 2022 using data collected through mandatory reporting requirements set forth in the Agricultural Foreign Investment Disclosure Act of 1978 (AFIDA). Foreign-held, long-term leases (i.e., 10 years or more) accounted for roughly one-third (32.5 percent) of foreign-held U.S. agricultural land as of December 31, 2022, up from roughly 20 percent in 2017. This report also identifies important differences between foreign-owned and long-term foreign-leased agricultural land in the United States in terms of its use, location, size, and other characteristics. A much greater share of long-term foreign-leased agricultural land is associated with renewable energy development compared to foreign-owned land (85 percent versus 2 percent). A much smaller share of long-term foreign leaseholds (less than 10 percent) is associated with a change in the agricultural producer (operator) compared with foreign purchases of agricultural land. The findings in this report indicate that foreign leases of agricultural land are more likely to result in dual use (i.e., agriculture and renewable energy) thereby providing an additional income stream to owner-operators. The results also show that around 97 percent of foreign land leaseholders indicated they did not intend to take the land out of agricultural usage.

Keywords: agricultural land, foreign holdings, Agricultural Foreign Investment Disclosure Act of 1978 (AFIDA), renewable energy, leases

Acknowledgments

The authors would like to thank Joy Harwood, Catherine Feather, and Thomas Gajnak (USDA, Farm Production and Conservation Business Center) for their feedback on this report. The authors would also like to thank Casey Keel, Grant Wall, and Eleanore Belanger (USDA, Economic Research Service (ERS)) for their editorial support and Christopher Sanguinett and Jeremy Bell (USDA, ERS) for layout and design.

About the Authors

Noah Miller is an economist with USDA, Economic Research Service (ERS). Clayton Winters-Michaud is a former USDA, ERS economist. Bassmah Isa was an intern with USDA, ERS through the Hispanic Association of Colleges and Universities Program when this research was conducted.

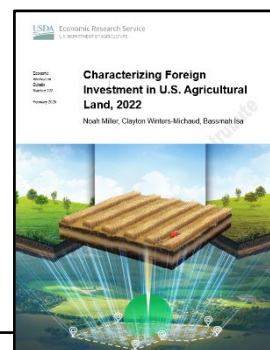
Contents

- Summary..... iv**
- Introduction..... 1**
- Data and Methodology 2**
 - AFIDA and FSA-153 2
 - Identifying Foreign-Owned and Long-Term Foreign-Leased Land 2
 - Identifying Business Types 3
- Results 4**
 - Share of Foreign-Holdings by Interest Type..... 4
 - Historical Trends in the Share of Long-Term Foreign-Leased Acreage 5
 - Differences in Land-Use Patterns 6
 - Regional Patterns 7
 - Comparing Potential Business Types..... 8
 - The Prevalence of Different Business Structure Types..... 10
- Intended Land Use..... 11**
 - Relationship to the Producer 12
- Conclusions..... 13**
- References..... 14**
- Appendix A 15**

A report summary from the Economic Research Service

Characterizing Foreign Investment in U.S. Agricultural Land, 2022

Noah Miller, Clayton Winters-Michaud, Bassmah Isa



Key Points

- Foreign entities held an interest in 3.4 percent of all privately held agricultural land in the United States (43.4 million acres) as of December 31, 2022.
- This study found that foreign entities long-term leased (10 or more years) roughly one-third (32.5 percent or 14.1 million acres) of all foreign-held U.S. agricultural land as of December 31, 2022, a percentage that has been steadily increasing over time (up from roughly 20 percent in 2017). Of the foreign-held land acquired in 2022, 58 percent was done through long-term leases.
- Roughly two-thirds of foreign-leased U.S. agricultural land was cropland; in comparison, just over two-thirds of foreign-owned U.S. agricultural land was forestland.
- Most long-term foreign-leased agricultural land (approximately 85 percent compared with 2 percent for foreign-owned agricultural land) was leased by companies engaged in renewable energy production. Our findings indicate that the majority of long-term foreign leases result in the dual use of land (i.e., continue agricultural production as well as lease part of the land).

Why Does This Matter?

Over time, foreign ownership and foreign leasing of land have created questions regarding national security and the impacts on farm communities. Foreign interests include ownership and leaseholds, though legislation rarely distinguishes between them. Not all U.S. agricultural land that is foreign held is foreign owned, and the Agricultural Foreign Investment Disclosure Act (AFIDA) requires foreign investors to report their holdings in the case of ownership, trusts, life estates, purchase contracts, and long-term leaseholds of 10 or

more years. Even though long-term leaseholders do not have ownership of the land, they have some form of control over the land and its use for a significant period. According to our estimates, roughly one-third of all foreign-held U.S. agricultural land was in the form of long-term leases as of the end of 2022 (up from 20 percent from 5 years earlier), with trusts, life estates, and purchase contracts accounting for a combined 1 percent of foreign holdings. The differing impacts of foreign-owned versus foreign-leased land on the economy, land markets, national security, and the impacts on farm communities are not fully understood.

A Few More Details

The Agricultural Foreign Investment Disclosure Act (AFIDA) of 1978 requires that all foreign persons with a significant interest in U.S. agricultural land (including forestland and long-term leases) must file an FSA-153 report with USDA, Farm Service Agency (FSA) within 90 days of acquisition or disposition. Using AFIDA data containing acquisitions up to December 31, 2022, we compared key characteristics between foreign-owned and long-term foreign-leased agricultural land.

Summary of dominant characteristics and other key findings of foreign-held U.S. agricultural land by type of interest held

Item of interest	Foreign owned	Foreign leased
Total acreage	28.8 million	14.1 million
Share of U.S. agricultural land	2.3 percent	1.1 percent
Number of parcels	19,450	24,675
Average parcel size (acres)	1,483	571
Dominant land use	Forestland	Cropland
States with highest share	Maine, Texas	Oklahoma, Colorado, Washington
Dominant purpose of holding	Timber production	Renewable energy production (primarily wind)
Dominant business structure	Corporation	Limited Liability Company (LLC)
Dominant intended land use	Stay in agriculture (no change)	Stay in agriculture (no change)
Dominant owner/producer relationship	Owner operated	Owner operated
Share of previous producers replaced	43 percent	9 percent

Note: When no numerical value is given, the characteristics listed represent the most common characteristic for each item of interest.

Source: USDA, Economic Research Servicing using USDA, Farm Service Agency's Agricultural Foreign Investment Disclosure Act database data for holdings as of December 31, 2022.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

Characterizing Foreign Investment in U.S. Agricultural Land, 2022

Introduction

There has been increasing interest by policymakers at both the State and national level in the potential effects of foreign investment in U.S. agricultural land. In response, as of November 2024, legislators in 28 States proposed bills related to foreign investment in U.S. agricultural land according to the National Agricultural Law Center (Brown & Spellman, 2024), and 22 States had enacted restrictions on foreign ownership of U.S. land between January 2023 and July 2024 according to the Congressional Research Service (LSB11013). Over 20 pieces of related legislation were introduced in the 117th and 118th U.S. Congresses, 3 of which passed the House of Representatives. Although these concerns have historically been based on the potential economic impacts to rural communities and farms, recent discussions have included issues of national security as well as resource scarcity. As of December 2024, approximately 25 States explicitly forbade or limited nonresident aliens, foreign businesses and corporations, and foreign governments from acquiring or owning an interest in agricultural land within their State (Spellman & Brown, 2024). However, little is known about the extent and nature of foreign-owned versus foreign-leased land and how these laws have affected the rural economy.

USDA, Farm Service Agency (FSA) and the USDA, Farm Production and Conservation Business Center (FPACBC) collect data on foreign-held U.S. agricultural land to fulfill the mandate of the Agricultural Foreign Investment Disclosure Act of 1978 (AFIDA), which states that all foreign persons who acquire or transfer an interest in agricultural land¹ report such transactions within 90 days of the date of acquisition or transfer using the FSA-153 form (see appendix). USDA, FSA then uses these data to publish an annual report on the state of foreign holdings of agricultural land in the United States, which can be found on the USDA, FSA website. All data underlying the AFIDA annual report have also been posted on the USDA, FSA website in Excel spreadsheets. Please note that USDA, FSA may update or change such data over time.

According to the annual AFIDA report, foreign investors held an interest in approximately 43.4 million acres of U.S. agricultural land, including forestland, as of December 31, 2022 (USDA, Farm Service Agency (FSA), 2023a). This is an increase of over 3.4 million acres from the December 31, 2021, report and represents 3.4 percent of all privately held agricultural land (including forestland) in the United States.

Not all U.S. agricultural land that is foreign held is foreign owned, and AFIDA also requires foreign investors to report their holdings in the case of trusts, life estates, purchase contracts, and long-term leaseholds of 10 or more years. Even though long-term leaseholders do not have ownership of the land, they have some form of control over the land and its use for a significant period. According to our estimates, roughly one-third of all foreign-held U.S. agricultural land was in the form of long-term leases as of the end of 2022 (up from 20 percent from 5 years earlier), with trusts, life estates, and purchase contracts accounting for a combined 1 percent of foreign holdings. Given the increased prevalence of foreign leases among

¹ Forestland is included in AFIDA's definition of agricultural land and must also be disclosed through FSA-153 form filings.

foreign holdings, this report examined whether important differences exist between foreign-owned and long-term foreign-leased U.S. agricultural land.²

We found that important differences exist between foreign-owned and foreign-leased U.S. agricultural land. As of December 31, 2022, 71 percent of foreign-owned U.S. agricultural land was associated with forestland, as opposed to cropland, pasture, or other agricultural land. In contrast, long-term foreign leases were typically associated with cropland (65 percent), with less than 7 percent associated with forestland. We also found that the vast majority of foreign investors entering into long-term leases on U.S. agricultural land were in the renewable energy business, rather than the agricultural business.

Although we were unable to formally test these mechanisms, our findings suggest that a large share of these renewable energy leases resulted in dual use of the land, where agricultural production continues alongside energy development. This would be consistent with income diversification on the part of the owner-operator, with the lease resulting in an alternative income stream for the domestic owner-operator (Winikoff & Maguire, 2024).

Data and Methodology

AFIDA and FSA-153

We used data that was compiled by USDA, FSA and the USDA, Farm Production and Conservation Business Center (FPACBC) per the requirements of AFIDA. AFIDA requires that all foreign persons who acquire, transfer, or hold a significant interest or substantial control in U.S. agricultural land (whether directly or indirectly) must complete USDA, FSA Form 153 within 90 days from the date of the transaction. A foreign person is defined as any individual, corporation, company, association, firm, partnership, society, joint stock company, trust, estate, or any other legal entity that operates under the laws of a foreign government. Substantial control, as defined in 7 Code of Federal Regulations (CFR) Part 781.2(k), is an interest of 10 percent or more for a single person or 50 percent or more in the aggregate and can include long-term leases of 10 or more years. By law, failure to furnish the requested information or falsification of reporting may result in a civil penalty of up to 25 percent of the fair market value of the foreign person's interest in the agricultural land. The data from these disclosures is compiled in an annual USDA, FSA report for Congress.³ This USDA, ERS report analyzed parcel-level data⁴ for all reported foreign-holdings as of December 31, 2022. Unlike previous research on foreign investment in U.S. agricultural land, this report compared important characteristics between foreign-owned and long-term foreign-leased U.S. agricultural land.

Identifying Foreign-Owned and Long-Term Foreign-Leased Land

To identify potential differences between foreign-owned and long-term foreign-leased agricultural land, we first determined the type of interest in each parcel. To classify foreign-owned and long-term foreign-leased agricultural land, we relied on item 5 of the FSA-153 (figure A.1). In item 5, filers must select the type of interest held in the agricultural land from the following options: (A) fee interest (ownership) whole, (B) fee

² Though filing requirements provide information about the country of origin of foreign investors, this report does not assess which countries are the primary investors in U.S. agricultural land.

³ Annual reports, as well as more information on AFIDA, can be found on USDA, FSA's AFIDA web page.

⁴ Specifically, individual FSA-153 observations. AFIDA defines a parcel as all land acquired by the exact same person(s) on the same date in the same county, even if said parcel is comprised of multiple tracts of noncontiguous land.

interest (ownership) partial, (C) life estate, (D) trust beneficiary, (E) purchase contract, or (F) other. For the purposes of this analysis, we categorized each parcel based on the type of interest held.

AFIDA classifies owned land as either wholly or partially owned (fee interest), which are grouped together for this report. Instances where the “other” category was selected on the FSA-153 form were classified as long-term foreign-leased agricultural land in this report. Despite not being explicitly reported as a long-term lease, consultation with USDA, FSA and USDA, FPACBC and our personal research, led us to conclude that the vast majority (approximately 85 percent, though likely higher) of those who selected “other” were long-term lessees. It should be noted that USDA, FSA and USDA, FPACBC are currently in the process of revising the FSA-153 form to collect additional data on long-term leaseholders (USDA, FSA, 2023b), which will make such an analysis easier in the future.

The remaining interest types (e.g., trust beneficiary, life estate, and purchase contract) were combined here into a single category called otherwise held (or sometimes otherwise foreign held) in this report. As will be seen, this group only accounted for 1 percent of all foreign-held acres or less than 500,000 acres.

A comparison of how the interest type is reported in FSA-153 versus how it is classified in this paper is presented in table 1.

Table 1

Classifying type of foreign interest held based on FSA-153 item 5

FSA-153 item 5 options	Corresponding term used in this report
Fee interest (ownership) whole	Owned
Fee interest (ownership) partial	Owned
Life estate	Otherwise held
Trust beneficiary	Otherwise held
Purchase contract	Otherwise held
Other	Long-term leased

Note: The Agricultural Foreign Investment Disclosure Act of 1978 (AFIDA) has required that all foreign persons who acquire, transfer, or hold a significant interest or substantial control in U.S. agricultural land (whether directly or indirectly) must complete USDA, Farm Service Agency (FSA) Form 153 within 90 days from the date of the transaction. The form is included in the appendix of this report and collects basic information about the foreign investor and the parcel.

Source: USDA, Economic Research Service.

Identifying Business Types

In addition to quantitative variables, the AFIDA dataset also included the investor’s name, which was typically a business name. We used this information to identify the activities these businesses might be involved in, as well as to fill in gaps regarding the business structure. Both analyses were performed using a word search algorithm that searched each business name for a single term or at least one of a group of terms depending on the specification. Before performing the search, the entire string was converted to all lowercase characters, all punctuation was removed, and a space was added at the end. For each term (or combination of terms), we calculated the total number of acres held by businesses with that term (or combination of terms) in their name for both foreign-owned and long-term foreign-leased parcels.

We used this method to identify the type of activities each business was likely engaged in. Specifically, we searched for words related to renewable energy, agriculture, and timber production. We also used this method to identify the prevalence of the term “LLC” (Limited Liability Company) among business names because many foreign long-term leaseholders report other as their organizational structure.

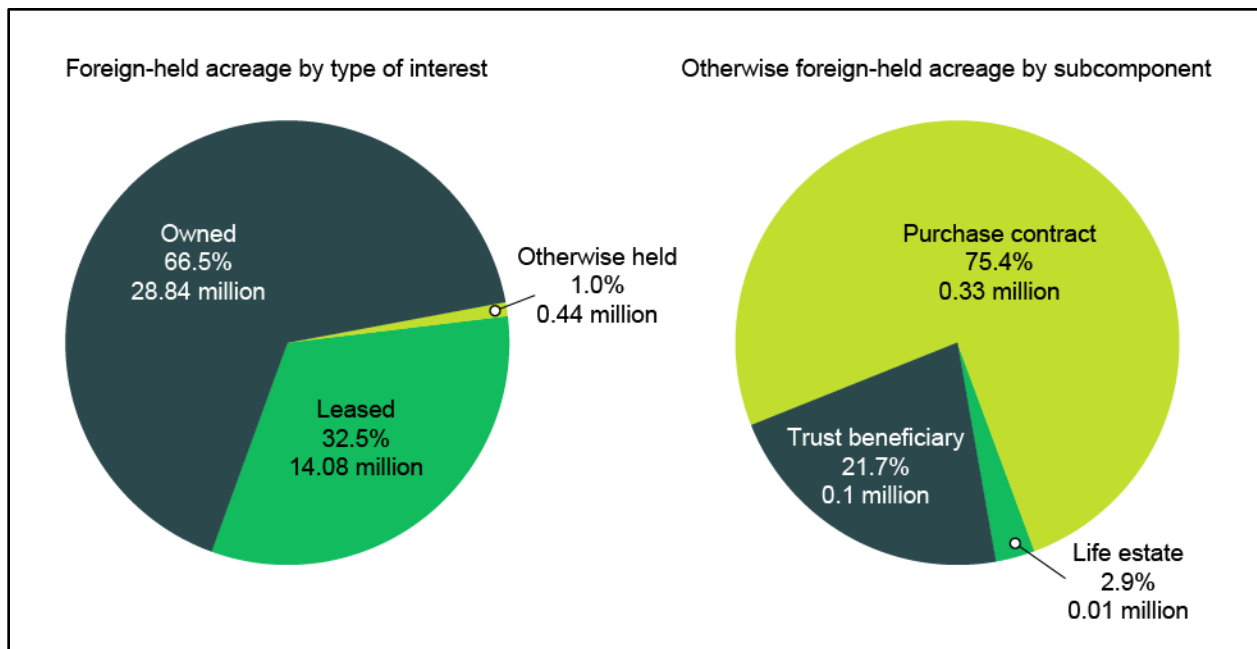
Results

Share of Foreign-Holdings by Interest Type

As of December 31, 2022, roughly 99 percent of the approximately 43 million acres of foreign-held U.S. agricultural land was either foreign owned (66.5 percent; 28.84 million acres) or long-term foreign leased (32.5 percent; 14.08 million acres) (figure 1). The remaining 1 percent (440,000 acres) comprised life estates (10,000 acres), trust beneficiaries (100,000 acres), and purchase contracts (330,000 acres).⁵ In total, these 43.4 million acres of foreign-held agricultural land represented 3.4 percent of all privately held agricultural land and 2 percent of all land in the United States according to the AFIDA annual report containing data as of December 31, 2022 (USDA, Farm Service Agency (FSA), 2023a).

Figure 1

The distribution of foreign-held U.S. agricultural land by type of interest as of December 31, 2022



Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

⁵ A life estate grants one person the right to use a property for their lifetime, while another entity has the future interest in said property. A trust beneficiary is one who receives the benefits or assets from a trust. A purchase contract is a legal agreement that outlines the terms and conditions of a sale of property between a buyer and seller.

Further analysis (table 2) shows that the average long-term foreign-leased parcel is roughly 40 percent the size of the average foreign-owned parcel (571 and 1,483 acres, respectively), and there are more long-term foreign-leased parcels (24,675) than foreign-owned parcels (19,450).

Table 2

Summary statistics on foreign-held U.S. agricultural land by type of interest held as of December 31, 2022

Interest type	Acres (millions)	Parcels	Average acreage	Percent of total
Leased	14.1	24,675	571	32.47
Owned	28.8	19,450	1,483	66.51
Otherwise held	0.4	918	480	1.02

Note: Otherwise held includes life estate, trust beneficiaries, and purchase contracts. The Agricultural Foreign Investment Disclosure Act of 1978 defines a parcel as all land acquired by the exact same person(s) on the same date in the same county, even if said parcel comprises multiple tracts of noncontiguous land.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

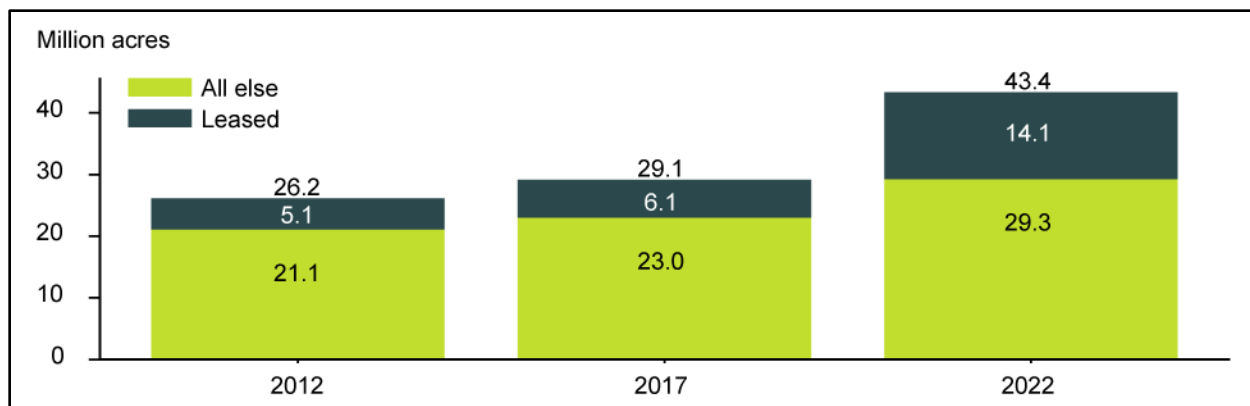
It is important to note that the impact of foreign leaseholding on land is hard to determine. Firstly, in cases where the leaseholders were renewable energy companies, there was no way to determine whether a renewable energy structure was installed. For example, land may be leased for many different reasons (e.g., exploration), without resulting in renewable installation. Secondly, some long-term leaseholders may be reporting the acreage of the entire parcel of the landowner, while others might only be reporting the estimated acreage they plan to develop. For more information on the footprint of renewable energy projects, see Maguire et al. (2024).

Historical Trends in the Share of Long-Term Foreign-Leased Acreage

The share U.S. agricultural land that is held in long-term foreign leaseholds has increased substantially from just 5 years earlier (figure 2). At the end of 2012 and 2017, roughly 20 percent of foreign holdings were long-term leases (5.1 million acres in 2012 and 6.1 million acres in 2017) compared with 32 percent (14.1 million acres) in 2022. For comparison, from 2017–22, the amount of long-term foreign-leased U.S. agricultural land grew by 136 percent, while all other holdings increased by only 27 percent.

Figure 2

Total acres of foreign-held U.S. agricultural land, 2012, 2017, and 2022



All else = foreign-owned land, life estates, trust beneficiaries, and purchase contracts.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022; December 31, 2017; and December 31, 2012.

Looking only at the 2 million acres of foreign-held land acquired in 2022, 58 percent (1.2 million acres) of the land acquired was done so through a long-term lease, with 42 percent being acquired through sale. At the parcel level, 89 percent of the parcels acquired in 2022 were foreign leased.

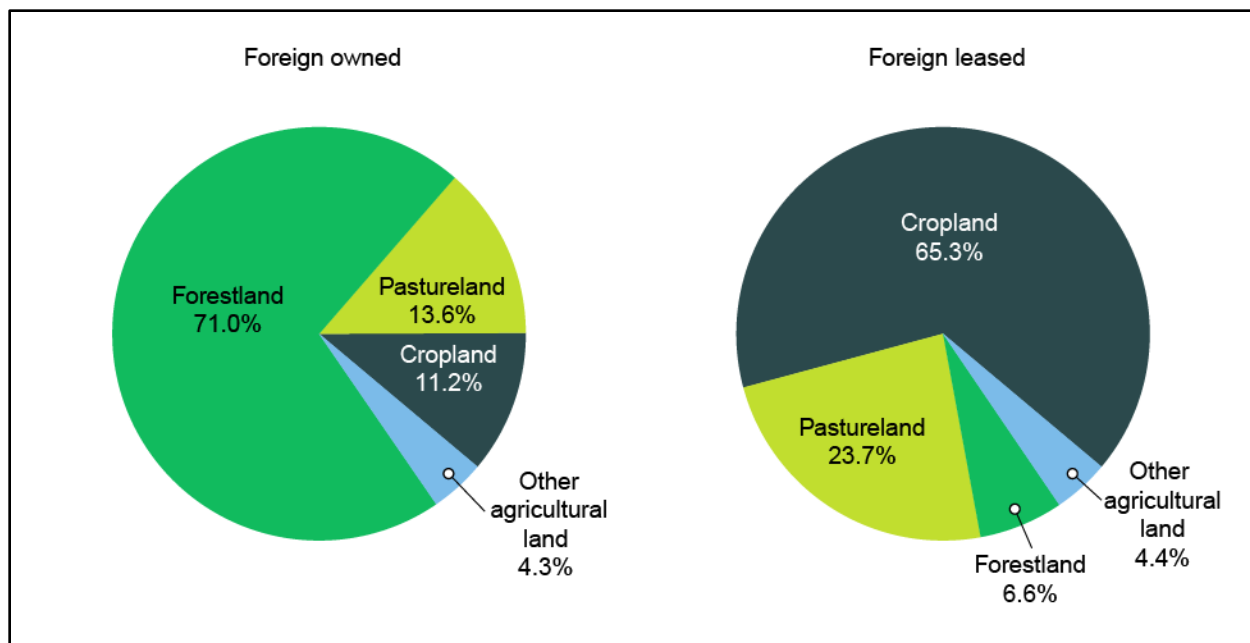
Differences in Land-Use Patterns

Foreign-held agricultural land can be broken down into four distinct land-use categories, as reported by the filer: (1) cropland, (2) pastureland, (3) forestland, and (4) other agricultural land.⁶ Comparing these land-use patterns between foreign-owned and long-term foreign-leased agricultural land shows large differences between the two, as shown in figure 3. Over two-thirds (71 percent) of foreign-owned agricultural land was forestland, while roughly two-thirds (65 percent) of long-term foreign-leased agricultural land was cropland. In contrast, less than 12 percent of foreign-owned agricultural land was cropland, while less than 7 percent of long-term foreign-leased agricultural land was forestland. This difference in the primary land use indicates that foreign-owned and long-term foreign-leased agricultural land are being used in different ways.

⁶ FSA-153 also included “nonagricultural” as a land use category on its form, but this land is excluded for the purposes of this specific analysis.

Figure 3

Comparison of land-use patterns on foreign-held agricultural land by type of interest (percent share)



Note: Totals may not sum to 100 due to rounding.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

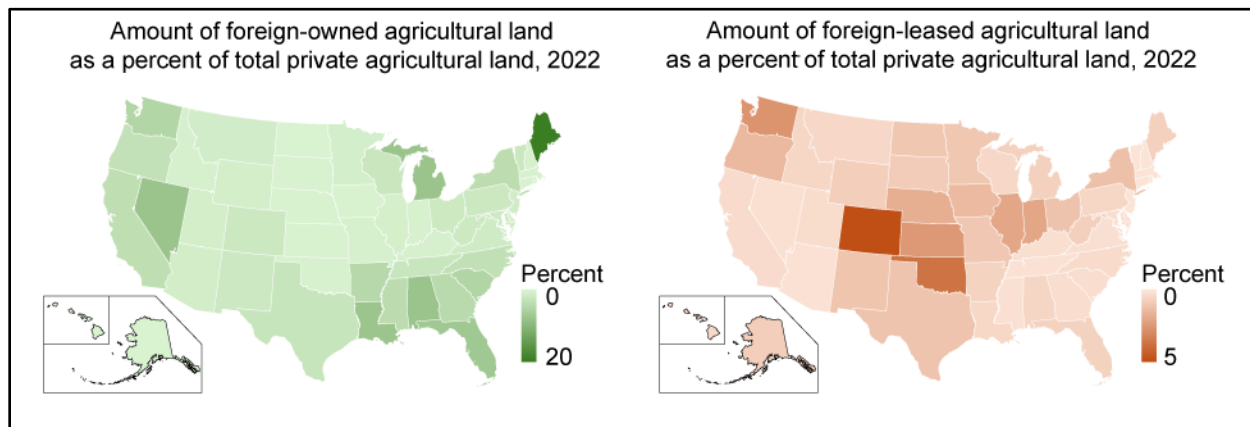
Regional Patterns

As a next step in examining potential differences in the utilization of foreign-owned and long-term foreign-leased U.S. agricultural land, we compared the State-level geographic concentration of these two groups as a percentage of each State's total amount of privately held agricultural land, as reported in the annual AFIDA report containing data as of December 31, 2022, and including privately held forestland. These results are presented in figure 4 and provide additional evidence of distinct differences between the two groups.

There is no clear geographic pattern to the concentration of foreign-owned agricultural land (figure 4). Maine has the highest proportion of foreign-owned agricultural land (20 percent of the State's private agricultural land and 11 percent of all foreign-owned acres in the United States, most of which is forestland), though the share is relatively low for the rest of the New England States. It is worth noting that Texas has the most total acres of foreign-owned agricultural land, but this represents only 2 percent of all privately held agricultural land in the State. Foreign-owned agricultural land is less common in the Corn Belt and Great Plains and slightly more prevalent among Gulf States, though this is not without exception. After Maine, Hawaii ranks second, while Alaska ranks last in share of foreign-owned agricultural land.

Figure 4

Concentration of foreign holdings as a percent of each State's privately owned agricultural land, including forestland, by type of interest



Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

In contrast, long-term foreign-leased agricultural land tends to be more concentrated in the center of the contiguous United States, with an additional cluster in the Pacific Northwest region. Long-term foreign-leased agricultural land was the most concentrated in Colorado, Oklahoma, and Washington. There was no long-term foreign-leased agricultural land located in Connecticut, New Hampshire, or Rhode Island.

Given that roughly two-thirds of long-term foreign-leased agricultural land is associated with cropland compared with 11 percent for foreign-owned agricultural land, we may initially suspect that the geographic concentration of long-term foreign-leased agricultural land is likely related to the amount of available cropland in each State. However, further analysis shows that the geographic concentration of long-term foreign leases is driven primarily by the economic geography of renewable energy development, particularly wind energy, which most commonly appears on cropland (Maguire et al., 2024).

We first compared the geographic concentration of long-term foreign-leased agricultural land with the geographic concentration of wind turbine installations using data from the U.S. Geological Survey (Hoen et al., 2022). We found that there was a strong positive correlation of 0.7 between the amount of long-term foreign-leased agricultural land in a State and the number of wind turbines installed as of 2020. This correlation suggests that much of the long-term foreign-leased land was being leased for renewable energy production rather than agricultural production.

Comparing Potential Business Types

Although the FSA-153 captures different agricultural land uses, it does not currently collect information on how much of the foreign-held land was purchased or leased for other nonagricultural purposes, specifically for renewable energy development. However, it is possible to infer how the land is intended to be used based on the business name of the owner or lessee.

To get a better sense of what this land is being used for, we used the business name associated with each filing to search for the prevalence (by acreage) of certain terms across foreign-owned and long-term foreign-leased land. We searched for the prevalence of 20 terms, which we also grouped into three categories:

renewable energy terms,⁷ agricultural terms,⁸ and timber production terms.⁹ Table 3 shows the percent of the total foreign-owned and long-term foreign-leased land that contains each term, as well as at least one term in each group. To save space, terms where both rows had a percentage below 1 percent have been omitted from the table, though they are still included in the grouped percentages.

Table 3

Terms contained in foreign business names holding U.S. agricultural land by type of interest held

Interest type	Percent of foreign-held agricultural land owned/leased by companies whose names contains the following term									
	Solar	Wind	Renewable	Green	Ranch	Farm	Ag	Timber	Wood	Forest
Leaseholder	9	75	2	1	3	16	2	3	0	0
Owner	0	0	0	2	4	4	7	37	3	6
Interest type	Percent of foreign-held agricultural land owned/leased by companies whose names contain at least one term from the following groups									
	Renewable terms			Agricultural terms				Timber terms		
Leaseholder	85			21				3		
Owner	2			15				46		

Note: The top two rows of percentages represent the percent of long-term foreign-leased and foreign-owned agricultural land (by acreage) that is held by companies that contain the above term somewhere in the company name as reported on the associated FSA-153. The bottom two rows group the corresponding individual terms into three groups and report the percent of long-term foreign-leased and foreign-owned agricultural land that is held by a company whose name contains at least one of these terms. The table has been color coded to show which terms belong to each group. To save space, terms where both percentage values were less than 1 were omitted from this table, though they are still included in the grouped percentages. These terms include the renewable term “clean;” the agricultural terms “livestock,” “meat,” “crop,” “animal,” “cattle,” and “grain;” and the timber terms “lumber,” “paper,” and “logging.” Rows do not sum to 100. Renewable terms used are not mutually exclusive, such that percentages in the bottom half of the table may be smaller than the sum of individual term percentages in the top half of the table if more than one term in the same group is reported.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

Of the total acres of long-term foreign-leased agricultural land, 75 percent contained the word “wind” in their business name, 9 percent contained “solar,” 2 percent contained “renewable,” and 1 percent contained “green.” In total, 85 percent of businesses with long-term foreign-leased agricultural land contained at least one of these four terms. Outside of the renewable terms, the other largest share was for the term “farm” (16 percent); however, roughly 84 percent of these instances contained the term “wind farm,” such that the amount of long-term foreign-leased agricultural land engaged in production agriculture is lower than 21 percent. Looking exclusively at long-term foreign-leased agricultural land acquired in 2022, 21 percent included one of the three agricultural terms (i.e., “ranch,” “farm,” and “ag”). However, 32 percent of these

⁷ Solar, wind, renewable, clean, and green.

⁸ Ranch, farm, ag, livestock, meat, crop, animal, cattle, and grain.

⁹ Timber, wood, lumber, forest, paper, and logging.

acres contained “solar” in their business name (compared with 9 percent for all existing holdings), and 88 percent contained at least one of our five renewable energy terms.¹⁰

In combination, this suggests that most of the long-term foreign-leased agricultural land is being leased for renewable energy development purposes, with that share continuing to increase over time. It is important to note, however, that renewable energy development does not necessarily imply installation, as there is often a lengthy development stage prior to installation, and potential sites may be leased for development without resulting in project installation.

Among foreign-owned agricultural land, the most prevalent of our terms was “timber” (37 percent by acreage) followed by “ag” (7 percent). In total, 46 percent of acres contained timber terms in their business name, 15 percent contained farming terms, and 2 percent contained renewable terms. This is further evidence that foreign-owned and long-term foreign-leased agricultural lands are typically used for different purposes.

The Prevalence of Different Business Structure Types

Filers can select from nine different ownership types: individual, government, corporation, partnership, estate, trust, institution, association, or other. This allows us to compare the prevalence of different business types between foreign-owned and long-term foreign-leased agricultural land.

Table 4

Percent of foreign-held U.S. agricultural land owned/leased by business type

Interest type	Corporation	Individual	Other	Partnership	All else
Percent					
Leased	11	0	89	0	0
Owned	38	3	42	17	1

All else = government, association, estate, institution, and trust. Other was a listed option without further explanation.

Note: Totals may not sum to 100 due to rounding.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

Table 4 shows that 38 percent of foreign-owned agricultural land was owned by a corporation, while 42 percent is owned by filers who selected “other.” Of the long-term foreign-leased agricultural land, 11 percent was leased by corporations, with the remaining 89 percent being leased by filers who selected other. Although these results provided further evidence of the uniqueness of the two types of foreign holdings, it would be advantageous to get a better sense of the types of businesses that are selecting “other,” as we suspect that a large proportion of those who selected other are LLCs. To that end, we once again applied a wordsearch algorithm to identify businesses whose names contained the term “LLC.”

Looking exclusively at the foreign businesses who selected other for the business type on the FSA-153 form, we found that almost all the long-term foreign-leased land (99.5 percent by acreage) had the term LLC in their business name. Looking across all business types, we found that 92.0 percent of long-term foreign-

¹⁰ Furthermore, 75 percent of business names contained wind, while renewable, green, and clean all contained less than 1 percent.

leased agricultural land was leased by a company with LLC in their name compared with 41.0 percent for foreign-owned agricultural land. This 41.0 percent was just below the 42.0 percent that was reported as “other” on the FSA-153 form. In combination, these two analyses suggest that while LLC and corporate structures are similarly common among the owners of these lands, LLCs are by far the most common business structure among long-term foreign-leased U.S. agricultural land.

Intended Land Use

Item 10 on the FSA-153 form asks filers to indicate the “Intended Use [of the Land] as of This Date” with options to select one or more of the following: (A) no change, (B) other agriculture, or (C) nonagriculture, with the option to write in NA.¹¹ Of the total acreage for both foreign-leased and foreign-owned land, 97 percent or more indicated that they did not intend to take the land out of agriculture (table 5). Although this similarity contrasts with many of our previous results, the finding that 96.2 percent of long-term foreign-leased agricultural land is intended to see no change provides additional insights into leased land usage and development, suggesting that renewable energy development does not necessarily imply taking the land out of agriculture (Maguire et al., 2024).¹²

Table 5

Intended use of foreign-held U.S. agricultural land by type of interest held

Question 10	Options	Leased	Owned
		Percent	
Intended use as of this date	No change	96.2	97.5
	Other agriculture	0.7	1.3
	Nonagriculture	3.1	1.2

Note: Question 10 refers to question 10 of the FSA-153 form. In addition, “as of this date” refers to the date that the FSA-153 was filed.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

¹¹ The option to select NA is only supposed to apply if the FSA-153 form is recording a land disposition or land-use change to nonagriculture and not by new filers. However, there may be cases where a filer filing an acquisition may have selected NA or left the question blank such that it was recorded as NA.

¹² Income from using agricultural land for renewable energy production is counted as farm income.

Throughout this analysis, we have provided several pieces of evidence that suggest the majority of long-term foreign-leased U.S. agricultural land has been leased for the purposes of renewable energy development. An important question thus becomes how leases will affect agricultural production, specifically whether these projects replaced existing farmland, or whether they can coexist among existing agricultural production, allowing for the dual use of the land. The finding that, according to AFIDA data, 97 percent of long-term foreign-leased agricultural land was intended to stay in agriculture suggests that such leases can serve as an additional source of income for landowners without taking the land out of agricultural production. For recent research on the role of commercial energy payments in agricultural producer income, see Winikoff and Maguire (2024).

Relationship to the Producer

Item 11A on the FSA-153 form asks whether the producer is: (1) the owner, (2) a manager, or (3) a tenant or sharecropper, with the option to write in “NA.” Of those who did not write in “NA,” 74.4 percent of the long-term foreign-leased agricultural land was owner-operated (table 6). This finding indicates that approximately three-quarters of foreign-leased U.S. agricultural land is owner-operated and, in most cases, a farmer (as opposed to a nonfarming landowner) is benefiting from the payments associated with the lease. However, it may be the case that this question is confusing for the filer when they are the leaseholder and therefore may not accurately reflect the relationship between the agricultural producer and the owner of the land.

Table 6

Distribution of producer types by type of interest held by a foreign entity

Question 11A	Options	Leased	Owned
		Percent	
The producer is	Owner	74.4	71.7
	Manager	0.5	13.6
	Tenant or sharecropper	25.1	14.7

Note: Question 11a refers to question 11a of the FSA-153 form.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

Item 12 on the FSA-153 form asks filers if the producer on this tract is: (A) the same person as when the tract was acquired or (B) a new person, with the option to write in “NA.” Among those who answered (i.e., selected either A or B), 90 percent of the acres of long-term foreign-leased agricultural land indicated that the producer was the same person as when the tract was acquired. In contrast, the previous producer was replaced by a new one for more than 43 percent of the foreign-owned agricultural land (table 7). AFIDA does not collect data that would allow the determination of whether the new producer is a U.S. citizen/permanent resident or foreign. Although 90 percent of long-term foreign-leased land acreage indicated the producer was the same person as before, 97 percent of all foreign-owned and foreign-leased agricultural operations that filed FSA-153 forms indicated that the producer was the same person as before. The likely explanation for this is that leases for renewable energy (as opposed to agriculture) have tended to be both smaller and less likely to replace the existing producer than larger leases used for agriculture.

Table 7

Producer tenure on foreign held U.S. agricultural land by type of interest held

Question 12	Options	Leased	Owned
		Percent	
The producer on this tract is	The same person as when the tract was acquired	90.1	56.8
	A new person	9.9	43.2

Note: Question 12 refers to question 12 of the FSA-153 form.

Source: USDA, Economic Research Service based on data from the Agricultural Foreign Investment Disclosure Act database for holdings as of December 31, 2022.

Conclusions

In 2022, foreign entities held an interest in 3.4 percent of all privately held agricultural land in the United States. In this report, we used data collected from the Agricultural Foreign Investment Disclosure Act (AFIDA) filings to characterize differences between foreign-owned and long-term foreign-leased U.S. agricultural land. We found that although the majority of foreign-owned U.S. agricultural land is forestland, the majority of foreign-leased U.S. agricultural land is cropland. Most of these leases appear to be for the purposes of renewable energy development—primarily wind, and are held by LLCs. Moreover, the land where the long-term foreign leaseholds exist largely continue to be used for agricultural production by the owner, which may indicate that returns from energy production represent a secondary stream of income rather than a replacement of primary income generated from production agriculture. As long-term foreign-held leases of U.S. agricultural land continued an upward trend in 2022, our findings shed light on a nuanced topic surrounding foreign investment in U.S. agriculture.

References

- Anderson, A. J., Hawkins, J. J., & Mulligan, S. P. (2024). *State regulation of foreign ownership of U.S. land: January 2023 to July 2024* (Report No. LSB11013). Congressional Research Service.
- Hoen, B. D., Diffendorfer, J.E., Rand, J.T., Kramer, L.A., Garrity, C.P., & Hunt, H. E. (2022). *2018, United States wind turbine database v4.3*. U.S. Geological Survey, American Clean Power Association, and Lawrence Berkeley National Laboratory.
- Maguire, K., Tanner, S. J., Winikoff, J. B., & Williams, R. (2024). *Utility-scale solar and wind development in rural areas: Land cover change (2009–20)* (Report No. ERR-330). U.S. Department of Agriculture, Economic Research Service.
- Spellman, M., & Brown, N. (2024). *Statutes regulating ownership of agricultural land*. The National Agricultural Law Center.
- U.S. Department of Agriculture, Farm Service Agency. (2023a). *Foreign holdings of U.S. agricultural land through December 31, 2022*. U.S. Department of Agriculture, Farm Service Agency.
- U.S. Department of Agriculture, Farm Service Agency. (2023b, December 18). *Request for information on Agricultural Foreign Investment Disclosure Act (AFIDA) FSA-153 Form modernization and information collection request*, 88 Fed. Reg. 87385.
- Winikoff, J. B., & Maguire, K. (2024). *The role of commercial energy payments in agricultural producer income* (Report No. EIB-271). U.S. Department of Agriculture, Economics Research Service.

Appendix A

Figure A.1
FSA-153 form

This form is available electronically. FSA-153 (10-13-10) U.S. DEPARTMENT OF AGRICULTURE Farm Service Agency		AMENDED <input type="checkbox"/>	Form Approved –OMB No. 0560-0097
AGRICULTURAL FOREIGN INVESTMENT DISCLOSURE ACT REPORT <i>Note: Read Instructions on Page 2 Before Filing in Any Data Below. (If Additional Space is Needed, Add Information in Item 6, Page 2, or attach an additional sheet.)</i>		1. TYPE ACTIVITY (See Instructions on Page 2) (check one) A. Land Holding B. Land Acquisition C. Land Disposition D. Land Use Change to Agriculture E. Land Use Change to Non-Agriculture	
ITEM 2. Tract Location and Description A. Legal Description or FSA Tract Number B. County or Parish C. Number of Acres D. State 3. Owner or Lessee of Tract (In Item 2A) (See Page 2) A. Name: B. Tax ID No. (Nine Digits) C. Legal Address (Street, City, State/Province, Country) D. Type of Owner (If Item D1 is checked, skip Items D2 and D3.) Check 1. Individual. (Indicate citizenship of husband and/or wife if applicable.) a. Citizenship of individual(s) 2. Government (Country) 3. Organization Check a. Type 1) Corporation 2) Partnership 3) Estate 4) Trust 5) Institution 6) Association 7) Other (Check box and Explain): b. Government or country under whose law the organization is created c. Principal place of business (For organizations only) d. List on separate sheet, the Name, Address and Country of all foreign persons who individually or in the aggregate hold significant interest or substantial control 1/ in the person owning the land. E. Complete only if Item 1C, Land Disposition, is checked. 1. Name of Person Receiving Tract 2. Address (Street, City, State/Province, Country) 3. Citizenship: USA Foreign Unknown 4. Representative of Foreign Person (Completing form, if applicable) A. Name B. Address (Street, City, State/Province, Country) C. Telephone No. (Area Code): D. Relationship of Representative to Foreign Person Check 1. Attorney 2. Manager 3. Agent 4. Other (Explain on item 6, Page 2)		ITEM 5. Type of Interest Held in the Agricultural Land (Check one) Check A. Fee Interest (Ownership) Whole B. Fee Interest (Ownership) Partial What Percent % C. Life Estate D. Trust Beneficiary E. Purchase Contract F. Other (Check Box and Explain Below): 6. How was this Tract Acquired or Transferred? Check A. Cash Transaction B. Credit or Installment Transaction C. Trade D. Gift or Inheritance E. Foreclosure F. Other (Check Box and Explain Below): 7. Value of Agricultural Land: A. Purchase Price of Land or if a land disposition, the original price paid by seller. \$ B. Non-Purchase, Estimated Value at the Time of Acquisition \$ C. What is the estimated current value or if a land disposition, the selling price of the tract of land? \$ D. How much of purchase price in Item 7A remains to be paid? \$ 8. Date of Acquisition or Transfer (See Instructions, Item 8, Page 2.) Month Day Year 9. Current Land Use (Usual use of land for idle land, report as Other Agriculture). Acres A. Crop B. Pasture C. Forest or Timber D. Other Agriculture E. Non-Agriculture F. Total Acres (Should equal Item 2C)	
13. CERTIFICATION: I certify that the information entered in this report is complete and correct. I understand that falsification of reporting is subject to a civil penalty not to exceed 25% of the fair market value of the interest held in the tract of land.		10. Intended Use as of This Date. Check or "NA" Check one or more or enter "NA" if Item 1C or 1E above is checked. A. No change. B. Other Agriculture C. Non-Agriculture 11. Relationship of Owner to Producer. Check one or more items if applicable. Enter "NA" if Item 1C or 1E is checked. A. Producer is: 1. Owner 2. Manager 3. Tenant or sharecropper (Item 11B must be completed.) B. Rental agreement is: (Not applicable if Item 1C or 1E above is checked.) 1. A crop share 2. Cash or fixed rent 12. The Producer on This Tract is: Check one or more. If not applicable for Item 11A, then enter "NA". (Not applicable if Item 1C or 1E above is checked.) A. The same person as when the tract was acquired. B. A new person.	
14A. SIGNATURE (Owner or Legally Authorized Representative)		14B. TITLE	14C. DATE (MM-DD-YYYY)

1/ Significant interest or substantial control as defined in 7 CFR Part 781.2(k)

Source: USDA, Farm Service Agency, FSA-153 form.