THOUGHT LEADERSHIP

Investing in natural capital

Investments in sustainably managed timberland and farmland can play a vital role in improving the world's natural capital while allowing investors to benefit from long-term global trends that will help them achieve their investment objectives.



Gwen Busby Head of Research and Strategy, Nuveen Natural Capital



What is natural capital?

Natural capital refers to the earth's air, its lands, waters and biodiversity. These assets and the services they provide help sustain life, livelihoods and well-being.

Why natural capital matters?

The benefits of natural capital include food, fibre and timber as well as a broad range of regulating, supporting and cultural ecosystem services that drive the global economy and human well-being. In fact, the World Economic Forum estimates that \$44 trillion, or over half, of global output is moderately or highly dependent on natural capital. Economic development, however, has degraded this capital, altering ecosystems and transforming landscapes. The global decline in nature puts this economic value and the well-being of people all over the world at risk.

Institutional capital can play a role in the shift from unsustainable land use toward more environmentally friendly and people friendly outcomes.

Sustainable land use

There are clear pathways for investments and financial flows toward more climateresilient and restorative natural capital strategies, which include investing in sustainably managed timberland and farmland.

Climate regulation

The natural ability of forests and soils to sequester and store carbon in biomass and organic matter means they have a key role to play in combating climate change. Investments in timberland and farmland have the potential to safeguard existing carbon stocks and provide low-cost, scalable increases in long-term carbon storage.

Greenhouse gas

emissions reduction

Reducing emissions from agriculture and land use is another way natural capital investment strategies can contribute to solutions. Sustainable management practices, such as installing solar panels on farms to reducing diesel used in irrigation pumping, can also help reduce emissions. Similarly, certain types of regenerative agriculture practices can reduce emissions and also lead to increased storage of carbon in the soil.

Skye Macpherson Head of Portfolio Management, Nuveen Natural Capital

Reasons to invest in natural capital

Three long-term trends support the case for natural capital.

1. Growing populations will require more food, fibre and timber

According to the U.N., the world's population is currently expanding by over 67 million people per year. By 2050, food, fibre and timber production will have to support a population of more than 9.7 billion people. In the face of continuing population growth and limited land base, investment is required to make farmland and timberland more productive and sustainable, using environmentally friendly and socially responsible practices.

2. Supply constraints for forest and agricultural land and production

Both timberland and farmland face supply constraints in many geographies. According to the U.N., the global forest area is shrinking by 4.7 million hectares per year. Remaining natural forests are increasingly protected for biodiversity conservation and climate mitigation to help combat deforestation and unsustainable management. Farmland is being lost to degraded soils, with one-third of the earth's soils already degraded, leading to losses in crop yields.

3. Growing demand for scalable climate solutions

As an asset class, natural capital investments such as timberland and farmland have the lowest average carbon intensity among alternative and traditional asset classes (as measured by the amount of net CO2 emissions per dollar invested). Allocations to natural capital can help balance more emissions-intensive sectors within an institutional portfolio, helping to achieve climate targets efficiently and without having to sacrifice returns. Investments in natural climate solutions also have the potential to generate verified carbon credits, providing investors exposure to growing carbon markets.

Farmland and timberland: the investment characteristics We used U.S. data to illustrate farmland

and timberland's potential as it is the

Figure 1: How farmland and timberland compare with other asset classes



Data are based on rolling one-year total returns, calculated on a quarterly basis for periods ended 31 Mar 1992 through 31 Dec 2020. Asset classes reflect the following indexes: U.S. stocks – Russell 3000 Index; non-U.S. stocks – MSCI ACWI ex USA Index; U.S. investment-grade bonds – Bloomberg Barclays U.S. Aggregate Index; non-U.S. investment-grade bonds – Bloomberg Barclays Global Aggregate Index; privately held U.S. otmmercial real estate – NCREIF Real Estate Index; privately held U.S. timbertand – NCREIF Real Estate Index; publicly traded U.S. real estate investment trusts [REITS] – FTSE Nareit U.S. Real Estate Index; public agricultural commodities – S&P GSCI Agriculture Index; public imber commodities – a Timber proxy index created by Nuveen that combines the S&P Global Timber and Forestry Index [2004 – 2019] with the returns of companies representing 4% or more of the index between 1992 and 2003. Sources: NCREIF, FactSet, Nuveen, LLC. Past performance is no guarantee of future results.

most comprehensive date set currently available. A global portfolio of natural capital assets, however, is likely to provide the same advantages, with the additional risk mitigation that comes from diversified exposure to different crop types, timber markets, and growing conditions around the world.

Historically strong returns

U.S. farmland performed on par with U.S. equities and outperformed U.S. bonds on an annualised basis over the last 30 years, providing both consistent income and capital appreciation. U.S. timberland outperformed U.S. and global bonds and global equities.

Attractive risk-return characteristics

As Figure 1 shows, farmland's annual volatility lies between fixed income and real estate, yet delivered a stronger return. Timberland also exhibits higher returns than these asset classes but with slightly higher volatility.

Diversification potential

Adding either farmland, timberland or both to a portfolio enhances diversification, lowers volatility and improves returns. Both asset classes have demonstrated negative or low correlation to equity and bond indices. Payments for ecosystem services provide an additional source of uncorrelated return and have the potential to enhance diversification benefits of land-based investments.

Inflation hedge

Farmland and timberland returns outpaced inflation in a variety of market environments and at a level that exceeds correlation between traditional asset classes and prices. Food from farmland is one of the major categories in consumer price indices. And timberland assets produce the raw materials for many products in the basket of goods used to calculate inflation (e.g., building materials, furniture, tissue, paper and packaging). Over time, rising crop and product prices lift cash yields and, in turn, capital appreciation components of return.

A store of value

The combined effect of natural capital's investment attributes means that these assets can be a good store of value and safeguard of wealth.

Natural capital underpins livelihoods and well-being of people all over the world. Investments in sustainably managed timberland and farmland together with the protection and restoration of natural capital offer tremendous returns for investors and for society.

Discover the role for natural capital in your portfolio. nuveen.com/naturalcapital

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