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State of Private Investment in Conservation 2016

A Landscape Assessment of an Emerging Market

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Executive Director
Sustainable Finance
JPMorgan Chase & Co.

Marc Diaz
Managing Director
NatureVest
The Nature Conservancy

Charlotte Kaiser
Deputy Managing Director
NatureVest
The Nature Conservancy

Eric Hallstein
Director of Conservation
Investments and Chief Economist
The Nature Conservancy, CA

Dan Winterson
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Gordon and Betty
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Encourage Capital

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Credit Suisse

John Tobin
Professor of Practice
Charles H. Dyson School of Applied
Economics and Management
Cornell University

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We wish to express our gratitude to our 159 survey respondents and others who generously gave of their time to share their data and insights.

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FOREST
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Author

Kelley Hamrick

Senior Associate

Ecosystem Marketplace

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Ecosystem Marketplace, an initiative of the non-profit organization Forest Trends, is the leading global source of information on environmental finance, markets, and payments for ecosystem services. As a web-based service, Ecosystem Marketplace publishes newsletters, breaking news, original feature articles, and annual reports about market-based approaches to valuing and financing ecosystem services. We believe that transparency is a hallmark of robust markets and that by providing accessible and trustworthy information on prices, regulation, science, and other market-relevant issues, we can contribute to market growth, catalyze new thinking, and spur the development of new markets, and the policies and infrastructure needed to support them. Ecosystem Marketplace is financially supported by a diverse set of organizations including multilateral and bilateral government agencies, private foundations, and corporations involved in banking, investment, and various ecosystem services.

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Foreword

JPMorgan Chase is committed to building a strong market for conservation finance, because we understand the critical role the natural environment plays in our economy and our communities. As ecosystems come under greater stress, the urgency of creating innovative and scalable investment vehicles to channel capital to the environment becomes all the more important. We also believe that effective market building and investment necessitate a structured understanding of the target market.

This is the second in a series of data-driven reports that characterize the landscape of investment across three fundamental conservation sectors: sustainable food and fiber production, habitat conservation, and water quality and quantity. JPMorgan Chase has spent several years working with the partners on this report to dig deeper, expand the data set, and promote thoughtful analysis on the nature and experience of private capital invested for conservation impact.

The collaboration represented in this work is significant in highlighting the shared conservation objectives of a diverse range of institutions. Together with our Advisory Committee partners—The Nature Conservancy's NatureVest unit, Encourage Capital, The David and Lucile Packard Foundation, the Gordon and Betty Moore Foundation, Cornell University, and Credit Suisse—JPMorgan Chase commends Forest Trends' Ecosystem Marketplace on their leadership role in producing this report.

We believe the findings are encouraging: the amount of private investment in conservation is growing, and a wider range of investors is participating in the market. Investment models are spreading geographically, and institutions that support the market are becoming more sophisticated. It's also striking to note that investors report they are achieving their blended goals of conservation impact and financial return. Important questions about how to scale these models still require our attention, and we invite you to participate in the ongoing dialogue on our shared work.

We hope you will agree that this report serves as an important contribution to the development of the conservation finance marketplace.



Doug Petno

CEO, Commercial Banking, JPMorgan Chase & Co.
Vice Chair, Advisory Board, NatureVest

Executive Summary

Conservation investing—intentional investments in companies, funds, and organizations with the goal of generating both a financial return and a measurable environmental result—is growing dramatically. In just two years, the total private capital committed to conservation investments jumped by 62%, to a total committed private capital of \$8.2 billion (B)¹ tracked from 2004 to 2015.

This is but one of several findings from the second report examining private investment in conservation, following and building upon the 2014 report *Investing in Conservation: A landscape assessment of an emerging market*.² This report is offered as the newest in a growing body of research to demonstrate the size, scope, and trends in new and increasing investments in sustainable forestry, agriculture, fisheries, habitat, and water.

The study was prepared for a range of audiences, including institutional investors, high-net worth individuals and family offices, pension fund managers, insurance companies, diversified financial institutions, and endowment and foundation asset managers. The analysis shines a light on the opportunities and experiences to date in private investment in conservation with the hope that the resulting knowledge helps to spur increased financing for conservation of forests, water, and biodiversity.

Defining Conservation Investment

For the purposes of accurately documenting the state of private capital committed to conservation, “conservation investments” were defined as:

Investments intended to return principal or generate profit while also resulting in a positive impact on natural resources and ecosystems. In addition, conservation impacts must be the intended motivation for making the investment; they cannot be simply a by-product of an investment made solely for financial return.

Additionally, the survey focused strictly on the following three groups of conservation-oriented investments:

1. **Sustainable food and fiber production** (including forestry, agriculture, fisheries, and more)
2. **Habitat conservation** (including mitigation banking, forest carbon trading, and more)
3. **Water quality and quantity protection** (including watershed protection, water rights trading, and more)

Investors Surveyed

This study was based on a survey of investors, supplemented by interviews and case studies. The survey was carried out from May to August 2016 and gathered detailed transaction, financial return, and conservation impact data from 128 banks, companies, fund managers, family offices, foundations, and non-governmental organizations directly investing in conservation. In-depth interviews were carried out with 31 additional representatives from these and other organizations to supplement the data with case study examples, emerging developments, and areas of opportunity.

Fund managers comprised most of the respondents, followed by corporations (many representing companies that invest in projects or real estate). Not-for-profit organizations (foundations and non-governmental organizations) made up the next level of respondents. While a handful of pension funds are known to be investing into conservation funds or companies, none responded to this survey.

¹ In this report, all monetary values are in US dollars (\$), unless otherwise noted.

² EKO Asset Management Partners and NatureVest, *Investing in Conservation: A landscape assessment of an emerging market* (Arlington, VA and New York: The Nature Conservancy and EKO Asset Management Partners, 2014), http://www.naturevestinc.org/pdf/InvestingInConservation_Report.pdf. EKO Asset Management Partners is now Encourage Capital.

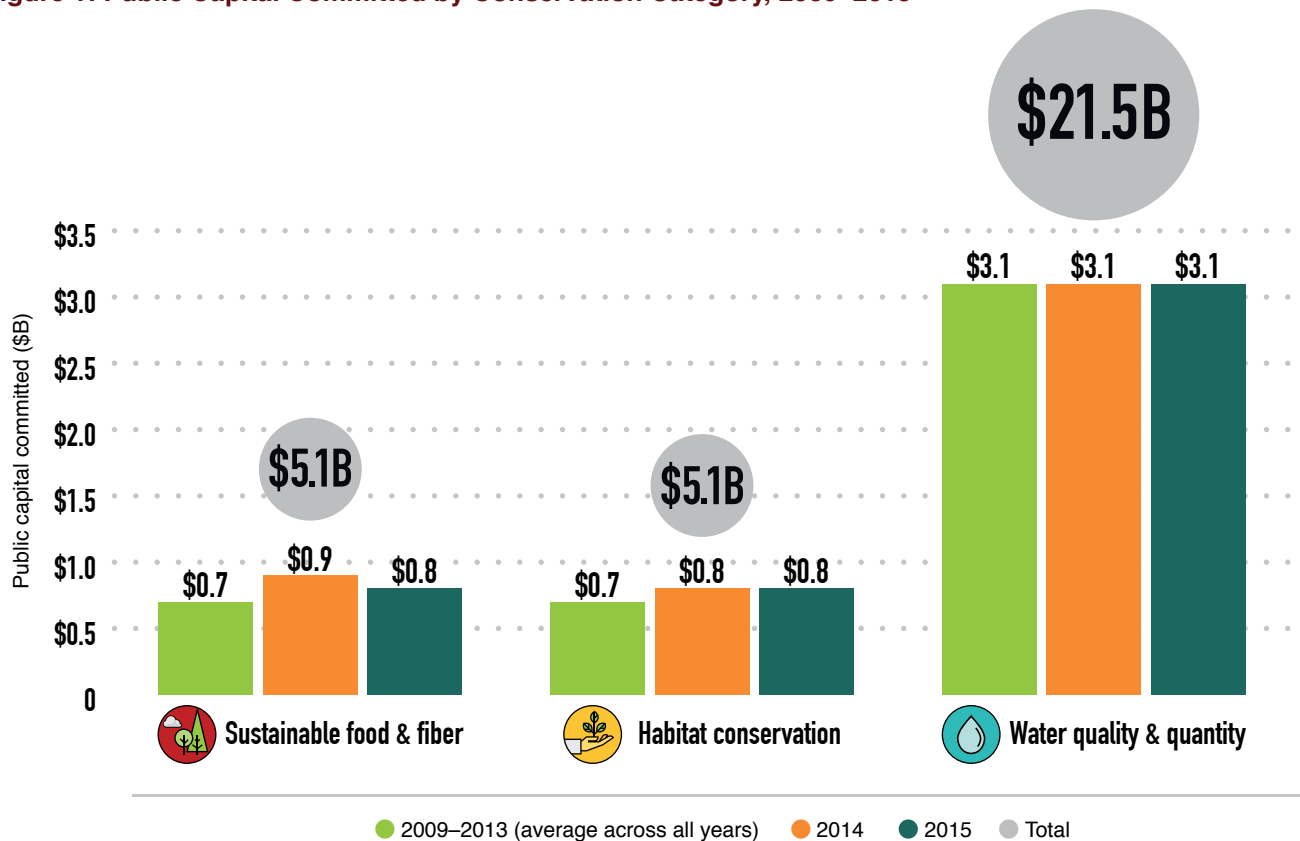
Summary of Observations

While the survey collected data from both public and private organizations, *public investment data was separated from private investment data except for one high-level figure*. The public investment data is provided at the beginning of the report findings to provide a sense of scale in relation to private capital committed and to recognize that private investment data is often entwined with or embedded in government investments or policies.

Public capital flows to conservation investments totaled \$31.7B from 2009 to 2015

Private investment in conservation is growing, but it remains dwarfed by public investment. This report tracked a total of \$31.7B in public capital committed between 2009 and 2015, up from \$21.5B committed between 2009 and 2013 as stated in the 2014 report. A small number of development finance institutions dominated these investments, which likely represented a minimum of public investment in this space.

Figure 1: Public Capital Committed by Conservation Category, 2009–2015

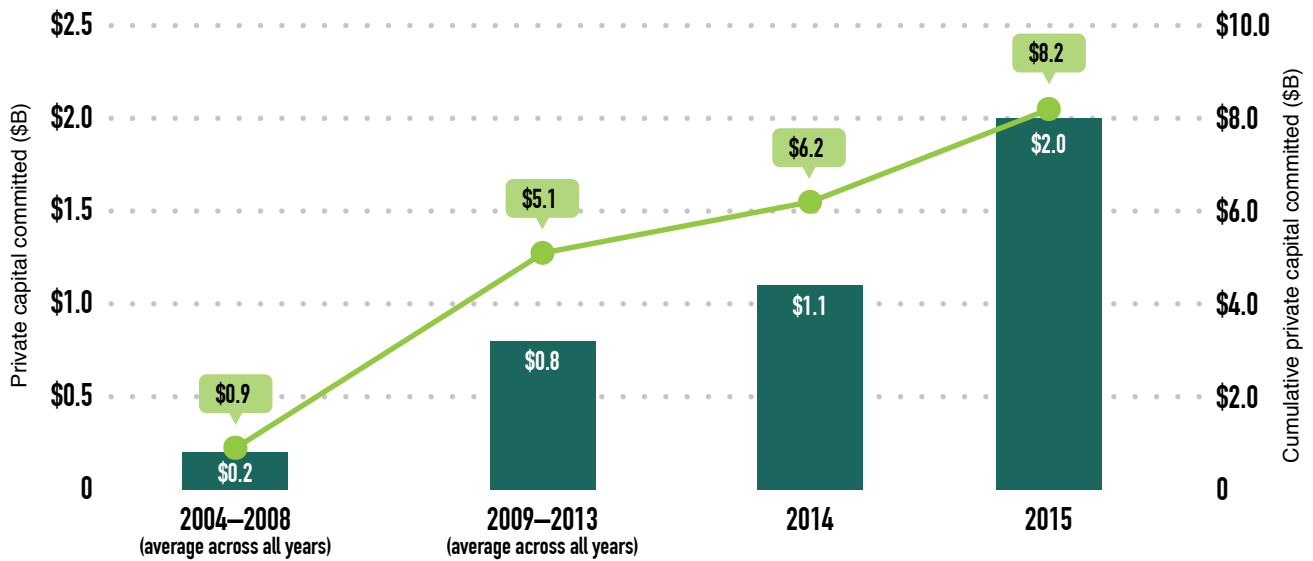


Note: Based on responses by 6 public organizations. Numbers may not add up to the totals due to rounding.

Private capital flows to conservation investments totaled \$8.2B from 2004 to 2015

Respondents reported a total of \$8.2B of private capital committed between 2004 and 2015, up considerably from the \$2.8B of private investment stated in the 2014 report, as well as from the updated number of \$5.1B from the 2016 survey. Survey results showed that investors, on average, committed more capital to conservation in 2014 and 2015 than in previous years. For example, this report tracks private investors committing, on average, \$0.8B/year between 2009 and 2013. That average doubled in the last two years, as investors reported committing \$1.6B/year in capital from 2014 to 2015.

Figure 2: Private Capital Committed Across All Tracked Years, 2004–2015

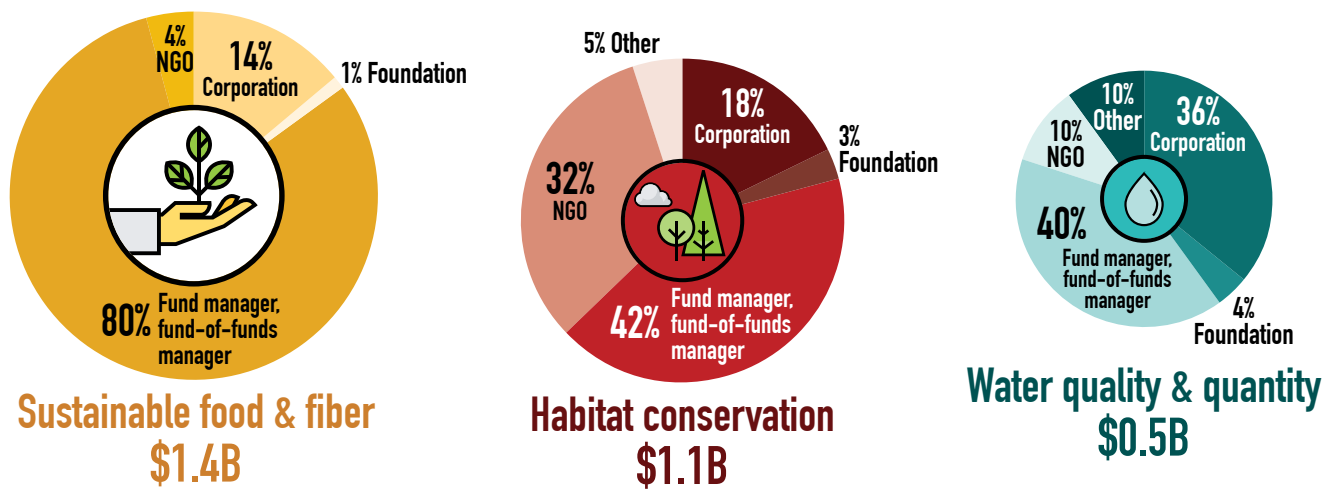


Note: Based on responses by 98 private organizations that reported making conservation commitments out of the total 128 organizations responding to the survey.

Future commitments: Another \$3.1B remained undeployed by current investors

Though private capital committed surged to a new high of \$8.2B, investors were still looking for deals with a reported \$3.1B undeployed at the end of 2015. This is more than double the amount reported in the 2014 report (\$1.5B). All but three respondents said that they planned to raise or reallocate more capital towards conservation investments in the next three years (2016–2018) than they committed in 2013–2015.

Figure 3: Already-raised Capital that Respondents Intend to Deploy in 2016–2018 by Conservation Category and Organization Type



Note: Based on 35 responses by organizations reporting un-invested capital in sustainable food and fiber, 27 by organizations reporting un-invested capital in habitat conservation, and 17 by organizations reporting un-invested capital in water quality and quantity.

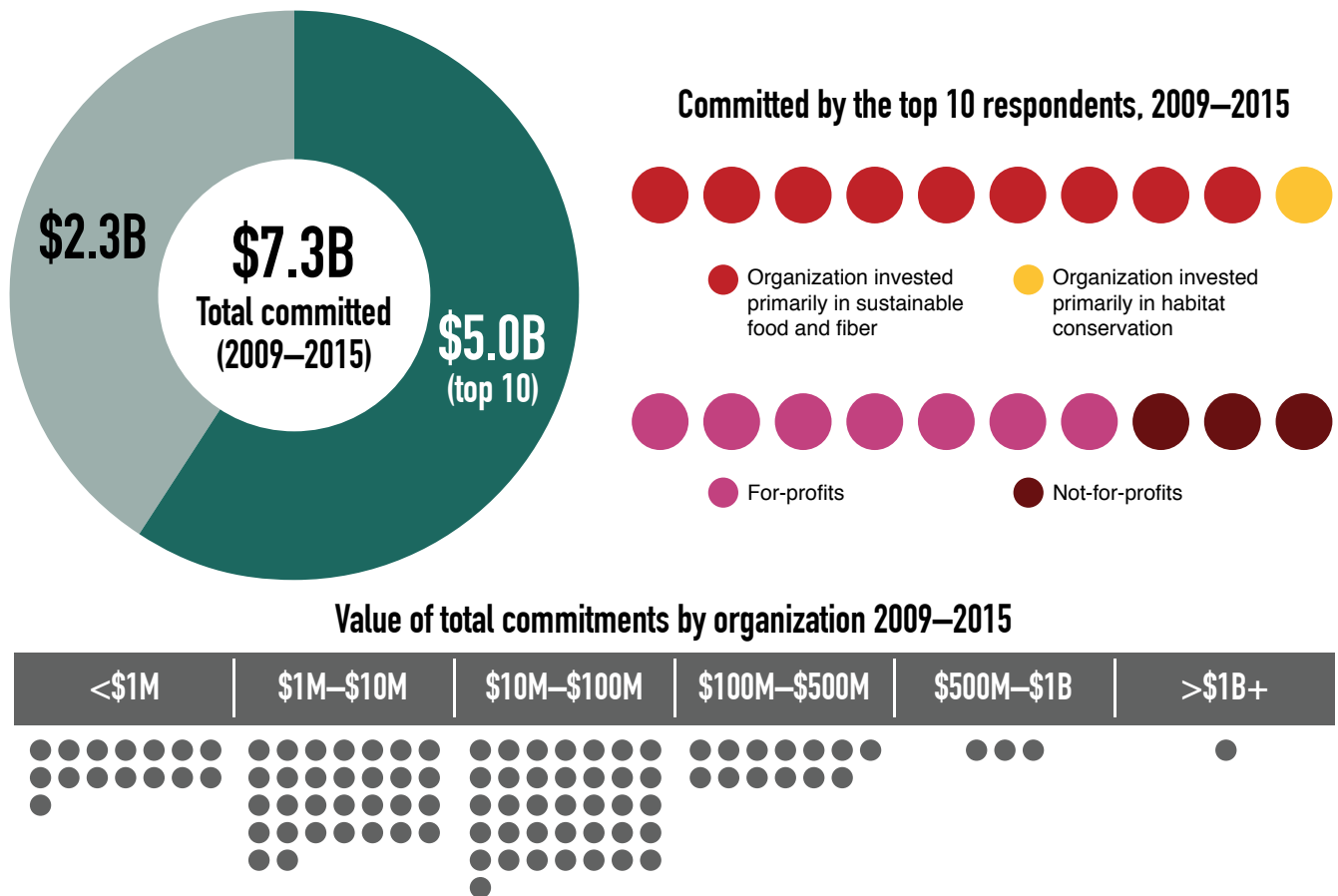
The 2016 report collected data from more than double the respondents and tracked nearly three times the amount of capital committed than in the 2014 report

Of the total 128 respondents to the survey, 98 investors and fund managers provided detailed transaction data about their capital committed. This was more than double the number (43) of private investors that shared this information in 2014. The greater response rate was at least one factor behind the finding that the \$8.2B tracked across all years represents more than three times the amount of capital (\$2.8B) tracked in the 2014 report.

The top 10 investors across all years accounted for 66% of tracked private capital, primarily invested in sustainable food and fiber production

In the 2014 report, the top 10 investors accounted for 80% of private capital committed between 2009 and 2013. With the addition of data from new respondents in 2016, this percentage decreased from 80% to 68%, suggesting a more even distribution of investment among respondents. However, the original trend re-established itself in the most recent years: the top ten investors made up 80% of all capital committed in 2014 and 86% of all capital committed in 2015.

Figure 4: Profile of Respondents by Capital Committed, 2009–2015



Note: Based on responses by 98 private organizations that reported making conservation commitments out of a total of 128 organizations responding to the survey.

Sustainable food and fiber production continued to attract the majority of capital committed

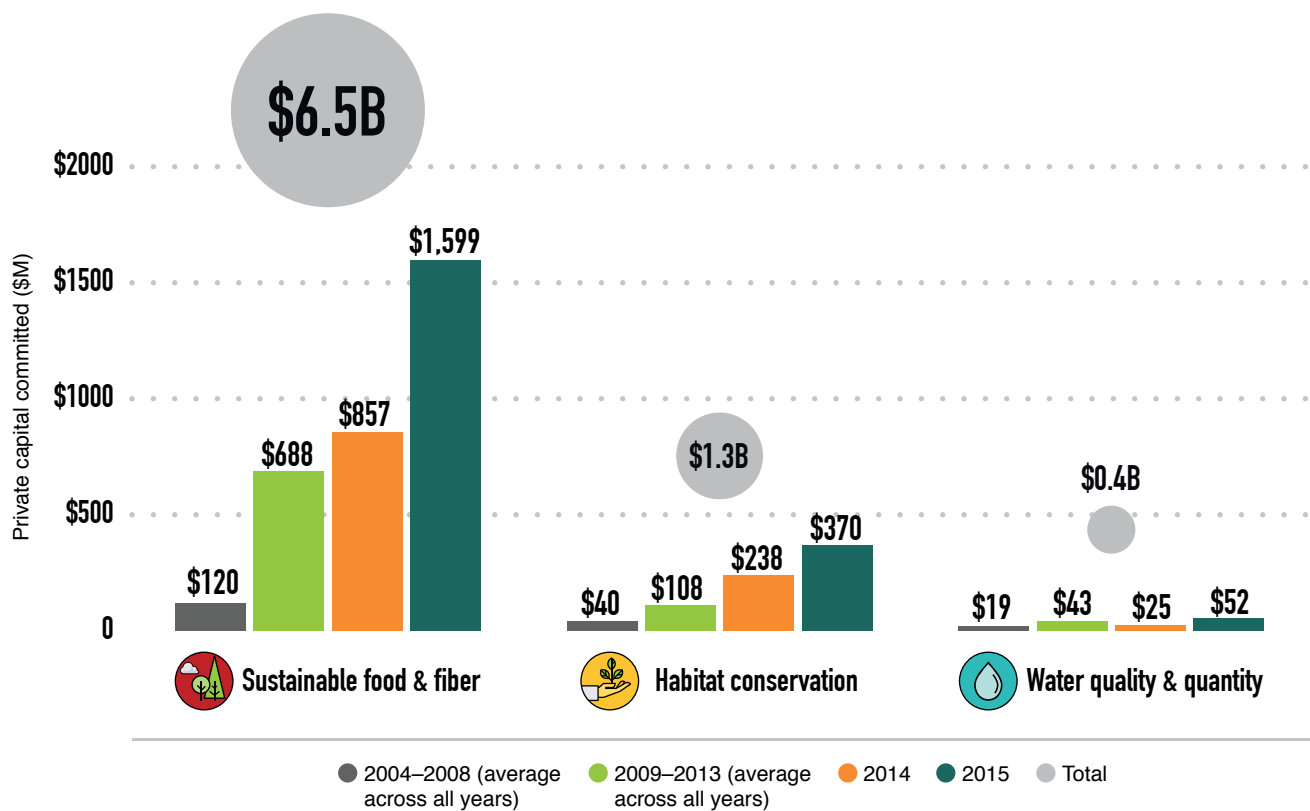
Investors reported committing \$6.5B in capital towards sustainable food and fiber production across all years (2004–2015), nearly four times as much as capital reported in the habitat conservation, and water quality and quantity categories combined. Investors directed the bulk of their capital towards sustainable forestry and

sustainable agriculture, which made up 44% and 32% of all capital invested across all three conservation categories, respectively. While investments in sustainable forestry increased the most between 2014 and 2015, the large jump was due primarily to a single organization's investments.

Habitat conservation: Investors favored US-based real asset acquisition

Organizations investing in habitat typically favored real asset investments, with almost half (48%) of habitat conservation capital committed towards direct land ownership and another 12% directed towards land easements, a popular tool for conservation in the United States due to tax incentives. Capital committed towards forest carbon or mitigation banking, which rely partly on the sale of environmental credits for revenue, constituted slightly smaller sub-categories, totaling 10% and 28% of capital committed respectively. While the bulk (79%) of all habitat conservation investments remained in the United States, most international investments were made in environmental credits.

Figure 5: Annual Private Capital Committed by Conservation Category, 2004–2015



Note: Based on responses by 98 private organizations that reported making conservation commitments out of a total of 128 organizations responding to the survey.

Water quality and quantity: No clear sign of growth yet; investors committed smaller amounts of capital totaling 5% of all conservation investments tracked

Fewer organizations reported making water quality and quantity investments, compared to sustainable food and fiber production or habitat conservation investments. Many of those who provided capital, did so under a larger umbrella investment that spanned multiple conservation categories, such as an investment into landscape restoration, which directed some capital towards stream restoration. Over half (53%) of capital committed towards water quality and quantity went into the self-described “other” sub-category, with respondents choosing more general terms of “water quality” and “water conservation” than any of the more specific sub-category options.

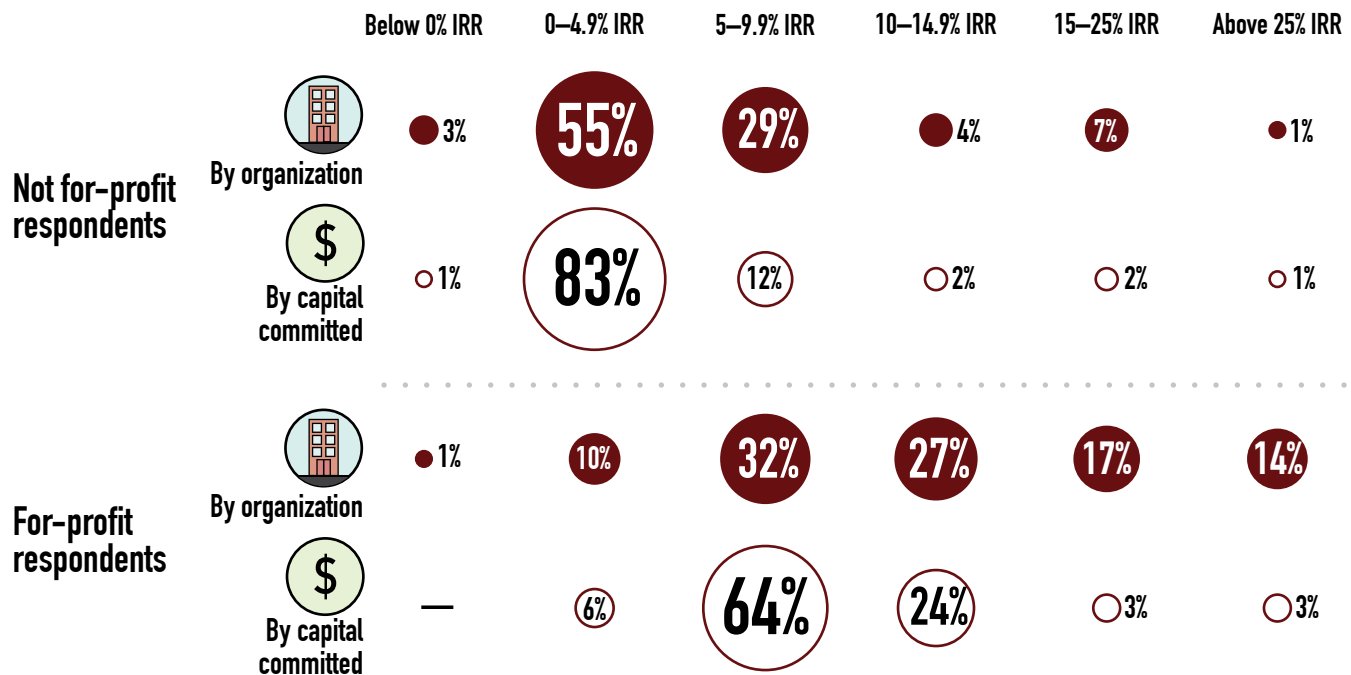
The majority of respondents were based in North America and Europe, but an increasing amount of investment moved to other continents

Organizations headquartered in North America supplied nearly two-thirds of all responses, with the bulk of remaining responses from Europe, and a few responses from Africa, Asia, and Latin America. Although headquarters largely remained in developed economies, a significant amount of investment has pushed into emerging economies, especially into sustainable forestry investments in Latin America and Africa. In particular, findings showed a four-fold increase in investment in Latin America (from an average of \$107M/year between 2009 and 2013 to \$538M/year between 2014 and 2015).

Average target internal rate of return remained in the range of 5% to 9.9%

While nearly a third of all respondents (31%) anticipated returns between 5 and 9.9%, return expectations were split depending on an organization's profit status. Over half of not-for-profit respondents (55%) expected a smaller return, between 0 and 4.9%. Meanwhile, the slim majority of for-profit respondents (32%) cited 5–9.9% as the most common expected return, followed by 10–14.9% (27%). Only 10% anticipated a return of less than 5%, while the remaining 31% anticipated returns of 15% or more.

Figure 6: Projected Internal Rate of Return by Organization and Capital Committed, by Organization Profit-Status, 2009–2015



Note: Based on responses by 81 private organizations that reported making conservation commitments.

Respondents listed a lack of attractive risk/return deals, small transaction sizes, and management track records as limitations to conservation investment growth

Across all respondents, the majority listed their primary challenge to future growth as a lack of available deals with appropriate risk/return profiles—a constraint that was repeated when asking respondents about challenges to including more institutional investors in this space and one that was also most-cited in the 2014 report. Respondents also pointed to a number of secondary concerns to growth and expansion for institutional investors, including small transaction sizes and lack of management track records. Outside of traditional investment concerns, investors also expressed the need for more government support to absorb risks and to create enabling market conditions through pricing environmental externalities.

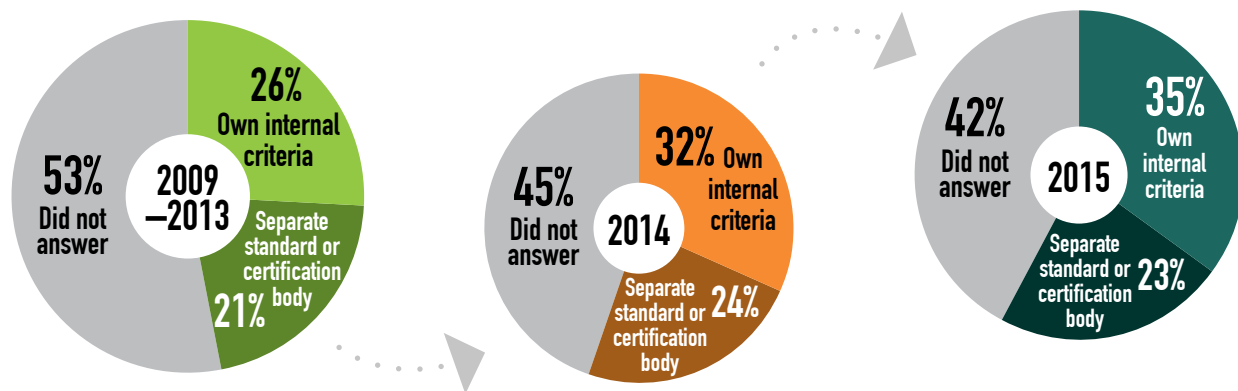
Private investors motivated by both conservation and financial return, but criteria for making investment choices varied slightly

When asked about their *motivation* for making conservation investments, private investor respondents ranked conservation objectives (30%) and financial return (27%) as near equals. In contrast, not-for-profits prioritized conservation objectives (48%) much more than financial return (8%), followed by other non-financial objectives (34%). However, with respect to actual deal-making, investors ranked the likelihood of meeting their financial return target (35%) and having desired conservation impacts (32%) as the top *criteria*.

More organizations monitored and/or reported on conservation impact in order to meet investor requirements or to voluntarily report on impacts

An increasing number of organizations monitored and/or reported on conservation impacts over the past few years. In 2015, respondents reported the highest use of monitoring and reporting, with 35% using internal criteria and 23% using a third-party certification or standard. Interestingly, a number of respondents indicated they developed or relied upon their own internal metrics for tracking conservation impacts, rather than utilizing an existing third-party criteria or certification.

Figure 7: Organizations that Monitor or Report on Conservation Impacts by Time Periods



Note: Based on responses by 45 private organizations that reported monitoring conservation impacts in 2009–2013; by 42 private organizations that reported monitoring conservation impacts in 2014; and by 50 private organizations that reported monitoring conservation impacts in 2009–2013.

Areas for Further Research

The findings of this survey brought to light five emerging themes that are worthy of further research on behalf of both private and public investors with an interest in investing in conservation:

Blended finance: A preponderance of mixed sources of investment capital and/or multiple revenue streams combined in an investment vehicle—often referred to as “blended finance” or “capital stacking”—was observed in innovative structures and generally with measurable conservation results in addition to competitive financial returns. The role of government financing or government policies (that, for example, enable favorable tax treatment or the maintenance of markets such as carbon finance) was significant in this area.

Public finance: While the authors tried to include public finance data in this report, only six public organizations responded. Of those, one development finance institution provided the overwhelming bulk of data; in essence, 94% of the reported public finance investment in this survey came from a single organization. Thus, there were likely far greater amounts of public finance being committed into conservation investments, and a more comprehensive analysis would benefit from a better understanding of both current investment practices and the role of public finance in spurring or enhancing private investment.

Supply chain commitments: Companies that utilize forest- and resource-damaging commodities such as soy, palm, cattle, and timber/pulp have increasingly made commitments to reducing or eliminating deforestation from their supply chains or have otherwise started to move toward more sustainable commodity sourcing. As part of their sustainability strategies, some of these companies are beginning to make their own internal investments in both their operations and their supply chain suppliers.

Conservation investments outside survey scope: In the course of developing the scope and the questions for the study, as well as the potential pool of targeted firms and organizations to survey, it became clear that a number of areas of current investment fell outside the defined scope of this study. Examples included investments in certain forms of agriculture with secondary benefits for forests or water, and investments in alternative cooking fuels or cleaner cook stoves that impact and benefit forests. This suggests that the potential scale of conservation-oriented private investment could be much larger than found in this study.

Investments moving into emerging economies: This report presents initial evidence that opportunities and experience from investments in developed economies in practices such as sustainable forestry or sustainable agriculture may finally be working their way into emerging economies, presenting new opportunities for investors in Latin America, Africa, and Southeast Asia. While this survey was successful in gathering responses from some organizations outside of North America and Europe, future studies should place an even stronger effort on outreach and engagement with investors in these other regions.

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