# CONSERVATION TRUST INVESTMENT SURVEY

FOR CALENDAR YEAR 2015





Photo contributed by Ryan Hawk -- Tree Kangaroo Conservation Program (Papua New Guinea)

# INVESTMENT SURVEY

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Prepared in collaboration with the Conservation Finance Alliance, the Latin American and Caribbean Network of Environmental Funds (RedLAC) and the Consortium of African Funds for the Environment (CAFÉ).



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Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

The Conservation Trust Investment Survey (CTIS) project is produced by the Wildlife Conservation Society in collaboration with the Conservation Finance Alliance (CFA), a collaborative network of governments, multilateral agencies, NGOs, private companies, academic institutions and independent experts, connecting to address sustainable finance for issues and solutions in support of conservation. The Latin American and Caribbean Network of Environmental Funds (RedLAC) and the Consortium of African Funds for the Environment (CAFÉ) are key stakeholders and partners of the initiative.

Funding for the project has been provided by the Gordon and Betty Moore Foundation, Acacia Partners, and the Linden Trust for Conservation. This report is made possible due to the voluntary participation of Conservation Trust Funds (CTFs) and we would like to thank all those who took the time from their many responsibilities to complete the survey, provide comments and suggestions, and contribute photos for this project.

We are especially grateful for the assistance of the CTIS Advisory Team for their input into the survey instrument and the report: John Adams, Arnaud Apffel, Carl Bruessow, Alexandra Erick, Sylvie Goyet, Scott Lampman, Kathy Mikitin, Fanny N'golo, Rosa Montanez, Lorenzo Rosenzweig, Juan Pablo Vallejo and Anniela Verona. We give particular thanks to Greg Alexander and Scott O'Connell of Acacia Partners for their insightful analysis and commentary in the Foreword.

## **PHOTO THANKS**

Each year, we ask the conservation finance community to provide photos to illustrate the CTIS report. Once again, we are stunned and gratified by the generosity and talent of the many people who contributed photo offerings this year. Specific thanks to the following people and organizations for sharing their work with us:

#### Imran Ahmad

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Photo contributed by Lorenzo Rosenzweig Pasquel, Fondo Mexicano para la Conservación de la Naturaleza

Dear Fund Manager,

Thank you for your important role in protecting the world's most important natural places. Our goal is to help conservation trusts learn more about endowment management and hopefully, help generate increased resources for your valuable work.

In past surveys we have highlighted the higher returns available from stocks over long periods of time. Over the last 88 years the S&P 500 has delivered an annual return of 11.4%. It is not a straight line however. Losses were recorded in 25 years and between 1950 and 2014, half of all annual periods saw an interim correction of 10% or more. The start of the new millennium saw three years in a row of declines in the S&P 500.

It should be no surprise to see results like 2015's tepid returns with the S&P +1.4% and the MSCI World (net return) -0.9%. Stock returns shouldn't be judged on a single year's results but on a multi-year basis.

Average annual return to 12/31/2015	3 year	5 year	10 year
S&P 500 Index	15.1%	12.6%	7.3%
MSCI World Index	9.6%	7.6%	5.0%

The following comments apply primarily to endowments, given that sinking funds have a much shorter life span that requires a different portfolio allocation.

As in past years, we urge you to rethink the amount of your assets in cash and fixed income which at an average of 61% seems far too high. While a number of funds have restrictions on how they can invest, for most trust funds there is no excuse for extreme underinvestment in equities with only 39% in stocks. And this 39% in stocks includes 'alternatives' and 'other', so the percent in equity-like assets might even be less than 39%.

As to the advantages of stocks, don't take it from us; instead, heed the words of Warren Buffett, currently worth over \$70 billion and one of the greatest investors of all time:

"Sometimes stocks get very volatile, but the important thing is where they're going to be. I am confident they'll be considerably higher in ten years. Stock prices will always be more volatile than cash, but over the long term [cash and bonds] are far riskier than a widely-diversified stock portfolio. I believe stocks will prove to be the runaway winner over any extended period of time. More important they will be by far the safest." 2 Buffett's point on safety refers to the risk to cash and bonds from inflation. The income from a bond is fixed over its lifetime, while the cost of living increases with inflation. The interest and principal on bonds are paid in currency that can be devalued by inflation, and the value of idle cash is similarly eroded by constantly rising prices.

The survey reports that for funds that have established a target return, the average return targeted is just under 7%. Given that a typical fund has 24% in cash, yielding almost nothing, and 37% in fixed income, yielding just a bit more, we can do a little math:

#### Annual return

24% in cash X 1% yield = 0.24% 37% in fixed income X a 3% yield = 1.11%

This portion of the portfolio generates a return of 1.35%, leaving the rest of the fund to earn another 5.58% to get to the targeted return of 6.93%. To accomplish that, the remaining 39% of the portfolio invested in stocks must earn 14.3% in order for the fund to hit its target. To earn 14.3% per year from equities over any period of time is wildly unrealistic, ensuring that most funds will miss their targets. The solution is to increase the percent invested in equities over time.

Over the long term, let's assume stocks can return up to say 9% per year, less than their historical average. Then, assuming a 3% blended return from cash and fixed income, how much should be in equities to hit a target return of at least 6.93%? The answer: 65%, dramatically higher than the current allocation.

	Annual return
35% cash and fixed income returns 3%	1.05%
65% equities returns 9%	5.85%
Total	6.90%

Thus, most funds need to either drastically increase their commitment to stocks or lower their targets for future annual returns.

We live in an era of historically low interest rates. Cash and bonds do not offer yields high enough to generate the income your trust needs. The world's best endowment managers understand this, which is reflected in their current portfolio allocations:

	Percent in fixed income and cash
Yale University	7.5%
Stanford University	9.3%
Harvard University	12.5%
Massachusetts Institute of Technology	14.2%

In stark contrast, the average conservation trust has 61% in these asset classes. This should be a red flag for target allocations over time. Yes, all of these great universities have professional staffs and invest in private equity and other assets not available to most conservation trusts. But they realize that keeping their money in cash and bonds will not produce the returns they need.

If these well-run endowments have so little cash and bonds, why do most conservation trusts own so much of them? In our experience, investors are too often beholden to their fears. Many investors want to wait for more certainty, for the economy or the international situation to improve, or until it is "safe" to invest. There is extensive research showing that investors fear losses twice as much as they value gains. Instead of taking rational guidance from historical long terms returns offered by stocks, they overweigh their fears.

Being overcautious typically comes from paying too much attention to the press which often features the negative. Investing based on headlines is hazardous to your financial health. Here are just a few recent examples of how investors can be misled:

 New York Times columnist and Nobel Prize economist Paul Krugman on the night of Donald Trump's election noting the Dow Jones Industrial Average (DJIA) was down 800 points in overnight trading tweeted, "It really does now look like President Donald J. Trump, and markets are plunging....If the question is when markets will recover, a first-pass answer is never." In fact, the DJIA didn't plunge 800 points the day after the election, instead jumping by 258 points. As of this writing, is it up over 2,300 points, or 13%, since Krugman's prediction.

- In the two days following the unexpected result of the UK Brexit vote in June, the London FTSE plunged more than 350 points or 5.6% as investors panicked. The media was full of stories detailing the terrible economic and market consequences of the vote. Unfortunately for investors who sold, the market gained back the 350 points in a matter of days and rose more than 1,300 points from the June 27 low.
- Veteran investor James O'Higgins points to Brazil as an example of real negative conditions on the ground obscuring an investment opportunity. "In 2016 Brazil's senior leadership has been embroiled in a vast corruption scandal, President Dilma Rousseff's powers have been suspended due to impeachment proceedings, Finance Minister Joaquim Levy has been forced to resign, and inflation is in double digits. Brazil suffered its worst GDP contraction since 1990." Time to get out of Brazilian stocks? No! In the face of unprecedented political and economic stress, the Brazilian stock market soared 39% in 2016.

The lesson is clear: you can't invest based on headlines or conventional wisdom. As Barry Ritholtz puts it "Don't try to time the markets. You lack the skill, the discipline and the ability.

Even if you get lucky, it's just that — dumb luck — and that serendipity is likely to encourage you to engage even more reckless and foolish behavior in the future. The odds of you jumping out on time and getting back in are stacked against you. Add in taxes and other costs, and it becomes a fool's errand."

Underscoring the point is Morgan Housel who examined the annual S&P 500 predictions for years 2000 to 2014 made by the top 22 top market strategists at the biggest banks and brokerage firms. On average, these annual forecasts missed the actual market performance by an incredible 14.6 percentage points per year. Not 14.6% but by 14.6 percentage points!

How can these experts, who spend each waking moment studying and analyzing the markets, be so laughably wrong? They are smart, educated and highly paid yet are trying to do the impossible: predict the coming 12-month return of the stock market. If experienced experts consistently fail, it's a game you shouldn't play.

Most conservation trusts should have a minimum of 50% in equities and as much as 70% if they are well-funded and have any aptitude for choosing capable investors. If your trust doesn't, make a plan to get there. Assuming a trust has an annual withdrawal of 5%, having cash and shorter term bonds of 25% representing five years of annual distributions, is a reasonable allocation. If the market suffers through a bear market you won't have to sell when stocks are down to meet your payouts. The required funds will be available.

The vast majority of trusts must generate sufficient wealth to fund their work for decades into the future. This means having the largest allocation to stocks and not waiting for a mythical "all clear" signal before investing.

A trust fund doesn't have to change its allocation overnight, and probably shouldn't. For example, move 5% of your fixed income allocation into stocks every six months until you reach the target equity allocation. Anytime the market falls by 10%, add another 5% to stocks. Or mechanistically add 10% to stocks every year for the next three years. Whatever the specifics, the long term success of your trust ultimately requires the higher returns available from equities.

Yes, it's possible the stock market will decline sharply in the next year or two. It would be an aberration if it doesn't. Don't take counsel of your fears; for long term investors like the conservation trusts, declining markets are an opportunity to buy low. As Warren Buffett put it,

"I'm going to buy hamburgers the rest of my life. When hamburgers go down in price, we sing the 'Hallelujah Chorus' in the Buffett household. When hamburgers go up in price, we weep. For most people, it's the same with everything in life they will be buying -- except stocks. When stocks go down and you can get more for your money, people don't like them anymore."

We are honored to be part of the important work of the conservation trusts and heartened by this growing movement to protect the world's most important and beautiful places.

Sincerely,

Gregory Alexander & Scott O'Connell Acacia Partners





Photo contributed by Arnaud Apffel

Conservation Trust Funds (CTFs) are private, legally independent grant-making institutions established to provide stable, sustainable, long-term sources of funding for the protection and sustainable management of natural resources in areas of high biodiversity. CTFs typically encompass one or more endowments and/or sinking funds, and use income from investments to provide a reliable source of support for management of protected areas, long-term investment in conservation programs and projects and financing for indigenous communities. Many of the CTFs grow to become significant resource mobilization and grant-making institutions, effectively managing and disbursing funds from a variety of sources to support conservation and sustainable livelihood projects. To maximize their available resources for conservation funding, effective and prudent management of invested assets is critical to the success of the CTFs.

Since 2006, the Conservation Trust Investment Survey (CTIS) has been tracking the financial performance and investment strategies of CTFs throughout Africa, Asia, Eastern Europe, Oceania, Latin America and the Caribbean. The Conservation Trust Funds described in this study manage endowment funds, sinking funds, revolving funds,<sup>1</sup> or all three. The information reported in this study is based on a variety of investments denominated both in the local currency of the CTFs' home countries, and in international currencies, including US dollars and Euros. The investments range from those held almost exclusively in local banks or fixed deposits, to more complex globally diversified investment portfolios managed by international investment firms.

This year, 2015, was notable for both investment volatility and, in several markets, lower investment returns than have been seen in recent years. The S&P 500 returned only 1.38% for the year overall, compared to 13.69% in 2014 and 32.4% in 2013. The MSCI World Index, a measure of developed markets total equity return, had a negative return, -0.32%, compared to 5.5% in 2014 and 27.4% in 2013. And in the bond market, the Barclays Capital US Aggregate Bond Index returned only 0.55% in 2015, compared to 5.97% in 2014 and -2.02% in 2013; for a global comparison, the Barclays Capital Global Aggregate Bond index has returned -3.15% in 2015, 0.59% in 2014 and -2.60% in 2013.

<sup>&</sup>lt;sup>1</sup> A revolving fund is one that is filled and depleted in a short time period, typically less than one year. Often these funds accommodate Payments for Ecosystem Services that are managed by a CTF to achieve conservation goals in collaboration with National Governments. Because these monies are not typically invested, they are not addressed in any depth in this report, but we have begun collecting limited data on them as they are important conservation financing mechanisms and show the breadth of financing mechanisms that CTFs are managing.



Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

The CTIS draws on the example of the National Association of College and University Business Officers (NACUBO) annual study of college and university endowment investment performance (the "NACUBO-Commonfund Study of Endowments"), and we look to recent NACUBO studies for examples of how other endowments performed in the same time period. As the NACUBO study reports on a June 30 fiscal year basis, the comparisons are not perfect, but provide useful references nonetheless. For fiscal year 2015 (ending June 30), the average return of participating university and college endowments was 2.4%; in fiscal year 2014, the average return was 15.5%. While many of the participants are significantly larger than most of the CTIS participants, the performance by peer group is also helpful. For fiscal year 2015, the average return for endowments in the \$25-\$50M range was 1.9% and in the under \$25M range was 2.3%<sup>2</sup>.

Given this climate, it is not surprising that overall returns for the Conservation Trust Funds participating in this study are lower this year than last year. On average, the CTFs reported nominal organizational returns<sup>3</sup> of 0.44%, down from an average of 5.52% in 2014. Endowment funds returned, on average, -0.80% in 2015, down from 6.22% in 2014. Sinking funds returned, on average, 3.85%, in 2015, down from 5.11% in 2014. When inflation is considered, the average endowment real return is -3.72%% and the average sinking fund real return is -1.08%.



Photo contributed by Micronesia Conservation Trust



Graph 1: Average Nominal Annual Returns, 2011-2015

Average asset allocation for endowment funds of CTIS participants was 39.6% equities, alternatives & other and 60.4% fixed income & cash, while the NACUBO institutions invested 13% in fixed income and cash and the remainder in alternatives, equities, and other. In 2014, the difference in returns between the NACUBO endowments and the CTFs was significant; in 2015, the gap is more like 300 to 400 basis points although notably the NACUBO endowments had an average positive return, compared to a slightly negative return for the CTFs.



Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

<sup>2</sup> 2015 NACUBO-Commonfund Study of Endowments (NCSE). www.nacubo.org

<sup>3</sup>Organizational returns represent the overall average returns of a CTF that may manage and invest both multiple endowments and/or sinking funds. For CTFs that manage multiple funds, the organizational return is the weighted average of all returns. For those that manage only one fund, the organizational return and fund returns are the same. Returns are reported specifically for endowments and sinking funds separately.

#### Graph 2: CTIS 2015 Asset Allocation vs. NACUBO-Commonfund Endowments





Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

On a historical basis, three-year average nominal returns for the period ending in 2015 were 3.29%, and the five-year average returns were 4.41%.

Thirty-four (34) CTFs participated in the study this year, including two CTFs participating for the first time. The participating CTFs represent conservation efforts in 45 countries, on six continents, and range from small endowments protecting a single species in a specific ecosystem, to large national or regional institutions funding conservation efforts, supporting protected areas and conserving biodiversity throughout an entire country or for a transnational ecosystem.

The 2015 CTIS study continues the comparative analysis by region. In 2015, the groupings are made to reflect the two existing CTF networks (RedLAC in Latin America and the Caribbean, and CAFÉ in Africa), as well as the planned creation of a similar network in Asia/ Oceania. However, not all participants in Latin America/Caribbean or Africa are members of a network. Such regional analyses are possible due to the strong participation rates in each of these regions.

With funding from the Gordon and Betty Moore Foundation, the Linden Trust for Conservation and Acacia Partners, the CTIS continues to expand to provide additional analysis and educational support to the CTFs and other CTIS audience members. In 2017, a focus will be on rolling out investment management training workshops for Trustees/ Directors and senior staff of Conservation Trust Funds to help build knowledge and capacity in understanding investments. The initial focus of these education programs will be on inperson workshops, both for intact Boards and for mixed groups; the long-term goal is to create an online training and informational modality to enable broader participation and information access by Trustees/Directors and staff.



Photo contributed by Ryan Hawk -- Tree Kangaroo Conservation Program (Papua New Guinea)



Photo contributed by Lorenzo Rosenzweig Pasquel, Fondo Mexicano para la Conservación de la Naturaleza





Photo contributed by Ashvin Seaboo, Seychelles Islands Foundation

## BACKGROUND

Conservation Trust Funds provide long term financing for management of protected areas, biodiversity conservation projects and sustainable development. The significant majority of the CTFs participating in this study are managed as private organizations, independent of government. They are generally capitalized by grants from donor agencies, governments, foundations, nonprofit organizations, individuals and corporations.

Since the establishment of the first CTF in the early 1990s, Conservation Trust Funds have proven to be highly successful in providing stable funding sources by effectively managing income from investments and leveraging those monies to secure grants and other funds for conservation projects, thus helping to conserve important biodiversity worldwide. As of this writing over 80 Conservation Trust Funds have been established or are in active development, in Africa, Latin America and the Caribbean, Asia, Eastern Europe and Oceania, building on the structure and functional example of the early CTFs. Many of these CTFs have surpassed or are nearing two decades of continuous and successful operations and readily demonstrate the effectiveness of the CTF model. Recent years have seen growth in the number of regional Trust Funds, established to support protected areas or conservation goals that cross national boundaries. The regional networks (RedLAC, CAFÉ and the forthcoming Asia-Pacific CTF Network) offer opportunities for knowledge sharing, and several more focused partnerships among a smaller number of CTFs with shared interests have been formed to achieve investment, resource mobilization or programmatic goals.

Conservation Trust Funds have been able to use the income from endowment and sinking fund investments to cover their administrative and operational needs, and provide grant financing for activities and projects that are consistent with their mission and objectives. Moreover, the CTFs have been able to leverage their finance and administrative capability to raise additional funding for projects, through traditional fundraising as well as the use of innovative financing mechanisms. While most CTFs were originally established to provide a source of reliable funding for the operating costs of managing protected areas, many have become significant national institutions, with multiple effective mechanisms to



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- Manage and disburse funds to support a variety of conservation activities;
- Bridge local knowledge and conservation needs at a country or regional level with funding from international organizations;
- Provide stable management of protected areas through periods of economic or political volatility;
- Provide funding for indigenous communities and sustainable income development projects;
- Initiate partnerships with the private sector to support sustainable business practices and to create innovative funding sources for conservation projects;
- Manage funds from Payments for Ecosystem Service (PES) schemes and other similar sources;
- Initiate long-term programs that provide sustainable payments beyond what is normal for short or medium term projects, for improved land management in support of biodiversity conservation;
- Provide permanence and stability to long-term conservation efforts; and
- Operate as advocates at national and regional levels for conservation actions, financing, and policies that support biodiversity.

Furthermore, while they are usually structured as independent legal entities, CTFs operate as collaborative partners with national governments, working to achieve national objectives under the Convention for Biological Diversity, the UN Sustainable Development Goals, the UN Framework Convention on Climate Change and other international conventions as well as national objectives.

This CTIS study is designed to provide information that can assist established CTFs in analyzing their investment strategies and to create a foundation upon which new or nascent CTFs can learn from the experience of others. With the 2012 survey we added the option for CTFs to elect to share their raw data with one another. Thirty-one (31) CTFs elected to share data with each other in 2012, 37 respondents elected to do so in 2013, 33 elected to share data in 2014, and 27 elected to do so in 2015. These respondents have access to the raw data of those that have made a similar election, via the CTIS project manager, and can use the data to construct custom peer groups, draw more detailed conclusions, and identify specific peers to contact for more information.



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## **OBJECTIVES**

The main objective of this study is to report on the performance and present the investment strategies and structures implemented by participating Conservation Trust Funds. A secondary objective is to serve as an educational vehicle to promote discussion about investment management approaches and concepts.

This report will focus on the following financial information gathered through surveys of each participating CTF:

- Demographics of the participating CTFs
- Investment returns
- Asset and currency allocation
- Investment policies and management
- Use of investment professionals and typical fee structures



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Photo contributed by Micronesia Conservation Trust

## SURVEY FORMAT, ORIGINATION

This report is designed to gather and present investment information from privately directed Conservation Trust Funds (CTFs) that manage endowments, sinking funds or revolving funds with the mandate to provide long-term financing for conservation and sustainable development. Creation of the CTIS drew on the experience of the Commonfund-National Association of College and University Business Officers (NACUBO) annual survey of the performance of US college and university endowments.

## DATA COLLECTION

The survey for the calendar year ending December 31, 2015 was administered in two parts and emailed to all participating CTFs. Part 1, covering investment strategy and policy, was made available in MS Word as well as in an online (web-based) format. Part 2, covering investment returns, portfolio allocation and fees, was made available in MS Excel. The questionnaires were available in English, Spanish and French. The CTFs were encouraged, where practicable, to ask their external investment management professional to complete Part 2 of the survey. The CTIS Project Manager distributed the surveys directly to CTFs as well as through the Latin American and Caribbean Network of Environmental Funds (RedLAC) Secretariat, and the Consortium of African Funds for the Environment (CAFÉ) Secretariat. In total, direct requests for participation were sent to 82 organizations.

## DATA INCLUSION

A total of 34 organizations completed all or part of the survey. Thirty-two (32) completed Part 1, Strategic Management and 31 completed Part 2, Financial Data. Responses to some questions have been removed at the discretion of the authors, where a response was incomplete or, in the authors' judgment, the response did not make sense in the context of the question asked.



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## CONFIDENTIALITY

The CTIS project is committed to maintaining the confidentiality of each participating CTF's data submissions in the published report. Contact information for each of the

participating CTFs is provided; however, all financial data are reported anonymously and we have taken steps to ensure that data cannot be tied to specific funds in the published study. The survey instrument provided the option for respondents to opt-in to a voluntary sharing of data with peers. Those respondents who elected to do so will have access to the data of the other CTFs that have given similar permission; this data access will be limited to the specific years in which they have opted-in. The data will be available in a password-protected file. Those CTFs that declined to participate in this data sharing opportunity are included in this study; their data will not be made available for peer comparison. Of the 34 survey respondents, 27 have elected to participate in the data sharing for 2015; seven declined to participate or did not answer the question.

## **FISCAL YEAR**

All data and reporting are based on the calendar year 2015 ending December 31st unless noted.

## RETURNS

All performance data (returns) are reported net of management fees and expenses. All returns are reported to the CTIS in the currency in which the CTF measures the fund's performance; when a portfolio contains returns in multiple currencies, the authors have converted to US dollars to report the weighted average return for the portfolio.

## STATISTICAL VARIANTS

Survey participants were encouraged to answer as many of the questions as possible; however, not all respondents completed all questions. Therefore, the data tables in this report do not necessarily reflect a response from every participant. We indicate the number of respondents for a given table or graph with "n=" wherever possible.

## ACCURACY

The data and conclusions in this report rely on information that is self-reported by the staff of Conservation Trust Funds and, where applicable, by the external investment management professionals hired by the CTFs and duly authorized to report financial data to the CTIS project on behalf of the participating CTFs. The authors have not independently verified the accuracy of the data submitted by the participants.

The Glossary has been developed to improve accuracy by ensuring that all participants are using the same terminology; it accompanies the CTIS questionnaire as a reference. The contents of the Glossary have been developed in partnership with the authors of the "Practice Standards for Conservation Trust Funds" to ensure consistency across projects and with other documentation and studies prepared by the Conservation Finance Alliance (CFA).

## **AVERAGE RETURNS**

Following procedures used in the Commonfund-NACUBO study, average return values provided in this report are calculated as equal-weighted averages, meaning that each reporting CTF has an equal influence on the outcome of the average calculation, regardless of the size of the investments. This allows each individual CTF to compare its returns to those of other CTFs participating in this study. Organizational returns are based on the weighted average of returns for all funds reported by an institution. Fund returns reflect the returns reported by the CTF for a specific fund. Three- and five-year averages are calculated as compound returns.



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Conservation Trust Funds participating in this study manage endowments, sinking funds and revolving funds. Most of the CTFs are established as private foundations or trusts; many are established as Non-Governmental Organizations (NGOs) or have been incorporated as not-for-profit Limited Liability Corporations (LLCs) governed by charity or trust law. The CTFs are generally established in the country where they operate and are managed by a board of directors with members from both the public and private sectors. In some cases, the CTFs have been incorporated in third-party countries due to legal or financial constraints or administrative necessity; this is frequently also the case for regional CTFs supporting conservation work in multiple countries. The CTFs range from highly focused organizations that manage a single fund to support one protected area or species, to sizeable nonprofit organizations that manage and invest numerous funds on behalf of varied conservation objectives.

Thirty-four (34) CTFs participated in the CTIS study this year. Thirty-two (32) participated in Part 1 (organizational & strategic data) and 31 provided financial returns and portfolio allocations. In many cases, those that did not provide financial returns have recently begun investing or are still in the process of investing, and did not have returns to report.

In aggregate, this year's participating CTFs manage nearly \$737.5 million in US equivalent dollars. The CTFs manage endowments and sinking funds ranging from less than \$1M (US equivalent) to nearly \$110M.

Among those respondents that provided asset values, five have aggregate investments in excess of \$50M (US Dollar equivalent), seven have investments between \$20M and \$50M, six have investments between \$10M and \$20M, and 13 have investments totaling less than \$10M, as of December 31st, 2015.

Latin American and Caribbean CTFs constituted 49% of the respondents, while 26% were African CTFs, 18% came from Asian or Oceanian CTFs and 6% came from Europe/ Eastern Europe (see Graph 3).



Photo contributed by Arnaud Apffel







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## **ENDOWMENT AND SINKING FUNDS**

The CTFs analyzed in this report manage endowment funds, sinking funds, or both.

An **Endowment fund** is a sum of money that is intended to exist in perpetuity or preserve its capital over a long-term timeframe; an endowment's capital is invested with a long-term horizon and normally only the resulting investment income is spent, in order to finance particular grants and activities.

A sinking fund is defined a pool of monies that will spend down its capital within a designated period of time (e.g. 10, 20, 30 years). The entire principal and investment income is disbursed over a fairly long period (typically 10 to 20 years) until it is completely spent and thus sinks to zero.

Both result in stable funding sources with long-term benefits, though endowments, as a more permanent funding source, can create additional benefits, including the ability to support ongoing activities over a longer period of time, to enhance community buy-in, to create payment systems that provide longer-term incentives for conservation results, and to form government and private partnerships. In some cases, a CTF can set up a sinking fund in tandem with a new endowment in order to provide the CTF with a source of guaranteed revenue for several years, while allowing the endowment to reinvest its returns to build a larger capital base. Typically, the expectation is that endowments will preserve purchasing power over time, meaning that at minimum they generate sufficient returns to keep pace with inflation. This ensures that future generations will enjoy the same economic benefits from the endowment as the current generation; this is known as "intergenerational equity." There is also an expectation that sinking funds, particularly when they are set up for 20-30 years, will be invested such that economic value (and therefore the ability to support conservation activities) is not lost to inflation.

Twenty-two (22) of the participating CTFs manage a single endowment or sinking fund, and nine manage two or more funds. In total, the 34 participating CTFs are managing 57 investable funds; 41 of these are endowments, 15 are sinking funds, and one was reported as combined data. In addition, one of the CTFs reported that they manage three revolving funds.



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It is worthwhile to note that the responding CTFs were asked to report their data in alignment with the definitions, and for the most part seem to have done so. In some cases, the responding CTFs may have, for reporting purposes, combined multiple endowments or sinking funds that are co-invested under the same investment guidelines. This produces a small degree of confusion in the data, but the overall effect is minimal and the important distinction here, for analysis purposes, is that the data are clearly distinguished as "endowment" or "sinking fund" as this is vital for comparability. Strengthening the consistency of the data reporting remains an opportunity for continual improvement.

## AREA AND AGE OF PARTICIPANTS

This report has compiled data from 34 responding CTFs. Fifteen (15) of these respondents have participated in the study in every year since 2006, providing the opportunity to analyze investment data over multiple years. Each year, new CTFs join the study (two this year), many of them newly established CTFs that have just begun investing. While CTFs rarely drop out of the study permanently, some do decline to participate in a given year due to time constraints or other issues. This year, seven regular participants opted not to respond, a much higher than usual number; however, two CTFs that had taken a year or two off returned to the study. Of the CTFs that declined to participate this year, most indicated they were too busy.

The responding organizations range in age from one to 37 years since formation, with an average age of 14 years.

#### Africa

Nine (9) African Conservation Trust Funds completed the survey this year; eight of them are members of the Consortium of African Environmental Funds (CAFÉ). On average, the African CTFs participating in the survey are 14 years old, and those that provided financial data have average investments of \$20M (USD equivalent).

#### Latin America and Caribbean

Seventeen (17) CTFs from the Latin America and Caribbean region completed the survey this year; 15 of these CTFs are members of the RedLAC network. On average, the Latin American/Caribbean CTFs participating in the study are 15 years old and those that provided financial data have average investments of \$30M (USD equivalent).

#### Asia and Oceania

Six (6) CTFs in Asia and Oceania participated in the CTIS this year. On average, the Asia/ Oceania CTFs participating in the study are 14 years old and those providing financial data have average investments of \$13.6M (USD equivalent). As of this writing, CTFs in the Asia-Pacific-Oceania region are collaborating to form a network modeled on the experience of RedLAC and CAFÉ, for the purposes of sharing knowledge and ideas.

#### Eastern Europe

There are currently two participating CTFs registered in Europe and operating in Eastern Europe/Central Asia, the Caucasus Nature Fund and the Prespa Ohrid Nature Trust (PONT). Because there are only two CTFs we do not break out this region for separate analysis; data from CNF and PONT are included in all aggregate analyses.



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## **CURRENCY**

The CTFs participating in the study invest in a variety of currencies – for analysis purposes we group them according to which currencies they use to measure financial performance. Twenty-three (23) percent of the CTFs measure financial performance in domestic or primarily domestic currencies, and 72% measure financial performance in foreign currencies, specifically US dollars or Euros (no CTFs use US dollars or Euros as their domestic currencies). Sixty-eight (68) percent of the funds managed by CTFs are measured in US dollar or primarily US dollar-denominated portfolios, though it is important to note that even funds measuring performance in US dollars are frequently invested in other currencies and markets (See Asset Allocation and Diversification, below). Seven (7) percent of the funds are in Euro or primarily Euro portfolios and 23% are in exclusively or primarily domestic portfolios. Two (2) percent of the funds are in a mix of currencies, with no single currency dominating. The domestic currencies in use include Paraguayan Guaranis, Colombian Pesos, Brazilian Reais, Belize Dollars, and Bangladeshi Takas.



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#### **Graph 4: Primary Currencies of Funds**



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Photo contributed by Dennis Hansen, Seychelles Islands Foundation

#### **Notes on Risk**

Risk is a critical consideration in developing an investment strategy. In the context of investments, risk is typically measured by the volatility of an investment opportunity, that is, how likely the investment is to deviate from an expected or predicted return. A bond issued by a G7 country with a fixed rate of return has very low volatility; stocks in new technology companies might have high volatility, showing high returns one year and negative returns the next. Higher risk investments also have the potential for higher returns, along with the potential for losses. In developing an investment strategy, investors identify their risk tolerance and then seek to optimize returns (through asset allocation and diversification) for that level of risk. Each of the CTFs that responded to the CTIS this year has its own unique risk profile and has developed its investment strategy and target returns accordingly. The overall results of the CTFs, the range of returns (both nominal and real), the asset allocations and the patterns over time give opportunities for learning, discussion and exploration. Those CTFs that elected to participate in data sharing have access to the individual raw data of those CTFs that also elected to participate, and can also do a more detailed analysis of asset allocations and investment patterns by CTFs that they perceive as peers in terms of risk and other drivers of investment decision making.

# OVERALL ORGANIZATIONAL RATES OF RETURN (NOMINAL)

The Conservation Trust Funds providing investment returns for the calendar year 2015 reported nominal organizational returns ranging from -7.25% to 9.35%, with an average of 0.44% and median of -1.05%. Organizational returns of 15 CTFs fall in the interquartile range between the 25th percentile of -2.88% and the 75% percentile of 4.69%. Organizational returns are the weighted average returns for all funds managed by a CTF.

It is important to note that these are nominal returns, not adjusted for inflation, and that they include a large number of funds invested in domestic currencies where returns may reflect a higher risk premium. In future reports, we will explore ways to provide risk-adjusted returns and control for currency variation; in the mean time, we encourage readers to look at all analyses (overall nominal returns, nominal returns by currency, nominal returns by region, and real returns) to understand the overall picture of how CTF returns compare to one another.



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#### Graph 5. Nominal Organizational Returns

Table 1: Average Organizational Returns by Size

0.76%

0.87%

-0.79%

1.57%

0.56%

Avg. Org. Returns

In this year's data it appears that the largest CTFs also had the highest nominal organizational returns, on average, as shown in Table 1. This is consistent with a hypothesis that larger CTFs have access to better investment options by virtue of their size.

Size (USD Equivalent)

(n=32) 0-10M

10-20M

20-50M

Overall

50M+





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However, a regression analysis of size (both of portfolio and of organization) and returns showed little relationship, suggesting that size is not a factor in returns. Looking more closely into the returns within each grouping shows such a high degree of variability (nominal returns in the 50M+ USD group, for example, ranged from -3.84% to 6.75%) that no real conclusions can be drawn about the potential impact of size on returns, at least for this data set.

Similarly, one might hypothesize that the older and more established CTFs would demonstrate higher returns due to more years of investment experience. However, a regression analysis similarly showed no meaningful correlation between age and nominal organizational returns, indicating age and experience alone are not a fully explanatory factor.

## ENDOWMENT AND SINKING FUND INVESTMENT PERFORMANCE

Sinking funds had stronger investment performance than endowments this year, on a nominal basis. Endowments had an average nominal return of -0.80% and a median



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return of -2.3%, compared to Sinking Fund average returns of 3.85% and median returns of 4.73% (Graph 6). Sinking fund returns show a wider degree of variability than endowment returns. They also showed higher nominal returns this year than endowments, which is likely a reflection of asset allocations – on average, the sinking funds are more likely to be invested in domestic fixed income with a fixed rate of return, which produces consistent income on a nominal basis but can be volatile on an inflation-adjusted basis (see "Impact of Inflation/Real Returns," below).



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Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

Table 2: Endowment	Vs Sinking Funds.	Nominal F	Returns Over <sup>·</sup>	Time

	201	.5	201	L4	20	13
	Mean	Median	Mean	Median	Mean	Median
Endowment	-0.80%	-2.30%	6.22%	5.69%	5.44%	4.50%
Sinking Funds	3.85%	4.73%	5.11%	5.17%	2.54%	4.44%

## **BENCHMARKS & TARGETS**

The responding CTFs manage a total of 57 funds: 41 endowments, 15 sinking funds, and one reporting combined data. Of these, 28 of these funds measure performance based on a target rate of return, and 42 funds measure performance using benchmarks (note that some funds are counted twice as they use both targets and benchmarks to measure performance).

For those CTFs that established a target return to measure performance, the average nominal target was 6.93%. Thirty (30) funds provided us with both targets and actual return data; of these, nine funds (30%) met or exceeded their 2015 targets, and 21 (70%) underperformed their targets.

As investment conditions or spending expectations change, CTFs may adjust their target returns up or down from one year to the next. Table 3 shows reported changes in the target returns.



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#### **Table 3: Changes to Target Returns**

	2014 to 2015 (n=15)	<b>2015 to 2016 (expected)</b> (n=14)
% of CTFs that INCREASED the target returns	6.7%	28.6%
% of CTFs that DECREASED the target returns	60%	28.6%
% of CTFs reporting NO CHANGE in target returns	33.3%	42.9%

It would appear from this data that the CTFs anticipated that 2015 would see lower returns overall, and decreased their targets accordingly. In looking ahead to 2016, equal numbers of CTFs seem to have anticipated further decline in 2016 and improvement in 2016, as evidenced by their target-setting decisions, while just over 40% expected 2016 to be comparable to 2015.

Forty-two (42) of the funds measure performance using external benchmarks, typically a publicly reported index. The benchmarks are generally selected to align with a particular segment of the portfolio; for example, the S&P 500 may be used to measure performance of US stocks, whereas the Barclays Capital US Aggregate Bond Index may be used to measure the performance of the fixed income portion of the portfolio. For portfolios invested in domestic equity markets, an index of that country's stock market is typically used.

The most commonly used general (non-domestic) benchmarks are (2015 returns in parentheses, where available):

Equity Total Return (i.e. includes dividends)

- MSCI ACWI ("All Countries World Index") in USD (-5.25%)
- MSCI World in USD (despite the name this index only includes developed markets) (-0.32%)
- MSCI World in Euro
- S&P 500, measuring US stocks only (1.38%)
- MSCI Emerging Markets in USD
- MSCI World Index, Excluding US

#### **Fixed Income**

- Barclays Capital US Aggregate Bond Index (0.55%)
- Citigroup World Government Bond Index, excluding US, All Maturities (-5.54%)

#### REITs

National Association of Real Estate Investment Trusts (NAREIT) Index (2.83%)

In calendar year 2015, 12 of the participating CTFs reported nominal organizational returns that exceeded the S&P 500, and 15 exceeded the MSCI World. Thirteen (13) CTFs reported nominal organizational returns that exceeded the Barclays Capital US Aggregate Bond Index (BCABI).

Fourteen CTFs reported nominal organizational returns that exceeded a hypothetical portfolio consisting of 60% equity (measured by the MSCI World Index) and 40% fixed income (measured by the BCABI). The returns of this hypothetical "indexed" portfolio would be 0.03%.

It is important to note that the appropriate asset allocation for a CTF or a portfolio reflects a variety of needs, including but not limited to risk, liquidity, currency, and other strategic considerations. Therefore, there is no "one size fits all" optimal allocation that will work for all organizations, or that is preferable to another allocation. It is vital to determine



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the asset allocation that best aligns with the CTF's needs. The hypothetical benchmark portfolios provided here are for context and illustrative purposes only; they are not a recommendation.

## **RETURNS BY REGION**

Average nominal organizational returns for Africa, Latin America/Caribbean and Asia/ Oceania were -0.91%, 0.18% and 2.75%, respectively. Eastern Europe has too few data points to report separately.

Average nominal endowment returns by region ranged from -0.89% to 1.43%, a relatively small range. Average nominal sinking fund returns were more widely distributed, from 3.74% to 8.18%.

Region	Endowment (Average Return)	Sample Size	Sinking Fund (Average Return)	Sample Size
Africa	-0.89%	7		
Asia/Oceania	1.43%	5	8.18%	2
Latin America/Caribbean	-0.49%	23	3.74%	11
Overall*	-0.17%	36	4.54%	13

Table 4: Average Nominal Endowment and Sinking Fund Returns by Type and Region

\*Overall returns and sample size include Eastern European funds which are not reported separately.

## **IMPACT OF INFLATION/REAL RETURNS**

All CTFs must factor inflation and currency risk into their investment decision-making. Inflation, referring to the increase in the prices of goods and services being purchased, can significantly affect the CTF's purchasing power in the country in which it operates. For those CTFs that invest domestically, investment returns must exceed inflation for the returns to produce real income to the CTF. Those CTFs that choose to invest offshore may find more investment opportunities and a less inflationary environment; however these CTFs must then monitor currency exchange rates (and/or hedge currency risk) to ensure their investment returns are preserved when converted to the domestic currency for spending.

For purposes of this analysis, and in an attempt to simplify a complex topic, we will consider the relevant inflation rate for each fund to be the prevailing inflation rate in the country where the fund's performance is measured. We asked the participating CTFs to provide information on what they used to measure inflation; to the extent possible, we use this information for our inflation analysis as well. When the information was not provided by the CTF, we compared the domestic fund returns to domestic inflation, and the returns of the funds invested in US or European markets to US or European inflation rates. This approach deliberately excludes the impact of currency exchange for offshore investments; to incorporate currency into the analysis would require too many assumptions about the timing of currency exchanges, liquidity decisions and the ability of each CTF to hedge currency risk.

Inflation rates for the reporting funds ranged from -0.6% to 9.0%, with an average of 3.55% and median of 3.5%. The nominal rate of return, adjusted for inflation, provides the real rate of return (see Glossary for formula). Forty (40) of 57 funds earned negative real returns in 2015. On average, incorporating inflation lowered the average returns for all reporting funds by 3.44%.



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#### Graph 7: Average Nominal Endowment and Sinking Fund Returns by Type and Region



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#### Table 5: Average Nominal versus Real Fund Returns by Primary Currency

	Average Nominal Returns	Average Rate of Inflation	Average Real Returns
Domestic (n=12)	8.79%	5.99%	2.8%
Euro (n=4)	3.15%	0%	3.15%
US (n=20)	-0.71%	2.85%	-3.56%
US, with others (n=13)	-3.79%	3.38%	-7.18%

With the 2013 survey instrument, a new question was added to better understand why CTFs choose to invest domestically versus offshore. The question provided several options, with the instruction to check all that applied. The question was asked on a fund-by-fund basis; 13 respondents provided the following answers:

#### **Table 6: Reasons for Domestic Investment**

Reason	Number responding
Legal prohibitions on converting currency for off-shore investing	4
Risk tolerance (feel more confident with domestic investments)	4
Do not have the experience/expertise/contacts to invest off-shore	0
Time horizon for investing and spending makes currency conversion impractical (sinking funds only)	2
Other	5



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The five "Other" responses fell into four general categories:

- Recent change to the investment mandate will include international assets, starting in 2016
- The fund's specific profile made off-shore investing impractical (combination of currency risk, time horizon and/or spending requirements)
- The fund has an off-shore counterpart, and is therefore the domestic component of a diversification strategy
- Specified in the fund's founding documents or other governing documents

## **MULTI-YEAR RETURNS**

While the data for any one year is informative to a degree, when looking at investment results it is important to focus on multiple years of data since any one year can show unusual returns. Indeed, with low returns in 2015, it is all the more important to look at three- and five-year averages to gauge the overall performance of the CTFs. With the addition of 2015 returns to the past data, we do see a dip in the three- and five-year average nominal returns for the participating CTFs; however, overall the multi-year returns are fairly stable. Multi-year data are available for 22 funds (16 endowments, 6 sinking funds) representing 20 CTFs, although three of these funds did not provide 2015 data.

Through the year 2015, the three-year average nominal return for all funds is 3.29%, and the five-year average nominal return is 4.41%. The three- and five-year averages are calculated as a compound annual growth rate. This is, effectively, the return that smooths out interim fluctuations and shows the effective return from the beginning of 2013 to the end of 2015 (for the three-year) and from the beginning of 2011 to the end of 2015 (for the three- and five-year averages have declined from last year.



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#### Table 7: Three and Five Year Average Nominal Fund Returns, Through 2015

	Three-Year Average Return	Five-Year Average Return
Overall Average (n=22)	3.29%	4.41%
Sinking Fund Average (n=6)	2.30%	4.32%
Endowment Average (n=16)	3.66%	4.44%

With the benefit of returns data stretching back to, in many cases, 2007, we are able to see a picture of how returns have changed over time. Graph 8 illustrates the changes in the three-year average returns, for seven three-year periods ending 2009, 2010, 2011, 2012, 2013, 2014 and 2015.





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#### Graph 9: Average Annual Nominal Returns for Multi-Year Responders, 2007-2015



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Graph 9 provides the annual average nominal returns for the same set of 22 funds, going back to 2007 (where data is available). Returns for these funds, from 2009 to 2015, have been relatively stable; 2009 was, on average, a particularly high year; 2011 was, by contrast, quite a bit lower, but still positive on average. This annual variation is smoothed out when looking at three and five-year average returns. When we look, for example, at the threeyear average returns for years ending 2009 through 2015 (as shown in Table 8), we see the average three-year return is 6.52%, with a standard deviation of 3.22%. In other words, the average of three-year averages is solid, but we see the influence of two weak years (2008 and 2015) and one strong year (2009) causing variability. What that suggests is that while the CTFs are doing fairly well over time, they are definitely at risk from global market shocks, on average, which could suggest the need for revisiting portfolio diversification to build resilience.



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#### Three-Year Average 2009 2012 2014 2015 **Returns for the** 2010 2011 2013 Period ending in **Overall Average** 5.46% 5.25% 13.4% 6.38% 5.31% 6.57% 3.29% Sinking Fund 6.35% 2.30% 6.02% 8.37% 6.89% 4.62% 4.55% Average Endowment

5.56%

7.33%

3.66%

5.13% 4.96% 15.29% 6.18% Average (Note: Of the 22 funds with multi-year data, 18 have data beginning in 2007, 2 have data beginning in 2008 and 2 have data beginning in 2009; four funds did not report financial data in 2015. Averages may differ from numbers reported in prior years due to the inclusion of new historical data.)



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### Table 8: Three-Year Average Nominal Fund Returns, Over Time

#### Graph 10: Changes in the Average Five-Year Returns





Photo contributed by Micronesia Conservation Trust



By 2013, the five-year average returns had dropped the generally poor market performance of 2008; however in 2015, the five-year average returns reflect the relatively low returns of 2015. Overall, the five year average nominal returns remain above 4%, which provides for typical spending rates although raises questions about whether inflation is being adequately covered.

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Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust





## **INVESTMENT STRATEGIES**

In determining, and then implementing, their investment strategies, the majority (73.5%) of the survey respondents indicated that they have an investment policy document to guide investment decisions. Of the others, 3% said they do not have a policy, and 23.5% did not answer the question.

Conservation Trust Funds must balance a variety of factors in making decisions about their investment strategy. Typically, the investment policy must take into consideration a variety of factors, including

- Annual operating expenses and project funding needs (i.e. cash flow requirements)
- Long-term capital appreciation goals
- Various donor requirements and restrictions
- Economic conditions or potential for investment in domestic markets
- Size of the fund(s) and ability to access some investment vehicles
- Access to international investment opportunities, and/or legal constraints on off-shore investing
- Relevant inflation and the ability to maintain the real value of endowment funds over time
- Taxability of investment returns, where applicable

Most of the responding CTFs listed "maintaining real value of endowment" as the first investment priority, when asked to rank investment goals. Other investment priorities included growing the real value of the endowment, maintaining the nominal value of the endowment, interest and dividend income, and capital gains. Table 9 shows the number of CTFs that ranked each of the criteria as first, second or third priority.

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Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

#### **Table 9: Ranking of Investment Priorities**

Criterion	Number of CTFs Ranking First Priority*	Number of CTFs Ranking Second Priority*	Number of CTFs Ranking Third Priority*
Maintain Nominal Value of Endowment	3	7	0
Maintain Real Value of Endowment	13	5	4
Growing the Real Value of Endowment	7	4	6
Achieving a target income (interest and dividends)	7	4	9
Meet specific benchmarks	0	2	3
Achieving social or environmental impact with investments	0	3	0
Avoiding investment in specific companies or investments (negative screens)	2	1	0



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\* 29 CTFs responded to this question. Some CTFs ranked multiple criteria as first priority; as such, responses may exceed 29.

In addition, 85% of the responding CTFs indicated that they have a dedicated investment or finance committee focused on investment policy and oversight. The remaining CTFs indicated they do not have a formal committee or did not answer the question. Of those that have an Investment Committee and provided details (28 CTFs), the average size of the committee is five members.

#### ASSET ALLOCATION AND DIVERSIFICATION

Managing risk in investments is generally achieved through diversification of investments. Most fundamentally, diversification means holding multiple investments rather than just one. However, more broadly there are multiple dimensions on which to diversify: asset type (e.g. equity versus fixed income versus alternatives like real estate or commodities); asset sub-type (industry, size, growth versus value); currency; location of investment; time horizon; and the underlying perceived volatility of the assets themselves.

In this report, we largely address three major areas of diversification – what type of assets, what currency are they held in, and where do they originate. In 2014, we changed the structure of the questionnaire to get at the distinction between what currency the investments were held in, and where the investments originated.

Overall, the responding CTFs tended to weight their investments toward fixed income. Endowment funds relied on a more balanced portfolio, while sinking funds tended to concentrate in fixed income. The endowment funds also tended to have higher cash balances than might have been expected, given the expected low rates of return for cash relative to other asset classes. It is unclear whether this results from a temporary re-balancing of the portfolio, reflects the need for liquidity, represents a reaction to market uncertainty, or serves some other investment purpose. When combined, cash plus fixed income represent over 67% of the overall average asset allocation, 60.5% of the average endowment allocation and 77.6% of the average sinking fund allocation.

By contrast, the average asset allocation in the 2014 NACUBO study for North American college and university endowments was only 13% fixed income and short-term securities & cash, with the remainder in alternative strategies, equities, and other. This is illustrated in Graph 11.



Photo contributed by Dennis Hansen, Seychelles Islands Foundation



Photo contributed by Arnaud Apffel

Table	10:	Average	Asset	Allocation	of	Funds
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Asset Class	Overall Average (n=42)	Endowment Average (n=26)	Sinking Fund Average (n=15)
Equities	23.29%	27.9%	6.47%
Alternatives	4.91%	5.3%	4.05%
Cash	25.68%	23.7%	34%
Fixed Income	41.37%	36.8%	55.5%
Other	4.79%	6.4%	0%

Graph 11: CTIS 2015 Asset Allocation vs. NACUBO-Commonfund Endowments



Over time, the asset allocations for the funds have ranged from 40 to 71% in Fixed Income and 18 to 30% in Equities, with as much as 30% of the portfolio in cash. Graph 11 shows the average fund asset allocation from 2007-2015; average nominal investment returns for the funds in each year are noted in parentheses after the year. The growth in "other" reflects several types of investments used by a fraction of the CTFs that seem to defy typical asset classifications. These include preferred stock, investments considered "distressed" or "opportunistic," and subordinated debt.

#### Graph 12: Average Fund Asset Allocation Over Time





Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

In addition to diversifying on asset type, investors can also diversify geographically, i.e. where the underlying assets originate. With the 2014 CTIS questionnaire, we asked for new information – specifically, in what geographies are the CTFs investing? The data in the table below sums up where the underlying invested assets are based. In other words, for example, are African CTFs investing in Latin America? Are Latin American/Caribbean CTFs investing in Asia? Note that this question is distinct from the currency in which the investments are held, which is answered in an earlier section of the report.



Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust



Graph 13: Location of Investments

\* Eastern Europe does not have enough responses to break out separately. Note that for each region, the total investment allocation also includes the "Investments in Own Country" allocation for that region, e.g. Latin America/Caribbean investments would equal 63.41% (38.9% "Investments in Own Country" plus "24.51% Investments in LAC").

Of the three regions represented, the African CTFs tend to be the most geographically diversified. The Asia-Pacific CTFs, on average, are invested to a large extent in their own countries. The LAC CTFs are invested in their own countries as well as in other LAC countries, showing a regional preference.

Photo contributed by Micronesia Conservation Trust

## **INVESTMENT SERVICES**

#### **Types of Providers**

In 2014 we revised our approach to this topic – rather than just asking which types of outside service providers the CTFs used, we revised the structure of the questions to better understand the types of functions that fall into investment management, whether CTFs handle these functions internally or outsource them, and, where outsourced, what types of providers are being used.

The CTFs were asked about the following investment functions:

- Investment strategy and policy, asset allocation, selection of asset managers
- Asset management, i.e., making decisions about specific investment products or securities to buy or sell, and the timing of those transactions, within a specific asset class or sub-class and within the parameters of the investment guidelines
- Brokerage services, i.e., executing specific buy/sell transactions under client direction



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- Custodial services provider i.e., holding assets in safekeeping and arranging settlement of any transactions (purchases, sales, dividends, foreign exchange, etc.)
- Performance attribution and measurement, cost control, risk analysis

For each of the functions except Custodial Services, the CTFs were asked if they perform the function internally (by Board, staff and/or Investment Committee), if they perform the function partially internally and partially through outsourcing, or if they outsource the function. Custodial services are by definition outsourced.

The responses are illustrated in Graph 14.

**Graph 14: Staffing Models for Investment Functions** 





Photo contributed by Arnaud Apffel

For those CTFs that outsourced all or part of a function, the CTFs were asked what type of investment professional provided the services: Investment Management Consultant, Financial Advisors or Investment Managers (see Glossary for definitions).







Photo contributed by Lorenzo Rosenzweig Pasquel, Fondo Mexicano para la Conservación de la Naturaleza



Photo contributed by Lorenzo Rosenzweig Pasquel, Fondo Mexicano para la Conservación de la Naturaleza

## Typical Fees

For those CTFs using professional advisors, the typical fees average 0.43% for domestically invested funds, and 0.58% for US-based advisors and 0.56% for European-

based advisors. Notably, the US and European-based advisors were more likely to be investment management consultants or financial advisors, where a higher fee might be expected. It is also worth noting that CTFs invested domestically tended to be invested primarily in domestic fixed income and tended to be less likely to report any fees related to the portfolio. The data reported above was provided in Part 2 of the questionnaire, one that is frequently completed by investment professionals on behalf of the CTFs. We also ask the CTFs to explain the fee structures for their outside professionals in Part 1 of the questionnaire. Overall, the descriptions of fee structures were generally consistent between Part 1 and Part 2.

Another method of looking at fees is to calculate the cost of investment management by dividing the fees by the before-fee return<sup>4</sup>. This gives us a sense of what percentage of the total (before fee) return is going to pay for investment services – whether CTFs are seeing good value for money in their use of investment professionals. Obviously, the number will change over time, as fee structures (the numerator) tend to be stable while returns (the denominator) fluctuate. In 2015, because so many of the returns were negative, the cost of investment management data tended to show such extreme variability that it is challenging to draw any valuable conclusions from the data. Since this is only our second year of producing this calculation, and because the data is so wide-ranging this year, we are not going to report the calculated values this year but will continue to collect it, and show a three-year average in next year's report.



Photo contributed by Arnaud Apffel

#### **SPENDING RATES**

As part of a comprehensive investment strategy and to enable the organization to plan for expenditures and project budgets, most CTFs develop a spending policy or spending rule to define a predictable income stream over a multi-year period. Rather than adjusting the annual budget to market fluctuations, many CTFs determine an expected rate of expenditure from the investment returns of the funds.

In developing a spending rule or spending policy, the CTF must consider its annual expenses for operating costs and grants (i.e. the operating budget) as well as its expectations for growing or maintaining the capital base of the fund, to increase capitalization or to maintain purchasing power over time relative to inflation. While some CTFs consider the spending rule on an annual basis, many look at a three- or five-year average to smooth any variability in investment returns.

Examples of actual spending rules reported by the responding CTFs include:

- 0% (CTFs seeking to build the capital base and therefore reinvesting all investment returns)<sup>5</sup>
- 3-7% of the fund's principal
- Income from fixed income investments

Among those reporting a time horizon for spending, six CTFs use a five-year time horizon, three use a three-year time horizon, thirteen use an annual time horizon, and seven use other methods.

## **RESOURCE MOBILIZATION**

While Conservation Trust Funds frequently start out spending endowment income and sinking funds, usually the ultimate goal is that the organization will serve as a catalyst to attract other resources to support the conservation objectives. As the CTFs have established successful public-private partnerships and demonstrated financial management capability, they have often become effective fundraisers for added conservation funding.



Photo contributed by Dennis Hansen, Seychelles Islands Foundation

<sup>&</sup>lt;sup>4</sup> Rick Ferri, "The Heavy Toll of Investment Fees," Forbes Personal Finance (website), May 27, 2013.

<sup>&</sup>lt;sup>5</sup> These funds will often have other souces of money (e.g. grants) to support conservation and thus can revinest all their resources over a short time horizon.

Twenty-two (22) of the responding CTFs reported that they raised funds from sources other than investment returns in 2015. Of these, the most common sources of revenue were multilateral organizations, national governments and the private sector.

Of these, ten used all or a portion of the newly raised funds to add to their capital base (either as endowments or sinking funds). As well, six CTFs reported adding investment returns to their capital base.

## **DONOR RESTRICTIONS & OTHER CONSTRAINTS**

It is not uncommon for donors or the Board or investment committee to establish investment restrictions or prohibitions as part of the investment policy. Typically these constraints reflect concerns about investment risk, and are intended to prevent the CTFs from engaging in unduly risky investments. In other cases, CTFs may choose to exclude certain types of investments or industries because they do not meet social or environmental screening criteria.

Of the 28 CTFs that answered the question, 10 reported no donor-imposed restrictions. Of the 18 that indicated the existence of donor restrictions, they listed the following as representative examples:

- No offshore investment
- Safety of funds and high (or specific) returns on investments
- Professional investment manager
- Global diversification
- Specific geographies, markets or currencies
- Specific asset allocation
- Specific risk restrictions, or specifications of acceptable risk ratings on investment vehicles
- Specific approved investment professionals
- Must not invest in industries/markets that threaten the environment; other ethical investing criteria
- Conflicts of interest involving businesses owned or controlled by Board members
- Prohibitions on specific types of investments

Some donor constraints are in effect during the initial formation of the fund, but lapse as the CTF graduates beyond the initial supervisory period by the donors.

In addition to donor-imposed restrictions, of 26 CTFs that answered the question, 21 indicated that their investment policies specifically prohibited certain types of investments. The following examples are representative of some excluded investments:

- Industries or investments that damage the environment; may be as specific as addressing whether companies have adequate environmental remediation or emission treatment practices
- Individual (non-managed) commodities and futures contracts
- Private placements
- Options
- Private Non registered limited partnerships
- Venture capital investments
- Derivatives
- Derivatives which increase portfolio risk
- Derivatives but hedging is permitted
- Short sales and margin investing
- Private investments



Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust



Photo contributed by Arnaud Apffel



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- Securities where the issuer has filed for bankruptcy
- Use of derivatives for speculative purposes
- Precious metals
- Commodities
- Equipment leasing
- Currency speculation other than normal hedging of a larger portfolio
- Mutual funds with an investment philosophy of market timing or chart reading
- Emerging markets
- Hedge funds
- Any investments considered speculative by an experienced investor

Additionally, some investment policies specify

- Minimum bond ratings and allowable maturities
- Allowable currencies and/or number of currencies



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Photo contributed by Aurélien & Véronique Brusini, Seychelles Islands Foundation

Returns in 2015 may be disheartening to CTFs and those that partner with them; however, it is important to remember that down years are inevitable in investments. Most investment experts provide the advice that making radical decisions in response to a down market will likely not be beneficial. Rather, it is important to look at multi-year performance and trends, consider performance relative to benchmarks, and only make changes after careful deliberation and a review of available information on investments. We hope that the CTIS helps provide some useful background information that can help guide these deliberations.

It is relevant to note that the CTFs underperformed benchmarks and peers in 2015. While the NACUBO study is not a perfect comparator because of the six-month timing variance (June year-end versus December year-end), we note that the CTFs' median return was below several reference points, as shown in Table 12.

Table 12: CTF Nominal ReturnVersus Comparators

This raises concerns about whether the CTFs, on average, are adequately diversified to

take advantage of growth in an up market while also minimizing losses in a down market. Given the vital importance of the CTFs' role – protecting our planet's biodiversity – there is a critical need to ensure that investment strategies and practices are optimized for the long-term. Again, while radical change in response to one down year is generally not recommended, CTFs might take the opportunity to review their investment

Comparator	Return
NACUBO \$20-50M, 2015	1.90%
Barclays Capital Aggregate Bond Index	0.55%
Hypothetical Benchmark: 60% MSCI, 40% BCABI	-0.27%
MSCI	-0.32%
Median CTF nominal return	-1.05%

strategies and asset allocation to ensure they are optimized for long-term success.

In 2017, the CTIS project will launch a series of investment management workshops for Trustees (Board Directors) and staff of Conservation Trust Funds, with a goal of building capacity among the key fiduciaries and decision-makers linked to the CTFs. Initially, the program will focus on in-person workshops, with a long-term goal of adding an online modality to maximize the number of participants. In this way, the CFA will expand access to information on investing and help create more informed dialogue between the CTFs and investment professionals for the benefit of the CTFs and of the planet's biodiversity.





Photo contributed by Lorenzo Rosenzweig Pasquel, Fondo Mexicano para la Conservación de la Naturaleza

**Conservation Trust Fund (CTF)** -- CTFs are private, legally independent institutions that provide sustainable grant funding for biodiversity conservation. They often finance part of the long-term management costs of a country's protected area (PA) system as well as conservation and sustainable development initiatives outside PAs. CTFs raise and invest funds to make grants to non-governmental organizations (NGOs), community based-organizations (CBOs) and governmental agencies (such as national protected areas agencies). CTFs are financing institutions rather than institutions that implement biodiversity conservation. Within one CTF there may be one or more than one *fund*.

**Financial Advisor** -- A Financial Advisor is a licensed sales agent or broker with a securities firm.

**Endowment fund** – a sum of money that is intended to exist in perpetuity or preserve its capital over a long-term timeframe; an endowment's capital is invested with a long-term horizon and normally only the resulting investment income is spent, in order to finance particular grants and activities.

**Sinking fund** – a pool of monies that will spend down its capital within a designated period of time (e.g. 10, 20, 30 years). The entire principal and investment income is disbursed over a fairly long period (typically ten to 20 years) until it is completely spent and thus sinks to zero.

**Investment Management Consultant** – A fee-based advisor operating under a nondiscretionary arrangement who can provide guidance on portfolio theory, asset allocation, manager search and selection, investment policy and performance measurement. The role of the Investment Management Consultant is to provide independent advice, and the consultant's primary responsibility is to his/her client.



Photo contributed by Lorenzo Rosenzweig Pasquel, Fondo Mexicano para la Conservación de la Naturaleza

Investment Management Consultants can help to review the performance of Investment Managers relative to the investment goals of the client, and may give the client advice on which investment managers to hire and fire.

**Investment Manager** – Specialists in managing a portfolio or investments in a specific type of asset, such as medium quality corporate bonds; large-cap value equities, or emerging market governments' debt. Mutual fund managers, portfolio managers and hedge fund managers are examples of this. Investment Managers act with their own *discretion* to buy and sell investments or hire other asset managers within the parameters specified by the investment guidelines.

**Nominal Returns** – The face value or reported return; this is typically the percentage change in the value of a portfolio or asset over a specific time period. For purposes of the CTIS, reported nominal returns are net of fees.

**Real Returns** – Nominal returns, adjusted for the effects of inflation. Real returns are calculated with the formula (1+%nominal return)  $\div$  (1+%inflation), minus 1.



Photo contributed by Lorenzo Rosenzweig Pasquel, Fondo Mexicano para la Conservación de la Naturaleza



Photo contributed by Carl Bruessow, Mulanje Mountain Conservation Trust

## LIST OF PARTICIPATING CTFS

## Africa

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## Asia/Oceania

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Bhutan	Bhutan Trust for Environmental Conservation			www.bhutantrust.bt
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India	Ashoka Trust for Research in Ecology and the Environment (A-TREE)	Dr. Kartik Shanker		www.atree.org
Indonesia	Yayasan Keanekaragaman Hayati Indonesia (Indonesian Biodiversity Foundation)	M.S. Sembiring	sembiring@kehati.or.id	www.kehati.or.id
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## Eastern Europe

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Armenia, Azerbaijan, Georgia	Caucasus Nature Fund	Geof Giacomini		www.caucasus-naturefund.org

## Latin America/Caribbean

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Bolivia	Fundación para el Desarrollo del Sistema Nacional de Áreas Protegidas (FUNDESNAP)	Sergio Martín Eguino Bustillos	seguino@fundesnap.org	www.fundesnap.org
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