# A Review of Conservation Finance: The Financial, Ecological and Social Performance of Conservation Bonds

Master of Science in Sustainability Management
SSM1100Y - Research Paper
Student: Irene (Xi) Shao
Supervisor: Professor Yue Li

### Introduction

This research paper aims to address the critical issue of the financing gap in conservation by exploring the potential of using conservation bonds to mobilize private sector investment in conservation initiatives.

In light of ongoing global challenges, such as climate change and biodiversity loss, this research stresses the urgent need to reform the economic and financial systems to safeguard the natural world and to secure the well-being of present and future generations.

## Objectives

This research seeks to outline best bond models, and improvements that can enhance the appeal of conservation bonds to private investors, and promote the development of effective and innovative conservation finance mechanisms.

The findings of this research can contribute to the future development of innovative financial instruments that can mobilize private capital for nature conservation and biodiversity protection.

## Methodology

### Literature review:

- peer-reviewed articles
- published reports
- international policies

Deshkan Ziibi Conservation Impact Bond Leadership Team (DZCIBLT)

biodiversity and ecosystem services. Retrieved from https://ipbes.net/global-assessment

third-party rating agencies' opinion articles

The research analyzes three established conservation bonds in respect to their financial performance, ecological and social performance.

# Research Findings

#### Wildlife Conservation Bond

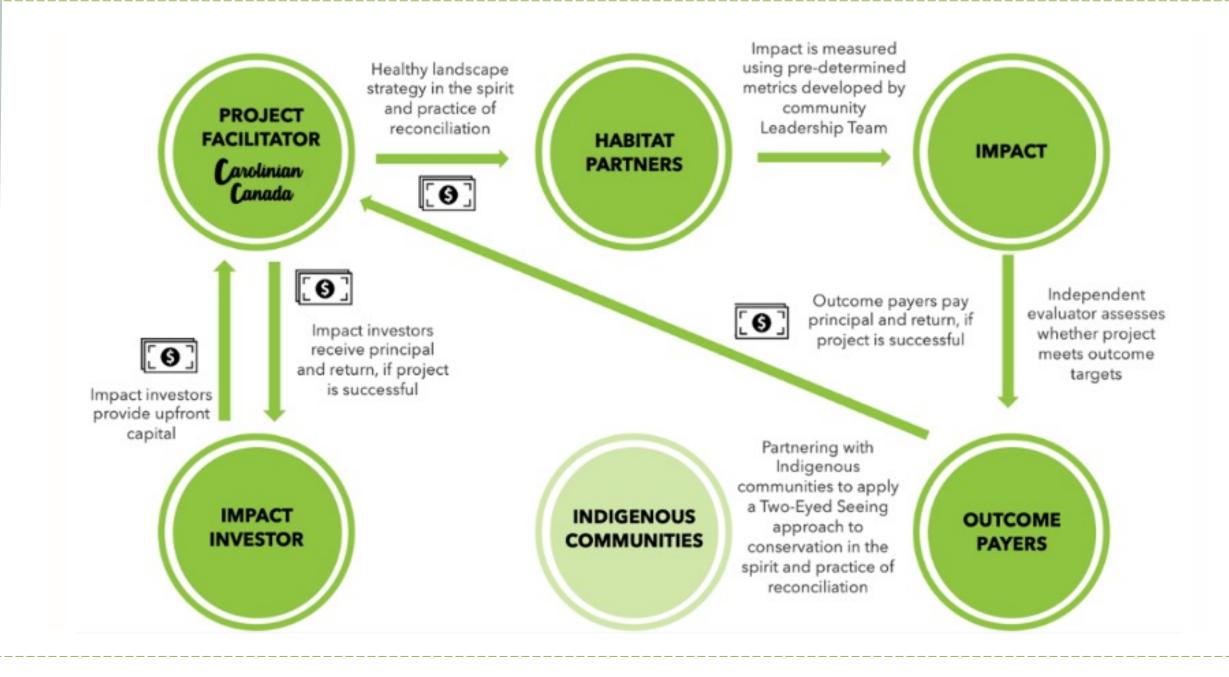
#### Financial risk: low

Ecological performance:

 Restore local ecosystems by improving the population of one keystone species (rhino)

#### Social performance:

- Generate eco-tourism and job opportunities
- Protect local culture and beliefs



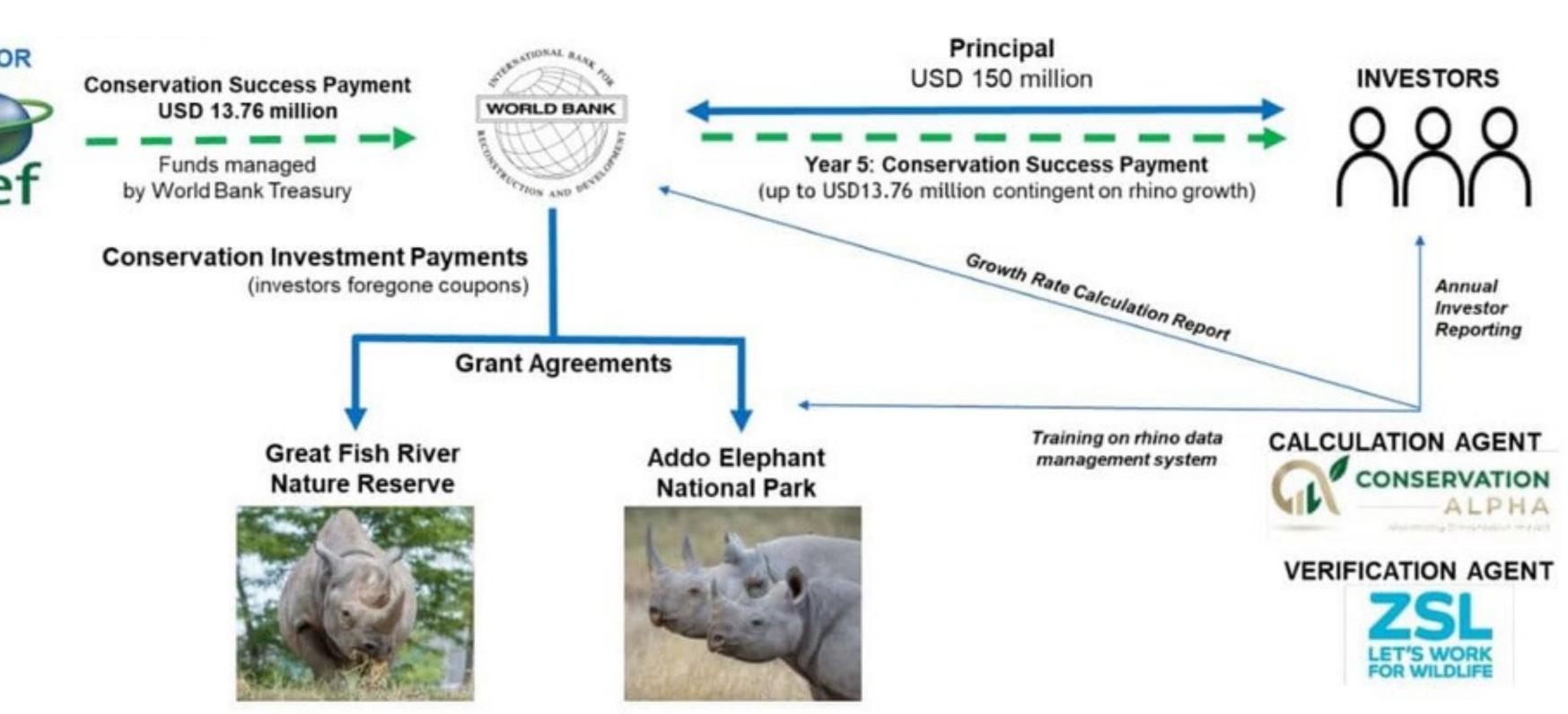
#### **Forest Resilience Bond**

Financial risk: medium to high Ecological performance:

 Protect local ecosystem through implementing forest fire preventative measures

#### Social performance:

 Create decent work in nature-based solutions, and economic benefits through restoring forests



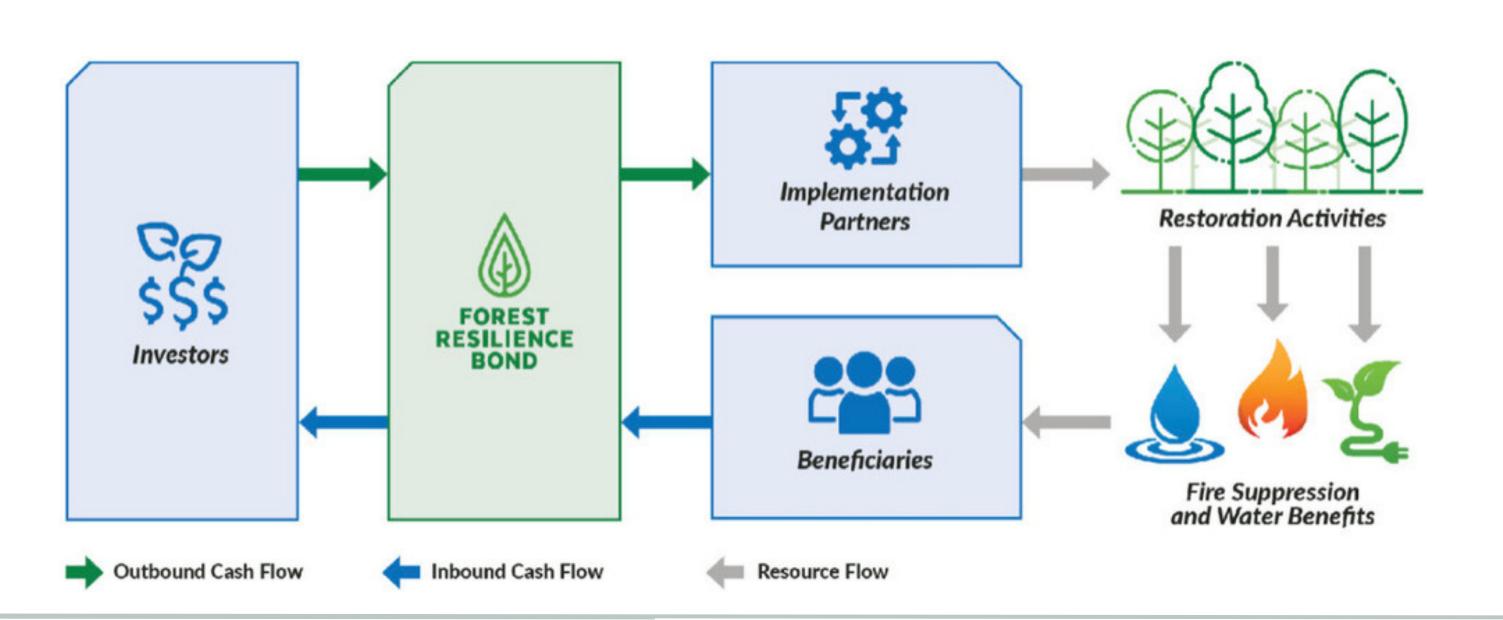
#### Deshkan Ziibi Conservation Impact Bond

Financial risk: medium to high Ecological performance:

- Protect critical habitats and landscapes in Ontario
- Improve carbon capture

Social performance:

- Indigenous worldviews and land practices implemented
- Benefit local communities



## Recommendations

- Conservation bonds are recommended to consider using the outcome payment approach to pay back investors
- Conservation projects are recommended to collaborate with credible issuers to issue conservation bonds
- The use of proceeds is recommended to focus on protecting one keystone species or areas with high ecological integrity
- Collaborating with Indigenous communities can create an inclusive decision-making process and social and ecological co-benefits
- The private sector are encouraged to consider exploring the issuance of conservation bonds

### References

IUCN. (2022). Funding the post-2020 global biodiversity framework. IUCN. Retrieved February 20, 2023, from https://www.iucn.org/sites/default/files/2022-06/policy\_brief-funding\_the\_post-2020\_global\_biodiversity\_framework\_mar22.pdf Kalron. (2013). Neo-conservation: A commentary on the future security of Africa's wildlife. African Security Review, 22(3), 160–166.https://doi.org/10.1080/10246029.2013.823795 Nielsen-Pincus, M., & Moseley, C. (2012). The economic and employment impacts of forest and watershed restoration. Restoration Ecology, 21(2), 207–214. https://doi.org/10.1111/j.1526-100x.2012.00885.x Pomerantz, L. (2020). The Forest Resilience Bond: An innovative financial tool used to fight fires in California. Calvert. Retrieved February 16, 2023, from https://calvertimpact.org/resources/the-forest-resilience-bond-an-innovative-financial tool -used-to-fight-fires

IBRD. (2022). The Wildlife Conservation Bond - World Bank. Retrieved February 16, 2023, from https://thedocs.worldbank.org/en/doc/f20060f9fcc437649c459c3b7f955b73 0340022022/original/QA-WildlifeConservationBond.pdf IPBES. (2019). Summary for policymakers of the global assessment report on