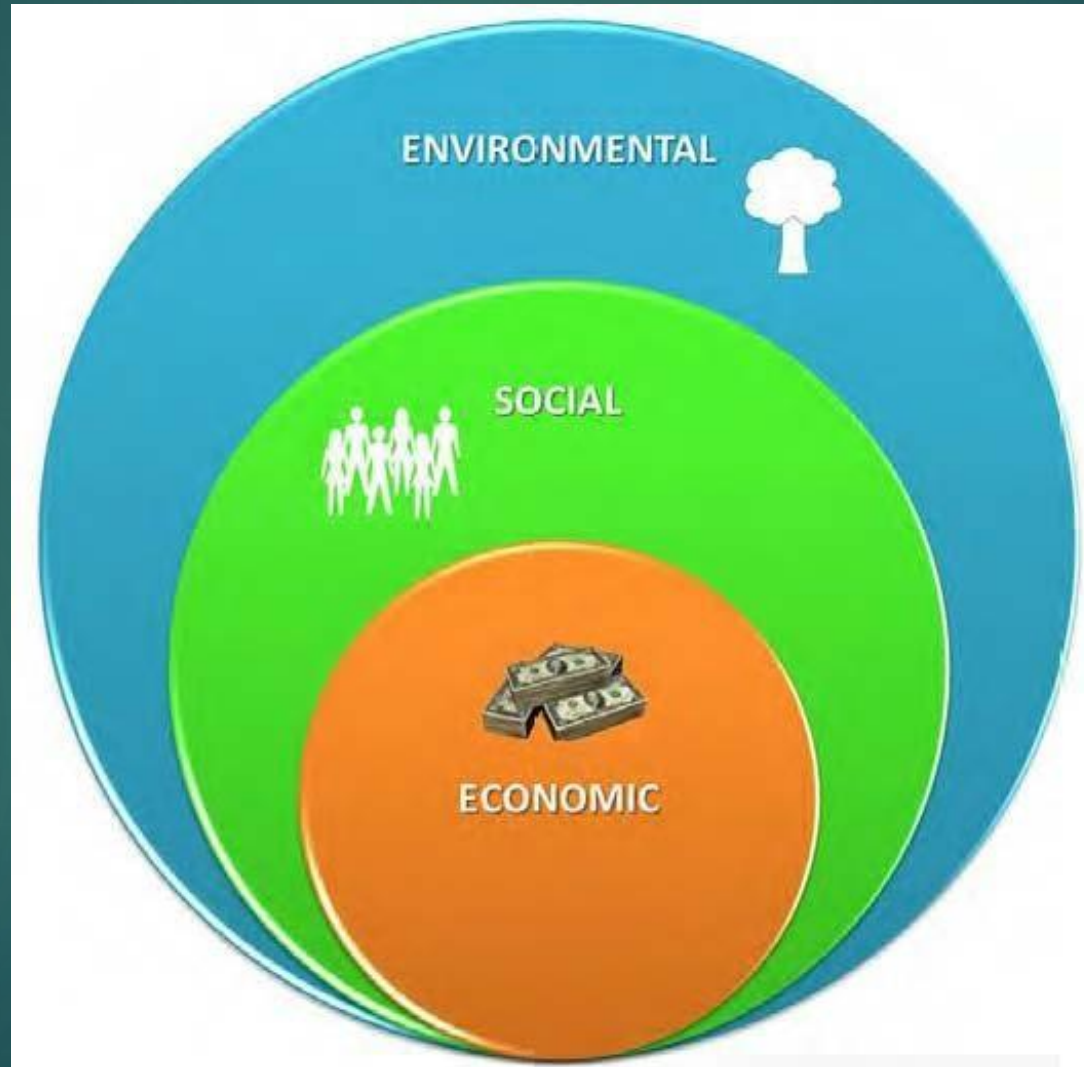




# Environmental Services Investment & Offset Bonds

CONSERVING THE WORLD'S HIGH CONSERVATION  
VALUE AREAS IN PERPETUITY

Nature provides services worth \$trillions annually to the world



# Important services provided by the natural world

Climatic  
regulation

Atmospheric  
gas balance

Water  
purification &  
regulation

Air  
purification

Carbon capture  
&  
sequestration

Bio-  
pharmaceuticals

Pest & disease  
control

Erosion  
protection

Shelter, livelihoods,  
water, fuel, and food  
security for 1.25  
billion forest people

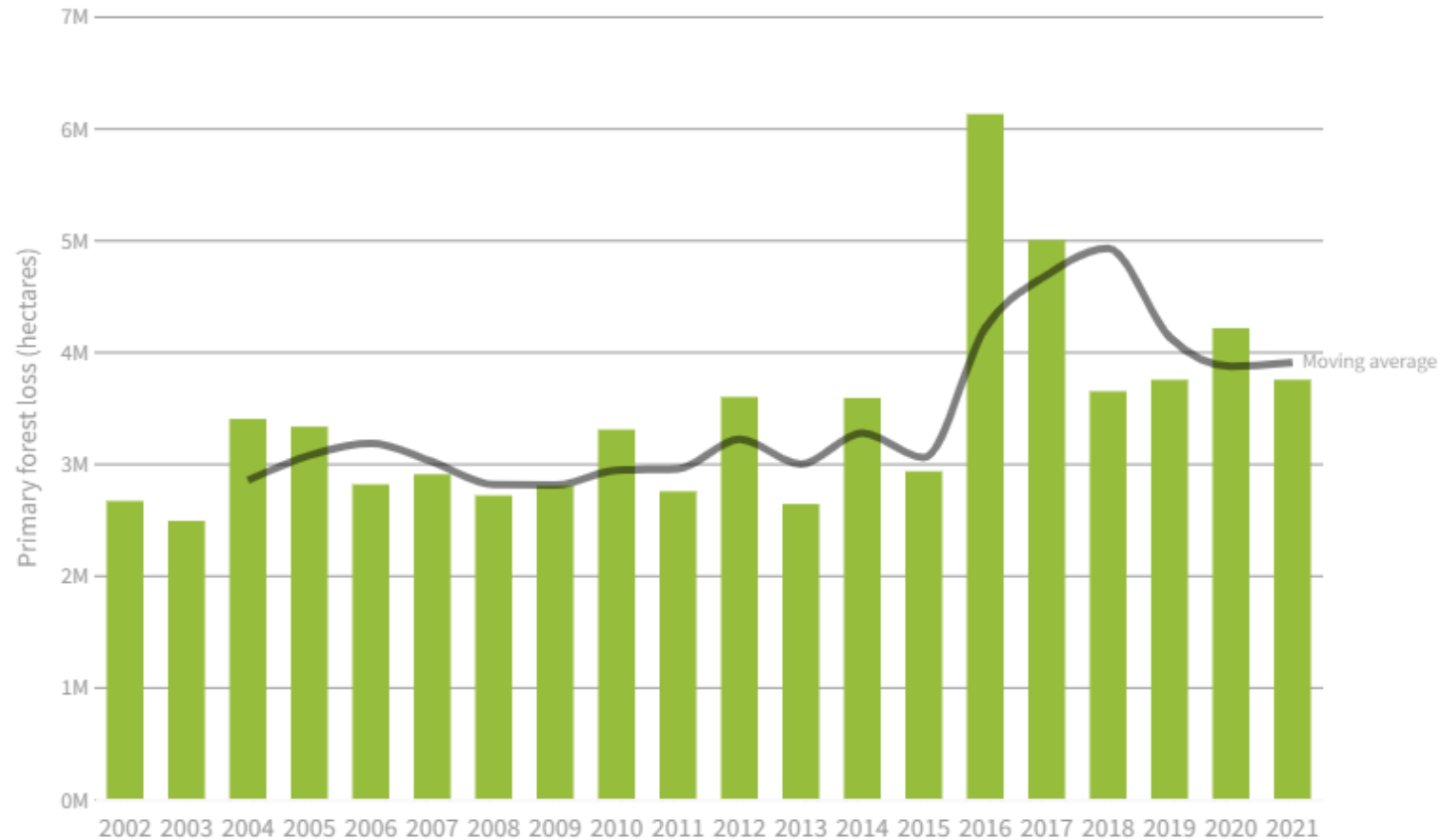
Soil structure  
and fertility

Maintaining  
biodiversity

Pollination

# UNDIMINISHED FOREST DESTRUCTION

Tropical primary forest loss, 2002-2021



The three-year moving average may represent a more accurate picture of the data trends due to uncertainty in year-to-year comparisons. All figures calculated with a 30 percent minimum tree cover canopy density



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□ **DEFORESTATION IS RESPONSIBLE FOR MORE CARBON EMISSIONS THAN THE TRANSPORT SECTOR**

**HCVAs - INCLUDING PRIMARY FOREST - ARE VALUED HIGHER BY MARKETS FOR THEIR PARTS AND THE LAND THEY OCCUPY THAN FOR THEIR PRICELESS SERVICES**

- **FATALLY EXPOSED BY MARKETS TO EXTRACTIVE / DESTRUCTIVE EXPLOITATION**
- **LOGGING**
- **FOSSIL FUEL, MINERALS AND METAL EXTRACTION**
- **AGRICULTURE**
- **INDUSTRIAL SCALE LICENCED AND ILLEGAL FISHING**

**Markets assign far greater value to other natural capital**

- **fossil fuels**
- **metals**
- **minerals**
- **rare earths**

# WHAT IS BEING DONE?

- ▶ **GOVERNMENTS HAVE PLEDGED TO STOP DEFORESTATION BUT**
  - A. REGULATION DOESN'T WORK – **95%** OF BRAZILIAN FOREST DESTRUCTION IS ILLEGAL BUT ECONOMIC INCENTIVES ARE TOO POWERFUL
  - B. THEY OFTEN REFER TO **NETT** DEFORESTATION TARGETS – WHICH ALLOWS DESTRUCTION & REPLACEMENT WITH BIODIVERSITY-IMPOVERISHED ARBOREAL MONOCULTURE
  - C. THERE IS NO PLAN BIG ENOUGH TO DO IT
  - D. THE **REDD+** SCHEME IS DEEPLY FLAWED
  - E. MANY SMALL SCHEMES AND INITIATIVES DOING EXCELLENT WORK, BUT THEY ARE TOO SMALL, AND OFTEN FRAGILE, INSECURE & LACKING LEGAL CERTAINTY
  - F. THE STATISTICS FOR ONGOING TROPICAL FOREST LOSS SIGNAL THAT THESE INITIATIVES ARE INSUFFICIENT
  
- ▶ **Q. HOW DO WE CONTINUE TO BENEFIT FROM THESE PRICELESS SERVICES FOR GENERATIONS TO COME?**







# INTRODUCTION

Simon M Lamb 2021

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**How do we empower nature conservation to rapidly prevail over destructive economic actions, and ensure permanence?**

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**Major market failures are afflicting natural resource management, and these can only be addressed effectively and permanently through innovative market-based solutions**

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**This proposal argues for the adoption of a new, market-oriented vehicle designed to support conservation by incentivising better protection of valuable natural resources**

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**The vehicle proposed is scalable and is expected to have dramatic positive sustainable development impacts in a short time**

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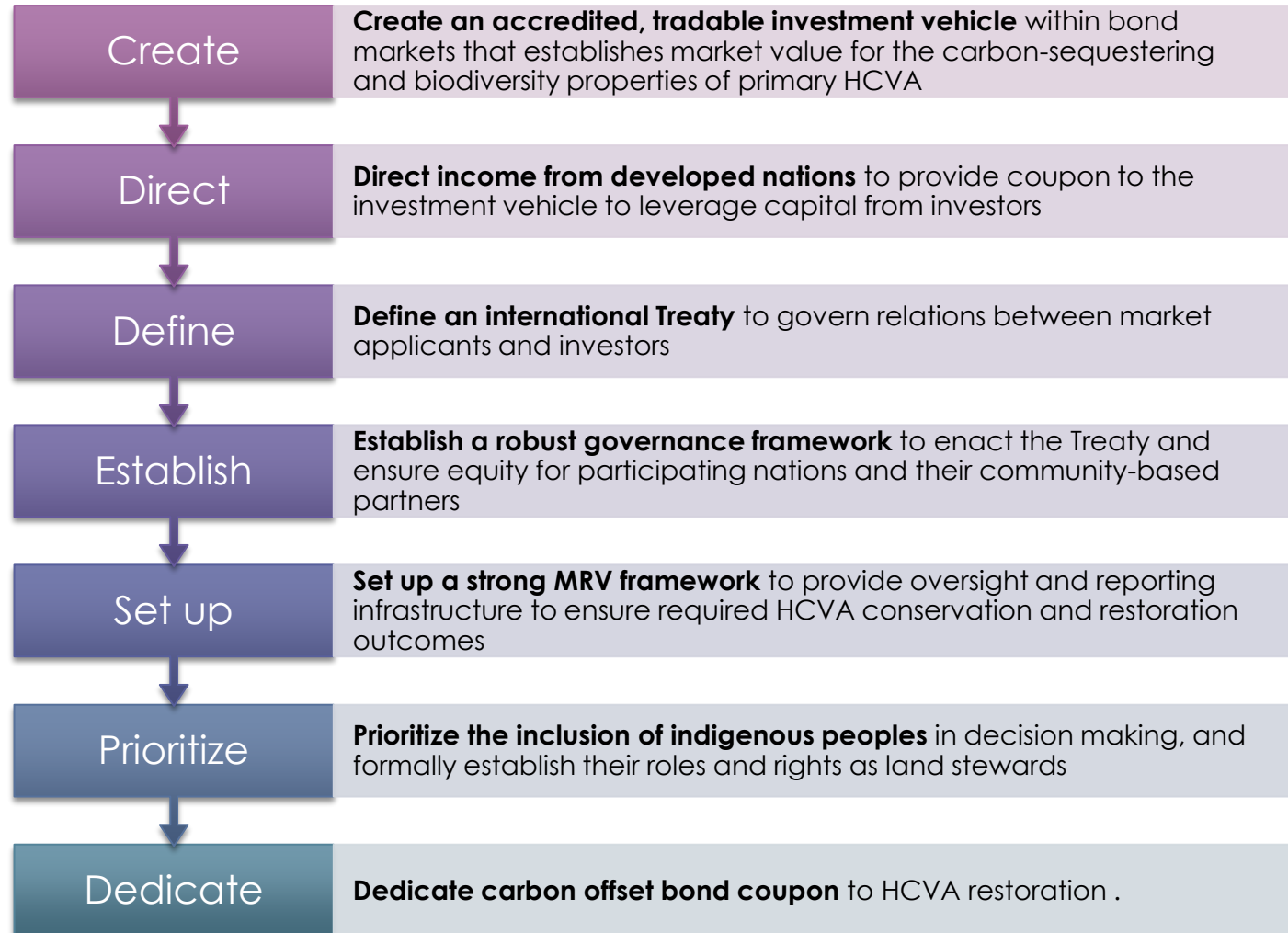
## Principle Objectives and Anticipated Impacts

- ▶ **Permanently** protect millions of hectares of HCVA (high conservation value areas) and its biodiversity
- ▶ Ensure substantial **carbon sequestration**
- ▶ Restore and conserve **previously degraded** HCVA
- ▶ Provide **capital to emerging economies** for green development, education and healthcare
- ▶ Formally establish the **rights of indigenous communities**
- ▶ Restore degraded farmland via **regenerative farming**

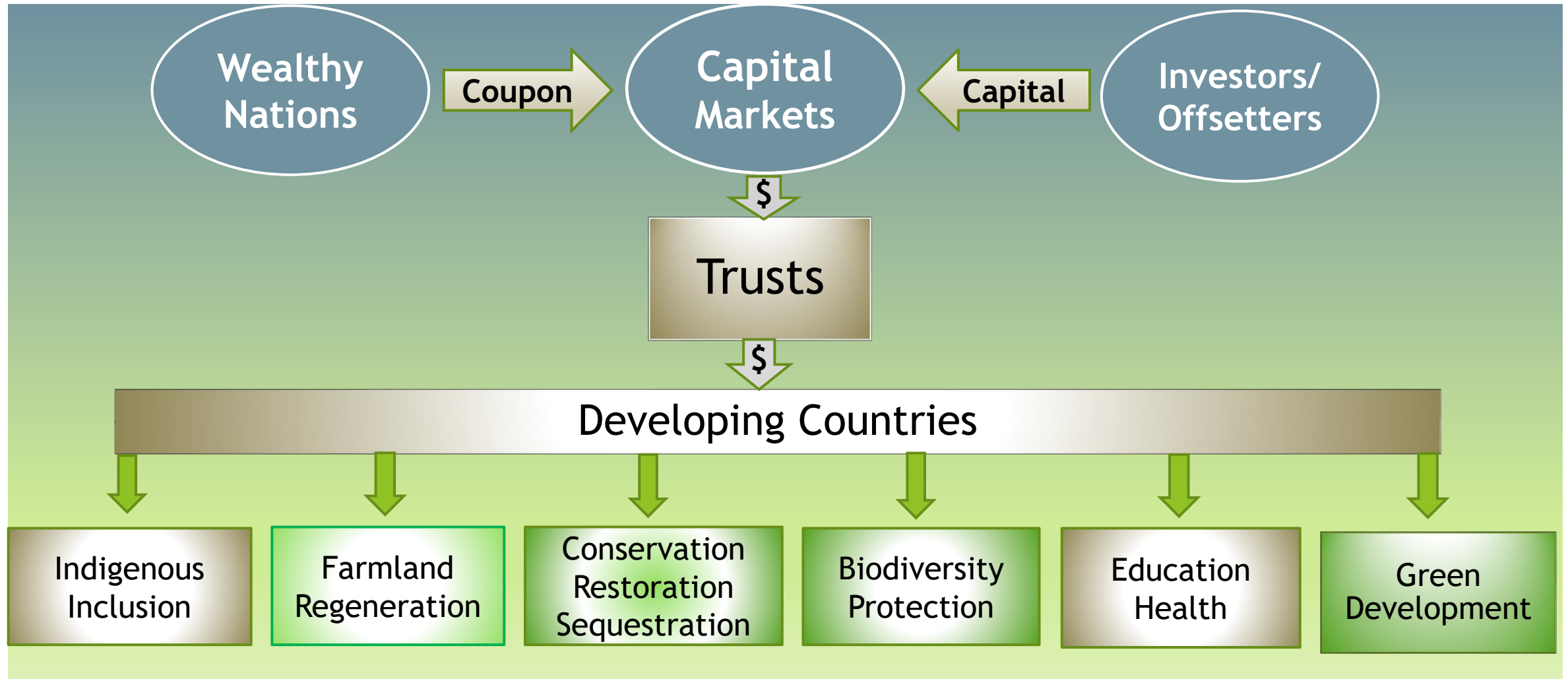




# STEPS TO ACHIEVE OBJECTIVES



## Environmental Services Bonds - Inputs / Impacts





## CO-BENEFITS



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**Alters national perceptions towards HCVA from being exploitable wasteland to a valued capital asset**

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**Reverses one of the largest sources of carbon release and incentivises the permanent restoration of carbon capture mechanisms – trees, plants, marshes, seagrasses and mangroves – at scale**

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**Facilitates rapid biodiversity recovery due to its adjacency to undamaged HCVA**

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**Avoids leakage by relocating soil-destructive cropping practices to previously degraded land away from sensitive areas, while transferring to regenerative agricultural practices**

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**Provides debt-free finance to emerging nations to develop green economies, improve social infrastructure, and avoid destructive exploitation of their natural capital for cash**

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**Establishes the world's first formal purchase mechanism for ecosystem services to support HCVAs and indigenous communities through innovative, market-based sustainable development activities**

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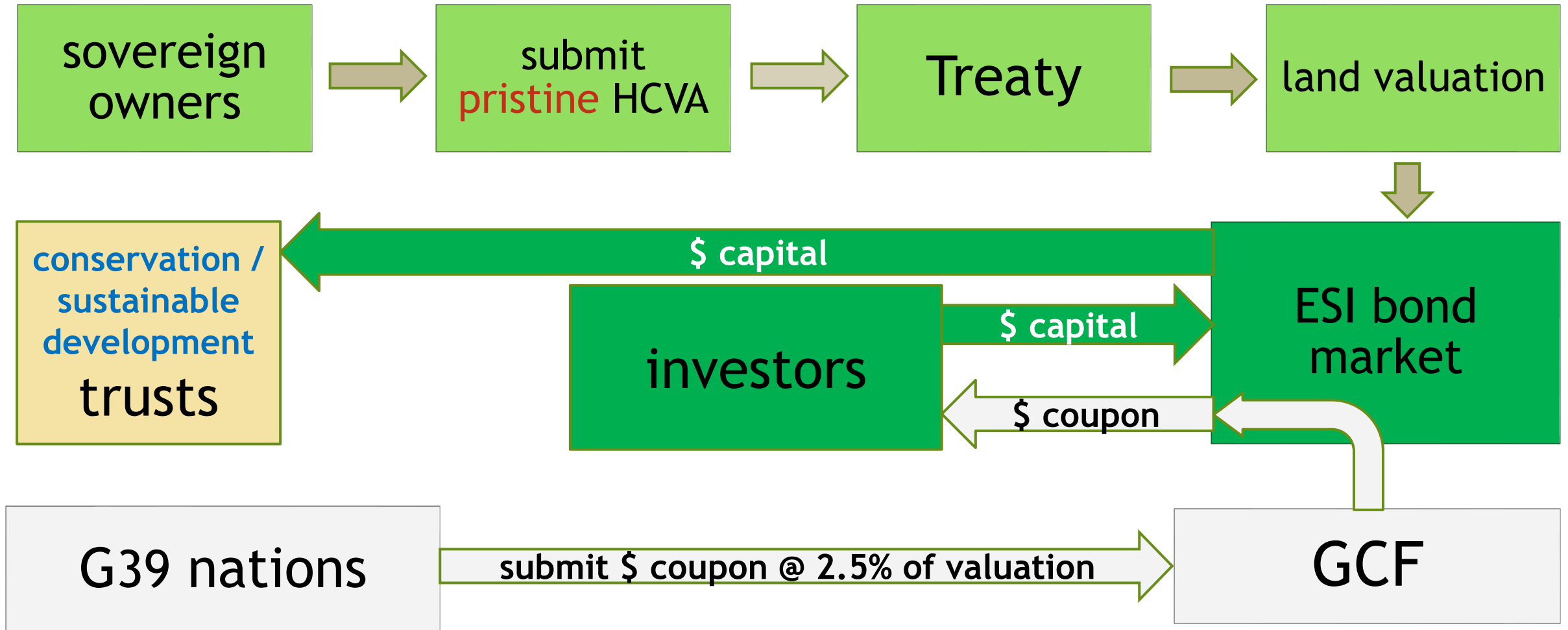
# Designing the Market

## 1. Environmental Services Investment Bonds

- ▶ **General**: Establish an Environmental Services (ES) bond market, commencing with the issuance of two primary classes of perpetual sustainability bond (“consoles”)
- ▶ **1. ESIs**: Incorporate the Treaty-bound permanent conservation of specific parcels of sovereign-owned HCVA in pristine condition. ESI investors receive coupon from G39 nations via the GCF and may freely trade bonds
- ▶ Capital is distributed selectively via Trusts and is debt-and-interest free (except in default, when it converts to debt)
- ▶ HCVA are managed under good practice guardianship of indigenous communities



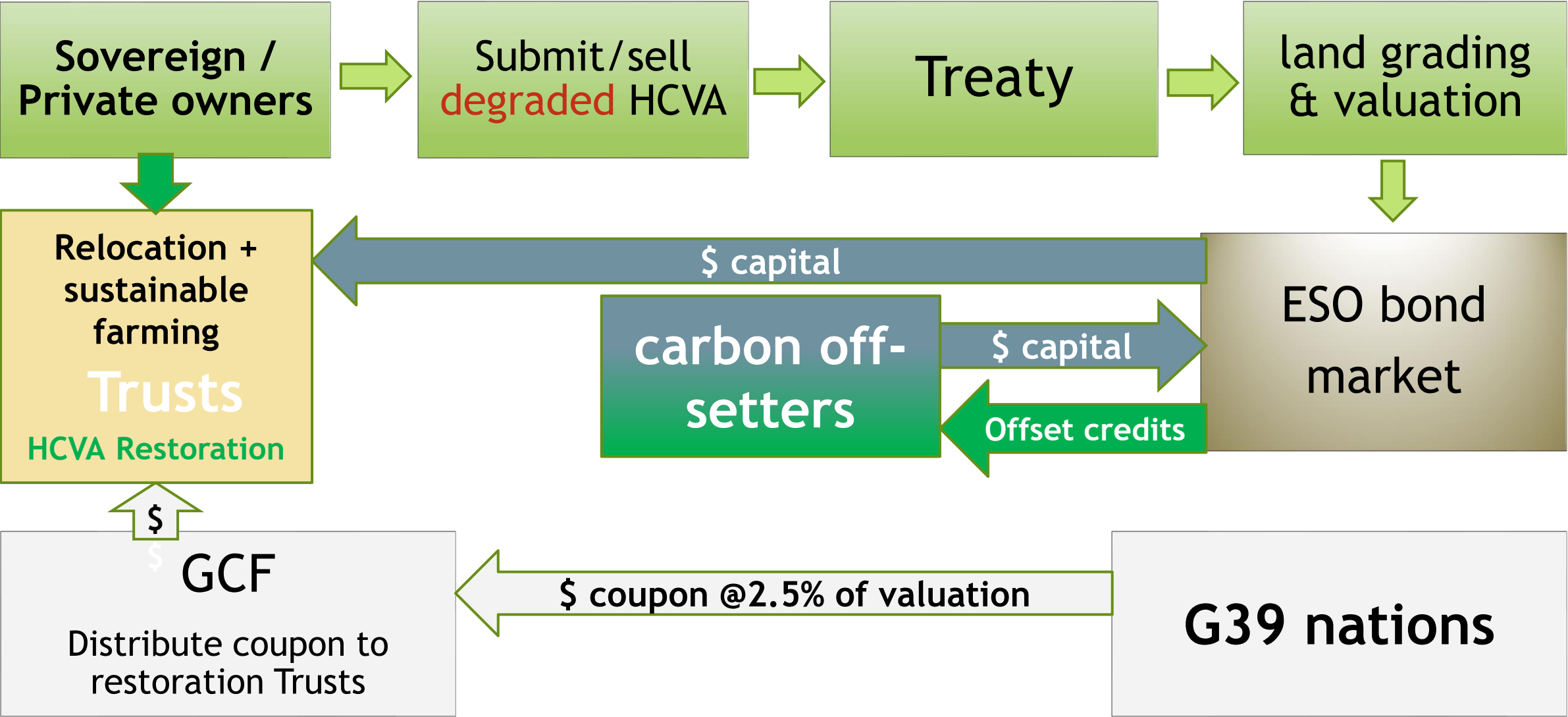
## Environmental Services Investment (ESI) Bonds



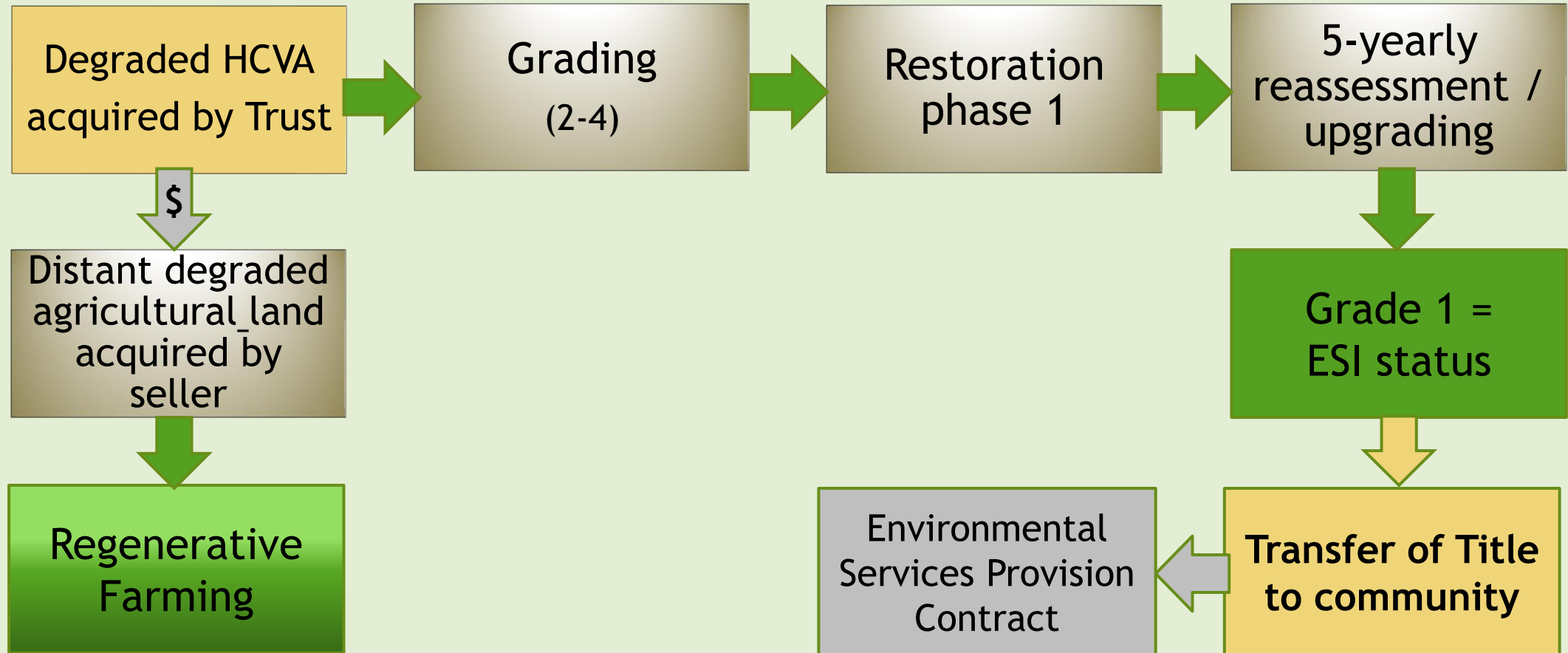
## 2. Environmental Services Offset Bonds

- ✿ ESOs are linked to the regeneration of degraded HCVA
- ✿ Companies that have maximised in-house carbon reduction purchase ESOs to offset remaining emissions to achieve net zero
- ✿ Capital is allocated to buy farms adjacent to pristine HCVA, relocate environmentally damaging farming activities, and fund conversion to regenerative farming on degraded agricultural land elsewhere
- ✿ Coupon is channelled via Trusts for initial restoration of HCVA , followed by long term regeneration by indigenous peoples
- ✿ ESO bonds eventually mature into ESIs
- ✿ Land ownership transfers to communities
- ✿ (VESR bonds allow voluntary participation in the ESO infrastructure)

Environmental Services Offset (ESO) bonds



## Environmental Services Offset (ESO) Bonds - Restoration trajectory





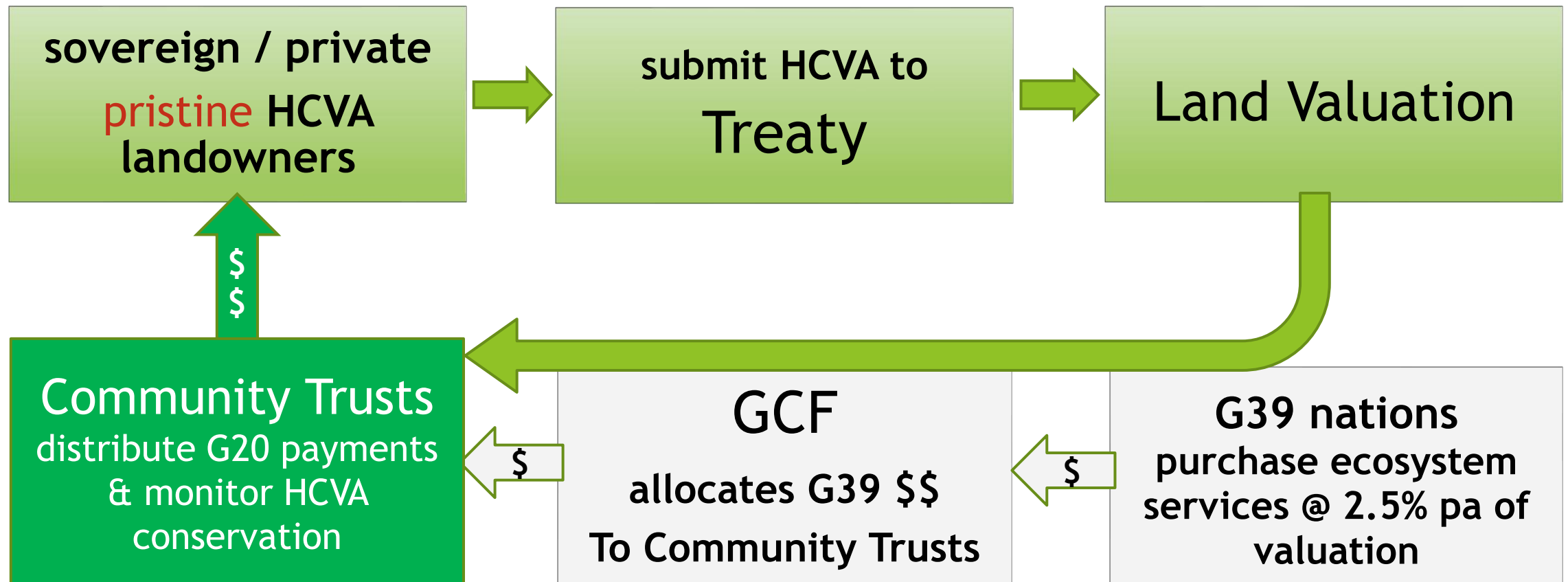
### 3.

# Environmental Services Provision Contracts



- ▶ An additional arrangement where annual income is required to meet conservation and socio-economic needs
- ▶ Sovereign or private landowners sell environmental services from pristine HCVA to wealthy nations and/or institutions in return for signing the perpetual conservation Treaty

# Environmental Services Provision Contracts



## Further Information

For a more detailed explanation of this proposal please refer to Simon Lamb  
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Dorset, UK  
August 2022