

#### Nature-based Solutions

Nature-based Solutions (NbS): "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits" (IUCN 2021)

#### **Examples:**

- Conservation and restoration activities
- Sustainable certification strategies
- Productive landscape interventions
- Payment for ecosystem services





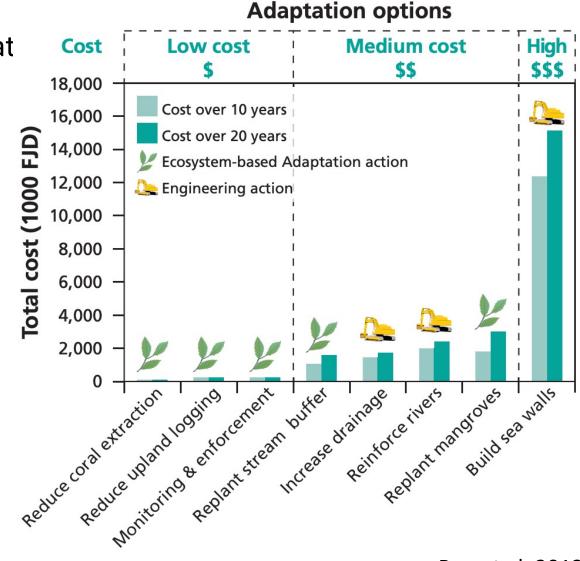
## Growing calls for NbS

#### **Advantages:**

- Capacity to achieve multiple policy objectives at one time
  - Mitigation
  - Adaptation
  - Biodiversity conservation
  - Economic development
- Cost-effectiveness compared to "gray" infrastructure

#### **Calls for NbS**

- Alignment with international agreements:
  - Paris Agreement
  - Convention on Biodiversity
  - Sustainable Development Goals
- Calls for "green recovery"



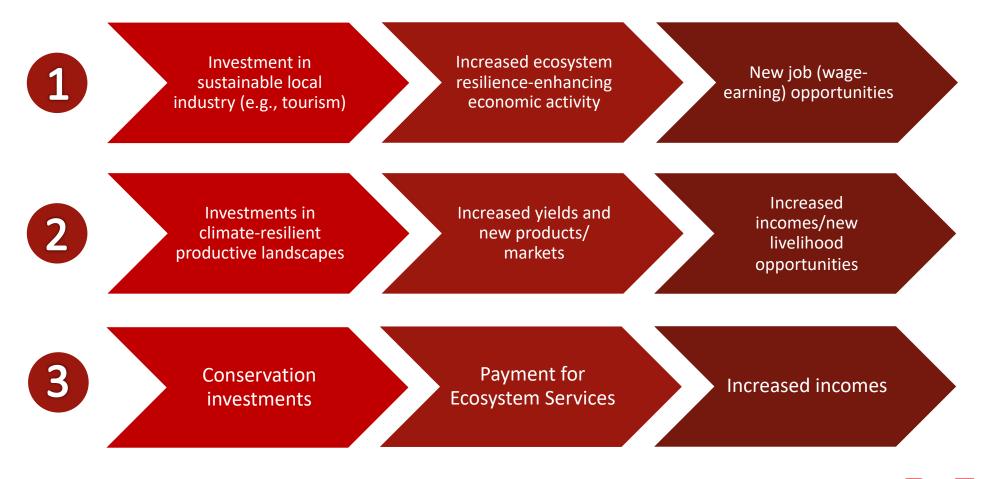
### Particular relevance for Latin America and the Caribbean

- Climate change poses significant challenges to the economic resilience
- LAC is an incredibly biodiverse region
  - More than 40% of remaining tropical forests
  - More marine eco-regions than any other region
  - 11% of world's agricultural land
  - value of terrestrial ecosystem services to be \$15.3 trillion annually
- Covid-19 has caused a significant economic recession
  - An average 7.7% drop in GDP
  - Growing inequality: 3% rise in the average Gini index
  - Unemployment over 10%





### Pathways through which NbS contribute to Jobs, Livelihoods & Incomes





### Contributions of NbS to Market Resilience

- Increasing the productivity and diversity of the agricultural sector
- Connecting local producers to specialty markets for sustainably produced goods

Enhancing the resilience of the ecosystem services that markets rely on, such as water cycle regulation, local climate stabilization, and soil fertility





## Policy Implications for jobs and livelihoods

Significant investments in the enabling environment are required to realize the job and livelihood potential of NbS

The benefits to vulnerable households extend beyond simply creating new jobs, livelihood opportunities, or increasing incomes

The geographic benefits of NbS extend far beyond the communities in which these strategies are implemented







## **Policy Implications for market resilience**

Tensions between resilience of the market system and individual resilience strategies must be acknowledged

NbS can strengthen local markets by promoting farmers markets, seed exchanges, and production of locally-appropriate food

Focusing on climate-resilient local markets, where the priorities of market system resilience, household resilience, and food sovereignty align most closely is strategic







## **Acknowledgements**

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# Colombia: Payment for Ecosystem Services (PES) and Biodiversity Conservation in the Coffee Sector

- Payment Ecosystem Services (PES) for carbon sequestration
- Certification for sustainable coffee cultivation
- Diversification of livelihood opportunities
- Producers gained additional income (on average 8% increase, some 29% higher)
- Sustainable coffee covered over 20,000 ha more than at baseline





# Climate Change Resilient Productive Landscapes and Socio-economic Networks Advanced in Guatemala

- Local climate data sharing and early warning
- Commercial networks for producers of honey, cocoa, peas and maxán leaf and certification of Good Agricultural Products
- Reduced use of chemical inputs due to improved ecosystem services
- PES for agroforestry and soil and water conservation
- Increased productivity/yields
- Increased food sovereignty
  - Family gardens
  - Diversified crop production





# **Cuba: Reduction of Vulnerability to Coastal Flooding through Ecosystem-based Adaptation**

- Mangrove restoration efforts
- Agroforestry efforts
- Promotion of sustainable tourism
- Diversified livelihoods: beekeeping
- Increased productivity and diversity of fisheries due to improved water quality and vegetation cover



