




Green infrastructure and its co-benefits



Green Infrastructure: “A strategically planned **network of natural and semi-natural areas** with other environmental features designed and managed to deliver a wide range of **ecosystem services**” (European Commission 2013)

The diagram illustrates a network of green infrastructure elements and their associated co-benefits. Key features include a green wall, green roof, wildflower verge, Natura 2000 Forest, hedgerow, biodiversity-rich business park, multifunctional farming, wildlife overpass, reedbed, and fish ladder. The co-benefits are categorized into Water, Biodiversity, Disaster risk management, and Climate change.

Forests as green infrastructure



Green and grey infra

Bank restoration, Switzerland

Multifunctional forested landscape, Madagascar

International frameworks promoting green infrastructure



United Nations
Framework Convention on
Climate Change



United Nations
Convention to Combat
Desertification

**Ecosystem-based
approaches**

**Nature-based
solutions**

**Green
infrastructure**

**Multifunctional
landscapes**

providing
ecosystem services

Market mechanisms for green infrastructure

Mechanisms for watershed investments (green infrastructure for water supplies) distinguished by the Ecosystem Marketplace (Bennett & Ruef 2016):

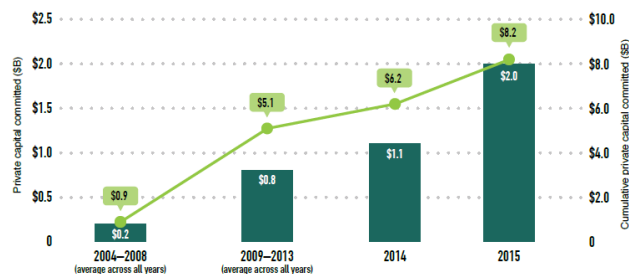
- **Public subsidies for watershed protection**
Governments reward land holders for watershed protection.
- **User-driven watershed investments**
Water users pay land holders for conserving, restoring or creating green infrastructure.
- **Water quality trading and offsets**
Water users manage their impacts on water by compensating others for offsite activities that improve water quality or supply.
- **Environmental water markets**
Trade of water rights to achieve environmental objectives.

Current investment trends

Watersheds
(Bennett & Ruef
2016)



Private
investments in
conservation
(Hamrick 2016)



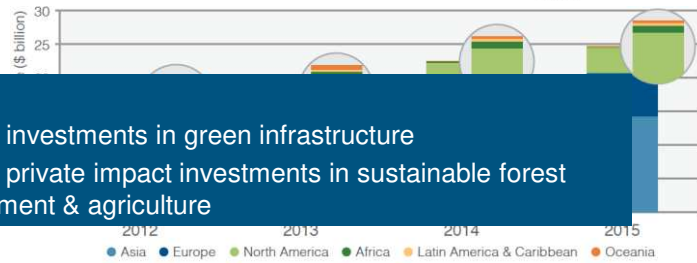
Current investment trends



Waters
(Bennett &
2016)

Trends

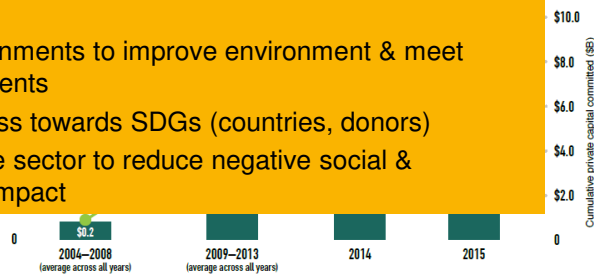
- Growing investments in green infrastructure
- Growing private impact investments in sustainable forest management & agriculture



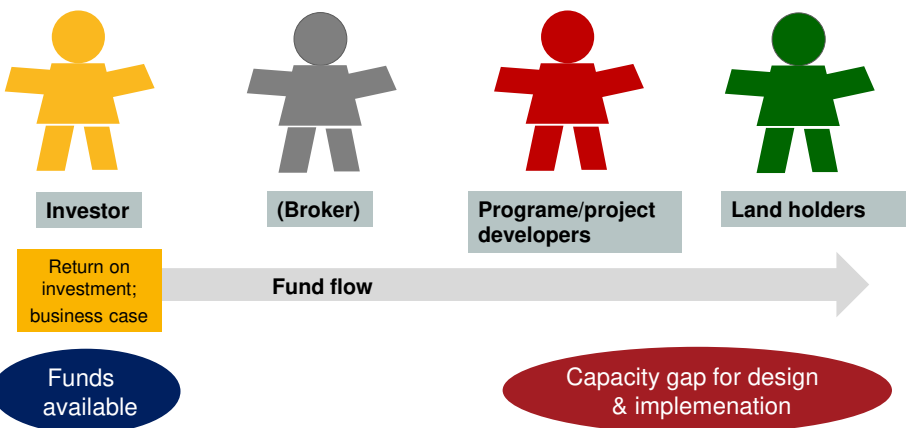
Private
investm
conserv
(Hamrick
2010)

Drivers

- Efforts by governments to improve environment & meet climate commitments
- Push for progress towards SDGs (countries, donors)
- Efforts of private sector to reduce negative social & environmental impact



Selected challenges to scale up investments



Further challenges include: regulatory uncertainties; value and measure co-benefits; demonstrating effectiveness & benefits.

Green infrastructure investments in forests



Multifunctional forested landscapes:

- Biodiversity
- Climate change
- Water
- Products

- ? How can funds available with the private sector and public investors be better mobilised for watershed management and sustainable forest management?
- ? How can funds of investors (private/public) be better channelled to project/programmes?
- ? What are critical elements for the design of projects/programmes to ensure effectiveness and return of investment?
- ? How can risks of investments into forests and other common pool resources (e.g. unsecure tenure rights) be addressed?



Thank you!

