

INTEGRATING GREEN AND GRAY

Creating Next Generation Infrastructure



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How Green and Gray Infrastructure Can Work Together

Service	Gray Infrastructure Components	Example Green Infrastructure
WSS	Reservoirs, plants, pipes	Watershed Wetlands
Hydropower	Reservoirs and power plants	Watersheds:
Coastal Flood Protection	Embankments, Dikes, Sluice Gates	Mangrove Forests
Urban Flood Management	Storm drains, pumps, outfalls	Urban Flood Retention Areas
River Flood Management	Embankments, gates, pumps	River Floodplain
Agriculture I&D	Barrages/dams, canals	Agricultural Soils

ASSESSMENT FRAMEWORK TAILORED FOR GREEN INFRASTRUCTURE

Environment



Social



Economy



Enabling
Framework



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COMMUNITIES: **PILLAR OF GREEN** **INFRASTRUCTURE**





MULTI-CRITERIA ECONOMIC ANALYSIS AND GREEN FINANCING



Figure 5.4 | Global Investments in Watershed Conservation, by Region

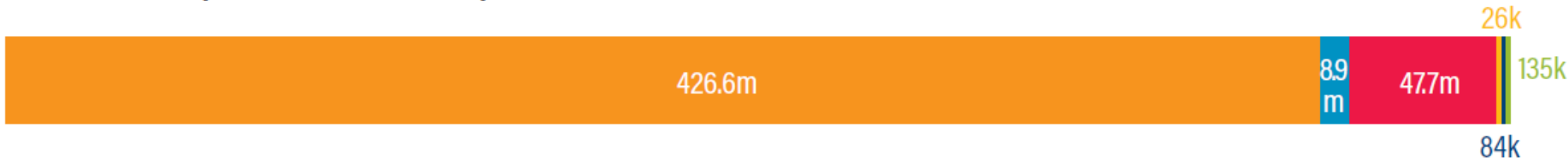
Number of Programs (419 total)



Total Transaction Value (24.6b total)



Area in 2015 (486.7m ha in total)



Asia North America Europe Latin America & Caribbean Africa Oceania

Source: Forest Trends, 2016

Sources of Financing For Green Infrastructure

1. Public Financing
2. Private Financing
3. Development Partners

1. Public Financing For Green Infrastructure

- A. General Government Budget
- B. Ear-Marking Government Revenue
- C. Dedicated Service Fees
- D. Environmental Compensation Fees

2. Private Financing For Green Infrastructure

- A. Environmental Bonds
- B. Corporate Stewardship
- C. Water Funds
- D. Insurance Companies

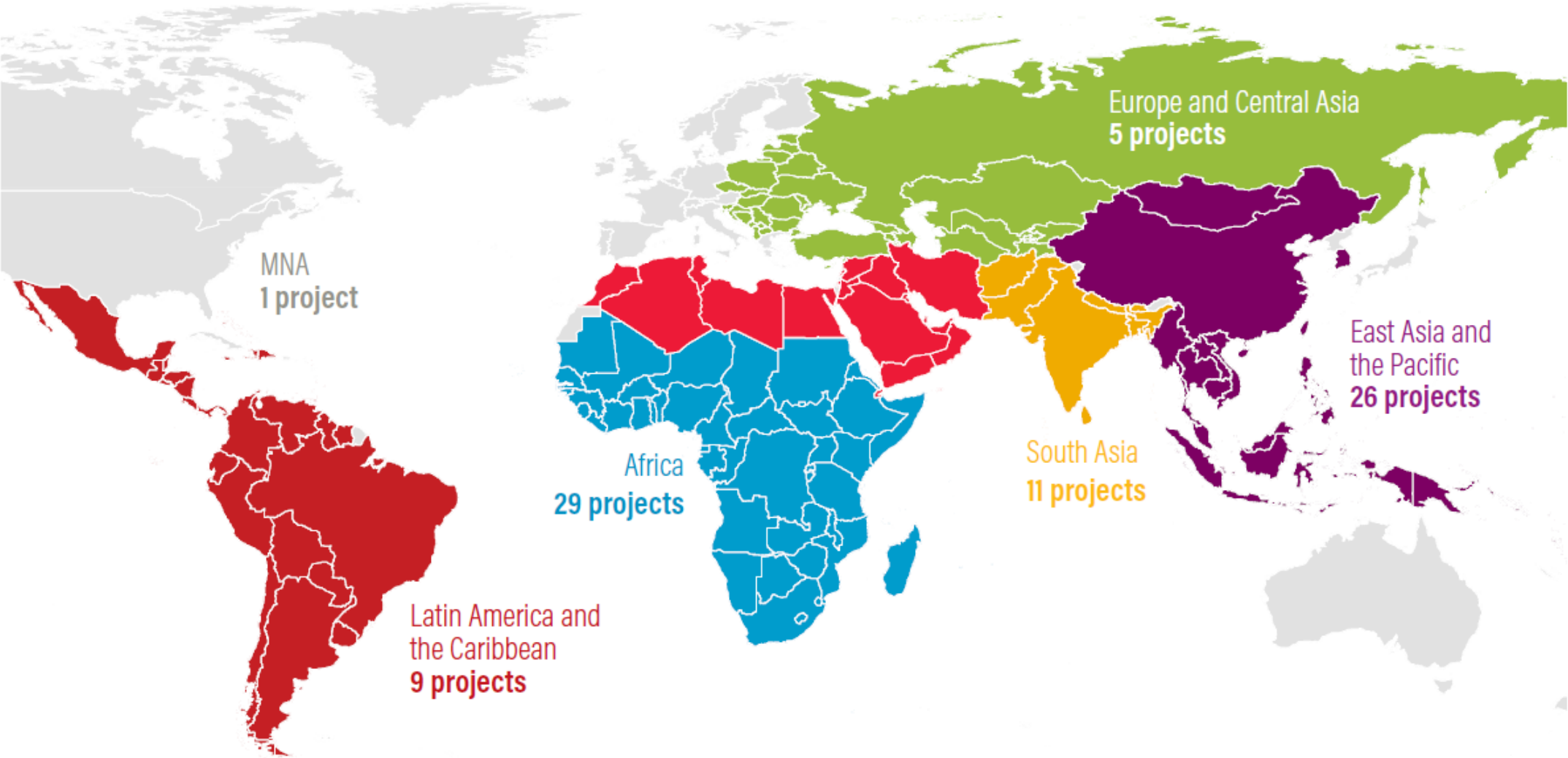
3. Development Partners

A. Bilateral Development Grants and Loans

B. Multilateral Specialized Agencies: GEF, GCF

C. Multilateral Development Banks

Figure 5.6 | World Bank Green Infrastructure Projects, by Region



GREEN GRAY IS POTENTIALLY A TRIPLE WIN

Environment



Social



Economy



Climate Resilience



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UNITED NATIONS
DEVELOPMENT PROGRAM



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Thank You



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