

# The GEF and Asia

TWO DECADES OF PARTNERSHIP TO SAFEGUARD THE GLOBAL ENVIRONMENT  
1991-2014

## ASIAN SUSTAINABLE TRANSPORT AND URBAN DEVELOPMENT PROGRAM (ASTUD)

Total GEF Grant: US\$14 million  
GEF Agency: ADB

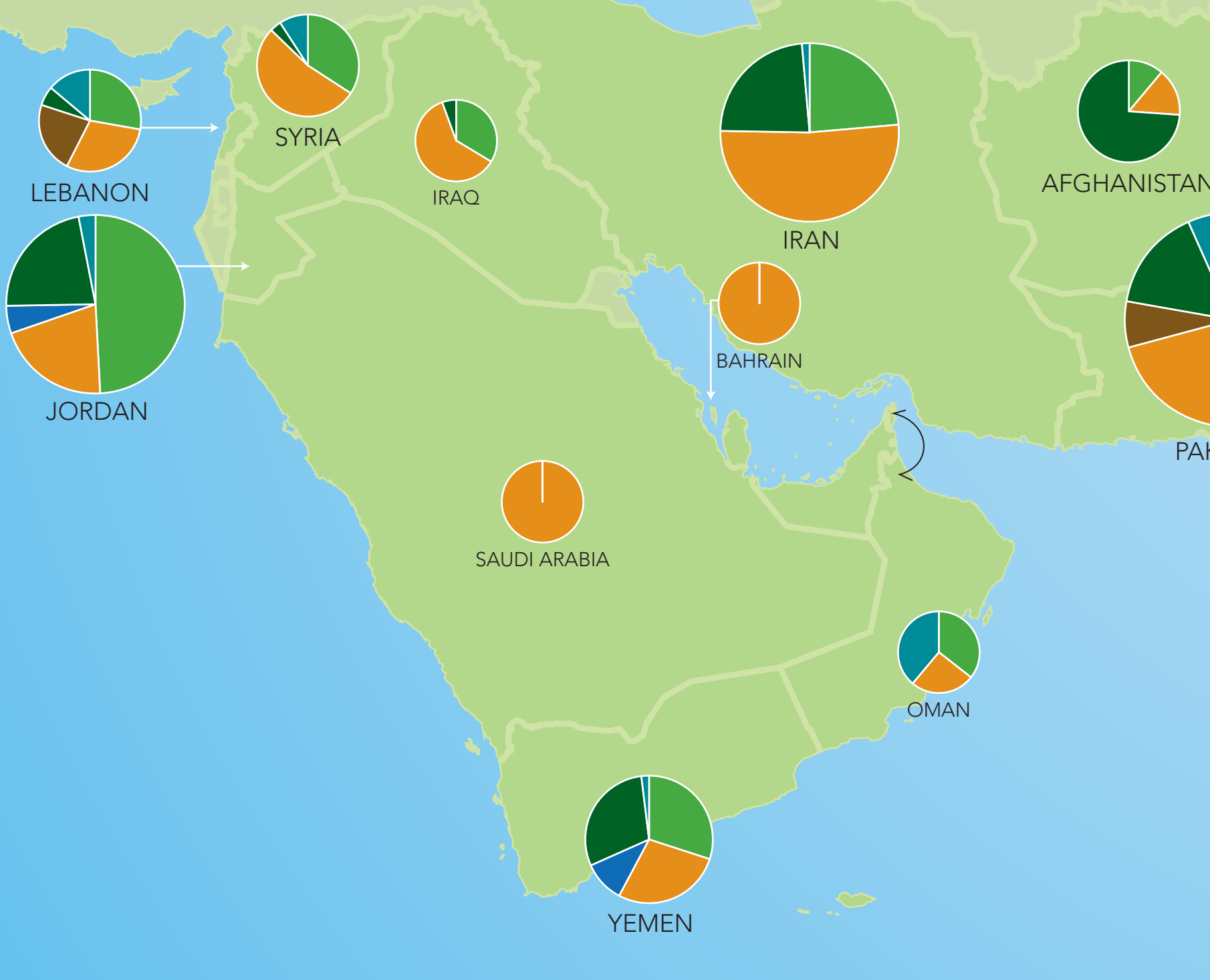
Co-financing: \$988 million  
Implementation: 2012 - present

This program aims to support Asian cities in Bangladesh, China, and Mongolia to develop low-carbon transit infrastructure and transport services that is integrated with transit-supportive urban development, resulting in greenhouse gas reductions and local co-benefits. The program focuses on clean bus leasing, sustainable transport corridors development, and sustainable urban transport.

improve the quality of life for urban dwellers, including the reducing the time and expense of commuting and improving air quality. The resources used for this program have primarily focused on investment in public transport systems, such as bus rapid transit and metro. Thus far, about 14.8 Mt CO<sub>2</sub> eq of expected GHG reductions are directly attributable to program investments.

The ASTUD program is a multi-year multi-country program that provides an umbrella framework for a range of projects in Asia. The smart planning and urban development is being developed to not only reduce greenhouse gas emissions, but also

This program is designed to expand to additional countries in future rounds. The results of the program directly and the indirect impact of the lessons learned on additional areas has the potential to transform urban development for Asia as a whole.



## BHUTAN: REDUCING CLIMATE CHANGE-INDUCED RISKS AND VULNERABILITIES FROM GLACIAL LAKE OUTBURST FLOODS IN THE PUNAKHA-WANGDI AND CHAMKHAR VALLEYS

Total GEF Grant: US\$3.4 million  
GEF Agency: UNDP

Co-financing: US\$3.4 million  
Implementation: 2008 - 2013

A recent inventory of glaciers and glacial lakes in Bhutan identified 24 lakes that pose a high risk of a glacial lake outburst floods (GLOF). This LDCF-financed project seeks to reduce the risk of climate change-induced GLOFs in targeted mountain valleys by: enhancing national and sub-national capacities to prevent climate change-induced GLOF disasters; reducing the risk of GLOF from

Thorhomi Lake through an artificial lake-level management system; and reducing human and material losses in vulnerable communities through a GLOF early-warning system. The results of the project include (i) a new Disaster Risk Management Act, representing a major achievement towards integrating improved disaster risk management practices into decision-making processes at different levels; (ii) the

imminent threat of a GLOF from Thorhomi Lake has been removed for a downstream populations through the artificial lowering of water levels; and (iii) an early-warning system is in place and operational. Importantly, the project has demonstrated a viable, cost-effective approach to addressing the growing risk of GLOFs in Bhutan and other vulnerable, mountainous areas across the globe.

## DEMONSTRATION OF ALTERNATIVES TO CHLORDANE AND MIREX IN TERMITE CONTROL

Total GEF Grant: US\$ 14,357,000  
GEF Agency: World Bank

Co-financing: US\$ 13,341,657  
Implementation: 2006-2011

Because of growing evidence of their toxicity to people and the environment, the termite control chemicals chlordane and mirex are among the persistent organic pollutants (POPs) identified for elimination by the Stockholm Convention. The purpose of this project was to eliminate the use of these POPs for termite control in the demonstration provinces through introduction of Integrated Pest Management (IPM) systems, allowing people to control termites without the use of toxic chemicals. In addition, IPM requires lower input costs for the landowner increasing

profits for farmers. The project also set up a national replication program for complete phase-out of these toxic substances in China. Project components including the piloting of bait systems, training and initiating policy reforms produced significant results early in project implementation that resulted in the elimination of 450 tons of chlordane and mirex. Based on the success of the project, the Government of China decided to completely ban the production and consumption of chlordane and mirex nationwide.

## FUNDING FOR CURRENT PROJECT "SCALING UP THE IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT STRATEGY FOR THE SEAS OF EAST ASIA"

Total GEF Grant: US\$10,643,992  
GEF Agency: UNDP

Co-financing: \$157,245,447  
Implementation: 1994 - present

The Partnership in Environmental Management for the Seas of East Asia (PEMSEA) is a regional mechanism (which has become an agreed International Legal Personality) that facilitates sustainable environmental decision making and actions in river basins, coasts, islands and seas in East Asia (including Cambodia, DPR Korea, Indonesia, Japan, Laos, PR China, Philippines, South Korea, Singapore, Thailand, and Timor-Leste). With the support of the GEF, UNDP, International Maritime Organization (IMO), the World Bank and other donors, PEMSEA has built partnerships that promote regional cooperation and ownership in addressing the complex issues of coastal and ocean governance at local, national and regional levels. Through a long-term, sustained commitment to supporting regional cooperation, PEMSEA has been successful in

mobilizing local governments in the region to implement and expand integrated coastal management (ICM) practices. To date, more than 31 ICM sites have been operationalized in 12 countries, covering 27,245 km of coastline (approx. 12% of the total coastline) and 33,154,600 ha of watershed areas, positively affecting the lives and properties of more than 150 million people. The GEF is supporting a fourth PEMSEA phase that, among other activities, is expected to produce signed Agreements with Country and Non-Country Partners on commitments to sustain PEMSEA's core operations.

## SUSTAINABLE LAND AND ECOSYSTEM MANAGEMENT COUNTRY PARTNERSHIP PROGRAM (SLEM-CPP)

Total GEF Grant: US\$ 27.3 million  
GEF Agencies: FAO, UNDP, and World Bank

Co-financing: \$200 million  
Implementation: 2004 - present

This multi-focal area program is composed of six projects executed by the Indian Ministry of Environment and Forests focusing integrated management of natural resources primarily using climate change adaptation and resilience as an entry point. One of the projects under the program was the Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector. This project focuses on improving the productive potential of natural resources and increasing incomes of rural inhabitants in selected watersheds through socially inclusive, institutionally and

environmentally sustainable practices. It created the foundation needed for integrated management of natural resources and demonstrated that integrated management of the full watershed can be used to restore and sustain ecosystem functions and biodiversity while simultaneously enhancing income and livelihoods. GEF resources targeted micro-watersheds based on the severity of erosion, extent of poverty, and lack of infrastructure. Project activities were focused on improving soil and water conservation, reducing erosion and siltation, sustainable use of forest resources (NTFFS),

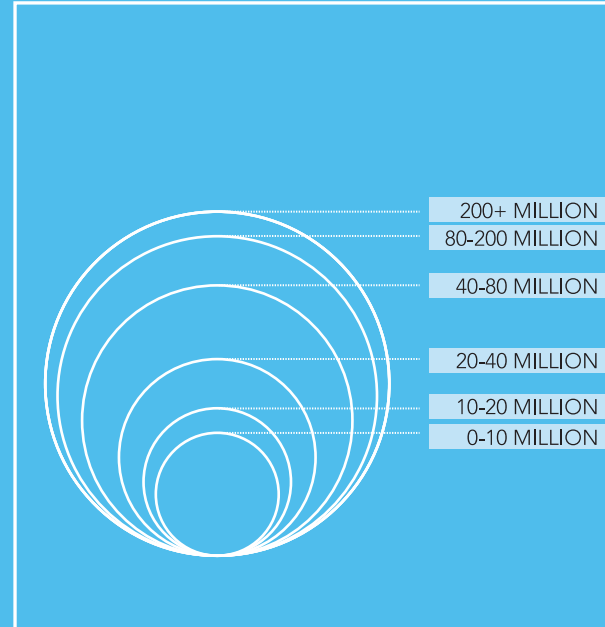
introducing alternative energy sources. As a result, the reduced felling of trees for fuel wood protects the fragile slopes, contributes to biodiversity conservation, and helps to increase flow of water. The project has already seen a 10% increase in vegetative cover in the targeted areas and increased presence of key species of flora and fauna. The project also demonstrates how results are linked directly to interventions for improving livelihoods and creating options at the local level. For example, pine briquetting reduces dependency on fuel wood collection by women, reducing deforestation and greenhouse gas emissions.

## STRENGTHENING SUSTAINABLE FOREST MANAGEMENT AND THE DEVELOPMENT OF BIO-ENERGY MARKETS TO PROMOTE ENVIRONMENTAL SUSTAINABILITY AND REDUCE RURAL POVERTY AND CO<sub>2</sub> EMISSIONS IN CAMBODIA

Total GEF Grant: US\$32.4 million  
GEF Agency: UNDP

Co-financing: US\$7.6 million  
Implementation: 2011 - present

The project assists in removing the main barriers to reducing land and forest degradation by integrating and mainstreaming community-based forest and protected area management into policy, planning and investment frameworks. The project is also supporting participatory land-use planning (accompanied by forestland demarcation), speeding up the legal recognition and registration of community forests and protected areas managed by communities. Another component focuses on enhancing benefits derived from timber and non-timber forest products and creating markets for efficient bioenergy technologies, reducing fuelwood use. This project also involves the development of an effective supply chain for improved cook stoves including local technology suppliers so that they respond to local needs.



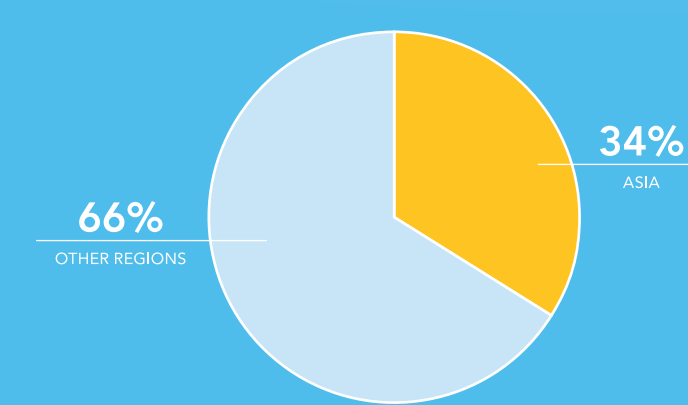
### REGIONAL AND TRANSBOUNDARY WATER BASIN INVESTMENTS UNDER THE INTERNATIONAL WATERS FOCAL AREA



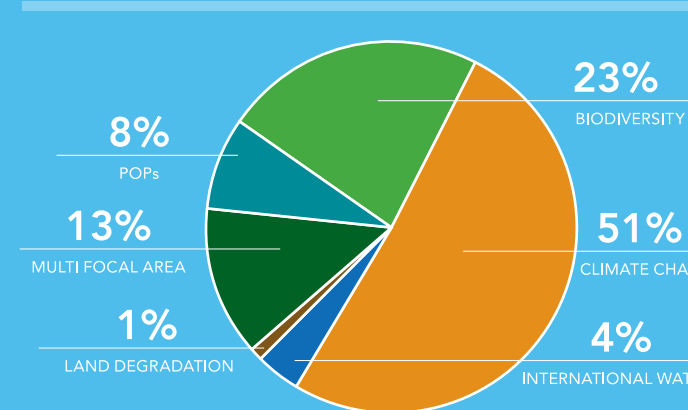
The designations employed and the presentation of the material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the GEF concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

- POPs
- MULTI FOCAL AREA
- LAND DEGRADATION
- INTERNATIONAL WATERS
- CLIMATE CHANGE
- BIODIVERSITY

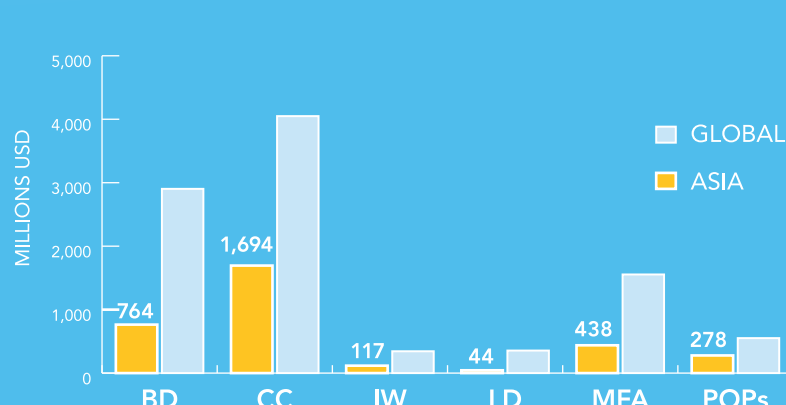
### ASIA'S SHARE OF THE OVERALL GEF FOCAL AREA INVESTMENTS



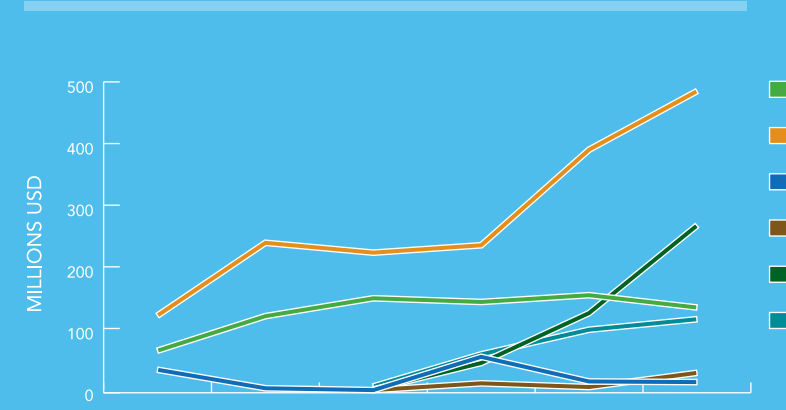
### TOTAL FOCAL AREA INVESTMENTS



### CUMULATIVE PROGRAMING OF FOCAL AREA RESOURCES



### TRENDS IN GEF FOCAL AREA INVESTMENTS



### CORAL TRIANGLE INITIATIVE

Total GEF Grant: US\$74 million  
GEF Agency: ADB, FAO, UNDP, UNEP, and World Bank

Co-financing: US\$500 million  
Implementation: 2008 - present

Spanning Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands and Timor-Leste, the Coral Triangle supports the richest concentration of marine biodiversity in the world. The Coral Triangle Initiative has brought together six governments, multilateral institutions, NGOs and many other partners to address the management, conservation and adaptation to climate change of the tuna fisheries and coral ecosystems in that region. The GEF's program within the Coral Triangle Initiative provides a framework for action on conservation of the SE Asia portion of the Coral Triangle and supports the region's sustainable development. The effort includes establishing national and sub-regional governance frameworks and regional mechanisms to address threats to marine resource systems, and strengthening capacity of key institutions responsible for coastal and

marine resource management, especially at the national and local levels.

The program helps Coral Triangle countries expand national Marine Protected Areas and Marine Managed Areas networks and also helps develop adaptive management strategies in response to climate change impacts. For example, the Integrated Natural Resources Management Project in the Philippines is working to restore the productive capacity of critical watersheds, enhance biodiversity conservation and protected area networks while reducing poverty of dependent communities. These efforts slow the degradation and overexploitation of target watersheds and eventually lead to their rehabilitation, enabling them to produce water and other environmental services.

### PACIFIC ISLANDS RIDGE TO REEF PROGRAM COOK ISLANDS, FIJI, MICRONESIA, KIRIBATI, MARSHALL ISLANDS, NAURU, NIUE, PAPUA NEW GUINEA, PALAU, SOLOMON ISLANDS, TONGA, TUVALU, VANUATU, SAMOA

GEF: \$90.4M Co-financing: \$333M  
GEF Agencies: FAO, UNDP, UNEP

This GEF program brings together 14 countries and three GEF agencies to develop and implement cross-sectoral projects that maintain and enhance Pacific Island countries' ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest, biodiversity and coastal resource management that contribute to poverty reduction, sustainable livelihoods and climate resilience.