



# Investing in Land Stewardship

REPORT OF THE GLOBAL ENVIRONMENT FACILITY TO THE  
ELEVENTH SESSION OF THE CONFERENCE OF THE PARTIES TO THE  
UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION

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## TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
LIST OF ABBREVIATIONS.....	4
EXECUTIVE SUMMARY .....	5
INTRODUCTION .....	11
STATUS OF GEF LAND DEGRADATION FOCAL AREA PORTFOLIO.....	13
Programming Trends .....	13
Focal Area Objectives.....	14
Multifocal-areas Programming .....	14
Geographical Trends.....	15
Regional and Global Programming.....	21
SUSTAINABLE LAND MANAGEMENT AS A CROSS-CUTTING AND SYNERGISTIC ELEMENT IN OTHER GEF FUNDING WINDOWS.....	24
SLM opportunities in the LDCF/SCCF for Climate Change Adaptation.....	24
SLM synergies through the Adaptation Fund.....	26
PROGRESS WITH GEF-5 PROGRAMMING REFORMS.....	28
Progress in Overall Programming of LDFA Resources.....	28
Progress in utilization of the System for Transparent Allocation of Resources .....	29
Enabling Activities.....	31
<i>Direct Access Modality</i> .....	31
<i>GEF Agency Modality</i> .....	32
<i>Umbrella Project Modality</i> .....	32
SFM/REDD-plus Incentive Mechanism.....	33
Capacity Development Program.....	34
LAND DEGRADATION FOCAL AREA PORTOFOLIO MONITORING AND ASSESSMENT.....	35

Annual Monitoring Report FY2011.....	35
Annual Monitoring Report FY2012.....	36
Portfolio Monitoring and Learning Review.....	38
CONCLUSION.....	42
ANNEX 1: GEF-5 LDFA Results-Based Management Framework.....	44
ANNEX 2: LDFA PROJECT PORTFOLIO – FY2012 AND FY2013 .....	47
ANNEX 3: PROJECTS WITH ACTIVITIES IN PRODUCTION LANDSCAPES APPROVED UNDER LDCE/SCCF, FY12 and FY 13 .....	59
ANNEX 4: PROJECTS APPROVED UNDER THE ADAPTATION FUND, FY12 and FY13 .....	64
ANNEX 5: DESCRIPTION OF APPROVED PROGRAMS AND PROJECTS.....	66
LDFA STAND-ALONE PROJECTS.....	66
MULTI-FOCAL AREA PROJECTS.....	73
ENABLING ACTIVITY PROJECTS FINANCED UNDER THE LDFA .....	96
<i>Projects under the Direct Access Modality</i> .....	96
<i>Projects under the GEF Agency Modality</i> .....	97
<i>Umbrella Project Modality</i> .....	101
PROJECTS WITH ACTIVITIES IN PRODUCTION LANDSCAPES APPROVED UNDER SPECIAL CLIMATE CHANGE FUND (FY12 AND FY13).....	102
PROJECTS WITH ACTIVITIES IN PRODUCTION LANDSCAPES APPROVED UNDER THE LEAST DEVELOPED COUNTRIES FUND (FY12 AND FY13).....	105
PROJECTS APPROVED UNDER THE ADAPTATION FUND, FY2012 AND FY13.....	119

## LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AfDB	African Development Bank
AMR	Annual Monitoring Report
CBD	Convention on Biological Diversity
COP	Conference of the Parties
CRIC	Committee for Review of Implementation of the Convention
CSP	Country Support Program
DLDD	Desertification, Land Degradation, and Drought
EBRD	European Bank for Reconstruction and Development
FAO	Food and Agriculture Organization
FY	Fiscal Year
GEBs	Global Environmental Benefits
GEF	Global Environment Facility
GGWI	Great Green Wall Initiative of the Sahel and Sahara
IDB	Inter-American Development Bank
IEM	Integrated Ecosystem Management
IFAD	International Fund for Agricultural Development
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LDFA	Land Degradation Focal Area
LFCC	Low Forest Cover Countries
LULUCF	Land Use, Land Use Change, and Forestry
MFA	Multi-Focal Area
MOU	Memorandum of Understanding
MSP	Medium-Sized Project
NAP	National Action Program
NAPA	National Adaptation Program of Action
NPFE	National Portfolio Formulating Exercise
OP	Operational Program
PES	Payments for Ecosystem Services
PIF	Project Identification Form
PIR	Project Implementation Report
PPG	Project Preparation Grant
PRAIS	Performance Review and Assessment of Implementation System
RBM	Results Based Management
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCCF	Special Climate Change Fund
SFM	Sustainable Forest Management
SGP	Small Grants Program
SIDS	Small Island Developing States
SLM	Sustainable Land Management
STAR	System for a Transparent Allocation of Resources
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
WB	The World Bank

## EXECUTIVE SUMMARY

This report has been prepared by the Global Environment Facility (GEF) Secretariat for submission to the eleventh session of the Conference of Parties to the United Nations Convention to Combat Desertification (UNCCD COP-11) in Windhoek, Republic of Namibia, from September 16 to 27, 2013. This is the fourth report prepared by the GEF to the COP in accordance with the Memorandum of Understanding (MOU) between the UNCCD and the GEF. This is also the second time the GEF is reporting since the GEF Instrument was amended to list the UNCCD among the Conventions for which the GEF serves as a financial mechanism.

The report follows the suggested format outlined in the MOU. It provides information on GEF activities in sustainable land management as they relate to GEF Land Degradation Focal Area, specifically desertification and deforestation, for the period of July 2011 to June 2013. In accordance with the MOU, activities in other GEF Focal Areas and funding windows related to Sustainable Land Management (SLM) are also presented. The reporting period coincides with the second and third full years of the Fifth GEF Replenishment Phase (GEF-5).

The report also complements information provided through the Performance Review and Assessment of Implementation System (PRAIS), which was included in the global synthesis submitted to the Committee for Review of Implementation of the Convention at its 11th Session (CRIC-11). However, the data submitted through the PRAIS was based on the GEF report to COP-10, which covered the period 2009 – 2011. Therefore the details presented in the present report to COP-11 are not reflected in the PRAIS data.

### **L DFA Portfolio Trends Highlights (July 2011–June 2013)**

#### Total GEF Programming

- a. A total of 108 projects were approved with funding from the LDFA. The total GEF grant for the projects amounted to US\$655.7 million, with an additional US\$2.47 billion in co-financing. Of the total GEF grant, US\$199.2 million were LDFA resources utilized by countries through stand-alone focal area projects or through multi-focal area projects.
- b. The portfolio includes 76 full-sized projects, five (5) medium-sized projects, and 27 Enabling Activity projects. Forty-one (41) of the projects are stand-alone LDFA utilizing US\$61.3 million (31%), while 60 are multi-focal area projects using US\$577.5 million from GEF resources, including US\$137.8 million (69%) of the LDFA resources.
- c. A total of US\$138.7 million of the focal area resources invested through multi-focal area projects was linked to US\$438.8 million from other focal areas, including Biodiversity (US\$222.5 million), Climate Change (US\$139.01 million), International Waters (US\$22.04 million), and the SFM/REDD-plus incentive program (US\$55.2 million).

#### Focal Area Objectives

- d. A total of US\$183.7 million (89.1%) of the focal area resources utilized during the reporting period was directed to the four focal area objectives, with the remainder going toward project management costs and project preparation grants.

- e. Objective three (LD3), which focuses on achieving sustainable land management through integrated landscapes approaches accounted for the highest utilization, with more than US\$100 million programmed through 65 projects.
- f. Objective one (LD1), which focuses on sustainable land management in agriculture and rangelands, also showed strong programming, with US\$67 million of the LDFA resources allocated through 36 projects.
- g. There was low programming of resources for objective two (LD2), which is likely due to the fact that while dryland forest landscapes are crucial for livelihoods and ecosystem resilience, their management may be best addressed through linkages to crop and livestock production (LD1) or integrated management of wider landscapes (LD3).
- h. Objective four (LD4) on adaptive management was intended for enabling activities and cross-cutting activities to enhance focal area learning, and therefore does not require significant investment of the focal area allocation.

#### Geographical Highlights

- i. Sixty-five (65) countries in Africa, Asia, Central and Eastern Europe (CEE), and Latin America and Caribbean (LAC) utilized US\$126.7 million (63%) of LDFA resources for 87 single country projects. The Africa (US\$39.4 million) and Asia (US\$39.8 million) regions accounted for the highest amount of LDFA resources programmed, followed by LAC (US\$28.3 million) and CEE (US\$19.1 million).
- j. The additional US\$72.5 million of LDFA resources was programmed through eight (8) global and six (6) regional projects designed to invest in coordinated actions by multiple countries or address specific thematic issues for sustainable land management. Three (3) global projects were designed to support 50 that utilized a total of US\$19.2 million of their LDFA allocations for the Small Grants Program.

#### **SLM synergies through other GEF Windows**

- a. Affected country Parties can also take full advantage of synergies with climate change adaptation, and advance climate-resilient SLM with resources from three adaptation funds being managed by the GEF: the *LDCF and SCCF* under the UN Framework Convention on Climate Change (UNFCCC), and the *Adaptation Fund* under the UNFCCC's Kyoto Protocol.
- b. During the reporting period, 31 projects were financed under the *Least Developed Countries Fund* with links to production systems. The projects involve 22 countries in Africa (16), Asia (5), and LAC (1), utilizing a total of US\$181.2 million and leveraged an additional US\$734.4 million in co-financing. Two (2) of the projects were combined LDCF and GEF Trust Fund resources to maximize synergies at scale.
- c. Twelve (12) projects linked directly to natural resource management were financed under the *Special Climate Change Fund* for a total of US\$56.8 million, leveraging an additional US\$570.7 million in co-financing. Nine (9) of the projects were single-country investments in the Africa, Asia, LAC and CEE regions, while the other three (3) were multi-trust fund regional programs.
- d. Eighteen (18) projects were financed under *the Adaptation Fund* with direct links to sustainable land management. The projects involve 17 countries in Africa (6), Asia (5), LAC (5) and CEE (1), for a total grant of US\$123.7 million.

## **Progress with Implementing GEF-5 Reforms**

### Overall Programming of LDFA Allocation

- a. Of the total US\$385 million allocated to the LDFA during GEF-5, US\$260.1 (67.5%) million has been programmed to-date.

### Utilization of Country Allocations in the STAR

- b. From the total US\$324 allocated to countries under the System for a Transparent Allocation of Resources (STAR), US\$245.8 million (76%) has been utilized to-date.
- c. Only five (5) of the 143 countries with LDFA allocations (Republic of Congo, Dominica, Democratic People's Republic of Korea, Libyan Arab Jamahiriya, and Turkmenistan) have not submitted any projects utilizing the STAR.
- d. For 63 countries eligible under the STAR flexibility rule (i.e. with less than or equal to US\$7 million total allocation for three focal areas), 60 have utilized some or all of their allocations either for a stand-alone focal area or a multi-focal area project.
- e. Progress in utilizing the LDFA allocations has exceeded 70% in all regions, with the CEE region showing the highest at 80%, and Africa and Asia at 76%.

### Enabling Activity Financing:

- f. 101 of 144 eligible countries have requested GEF resources for Enabling Activities through one of three modalities: *Direct Access* (11), *GEF Agency* (18), and *Umbrella Project* (72). For the Direct Access modality, only seven (7) of the countries (Albania, Armenia, Bangladesh, Bhutan, India, Jordan, and Kyrgyz Republic) have so far successfully met all the requirements for disbursement of funds. Of the remaining 43 countries that have yet to submit requests, seven (7) are in Africa, 17 in Asia, four (4) in CEE, and 15 in LAC.
- g. The total LDFA resources requested by all countries through the three modalities is US\$8.49 million, with about 70% targeted for alignment of National Action Programs with the UNCCD 10-Year Strategy and Action Plan, and 30% for Reporting and Review Process.

### SFM/REDD-plus Incentive Mechanism

- h. Of the 60 multi-focal area projects in the LDFA portfolio for this reporting period, 36 leveraged funding from the SFM/REDD-plus incentive program, amounting to US\$55.3 million.

### Capacity Development

- i. Twenty-five (25) Capacity Development projects were financed during the period under reporting, for a total GEF grant of US\$22.7 million and an additional US\$42.4 million in co-financing. The portfolio includes 22 individual country projects and two (2) regional projects for countries in the Pacific Islands.

## **Portfolio Monitoring and Assessment**

- a. Portfolio monitoring and assessment is an important activity within the focal area cluster, and is based on projects under implementation. For the period covered by this report, highlights are presented from

the LDFA cluster inputs into two Annual Monitoring Reports (FY2011 and FY2012) and from a Monitoring and Learning Review mission to China.

#### Annual Monitoring Report FY2011

- b. The portfolio for FY2011 AMR included 11 projects with mid-term reports and 12 with terminal evaluation reports. Based on data reported, the following results were achieved through project interventions:
- i. 565,828 hectares of land under some form of sustainable management, including land under crop and livestock production (99,869 ha), forest restoration/rehabilitation (16,670 ha), and production landscapes under integrated ecosystem management (106,600 ha).
  - ii. The additional 342,689 ha includes land area benefiting from improved management practices through implementation of the integrated ecosystem management (IEM) approach, which fosters the application of a wide range of practices based on livelihood needs and priorities of local land users.
  - iii. 607 discrete stakeholder entities engaged for supporting SLM actions at national level (federal, state and municipal institutions, civil society organizations, private sector institutions, and universities/research institutions), and local level (grassroots groups, school teachers, small-scale producers, micro-watershed associations).
  - iv. 317 farmer households and an additional 806,585 people considered as benefiting directly from project activities through participation in trial demonstration projects, capacity building in farmer field schools and training courses on SLM, awareness raising activities, and adaptive research on SLM.

#### Annual Monitoring Report FY2012

- c. The FY2012 AMR included 12 projects with mid-term reports and 10 with terminal evaluation reports, of which 16 (8 MTR and 8 TER) were LDFA stand-alone projects. Unlike FY2011, none of the TERs submitted for the FY2012 AMR were from projects combating land degradation through integrated ecosystem management (IEM). This is perhaps a signal that most of those IEM projects have now been completed or in the final stages of implementation. Based on data reported in the project cohorts with MTRs and TERs, the following results have been achieved:
- i. More than three (3) million hectares of land under some form of sustainable management, out of which 1.08 million hectares were specifically reported as due to implementation of SLM options to increase vegetation cover, reduce soil erosion and improve irrigation in agricultural landscapes, and improve pastures and grazing systems.
  - ii. Additional coverage was reported for impacts such as sand dunes (190 hectares restored), forests (30,400 hectares restored), forests under community management (161,478 hectares), and application of forest land use planning (78,500 hectares).
  - iii. A total of 241 discrete stakeholder entities engaged in supporting SLM at national and local levels.
  - iv. A total of 158,500 people were considered as benefiting directly from project activities.

### Portfolio Monitoring and Learning Review Mission

- d. GEF undertook a learning mission in February 2012 to the People's Republic of China to observe and understand the integrated ecosystem management (IEM) approach to combating land degradation. The mission was focused on the overall PRC-GEF partnership approach but based on experiences from two of the eight subprojects implemented by the Asian Development Bank and the World Bank. Key lessons relative to the LDFA learning objectives for GEF-5 are presented under the following topics:
- i. *Measurement of agreed global environmental benefits of SLM at different scales (site / farm-scale, landscape / watershed, national, regional)* - Despite the overall spatial coverage of SLM reported, there are no clear measures of how the interventions are contributing to the agreed global environment benefits at different scales. The learning mission found that there are still challenges with selecting and applying indicators for portfolio level monitoring of these agreed global environmental benefits.
  - ii. *Tools for monitoring and measurement of agreed global environmental benefits* - There is still no consistency in tools being used for measurement of global environmental benefits, and emphasis is mainly at farm scale in the pilot demonstration sites. Some projects are overcoming the challenge by applying satellite imagery and GIS-based tools at scale in combination with "spot-check" and field surveys for verification.
  - iii. *Linking the agreed global environmental benefits to project level impacts at the different scales* - Links between SLM interventions and project level impacts are evident through measures of socio-economic benefits and numbers of target beneficiaries, which are also equally important for the focal area mandate. Links are particularly manifested at the local level, where SLM impacts contribute directly to livelihoods and economic benefits for farmers, especially those involved in small-scale production practices.
  - iv. *Major tradeoffs associated with generating ecosystem services from SLM projects in different production systems* - Because of the dynamic nature of land uses, maintaining a balance in flow of ecosystem services is essential for long-term success of SLM interventions in production systems. However, tradeoffs in land, water, and biomass production are inevitable and therefore need to be managed at scale as part of the overall approach to SLM. While this was indeed demonstrated in one pilot site, the magnitude and scale of transformation in traditional grazing lands could be significant for both development and global environmental benefits, if quantified.
  - v. *Achievement of synergy in generating agreed global environmental benefits from implementation of SLM projects at multiple scales* - In the PRC-GEF partnership, synergies are being fostered through institutional development at provincial level, capacity building for local communities, and support for innovations in the production landscapes. The IEM approach is an important means of achieving synergies that not only enable a better platform for capturing beneficial multiple impacts, but also encourage co-benefits for the global environment and for local human development.
  - vi. *GEF catalytic effect in SLM projects with respect to scaling-up and replication* - The GEF's catalytic role is manifested in three major ways: i) potential investments and financial reflows for SLM, such as inclusion of budgeting for IEM activities in five-year development plans at

Provincial level as a means of leveraging government resources for SLM; ii) policy innovations and options designed to remove barriers for SLM, such as through institutional and policy transformations at provincial level, leading to mainstreaming of IEM in development planning; and iii) mobilization of diverse stakeholders to support SLM at multiple scales, including community groups, civil society, private sector, and government agencies.

### ***Conclusion***

The period 2012-2013 has seen major progress and achievements with respect to GEF role in general as financial mechanism of the UNCCD, and more specifically in relation to GEF activities in the Land Degradation Focal Area. With the LDFA portfolio having a fairly significant number of projects covering a range of geographies, agro-ecologies, and thematic issues, the potential for achieving transformational impact through sustainable land management is now high for all affected regions. This presents a timely opportunity for GEF and UNCCD to strengthen collaboration for actions and innovations to more effectively monitor global environmental benefits and impacts at scale, as well as demands for targeted investments to scale-up the achievements beyond project sites.

## INTRODUCTION

1. The Land Degradation Focal Area (LDFA) is the GEF window for investing in projects and programs to combat land degradation, which directly supports the implementation of the UNCCD. The LDFA fosters synergetic benefits with the CBD, UNFCCC, and relevant international agreements on the sustainable use of international waters. It also contributes indirectly to the Non-Legally Binding Instrument (NLBI) on all types of forests of UNFF.
2. The goal of the LDFA is to contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation. This is accomplished by investing in projects that promote and support good practices conducive to sustainable land management (SLM), and that are able to generate global environmental benefits while supporting social and economic development at the local and national level. In addition, the focal area also supports the application of effective policies, legal and regulatory frameworks, capable institutions, knowledge sharing and monitoring mechanisms for advancing SLM.
3. The portfolio of projects and programs implemented under the LDFA strategy is based on the results-based management framework, which includes four objectives with target outcomes and outputs (see Annex 1). The GEF-5 strategy builds on the previous replenishment phase (GEF-4), but emphasizes the landscape approach as a means to foster synergies through SLM. All projects and programs are designed to contribute to the following agreed global environmental benefits and expected socio-economic benefits:
  - a) Agreed global environmental benefits:
    - Improved provision of agro-ecosystems and forest ecosystem goods and services.
    - Reduced GHG emissions from agriculture, deforestation and forest degradation and increased carbon sequestration.
    - Reduced vulnerability of agro-ecosystem and forest ecosystems to climate change and other human-induced impacts.
  - b) Expected national socio-economic benefits:
    - Sustained livelihoods for people dependent on the use and management of natural resources (land, water and biodiversity).
    - Reduced vulnerability to impacts of CC of people dependent on the use and management of natural resources in agricultural and forest ecosystems.
4. This report presents the status of the project and program portfolio for the Land Degradation Focal Area, covering the period July 2011 to June 2013. The last COP report for the period July 2009 to June 2011 coincided with the final year of GEF-4 and the first full year of GEF-5. Hence, it highlighted major achievements at close of GEF-4 and presented important

milestones for GEF-5, including the GEF and UNCCD relations in general, and specifically for the LDFA.

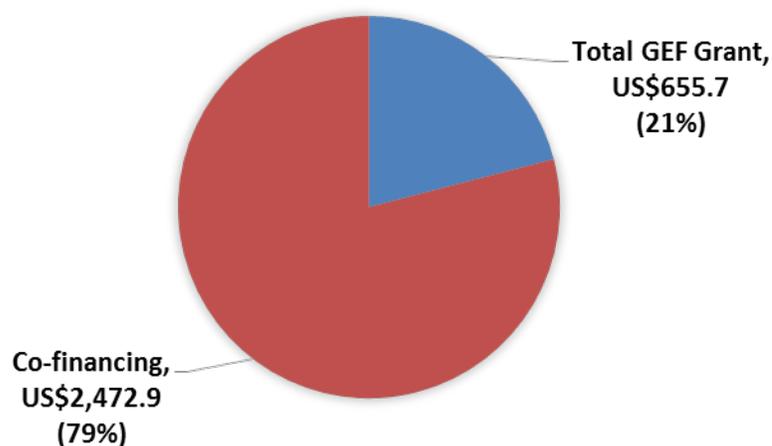
5. The present report covers the second and third full year of GEF-5 (FY2012 and FY2013), with a focus on programming of the GEF-5 resources under the LDFA and through other funding windows supporting sustainable land management (SLM). It also highlights activities related to SLM financing from other GEF funding windows, including multi-focal area projects with Biodiversity, Climate Change, and International Waters; core funding for the Small Grants Programme (SGP); the Least Developed Countries Fund and Special Climate Change Fund; and the Adaptation Fund. Details of programming trends are presented for focal area objectives, multi-focal area projects, and geographical regions.

6. In addition to the detailed synthesis on programming trends, the report also presents progress in the implementation of GEF-5 reforms, including utilization of the System for a Transparent Allocation of Resources (STAR) and financing for enabling activities under the UNCCD. A focal area synthesis of the GEF Annual Monitoring Report for FY2012 and FY 2013 is also presented, including achievements and emerging lessons from GEF projects implementation by eligible countries and partners around the world.

## STATUS OF GEF LAND DEGRADATION FOCAL AREA PORTFOLIO

7. The overall LDFA portfolio is characterized by projects utilizing GEF resources solely under the focal area (i.e. stand-alone projects) or in combination with resources from other focal areas (i.e. multi-focal area projects). During the reporting period, a total 101 projects were approved with funding from the LDFA. The total GEF grant for the projects amounted to US\$655.7 million, with an additional US\$2.47 billion in co-financing, offering a ratio of 1:4.12 (Fig 1). Of the total GEF grant, US\$200.3 million were LDFA resources utilized either as stand-alone focal area projects or through multi-focal area projects involving Biodiversity, Climate Change, International Waters, the Incentive Program on Sustainable Forest Management (SFM/REDD-plus), and the Small Grants Programme (SGP). The portfolio includes 41 stand-alone projects utilizing US\$61.3 million (31%) and 60 multi-focal area projects using US\$577.5 million from GEF resources, including US\$137.8 million (69%) of the LDFA resources programmed during the period. While the average amount for a LDFA stand-alone project is US\$1.5 million, it is US\$9.6 million for MFA projects. It is worth noting that every dollar of LDFA resources planned for multifocal projects was able to leverage US\$3.1 from other GEF focal areas.

**Fig 1. Total GEF grant and Co-Financing (in millions) for all projects utilizing LDFA Resources (2012-2013)**



### Programming Trends

8. The LDFA portfolio for the reporting period includes 76 full-sized projects, five (5) medium-sized projects, and 27 Enabling Activity projects. While all five (5) of the medium-sized projects are stand-alone projects utilizing US\$4.9 million of the focal area resources, only 14 of the full-sized projects were stand-alone projects amounting to US\$50.8 million (25.5%) of the total LDFA resources programmed during the reporting period. Enabling Activity projects accounted for US\$8.49 million of the LDFA resources. These trends are further elaborated in the

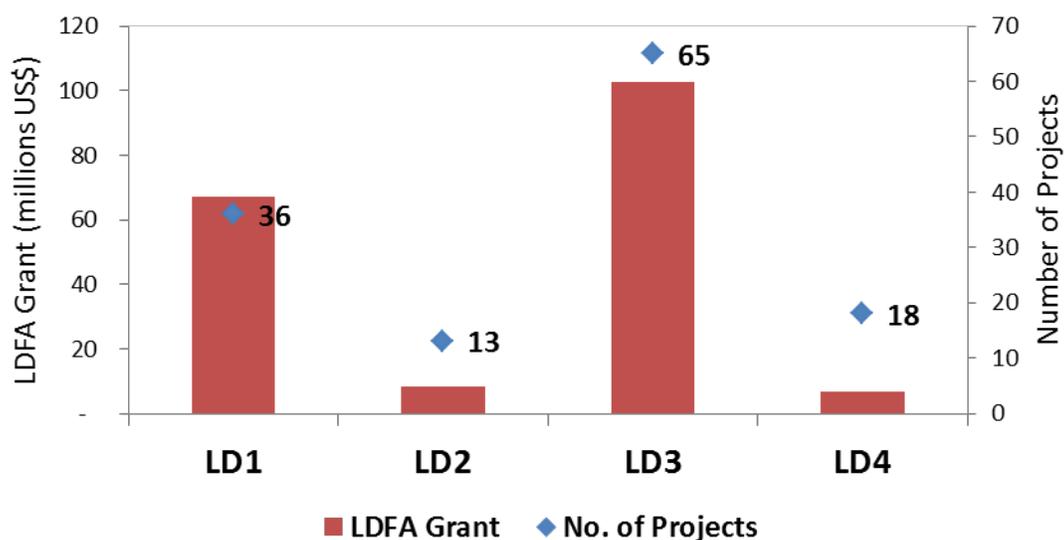
following paragraphs, including programming by LDFA objectives, regions, and in relation to other GEF focal areas and the SFM/REDD-plus incentive mechanism.

### Focal Area Objectives

9. The LDFA strategy for GEF-5 includes four objectives, which serve as guidance for programming of the focal area resources in accordance with the focal area mandate (see Annex 1). A total of US\$183.7 million (89.1%) of the focal area resources utilized during the reporting period was directed to these four objectives, with the remainder going toward project management costs and project preparation grants. Fig 2 shows the amount of resources utilized for each objective and number of projects involved.

10. Objective three (LD3), which focuses on achieving sustainable land management through integrated landscapes approaches accounted for the highest allocation with more than US\$100 million programmed through 65 projects. Objective one (LD1), which focuses on sustainable land management in agriculture and rangelands, also showed strong programming with US\$67 million of the LDFA resources allocated through 36 projects. The low programming for objective two (LD2) is likely due to the fact that while dryland forest landscapes are crucial for livelihoods and ecosystem resilience, their management is more directly linked to crop and livestock production (LD1) of integrated management of wider landscapes (LD3). Objective four (LD4) on adaptive management also showed relatively low programming because it was intended for enabling activities and cross-cutting activities to enhance focal area learning.

**Fig 2. Trends in programming of LDFA grants by GEF-5 focal area objectives**



### Multifocal-areas Programming

11. As previously indicated, the LDFA portfolio includes 60 multi-focal area projects and programs approved during the reporting period. A total US\$138.7 million of the focal area resources invested through multi-focal area projects leveraged US\$438.8 million from other

focal areas, including Biodiversity (US\$222.5 million), Climate Change (US\$139.01 million), International Waters (US\$22.04 million), and the SFM/REDD-plus incentive program (US\$55.2 million). The links with other focal areas is primarily based on potential for achieving synergies through integrated landscape management. This is consistent with the high programming of focal area resources in LD3, which serves as a framework for cross-focal area linkages to enhance multiple global environmental benefits, including increased landscape connectivity (BD), carbon sequestration and reduction of land-based emissions of greenhouse gases (CC-M), and reduced siltation and degradation of freshwater bodies and coastal areas (IW).

## Geographical Trends

12. The LDFA portfolio is represented by 65 countries distributed relatively evenly across all affected regions of the UNCCD – *Africa, Asia, Central and Eastern Europe (CEE), and Latin America and Caribbean (LAC)* (Table 1). For just these four regions, a total GEF Grant of US\$353.3 million, including US\$126.7 million (63%) of LDFA resources was programmed by individual countries for 87 projects during the reporting period. This trend suggests considerable progress by affected country parties to utilize GEF resources for combating land degradation due to desertification and deforestation. The remaining US\$301.3 million (including US\$72.5 million of LDFA resources) was programmed through eight (8) global and six (6) regional projects designed to invest in coordinated actions by multiple countries or address specific thematic issues for sustainable land management. The programming trends in specific geographical regions and scales are further described in this section.

**Table 1: Number of Projects and LDFA resources (USD millions) by geographical region and scale** (Note: Project numbers in this table include MSPs, FSPs, Programs, and Enabling Activities)

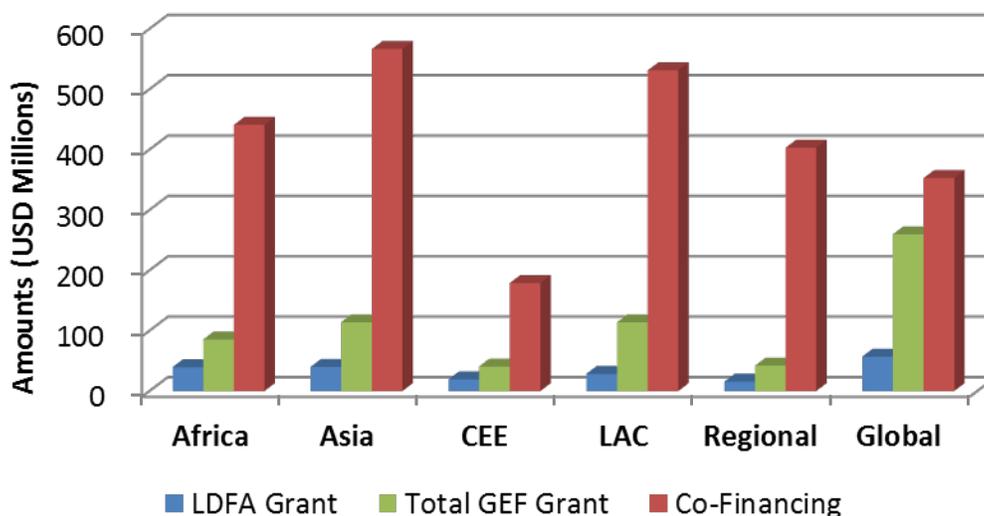
Region	No. of Projects	LDFA Grant	Total GEF Grant
Africa	24	39,458,742	85,233,915
Asia	28	40,355,976	114,479,690
CEE	20	19,538,417	41,039,656
LAC	22	28,446,527	113,687,642
Global	8	15,547,823	259,479,729
Regional	6	56,955,084	41,838,343
<b>Total</b>	<b>108</b>	<b>200,302,569</b>	<b>655,758,975</b>

13. A particularly consistent trend with programming is the high level of co-financing across all geographical regions and scales (Fig 3). In addition to leveraging resources from other GEF focal areas, the average co-financing ratio from other sources is 1:13.5, with the lowest in CEE (1:9.4) and the highest in LAC (1:18.9). Financing through global and regional initiatives also generates significant co-financing, with ratios of 1:26.8 and 1:6.2, respectively. These high levels of co-financing further reinforces the catalytic role of the LDFA in mobilizing resources for integrated and sustainable land management in the different regions.

## Africa Region

14. For the period covered by this report, the Africa region has programmed a total GEF grant of US\$85.2 million, including US\$39.4 million for 24 projects, leveraging US\$440.6 million in co-financing. This amount covers five (5) stand-alone LDFA projects, 14 multi-focal area projects, and one (1) Programmatic Approach.<sup>1</sup> A total of 18 countries designed individual projects further reinforcing commitment to implementing sustainable land management as a priority. The five (5) stand-alone LD projects are worth highlighting because they represent important milestones for the focal area in this region.

**Fig 3. Geographical breakdown of LDFA and Total GEF Grants for the period 2012 – 2013**



15. Three (3) of the projects involve countries that are programming LDFA resources for the first time targeting rangeland and livestock management. In Botswana (#4751), the project aims to increase vegetative cover on half a million hectares of rangeland for improved livelihoods through SLM in the Ngamiland District, and in the process aim at mainstreaming SLM in institutions, policies and markets in the livestock sector. In Angola (#4720), the government is focusing on the small-holder agro-pastoral sector in the South Western region to mitigate the impact of land degradation, and rehabilitate degraded lands by mainstreaming SLM. The project in South Africa aims to mainstream the SLM and the natural capital agenda in local planning and decision systems (see Box 1).

16. The other stand-alone projects involve Madagascar and Namibia, two countries with a longer history of implementing SLM projects. The Madagascar project (#5354) is an MSP focused on the Grassland Plateaus of Western Madagascar to reverse land degradation and improve livelihoods through participatory sustainable management of the grasslands. The project

<sup>1</sup> This is a Middle East and North Africa Regional Program that also includes Jordan.

in Namibia (#4832) aims to reduce pressure on forest resources and increase the productivity of the dryland ecosystems practices such as agroforestry that will protect soils and watersheds, provide livestock feed and shade, and improve carbon sequestration.

17. For multi-focal area programming, a particularly innovative initiative launched during the reporting period is the World Bank/GEF Middle East and North Africa Desert Ecosystems and Livelihoods Program (MENA-DELP, see Box 2). This program builds on commitment by countries in the region to focus on deserts as assets for sustainable development, and leverages resources from the LDFA and other focal areas to support country-specific efforts in this regard.

#### **Box 1 - Securing Multiple Ecosystems Benefit through SLM in South Africa**

The UNDP/GEF project on *Securing Multiple Ecosystems Benefit through SLM in the Productive but Degraded Landscapes of South Africa* is the first Land Degradation Focal Area stand-alone project in South Africa. This project is of particular significance because it complements the country's achievements in securing globally important biodiversity, and demonstrates an innovative approach to mainstreaming sustainable land management nationally. With a GEF Grant of US\$4.2 million and an additional US\$20.5 million in co-financing, the project will support the country's Green Economy agenda, including concrete activities on the ground to integrate SLM interventions at scale.

The project aims to provide long term SLM and livelihoods solutions in the Karoo, Olifants, and Eastern Cape, by scaling up and providing sustainability elements through knowledge, capacity, financing, and governance. It will leverage four existing baseline initiatives - *LandCare Program*, *Working for Water*, *Thicket restoration*, and the *Drylands Fund* – that together contribute significant co-financing and ensure long-term sustainability of outcomes. The project will ultimately lead to increased and sustained productivity in the target landscapes, advance the local level green economy, and reduce vulnerability to effects of land degradation for more than 100,000 households.

#### **Asia Region**

18. With 28 projects and programs and a total GEF investment of US\$114.4 million, including US\$40.3 million from the LDFA, Asia emerged strong in the portfolio for the reporting period. The cohort of projects in this region comprises twelve (12) LDFA stand-alone projects, seven (7) multi-focal area projects, and nine (9) SFM/REDD-plus projects. Five (5) of the stand-alone LDFA projects are full-sized projects accounting for US\$19.9 million, which is 50% of the total programmed during the reporting period. Four of the countries with stand-alone projects have previously implemented sustainable land management projects with GEF resources, but Samoa is doing so for the very first time and utilizing all of its country allocation under the STAR for this purpose. A particularly noteworthy stand-alone project in this region is the UNDP/GEF *Lebanon Sustainable Land Management in the Qaroun Watershed* project (#5229), which is a model of how the challenge of watershed degradation can be addressed through sustainable land management (Box 3).

## **Box 2 - Desert Ecosystems and Livelihoods in North Africa**

The desert ecosystems are major assets for sustainable development in the North Africa and Middle East region. But maintaining the capacity of desert ecosystems to provide goods, services and livelihoods in an integrated manner requires multi-scale engagement by countries in the region. This will ensure underpin the long-term prospects of development in fragile deserts at local, national and regional levels. It is on this basis that countries in the region proposed a programmatic approach with the GEF and World Bank that will both support country-specific efforts and foster regional cooperation on the desert ecosystems.

The *Middle East and North Africa Desert Ecosystems and Livelihoods Program (MENA-DELP)* aims to contribute to the enhancement of livelihoods in desert ecosystems by harnessing their value in an environmentally and socially sustainable manner so that the flow of desert goods and services can be optimized. The program involves three North African Countries (Algeria, Egypt, and Morocco) and Jordan in the Middle East, and draws on GEF resources from the Biodiversity, Land degradation, and Climate Change focal areas amounting to US\$21.2 million, with an additional US\$226.2 million in co-financing. The Government of Algeria also leveraged resources from the Special Climate Change Fund (SCCF) to invest in new ways to help sustain and improve desert livelihoods and diversify economic activities.

The individual country projects under the program will build on investments in different production sectors and enhance their sustainability through an integrated ecosystem management approach. For example the *Social and Integrated Agriculture project (ASIMA)*, in Morocco designed under MENA-DELP is linked directly to the country's flagship "Plan Maroc Vert," which is the country's agricultural strategy for the period 2008-2020, aiming to double the sector's value-addition. GEF financing will enable the government to pilot land and biodiversity conservation measures in the targeted marginal areas of Souss-Massa-Draa and Marrakech-Tensift-Al Haouz regions, for which a sub-project under ASIMA will be designed to complement the PMV investment. Small farmers will benefit from conservation measures with reference to selected agri-food chains typical of marginal areas. Hence the project will allow the government to further leverage the PMV in an environmentally sound way.

A separate regional MSP with US\$1 million from the LDFA will facilitate knowledge exchange and integration among the participating countries. It will also create the foundation for future engagement of other countries in the region, so that the challenges and opportunities associated with desert ecosystems are increasingly addressed through regional cooperation.

### **Box 3 – Sustainable Land Management in a threatened Watershed in Lebanon**

Through the UNDP/GEF project on *Sustainable Land Management in the Qaroun Watershed*, the Government of Lebanon is seeking to reduce and arrest land degradation in an area that is critical for urban water supply and food production. Despite its national significance, the 1,570 km<sup>2</sup> Qaroun watershed suffers from accelerating land degradation, which is undermining ecosystem functions and services. The project will promote an integrated approach towards fostering SLM to balance environmental management with development needs.

Amongst other things, it will set-up a multi-sector planning platform to balance competing environmental, social and economic objectives in district development plans and associated investments. In doing so, it will reduce conflicting land-uses and improve the sustainability of land management so as to maintain the flow of vital ecosystem services and sustain livelihoods of local and downstream communities. The GEF grant will help to bring at least 157,000 hectares under SLM, leading to improved vegetative and forest cover, reduced erosion rates, and increased land productivity, while benefiting local farmers and herders in four districts.

19. The projects and programs in Asia mainly address Objective 3 of the LDFA strategy for GEF-5, which invests in *reducing pressures on natural resources from competing land uses in the wider landscape*. The projects predominantly use an integrated landscape management approach to project implementation, which facilitates the scaling-up of SLM innovations. A number of projects also addresses Objective 2 of the LDFA strategy, which *generates sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependent people*, for example through the projects in Kyrgyzstan (#4761), Mongolia (#4744), China (#4633), and Pakistan (#4754), with the first two projects being SFM/REDD-plus projects.

### **Box 4 - Sustainable Land Use Management in the Semi-arid Region of North-East Brazil**

The Government of Brazil has previously leveraged GEF resources to combat desertification in the Cerrado and associated production systems, yet a fundamental barrier to implementing sustainable land management nationally is the land use policy and governance framework, especially at the State level. The UNDP/GEF project *Sustainable Land Use Management in the Semi-arid Region of North-East Brazil* focuses on the State of Sergipe, and will build on lessons and experience from previous States to advance SLM in areas susceptible to desertification.

The GEF grant of US\$3.8 million leverages an additional US\$16.9 million from planned and existing investments by the National and State Government to implement the State Action Plan to Combat Desertification. An innovative aspect of the project is to capitalize on existing national and state commitment to addressing poverty reduction and drought mitigation. Consequently, SLM will be mainstreamed as a tool for enhancing sustainability, while empowering local land users to implement appropriate interventions on the ground with environmental and socio-economic benefits. The land governance framework and commitment by the national and state governments will ensure that successes and gains are sustained, with potential for scaling up to other affected areas.

## *Latin America and Caribbean Region*

20. The LAC region is well represented in the LDFA portfolio for the reporting period, with 22 projects accounting for a total GEF grant of US\$113.6 million, including US\$28.2 million of the LDFA resources. However, only two (2) of the projects are full-sized stand-alone LDFA projects with one in Argentina (#5044) and the other in Brazil (#5276), which together utilized only US\$7.5 million of the focal area resources. These are the same two LAC countries with a strong track record of programming GEF resources to combat land degradation in the drylands. The Brazil project is noteworthy because it focuses on a dryland region in the North-western State of Sergipe, where the ecosystem and livelihoods are threatened by land degradation (see Box 4). The project in Argentina also reflects a shift by the country from rangelands to dryland forest landscapes where desertification is also a challenge. The other stand-alone LDFA projects are Enabling Activity requests from countries such as Honduras, Uruguay, and Panama that do not have such a track record.

21. Multi-focal areas projects account for most of the LDFA resources programmed by countries in the LAC region. These projects largely addressed Objective three (LD3) of the focal area strategy, and leveraged US\$17 million of the SFM/REDD-plus incentive to enhance integrated management of forest landscapes at scale. A particularly notable project is the FAO/GEF multi-Trust Fund project on *Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification in Vulnerable Provinces in Ecuador*. This project combines US\$3.87 million of GEF Trust Fund resources with US\$1.47 million from the Special Climate Change Fund for an integrated approach to increase multiple benefits needed in the livestock sector in Ecuador. It is particularly innovative because it seeks to harness the synergies between SLM, climate change mitigation, and climate change adaptation. Climate-smart livestock management (CSLM) integrates both climate change adaptation and mitigation practices in the agro-livestock sector while enhancing the achievement of national food security and development goals. The GEF financing will support interventions to reduce soil degradation, increase adaptive capacity to climate change, and mitigate GHG emissions by implementing cross-sectorial policies and climate-smart livestock management with emphasis on vulnerable provinces.

## *Central and Eastern Europe Region*

22. Countries in the **Central and Eastern Europe (CEE)**<sup>2</sup> region programmed a total GEF grant of US\$41.0 million, including US\$19.5 million from the LDFA, leveraging US\$178.8 million in co-finance. The cohort of projects comprises 11 LD stand alone, three (3) multi-focal area projects, and three (3) SFM/REDD-plus projects. Several projects play a strong role in promoting innovation in the agricultural sector as well as in cross-sectorial issues. A notable example is the *Agriculture Competiveness Project* in Moldova (#4630), which supports reforms

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<sup>2</sup> GEF data include Albania and Turkey (Northern Mediterranean) in the CEE region.

aimed at enhancing export competitiveness, facilitating market access for farmers, and supporting agricultural business development through consulting and training. GEF investments will contribute toward regulatory and institutional support, as well as capacity building for sustainable land management.

23. The projects in CEE are mainly addressing Objective one (LD1) of the LDFA strategy, which *maintains or improves the flow of agro-ecosystem services sustaining the livelihoods of local communities*, with an exemplary project in Turkey (#4583) on sustainable land management and climate-friendly agriculture (Box 5). These projects are targeted at production systems, with an emphasis on improving soil, water and vegetation management to enhance flow of ecosystem services that underpin agricultural and livestock productivity, hence contribute to maintenance or improvement in flow of ecosystem services in agricultural and livestock production systems, and forest production landscapes.

#### **Box 5: Environmental Land Management and Rural Livelihoods Project in Turkey**

This FAO/GEF multi-focal area approach (GEF Project Grant: US\$5.7 million; co-financing: US\$21.3 million) aims at improving sustainability of agriculture and forest land use management through the diffusion and adoption of low-carbon technologies, with win-win benefits for climate change and biodiversity conservation, and increased farm profitability and forest productivity.

The project will be implemented in Central Anatolia, with most activities focused on the Konya Closed Basin. The basin encompasses production landscapes, wetlands, water bodies, and important natural sites with high ecological value. GEF financing will generate global environmental benefits through implementation of conservation agriculture on 50,000 ha, the rehabilitation of 20,000 ha of degraded forest lands, and improved rangeland management on 30,000 ha. In addition, natural habitats essential for threatened biodiversity will be secured in 80,000 ha of production landscapes.

### **Regional and Global Programming**

24. During the reporting period, US\$56.9 million and US\$15.5 million, respectively, were programmed through six (6) regional and eight (8) global projects. Although GEF resources are largely utilized by countries through discrete projects to support their country-driven priorities, these regional and global projects are crucial for implementing coordinated efforts involving specific regions or multiple countries. They also enable the GEF to address specific thematic or cross-cutting issues that are crucial for advancing focal agendas beyond national boundaries. Global programming is also used to facilitate efficient use of GEF resources for the Small Grants Program, which is now widely embraced by GEF eligible countries.

25. An important regional flagship for the reporting period is the UNDP and UNEP project on *Implementing Integrated Land Water and Wastewater Management in Caribbean SIDS* (#4932), which involves Antigua and Barbuda, Barbados, Cuba, Dominican Republic, Grenada, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines. This regional project

programs resources from the country allocations under BD (US\$8.5 million) and LD (US\$2.5 million) focal areas, and leverages additional US\$9.5 million from the IW focal area and US\$2.9 million from the SFM/REDD-plus incentive to implement a "ridge to reef" framework for addressing the multiple challenges of sustainable water, land, forests and biodiversity management and conservation. Building on previous GEF efforts in the region, the project will continue cross-sector reforms to protect essential ecosystem services and support their replication through the region. The combination of country-level actions and regional approaches for natural resource management will likely trigger transformational changes in the agriculture and forest sectors and land-use planning.

26. Among the global projects, the FAO/GEF *Decision Support for Mainstreaming and Scaling-up of Sustainable Land Management* (#4922) is worth highlighting because of its potential role for advancing sustainable land management globally. The project draws exclusively on LDFA resources, including focal area allocations from 15 countries to implement national level actions for advancing SLM to combat land degradation. It builds on previous GEF efforts to facilitate scaling-up of investments and interventions through increased access to knowledge and tools. This includes resources to effectively diagnose the land degradation problem and its impacts, and tools to understand how ecosystem services can be more efficiently enhanced in production systems. The FAO as lead GEF Agency will harness existing global networks (e.g. the World Overview of Conservation Agriculture Technologies) and regional initiatives (e.g. the Great Green Wall Initiative of Sahel and Sahara) to inform policies and investments at country-level. A particularly innovative aspect is the potential for strengthening regional level integration by linking affected countries with long history of GEF investments in SLM (e.g. Argentina, China, Lesotho, and Tunisia) with those that have not previously designed any GEF projects to combat land degradation (e.g. Bangladesh, Bosnia and Herzegovina, Panama, Philippines, Thailand, and Turkey) .

### ***Small Grants Program***

27. The GEF SGP plays an important role in helping countries to mobilize civil society in the implementation of the conventions for which the GEF serves as financial mechanism. In this regard, it is worth highlighting the extent to which the LDFA resources have been programmed by countries during the reporting period. By using global projects for the SGP, UNDP as lead GEF Agency can effectively support implementation across multiple eligible countries in all affected regions. Although several countries received a SGP core allocation, three (3) global projects were developed to program more resources from STAR allocations. The projects programmed a total of US\$246.6 million of GEF resources for 85 countries, utilizing a total of US\$76.9 million from the country allocations under the STAR. Fifty (50) of these projects utilized a total US\$19.2 million of their LDFA allocations. These resources will provide grants to civil society organizations, community-based organizations, and indigenous groups to support sustainable land management activities. The LDFA resources were mostly allocated to objective

one (LD1) and objective three (LD3) of the focal area strategy, to support improved integrated management of agro-ecosystems and production landscapes where deterioration of ecosystems services and goods undermines the livelihoods of grassroots communities.

## **SUSTAINABLE LAND MANAGEMENT AS A CROSS-CUTTING AND SYNERGISTIC ELEMENT IN OTHER GEF FUNDING WINDOWS**

28. In addition to LDFA stand-alone and MFA activities, investments in SLM also benefited from other funding windows during the reporting period. Because of their emphasis on production systems and vulnerability of human livelihoods, three major funding windows focused on climate change adaptation are particularly invaluable in the context of UNCCD. The GEF recognizes that adaptation programs should not operate in a vacuum. For example, the need to address impacts from drought and floods can be pursued through integrated land and water resources management with multiple benefits. Such integrated approaches will have significant beneficial impacts on community livelihoods, food security, and a high potential to sequester carbon. Therefore, GEF eligible countries focusing on activities to combat land degradation (desertification and deforestation) can take full advantage of synergies with climate change adaptation, and advance climate-resilient SLM with resources from the adaptation funds being managed by the GEF: the *LDCF and SCCF* under the UN Framework Convention on Climate Change (UNFCCC), and the *Adaptation Fund* under the UNFCCC's Kyoto Protocol.

### **SLM opportunities in the LDCF/SCCF for Climate Change Adaptation**

29. The GEF adaptation strategy has three overarching objectives: (i) reduce vulnerability (ii) improve adaptive capacity to address the impacts of climate change, including variability, and (iii) promote the transfer and adoption of adaptation technology. The GEF is currently managing two independent funds, established under the UNFCCC with a priority on adaptation: the LDCF and SCCF. The LDCF is aimed at addressing the special needs of the Least Developed Countries (LDCs) under the UNFCCC. Adaptation has been identified as the most relevant issue, and the fund is specifically designed to support projects addressing the urgent and immediate adaptation needs of LDCs. This includes reducing the vulnerability of those sectors and resources that are central to human and national development, such as water, agriculture and food security, health, disaster risk management and prevention, and infrastructure, as identified and prioritized in their National Adaptation Programmes of Action (NAPAs).

30. The SCCF is designed to finance activities, programs and measures related to climate change that are complementary to those funded by GEF under the climate change focal area, in the areas of: (a) adaptation to climate change; (b) technology transfer; (c) selected sectors including Energy, Transport, Industry, Agriculture, Forestry and Waste Management; and (d) economic diversification. Among these four financing windows, adaptation has the top priority. All developing country parties to the UNFCCC are eligible to receive financial support for adaptation interventions to be integrated into development activities. Projects proposed under this fund target adaptation activities under priority areas of intervention as identified by the UNFCCC, such as water resources management, land management, and agriculture. The SCCF also supports capacity building, including institutional capacity, for preventive measures,

planning, preparedness and management of disasters relating to climate change, including contingency planning particularly for droughts and floods in areas prone to extreme weather events.

31. During the reporting period, 31 projects were financed under the LDCF with links to production systems. The projects involve 22 countries, utilized a total of US\$181.2 million and leveraged an additional US\$734.4 million in co-financing. Regionally, 16 of the countries are in Africa, with Lesotho having three (3) projects, and Burkina Faso, Malawi, Mali, Niger and Rwanda each having two (2) projects. Five of the countries (Afghanistan, Bangladesh, Cambodia Nepal and Yemen) are in the Asia region, with Nepal having two (2) projects. Haiti was the only country in the LAC region with an LDCF project during the reporting period. The project in Haiti - *Increasing Resilience of Ecosystems and Vulnerable Communities to Climate Change and Anthropic Threats through a Ridge to Reef Approach to Biodiversity Conservation and Watershed Management* (#5380) and one in Rwanda - *Landscape Approach to Forest Restoration and Conservation* (#4952) combined LDCF and GEF Trust Fund resources to maximize potential for synergies at scale.

32. Twelve (12) projects linked directly to natural resource management were financed under the SCCF for a total of US\$56.8 million, leveraging an additional US\$570.7 million in co-financing. Nine (9) of the projects were single-country investments from Namibia and Zimbabwe in the Africa region; Colombia, Ecuador, and Honduras in LAC; India and Lebanon in the Asia region; and Georgia and Moldova in CEE. In addition to the single-country projects, the SCCF resources were also utilized through three multi-trust fund regional programs: *MENA - Desert Ecosystems and Livelihoods Program*(#4620); the *Greater Mekong Subregion Forests and Biodiversity Program*(#4649); and the *Rural Livelihoods Adaptation to Climate Change in the Horn of Africa* (#5228).

33. A particularly notable project is the *FAO/GEF Promotion of Climate-smart livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces* in Ecuador (#4775), which combined SCCF and GEF Trust Fund resources for a multi-trust fund investment to harness synergies between sustainable land management, climate change mitigation, and climate change adaptation. Through the project, the Government of Ecuador will implement Climate-smart livestock management (CSLM) to address land degradation and climate change in its livestock sector. The approach integrates both climate change adaptation and mitigation practices in the agro-livestock sector, and supports the development of sectorial policies aimed at combating desertification and reducing land degradation, while enhancing the achievement of national food security and development goals. The overall GEF financing will support interventions to reduce soil degradation, increase adaptive capacity to climate change, and mitigate GHG emissions by implementing cross-sectorial policies and climate-smart livestock management, with emphasis on vulnerable provinces. The SCCF grant would contribute towards the development of CSLM and its integration across existing land-use and development plans; as well as the transfer of relevant

adaptation technologies and practices, particularly drought or flood-tolerant grass species, rotational grassland management systems, and efficient use of rainwater.

**Box 6. Developing agro-pastoral shade gardens as an adaptation strategy for poor rural communities in Djibouti**

Djibouti has an arid and semi-desert climate, which makes it highly sensitive to drought and water scarcity. Changing climate patterns are affecting livelihoods of pastoral and farming communities, who are growing poorer with every season, being unable to water their crops, cattle and provide adequate drinking water for themselves and their families. Severe drought can result in families losing their entire herd or crop, often forcing them to migrate to cities in search of new livelihoods.

With an Adaptation Fund grant of US\$4.7 million through the UNDP, Djibouti is implementing *Developing agro-pastoral shade gardens as an adaptation strategy for poor rural communities* project to improve the resilience of rural communities to recurrent climate change induced droughts. The project specifically targeted communities of Grand and Petit Bara to help them develop adaptive capacity and embark on climate resilient economic development. The communities are working to develop alternative agro-pastoral practices that would alleviate environmental pressures, help them preserve their land, and ensure adequate water supply.

### SLM synergies through the Adaptation Fund

34. The Adaptation Fund has been established by the Parties to the Kyoto Protocol of the UNFCCC to finance concrete adaptation projects and programmes in developing countries that are Parties to the Kyoto Protocol. The Fund is financed with 2% of the Certified Emission Reduction issued for projects of the Clean Development Mechanism and other sources of funding. The GEF provides secretariat services to the Adaptation Fund Board on an interim basis in order to support and facilitate its activities.

35. The Adaptation Fund is strongly based on the principle of country-drivenness. There are no prioritized sectors or approaches but all project proposals have to be in compliance with national sustainable development strategies, including adaptation strategies. If such strategies include SLM among national adaptation priorities, SLM projects are eligible for Adaptation Fund financing within the country. The Strategic Results Framework of the Fund, which all Adaptation Fund projects should be aligned with, includes several expected outcomes and outputs that are also relevant to SLM projects, such as increased adaptive capacity within relevant development and natural resource sectors, increased ecosystem resilience in response to climate change and variability-induced stress, and diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas. The Fund also acknowledges the increasing burden imposed by climate change on the most vulnerable communities in the world, and gives special attention to their particular needs (e.g. Box 6). Because of the emphasis on vulnerable countries and communities, the potential for linking SLM priorities with climate

change adaptation offers a major opportunity for win-win outcomes in countries affected by Desertification Land Degradation and Drought (DLDD).

36. During the GEF reporting period, 18 projects were financed under the Adaptation Fund with direct links to sustainable land management. The projects involve 17 countries for a total grant of US\$123.7 million. The countries include Djibouti, Egypt, Madagascar, Mauritania, Mauritius, and Tanzania in the Africa region; Cambodia, Cook Islands, Lebanon, Papua New Guinea, and Sri Lanka in the Asia region; Georgia in the CEE region; and Argentina, Colombia, Jamaica, and Samoa, and Uruguay in the LAC region.

## PROGRESS WITH GEF-5 PROGRAMMING REFORMS

37. GEF-5 introduced several important reforms to strengthen country ownership and improving effectiveness and efficiency of the GEF Network. The reforms added new opportunities for GEF role as financial mechanism of the UNCCD, especially in the following areas: *i) an improved resource allocation system; ii) financing for Enabling Activities under the Convention; iii) an incentive financing mechanism for SFM/REDD-plus that covers all types of forests.* This section of the report highlights trends in programming to demonstrate how countries have responded to the reforms. In addition, it also presents detailed trends with respect to objectives the Land Degradation Focal Area.

### Progress in Overall Programming of LDFA Resources

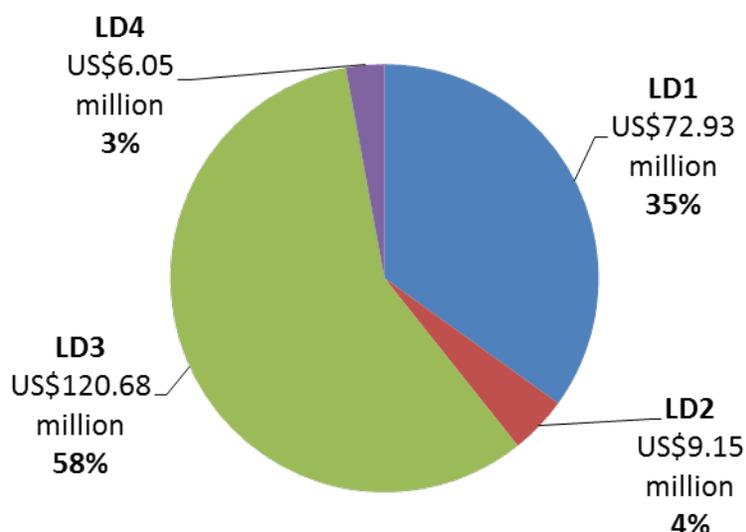
38. Of the total US\$385 million allocated to the LDFA during GEF-5, US\$260.1 (67.5%) million has been programmed through June 30, 2013 (Table 2). This amount covers all grants utilized by countries through stand-alone LDFA projects, multi-focal area projects, enabling activities, and the Small Grants Program. In addition, it also includes investments through global and regional projects designed to support country-level actions on sustainable land management.

Table 2: Status of LDFA Resources for GEF-5 (US\$ millions) as of June 2013

Total LDFA Allocation	Amount Programmed	% of Allocation Utilized
385.00	260.01	67.5

39. About US\$208 million (80%) of the total programmed to date will be directed toward implementation of the four LDFA objectives for GEF-5. Objective three (LD3) accounts for the highest proportion of focal area resources, with 58% of the total programmed to date (Fig 4). This reinforces the importance of this objective for countries to leverage other GEF focal areas and the SFM/REDD-plus incentive through multi-focal area projects. Objective one (LD1), which focuses on agricultural and rangeland systems accounts for US\$72.9 million (35%) of the resources. Objective two (LD2) and Objective four (LD4) each accounted for less than 5% of the total programmed. Based on indicative amounts allocated to each objective at start of GEF-5, these trends suggested that countries are on track with programming the focal area resources. However, LD1, which is expected to utilize up to US\$200 million of the focal area allocation will likely fall short of this indicative target.

**Fig. 4. Programming of GEF-5 LDFA resources by Focal Area Objectives** (Note: Grant amounts exclude Agency Fees and Project Management Costs)



### Progress in utilization of the System for Transparent Allocation of Resources

40. The System for Transparent Allocation of Resources (STAR) was introduced as an improved system for allocating GEF resources to eligible countries. It was intended to serve as an effective means for promoting priority-setting and strategic programming of GEF resources by eligible countries. The STAR covers LDFA, along with Biodiversity and Climate Change, and provided indicative allocations for LDFA for a total of US\$324 million for 143 countries in GEF-5 to use in activities related to combating land degradation and desertification. The STAR introduced an allocation floor of US\$0.5 million, and an allocation ceiling of US\$40.5 million, for the LDFA. The STAR allows for varying levels of flexibility in how countries utilize their resources - certain countries<sup>3</sup> can use the total of their allocations across all and any other focal areas during GEF-5 cycle.

**Table 3. Cumulative Utilization of STAR by Focal Area (through June 2013)**

Focal Area	Allocation (US\$ millions)	Utilization (US\$ million)	Share Utilized (%)
Biodiversity	968	759.45	78
Climate Change	1088	747.81	69
Land Degradation	324	245.82	76
<b>Totals</b>	<b>2380</b>	<b>1753.09</b>	<b>74</b>

<sup>3</sup> These are countries receiving a total indicative allocation of US\$7 million or less in the three focal areas of biodiversity, climate change, and land degradation.

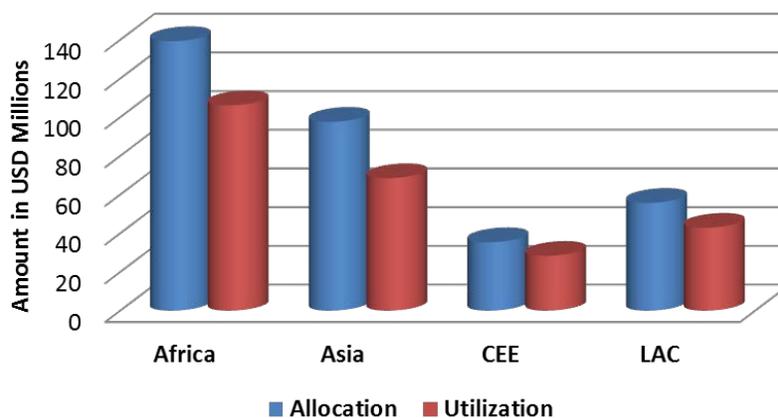
41. Through June 2013, US\$245.8 million (76%) of the total LDFA allocation has been utilized by countries (Table3). Of the 143 countries with LDFA allocations, only five (5) have not submitted any project to-date utilizing the STAR. They include Republic of Congo, Dominica, Democratic People’s Republic of Korea, Libyan Arab Jamahiriya, and Turkmenistan. For the 63 countries with less than or equal to US\$7 million total in the STAR, 60 projects have now utilized some or all of their allocations either for a single stand-alone focal area or a multi-focal area project. Samoa (see Box 7) and Tajikistan are the only two countries that exercised their eligibility under the flexibility rule to utilize their entire STAR allocation for a single project under the LDFA. Other flexible countries, including Comoros, Djibouti, Equatorial Guinea and Swaziland in Africa; Croatia, Montenegro and Serbia in CEE; and Guyana in LAC also exercised their eligibility but chose to do so for projects under the Biodiversity or Climate Change focal areas.

**Box 7 - Multi-sectoral Management of Critical Landscapes in Samoa**

The UNDP/GEF project *Strengthening Multi-sectoral Management of Critical Landscapes* combines Samoa’s STAR resources under the flexibility criterion into a stand-alone LDFA project combat land degradation and improving efficiency of multi-sectoral management at landscape level. This is the first time a SIDS addresses land degradation issues in an integrated way through a full-sized project. The project builds consistently on previous and ongoing initiatives in Samoa, which have laid the foundation for further up-scaling of SLM at the landscape level.

The GEF grant of US\$5 million leverages an additional US\$40 million for SLM interventions covering 80,000 hectares of production landscapes, including forest management interventions. Project activities will be based on community-based land use plans to be designed in a participatory manner. GEF support will lead to global environmental (e.g. increased vegetative cover in agro-ecosystems, increased carbon sequestration) and local socio-economic benefits through improved livelihoods.

**Fig 5. Progress in Programming of LDFA Country Allocations by Region (through June 2013)**



42. Progress in utilizing the LDFA allocations has exceeded 70% in all regions, with the CEE region showing the highest at 80%, and Africa and Asia at 76% (Fig 5). For flexible countries that have utilized some of their STAR allocation, three (3) countries each in Africa (Cape Verde, Central Africa Republic, Lesotho) and LAC (Barbados, El Salvador, Trinidad and Tobago), and two (2) in CEE (Georgia, Serbia) still have US\$2 million of their LDFA allocation remaining. In the Africa region, eight (8) of the 29 non-flexible countries have utilized 100% of their LDFA allocations. In the Asia region, eight (8) non-flexible countries have utilized or are all close to utilizing 100% of their LDFA allocation, while four (India, Indonesia, Iran, Kazakhstan, and Syria) have more than US\$3 million each remaining. In the LAC region, Argentina, Chile, Costa Rica, Guatemala, Honduras, and Jamaica are the non-flexible countries with 100% utilization of the LDFA allocations.

43. These trends suggest that the STAR has strongly influenced the engagement of countries across all affected regions in utilizing GEF resources to combat land degradation. At the same time, there is considerable variation in the extent to which countries program the LDFA resources, which is largely driven by individual needs and priorities for implementing the conventions for which the GEF serves as financial mechanism.

### **Enabling Activities**

44. For the first time ever, all GEF eligible and affected country Parties to the UNCCD were given the opportunity to access GEF resources for enabling activities to support implementation of the Convention. Based on consultation with the UNCCD Secretariat, the GEF financing was exclusively for activities related to alignment of National Action Programs (NAPs) with the 10-Year Strategy and for reporting and review process. Three modalities were put in place by the GEF Secretariat for accessing the funds: (i) Direct Access with the GEF Secretariat, (ii) through a GEF Agency or (iii) through an umbrella project to be developed with a GEF Agency.

45. During the reporting period, 101 of 144 eligible countries had requested GEF resources through one of the three modalities. The total LDFA resources requested by all countries through the three modalities is US\$8.49 million, with about 70% for activities to support NAP Alignment and only 30% related to Reporting and Review Process. Of the remaining 43 countries, seven (7) are in Africa, 17 in Asia, four (4) in CEE, and 15 in LAC. The following paragraphs briefly highlight trends for each of the three modalities as used by the countries.

### **Direct Access Modality**

46. For the Direct Access modality, 11 countries initiated the process with a total request of US\$1.49 million. During the period under reporting, only six (Armenia, Bangladesh, Bhutan, India, Jordan, and Kyrgyz Republic) of the countries have so far successfully met all the requirements for disbursement of funds. Requests from China, Ecuador, and Trinidad and Tobago were still under process at time of preparing this report, while that from Antigua and Barbuda was officially withdrawn by the designated government agency. As approved by

Council in June 2010, the Direct Access modality operates according to World Bank operational policies and procedures for small grants. While the GEF CEO has been granted authority by the World Bank President to sign grant agreements with the recipient countries, mandatory World Bank requirements must be met by the designated Government Agencies. The procedure for these turned out to be complex and time consuming, resulting in an average duration of 8-12 months for the seven (7) countries that successfully completed the process (Table 4).

**Table 4 - Average Duration of Direct Access Modalities relative to Stages of Processing and Location of Responsibilities** (Diagram below Table)

Technical review and clearance of proposal by the GEF	World Bank Financial Management and Procurement Assessment	World Bank clearance from Disbursement, Accounting and Legal	Grant agreement signing by GEF CEO	Grant agreement countersigning by Government	First Disbursement of Grant Funds
20 Days	6 Months	Two weeks	One Week	2 Months	1 Month



### **GEF Agency Modality**

47. Eighteen (18) countries successfully opted for the GEF Agency modality, with FAO (3), UNEP (11) and UNDP (4) as the GEF Agencies involved. A total of US\$3.1 million was requested through this modality, with US\$2.3 million for NAP Alignment and US\$0.8 million for Reporting. As far as the average GEF Secretariat turnaround time is concerned, requests submitted under this modality is similar to the Direct Access modality, averaging about 20 days. The period before submission of the proposal to the GEF Secretariat and after approval depends entirely on interactions between the country and the GEF Agency. Once the request is approved by the GEF CEO, the GEF Agency is in position provide direct support to the country for implementation of the enabling activities.

### **Umbrella Project Modality**

48. UNEP as GEF Agency also accepted to prepare umbrella projects for eligible countries that did not wish to consider the other two modalities. Two such projects (#4829 and #5136) were approved during the period under reporting, with endorsements from 72 countries for a total grant of US\$3.8 million. Through the projects, UNEP will make available US\$50,000 to each of the 72 eligible countries in accordance with individual country priorities for NAP Alignment and Reporting. UNEP also agreed to provide a “Help Desk” that will support countries with implementation and delivery of outcomes as appropriate.

49. Following the proposed streamlining process of the project cycle approved by the Council in November 2012, umbrella projects for enabling activities are further streamlined by an expedited CEO endorsement process. Starting from January 2013, after Council approval of an enabling activity umbrella project, a CEO endorsement letter will be sent automatically without going through a CEO endorsement request process. This is processed under the assumption that the Council did not provide major comments that require revision of the project.

### **SFM/REDD-plus<sup>4</sup> Incentive Mechanism**

50. As part of the fifth replenishment, the GEF strengthened its focus on forests by expanding a financial incentive mechanism pioneered in GEF-4. For this purpose, the GEF created a separate US\$250 million funding envelope operated as an incentive mechanism for eligible countries willing to combine significant fractions of their STAR allocations from Biodiversity, Climate Change and Land Degradation for more comprehensive SFM/REDD-plus projects and programs. The LDFA contributed US\$ 20 million to the SFM/REDD-plus Program to enable countries leverage investments for improving ecosystem services in forest production landscapes. The incentive program also enables the GEF to advocate a landscape approach, which embraces ecosystem principles as well as the connectivity between ecosystems. This is consistent with Objective 3 of the LDFA Strategy, which emphasizes the need to reduce pressure from competing land uses.

51. Of the 60 multi-focal area projects in the LDFA portfolio for this reporting period, 36 leveraged funding from the SFM/REDD-plus incentive program, amounting to US\$55.3 million. As expected, the projects were designed to improve conservation and sustainable use of forest landscapes through integration of sustainable land management interventions. When linked to biodiversity, the focus is on buffer zones or corridors of protected area landscapes, such as in projects in Malawi, Zambia, Laos, Colombia, and Peru. Watershed approaches are also used to enhance integrated management of forests in production landscapes, and feature predominantly in the projects from Mexico and Burundi. Forest restoration projects specifically target practices that increase forest and tree cover in landscapes, such as in Rwanda, Myanmar, and the Kyrgyz Republic, with the latter two specifically addressing dryland forests.

52. The Africa region also accounts for 14 of projects using the SFM/REDD-plus incentive, with projects covering a range of important interventions to combat land degradation from integrated natural resource management in the landscape, river basin approaches; or forest protection within a landscape approach. The LDFA resources are used to reinforce capacities and planning mechanisms at regional or local levels, and implement sustainable land management interventions (e.g. conservation agriculture, agroforestry, etc.) to reduce soil erosion, improve soil fertility, and increase land productivity.

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<sup>4</sup> REDD-plus: Reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

53. In the Asia region, the SFM/REDD-plus program in the Greater Mekong sub-region (#4649) includes three (3) LDFA financed projects, while the regional International Waters program in the Pacific Islands (#5395) includes three (3) projects so far. In LAC, SFM/REDD-plus projects in countries such as Chile, Colombia, Ecuador, Mexico, and Paraguay all include very innovative models for integrating SLM and SFM to improve landscapes and livelihoods. In the CEE, the SFM/REDD-plus incentive was leveraged by Albania, Bosnia-Herzegovina, and Russia Federation to also address LDFA Objective three (LD3) on reducing pressures from competing land uses at local level.

### Capacity Development Program

54. During GEF-5, a cross-cutting program on Capacity Development (CD) was established to help countries address challenge of engaging with institutional and policy frameworks for implementing the conventions. Projects financed through the program will address important capacity needs to enhance a country's ability to meet its obligations under the Conventions by creating synergies, while at the same time catalyzing the mainstreaming of multilateral environmental agreements (MEAs) into national policy, management or financial and legislative frameworks.

55. For the reporting period, 25 Capacity Development projects were financed, for a total GEF grant of US\$22.7 million and an additional US\$42.4 million in co-financing. The portfolio includes 22 individual country projects from Africa (*Burkina Faso, Cameroon, Cote d'Ivoire, Guinea, Togo*); Asia (*Afghanistan, Bangladesh, Cambodia, Fiji, Kazakhstan, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Sri Lanka, Tajikistan, Vietnam*); LAC (*Costa Rica, Belize, St. Lucia, Suriname*); and CEE (*Ukraine*); and two regional projects for countries in the Pacific Islands. By targeting specific components of the environmental governance system, it is envisaged that these investments will enable the countries to develop a more practicable approach towards meeting Rio Convention objectives and achieving environmental sustainability.

## LAND DEGRADATION FOCAL AREA PORTOFOLIO MONITORING AND ASSESSMENT

56. Portfolio monitoring and assessment is an important activity within the focal area cluster, and this report includes highlights from two main components: synthesis of project implementation reports for the GEF *Annual Monitoring Report (AMR)* and the *Monitoring and Learning Review Mission*. A third component that was not considered for this report is the *Portfolio Monitoring and Assessment Tool (PMAT, the LDFA “Tracking Tool”)*, which was only launched at start of GEF. All three components are essential for implementing the GEF Results-Based Management (RBM) Framework, including focal area learning to enhance further development of options and approaches for investing in global environmental benefits through SLM. However, synthesis of the PMAT has not yet started due to a limited number of GEF-5 projects submitted for endorsement to-date. For the period covered by this report, highlights are presented from the LDFA cluster inputs into two AMRs (FY2011 and FY2012) and from a Monitoring and Learning Review Mission to China.

### Annual Monitoring Report FY2011

57. The LDFA portfolio synthesis for FY 2011 AMR included 11 projects with mid-term reports and 12 with terminal evaluation reports. Majority of the projects were from Africa, including seven (7) with MTRs and six (6) with TER. There were only two (2) projects each from Asia, CEE, and LAC regions. Three (3) of the projects with TERs were global projects designed to generate knowledge resources and tools for enhanced implementation of the LDFA agenda by affected countries. Based on data reported, the following results were achieved through project interventions:

- a. 565,828 hectares of land under some form of sustainable management, including land under crop and livestock production (99,869 ha), forest restoration/rehabilitation (16,670 ha), and production landscapes under integrated ecosystem management (106,600 ha).
- b. The additional 342,689 ha includes land area benefiting from improved management practices through implementation of the integrated ecosystem management (IEM) approach,<sup>5</sup> which fosters the application of a wide range of practices based on livelihood needs and priorities of local land users.

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<sup>5</sup> The IEM approach enhances management of production landscapes (farms, pastures, and agroforests) alongside community forests, natural habitats, riparian zones, wetlands, and freshwater systems in spatially integrated manner. The typology of SLM interventions in the production systems includes zero till agriculture, crop rotation, erosion control, integrated pest management, green fertilizer, gully stabilization and restoration, pasture rotation. The IEM approach also considers spatial integration of production systems and protected areas to improve ecosystem services at scale.

- c. 607 discrete stakeholder entities engaged for supporting SLM actions at national level (federal, state and municipal institutions, civil society organizations, private sector institutions, and universities/research institutions), and local level (grassroots groups, school teachers, small-scale producers, micro-watershed associations).
- d. 317 farmer households and an additional 806,585 people considered as benefiting directly from project activities through participation in trial demonstration projects, capacity building in farmer field schools and training courses on SLM, awareness raising activities, and adaptive research on SLM.

58. Three (3) LDFA stand-alone global projects with terminal evaluation reports (TERs) for FY2011 also represent important achievements for the focal area. The UNEP/FAO/GEF *Land Degradation Assessment in Drylands (LADA)* project contributed tools and knowledge resources (database, maps, and manuals) for multi-scale assessment of land degradation trends. The UNDP/GEF medium-sized project on *Ensuring Impacts from SLM – Development of a Global Indicator System (KM:Land)* project contributed to the identification and refinement of indicators for SLM, which were useful in the development of a portfolio monitoring and assessment tool for the LDFA. The UNDP/GEF *Enabling Sustainable Dryland Management through Mobile Pastoral Custodianship (WISP)* project has helped to streamline the needs and priorities of pastoral communities in the context of safeguarding GEBs in drylands. The outcomes of these three projects have played an important role in reinforcing GEF’s mandate under the focal area, including support to affected countries for implementation of the UNCCD.

### **Annual Monitoring Report FY2012**

59. The LDFA portfolio synthesis for FY 2012 AMR included 12 projects with mid-term reports and 10 with terminal evaluation reports, of which 16 (8 MTR and 8 TER) were LDFA stand-alone projects. As was the case in FY 2011, majority of the projects were from Africa, including 4 with MTRs and 5 with TERs. Unlike FY2011, none of the TERs submitted for the FY2012 AMR were from projects combating Land Degradation through integrated ecosystem management (IEM). This is perhaps a signal that most of those IEM projects have now been completed or in the final stages of implementation. One of the projects with TERs, the UNEP/GEF *Enabling Paradigm Shift on Monitoring and Assessment within the UNCCD* was a global project designed to support a paradigm shift in reporting to the UNCCD by affected countries (Box 8).

60. Based on data reported in the project cohorts with MTRs and TERs, the following results have been achieved:

- a. More than 3 million hectares of land under some form of sustainable management, of which 1.08 million hectares of this total was specifically reported as due to implementation of SLM options to increase vegetation cover, reduce soil erosion and improve irrigation in agricultural landscapes, and improve pastures and grazing systems.

- b. Additional coverage was reported for impacts such as sand dunes restoration (190 hectares restored), forest landscape restoration (30,400 hectares restored), forests under community management (161,478 hectares), and application of forest land use planning (78,500 hectares).
- c. Total 241 discrete stakeholder entities engaged in supporting SLM at national level and local level.
- d. Total of 158,500 people were considered as benefiting directly from project activities.

**Box 8 – “PRAIS” for a Paradigm shift on Monitoring and Assessment in the UNCCD**

The UNEP/GEF project *Enabling Paradigm Shift on Monitoring and Assessment within the UNCCD* (GEF Grant: US\$2.54 million; Co-financing: US\$5.4 million) was approved in 2009 to support the development of a new "Performance Review and Assessment of Implementation System" (PRAIS) for the Convention. The overall goal was to strengthen Reporting and Review process for implementation of the Convention and its Ten-Year Strategy and Action Plan. The project closed in 2011, with a terminal evaluation highlighting significant achievements toward the creation of a “consistent, evidence-based means of assessing performance that will be of fundamental value to all stakeholders, and hence, centrally relevant to the programs and objectives of UNEP and GEF in drylands, Sustainable Land Management, and DLDD.”

With strong technical support from the UNEP World Conservation Monitoring Center, sub-regional Reference Centers were established with 14 regional and sub-regional institutions to support the reporting process with capacity-building and technical assistance for all affected country Parties. As a result, there has been a significant enhancement of national capacities to report progress against approved indicators, and to establish systematic national monitoring and assessment systems to inform UNCCD reporting. This increased capacity was reflected in a very high report submission rate amongst Affected Country Parties, contributing to the value of the baseline synthesis and accompanying synthesis of sub-regional, regional and global levels.

Despite constraints with its use by Parties and reporting entities, the PRAIS portal was successfully implemented for on-line input of systematic and comparable information of national reports providing an initial baseline of the status of the implementation of the Convention against the Strategic Plan Performance Indicators. As a consequence, for the first time in its history, the UNCCD has information that is objective, quantifiable and will become increasingly comparable across countries. Preliminary analysis of the baseline reporting at the global, regional and sub-regional level has been successful, identifying status and trends under each operational objective of the Strategy.

Since affected country Parties are now committed to the iterative process, the need for strengthening capacities and improving standards for knowledge management will be crucial. This will ultimately lead to a scientifically rigorous and credible assessment process for the PRAIS, including approaches for validation of the data reported and consistency of methodologies used for data collection. In this regard, Parties to the UNCCD may wish to consider this a major priority for future decision on collaboration with the UNCCD, particularly in the context of enabling activity financing to eligible countries.

61. There were also estimates of SLM coverage based on potential catalytic impact from policy influence. For example, the GEF support through the Central Asian Countries Initiative on Land Management (CACILM) is reported to have indirectly impacted the effective management of up to 32.7 million hectares of grazing land through policy level initiatives. In Namibia, the UNDP/GEF project on *Enhancing Institutional and Human Resource Capacity through Local Level Coordination of Integrated Rangeland Management and Support* engaged 14 forums for Integrated Resource Management to improve 5.8 million hectares of rangelands. In Pakistan, the UNDP/GEF *Sustainable Land Management Project* successfully created an enabling environment for SLM as foundation for scaling-up nationally in all affected districts. This was used as the basis for designing a local level funding mechanism to support SLM actions across the districts.

### Portfolio Monitoring and Learning Review

62. The LDFA strategy for GEF-5 includes two the following learning objectives:
- a. To develop a framework and tools for linking the measurement of agreed global environment benefits at project level to impacts across multiple scales.
  - b. To increase understanding of multiple benefits from sustainable land management.

The overall purpose of these learning objectives is to improve portfolio level monitoring and reporting based on lessons and experiences from projects under implementation, including approaches for monitoring agreed global environment benefits and for assessing tradeoffs, costs and benefits of SLM interventions in the delivery of GEBs.

63. Because the LDFA portfolio is currently dominated by projects approved in GEF-3 under the Integrated Ecosystem Management (IEM) Operational Program (OP12), the learning objectives were specifically targeted toward integrated approaches and achieving multiple benefits while combating land degradation in drylands. The first learning mission to Burkina Faso, which focused on the World Bank/GEF *Sahel Integrated Lowland Ecosystem Management* in Burkina Faso, was briefly highlighted in the COP10 report. Here we present a more detailed brief on the learning mission to the People's Republic of China, where the IEM approach was at the heart of the ADB-led *PRC-GEF Partnership to combat land degradation in dryland ecosystems*.

64. GEF undertook a learning mission in February 2012 to the PRC to observe and understand the IEM approach in combating land degradation. The mission was focused on the overall PRC-GEF partnership approach but based on experiences from two of the eight subprojects implemented by ADB and the World Bank. The visit included consultations with provincial leaders, project staff, and local stakeholders in three landscapes/watersheds under the program and one reforestation landscape funded by the Central Government. The consultations were guided by the following questions:

- a) What are the drivers that generate catalytic effect?

- b) How does the GEF's catalytic role influence the choice of activities to GEBs?
- c) How is progress toward targeted IEM outcomes being tracked?
- d) What tools and indicators are being applied for monitoring the IEM approach?

65. The PRC-GEF Partnership was based on a 10-year (2003 - 2012) Country Programming Framework developed by the Government of China. ADB is the lead GEF Agency, but IFAD and World Bank are also implementing sub-projects under the partnership. The partnership focuses on combating land degradation through a holistic approach that includes multiple sectors, institutions, and governance frameworks. It is focused on the vast western region covering 6.8 million km<sup>2</sup> of mostly dryland ecosystem, with a population of at least 350 million. Total GEF investment to-date is US\$27 million, with an additional US\$378.6 million in co-financing from the Government and GEF Agencies. Although most of the sub-projects are still in the early stages of implementation, there is clear progress being made with the IEM approach, including evidence of an established institutional and policy framework at multiple levels. The value-added and catalytic role of GEF in the partnership has been primarily demonstrated by the uptake and mainstreaming of IEM in development planning across all western provinces.

66. Drawing from the focal area learning objectives, lessons from the MTRs and TERs, the learning mission helped to put the portfolio lessons into perspective, especially in relation to GEF mandate and catalytic effect. Key lessons are presented under the following topics:

*Measurement of agreed global environment benefits of SLM at different scales (site / farm-scale, landscape / watershed, national, regional)*

67. Despite the overall spatial coverage of SLM reported, there are no clear measures of how the interventions are contributing to the agreed global environment benefits at different scales. The Learning Mission found that there are still challenges with selecting and applying indicators for portfolio level monitoring of these agreed GEBs. A range of ecosystem services such as carbon sequestration, land productivity, water-retention in soil, below-ground biomass, and resistance to water and wind erosion are being considered. However, indicators and tools for monitoring these GEBs are only just being developed under the various sub-projects. Important indicators such as vegetation cover and biomass accumulation were noted as difficult for monitoring and measuring at the landscape scale.

*Tools for monitoring and measurement of agreed global environment benefits*

68. There is still no consistency in tools being used for measurement of GEBs, and emphasis is mainly at farm scale in the pilot demonstration sites. Soil erosion assessments are based on small plots and catchment sediment monitoring and erosion models have all been used, but with data that are not comparable. Measures of carbon stocks follow IPCC methods with local modifications, and include above-ground woody biomass and below-ground *in situ* techniques. Some projects are overcoming the challenge of monitoring global environmental benefits by applying satellite imagery and GIS-based tools at scale, and in combination with “spot-check”

and field surveys for verification. Projects that report carbon sequestration estimates did not specify how the numbers were derived. Others reported specific efforts to develop tools and methods for monitoring GEBs, such as systems for a) monitoring agro-forestry systems including indicators in forest landscapes, and the impact of improved soil use on local biodiversity, and b) adjustment of allometric equations for carbon accumulation in biomass.

*Linking the agreed global environment benefits to project level impacts at the different scales*

69. Links between SLM interventions and project level impacts are evident through measures of socio-economic benefits and numbers of target beneficiaries, which are also equally important for the focal area mandate. Though considered difficult to quantify, socio-economic indicators were noted as most relevant in terms of motivation for implementation, sustainability and up-scaling of SLM by land users. Household and farmer surveys are used to assess and monitor improvements in livelihood options, including income generation from implementation of SLM interventions. Links are particularly manifested at the local level, where SLM impacts contribute directly to livelihoods and economic benefits for farmers, especially those involved in small-scale production practices. Increases in production consequent upon implementation of SLM practices are, for example, consistent with the ‘ecosystems goods and services’ approach as a benefit indicator. Effective portfolio level monitoring will require consistency in applying the agreed socio-economic benefits for the focal area, including evidence of links with GEBs from SLM in the production systems.

*Major tradeoffs associated with generating ecosystem services from SLM projects in different production systems*

70. Because of the dynamic nature of land uses, maintaining a balance in flow of ecosystem services is essential for long-term success of SLM interventions in production systems. However, tradeoffs in land, water, and biomass production are inevitable, and therefore need to be managed at scale as part of the overall approach to SLM. The potential of some SLM outcomes that generate ecosystem service benefits creating new pressures in the production systems are highlighted in Table 5 below. From the learning mission in China, it was noted that an important trade-off is in the presumption that intensification of production at the homestead (e.g. stall-fed sheep) will ease pressure on the degraded extensive rangelands, thereby contributing to environmental rehabilitation and development through compensatory investments into on-farm development. While this was indeed demonstrated in one pilot site, the magnitude and scale of transformation in traditional grazing lands could be significant for both development and global environmental benefits, if quantified. Tracking these likely tradeoffs at portfolio level will therefore help to foster innovations in the project approach, including the potential for increased synergy with other GEF focal areas and funding windows.

**Table 5 - Examples of Potential Tradeoffs from implementation of SLM in Production Systems**

<b>Production System</b>	<b>SLM Outcome</b>	<b>Potential tradeoff</b>	<b>Implication for Project Approach</b>
<b>Rangelands</b>	Increased vegetative cover and biodiversity in pastures and grazing areas	Increased livestock population create new pressures on natural habitats	Establish livestock thresholds and carrying capacity or create fodder alternatives
<b>Agriculture</b>	Improved small-scale irrigation for crop production	Expansion of crop production increase risk of water resources depletion	Integrate management options for improving hydrological flows in the landscape
<b>Forest Landscapes</b>	Increased tree and forest cover	Shifting of crop production create new pressures on natural habitats	Enhance shift toward high value tree crops in the production landscape

*Achievement of synergy in generating agreed GEBs from implementation of SLM projects at multiple scales*

71. Projects that implement the IEM approach are useful models for achieving synergy in generating GEBs from combating land degradation in production systems. Opportunities for demonstrating such synergy at scale include the use of incentive mechanisms such as Payments for Ecosystem Services (PES), which enable farmers to implement land use options that generate or improve global environmental benefits (e.g. water and carbon) in production landscapes. The use of micro-project financing was also common in IEM projects as a means of helping communities to implement SLM interventions with potential for synergy. For both PES and micro-project financing, synergies are achieved when the investments are targeted in spatial context (e.g. watershed) where the ecosystem services (e.g. carbon sequestration, biodiversity conservation) are linked to SLM practices. In the PRC-GEF partnership, synergies are being fostered through institutional development at provincial level, capacity building for local communities, and support for innovations in the production landscapes. For example, in some demonstration sites, biogas technologies are being used to improve access to renewable energy, which reduces the need for harvesting fuel-wood from the fragile watersheds. At the same time PES opportunities are being explored as incentives for both carbon sequestration and hydrological flows. These synergies represent a win-win for climate change mitigation and SLM, and therefore need to be tracked closely in projects under implementation. Integrated approaches, such as IEM and now the ecosystem goods and services approach as well as MFAs, are an important means of achieving synergies that not only enable a better platform for capturing beneficial multiple impacts, but also encourage co-benefits for the global environment and for local human development.

*GEF catalytic effect in SLM projects with respect to scaling-up and replication*

72. The GEF's catalytic role is manifested in three major ways:
- a. Potential investments and financial reflows for SLM - Investments and financial reflows are generated by the projects through participatory planning for SLM in targeted landscapes, especially in watersheds and catchments where the environmental and developmental benefits can be maximized at scale. This makes it possible for stakeholders to harness innovative mechanisms such as PES, as well as leverage financing for micro-projects within the landscape. In China, provincial governments now include targeted investments for IEM activities in their five-year development plans as a means of leveraging government resources for SLM;
  - b. Policy innovations and options designed to remove barriers for SLM - The greatest GEF catalytic effect in this case is manifested through improvements in land tenure and user rights, especially for smallholder farmers. GEF financing plays a critical role in facilitating the removal of barriers, which empowers communities to adopt SLM practices that generate global environmental benefits. Successes with even a few communities or group of land-users can easily trigger engagement by others across increasingly larger geographical areas, thus facilitating the scaling-up and replication of SLM beyond the project area. In the PRC-GEF Partnership, GEF catalytic effect is manifested through institutional and policy transformations at provincial level, leading to mainstreaming of IEM in development planning; and
  - c. Mobilization of diverse stakeholders to support SLM at multiple scales – The participatory planning processes for SLM in watersheds and catchments facilitates engagement of stakeholders, including community groups, civil society, private sector, and government agencies. GEF financing creates flexibility in mobilizing such engagement in order to ensure ownership over identified priorities for SLM implementation and sustainability of outcomes. The role of civil society organizations and private sector are considered particularly crucial for ensuring sustainability of projects and for future up-scaling and replication of outcomes.

## **CONCLUSION**

73. The period 2012-2013 has seen major progress and achievements with respect to GEF role in general as financial mechanism of the UNCCD, and more specifically in relation to GEF activities in the Land Degradation Focal Area. This report has demonstrated growing evidence of increased utilization of GEF resources by eligible countries for projects to support implementation of the Convention. At the same time, there are emerging lessons on programming trends and priorities in the affected regions, which will help to inform future directions for the focal area.

74. With the LDFA portfolio having a fairly significant number of projects covering a range of geographies, agro-ecologies, and thematic issues, the potential for achieving transformational impact through sustainable land management is now high for all affected regions. This presents a timely opportunity for GEF and UNCCD to strengthen collaboration for actions and innovations to more effectively monitor global environmental benefits and impacts at scale, as well as demands for targeted investments to scale-up the achievements beyond project sites.

## ANNEX 1 – GEF-5 LDFA Results-Based Management Framework

**Goal:** To contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation.

**Impact:** Sustained productivity of agro-ecosystems and forest landscapes in support of human livelihoods

**Indicators:**

- Change in land productivity (*greenness measure as proxy - NPP, NDVI – corrected by RUE*)
- Improved livelihoods in rural areas (*Farmer income*)
- Value of investment in SLM (*US\$ generated from diverse sources, co-financing in projects*)

Objectives	Expected Outcomes and Indicators	Core Outputs
<p><b>LD-1: Agriculture and Rangeland Systems:</b> Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities</p> <p>(US\$200 million allocation)</p> <p><i>Outcome Targets: Sustainable Management of 120 million ha production landscapes</i></p>	<p>Outcome 1.1: An enhanced enabling environment within the agricultural sector</p> <p><i>Indicator 1.1 Agricultural policies support smallholder and community tenure security</i></p> <p>Outcome 1.2: Improved agricultural management</p> <p><i>Indicator 1.2 Increased land area with sustained productivity and reduced vulnerability of communities to climate variability</i></p> <p>Outcome 1.3: Sustained flow of services in agro-ecosystems</p> <p><i>Indicator 1.3 Maintained/increased flow of services in agro-ecosystems</i></p> <p>Outcome 1.4: Increased investments in SLM</p> <p><i>Indicator 1.4 Increased resources flowing to SLM from diverse sources</i></p>	<p>Output 1.1 National policies that guarantee smallholder and community tenure security</p> <p>Output 1.2 Types of Innovative SL/WM practices introduced at field level</p> <p>Output 1.3 Suitable SL/WM interventions to increase vegetative cover in agro-ecosystems</p> <p>Output 1.4 Appropriate actions to diversify the financial resource base</p> <p>Output 1.5 Information on SLM technologies and good practice guidelines disseminated</p>
<p><b>LD-2: Forest Landscapes:</b> Generate</p>	<p>Outcome 2.1: An enhanced enabling environment</p>	<p>Output 2.1 National policies that guarantee</p>

Objectives	Expected Outcomes and Indicators	Core Outputs
<p>sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependant people</p> <p>(US\$30 million allocation plus US\$20 million for the SFM/REDD-plus Incentive Program)</p>	<p>within the forest sector in dryland dominated countries</p> <p><i>Indicator 2.1 Forestry policies support smallholder and community tenure security</i></p> <p>Outcome 2.2: Improved forest management in drylands</p> <p><i>Indicator 2.2 Increased land area under sustainable forest management practices</i></p> <p>Outcome 2.3: Sustained flow of services in forest ecosystems in drylands</p> <p><i>Indicator 2.3 Increased quantity and quality of forests in dryland ecosystems</i></p> <p>Outcome 2.4: Increased investments in SFM in dryland forests ecosystems</p> <p><i>Indicator 2.4 Increased resources flowing to SFM from diverse sources (e.g. PES, small credit schemes, voluntary carbon market)</i></p>	<p>smallholder and community tenure security</p> <p>Output 2.2 Types of innovative SFM practices introduced at field level</p> <p>Output 2.3 Suitable SFM interventions to increase/maintain natural forest cover in dryland production landscapes</p> <p>Output 2.4 Appropriate actions to diversify the financial resource base</p> <p>Output 2.5 Information on SFM technologies and good practice guidelines disseminated</p>
<p><b>LD-3: Integrated Landscapes:</b> Reduce pressures on natural resources from competing land uses in the wider landscape</p> <p>(US\$135 million allocation)</p>	<p>Outcome 3.1: Enhanced cross-sector enabling environment for integrated landscape management</p> <p><i>Indicator 3.1 Policies support integration of agriculture, rangeland, forest, and other land uses</i></p> <p>Outcome 3.2: Integrated landscape management practices adopted by local communities</p> <p><i>Indicator 3.2 Application of integrated natural resource management (INRM) practices in wider</i></p>	<p>Output 3.1 Integrated land management plans developed and implemented</p> <p>Output 3.2 INRM tools and methodologies developed and tested</p> <p>Output 3.3 Appropriate actions to diversify the financial resource base</p> <p>Output 3.4 Information on INRM technologies</p>

Objectives	Expected Outcomes and Indicators	Core Outputs
	<p><i>landscapes</i></p> <p>Outcome 3.3: Increased investments in integrated landscape management</p> <p><i>Indicator 3.3 Increased resources flowing to INRM and other land uses from divers sources</i></p>	<p>and good practice guidelines disseminated</p>
<p><b>LD-4: Adaptive Management and Learning:</b> Increase capacity to apply adaptive management tools in SLM/SFM/INRM by GEF and UNCCD Parties</p> <p>(US\$15 million allocation)</p>	<p>Outcome 4.1: Increased capacities of countries to fulfill obligations in accordance with the provisions provided in the UNCCD.</p> <p><i>Indicator 4.1: Improved quality and timeliness of reporting compliance by countries</i></p> <p>Outcome 4.2: Improved GEF portfolio monitoring using new and adapted tools and methodologies</p> <p><i>Indicator 4.2 GEF-6 LD focal area strategy reflects lessons learned, and results of targeted research portfolio and implementation results from earlier replenishment periods</i></p>	<p>Output 4.1 At least 50 countries implementing UNCCD priorities with improved monitoring of impacts at national level</p> <p>Output 4.1 All country investments in LD Objectives 1-3 are linked to UNCCD action programs and national reporting process</p> <p>Output 4.2 GEF-financed projects contribute to SLM/SFM/INRM knowledge base</p>

## ANNEX 2: LDFA PROJECT PORTFOLIO – FY2012 AND FY2013

All amounts in US\$ millions and include PPGs

### FY2012

GEF ID	Country	Agency	Project Title	Total GEF Grant	LDFA Amount	Co-finance	LDFA Objectives	Other Focal Areas
4329	Global (SGP)	UNDP	5th Operational Phase of the GEF Small Grants Programme	134.62	21.52	134.62	LD-1; LD-3	BD; CCM; IW CHEM
4479	Guatemala	UNDP	Sustainable Forest Management and Multiple Global Environmental Benefits	4.51	0.85	13.16	LD-2; LD-3	BD; CCM; SFM/REDD- plus
4541	Global <sup>6</sup> (SGP)	UNDP	Fifth Operational Phase of the GEF Small Grants Program - Implementing the program using STAR resources	40.83	8.86	35.92	LD-1; LD-3;	BD; CCM;IW; CHEM; CD
4550	Samoa	UNDP	Strengthening Multi-sectoral Management of Critical Landscapes	4.87	4.87	13.12	LD-3	
4560	Brazil	UNDP	Fifth Operational Phase of the GEF Small Grants Program in Brazil	5.00	1.00	5.05	LD-1	BD; CCM; CD; IW
4579	Bhutan	World Bank	Sustainable Financing for Biodiversity Conservation and Natural Resources Management	4.21	0.54	12.33	LD-1; LD-3;	BD; SFM/REDD- plus
4583	Turkey	FAO	Sustainable Land Management and Climate Friendly Agriculture	5.75	2.85	21.30	LD-1	BD; CCM
4584	Kazakhstan	UNDP	Improving Sustainability of PA System in Desert Ecosystems through Promotion of Biodiversity-compatible Livelihoods in and Around Pas	4.48	0.92	15.31	LD-3	BD
4590	Honduras	UNDP	Delivering Multiple Global	3.15	0.71	9.05	LD-3	BD;

<sup>6</sup> Argentina, Cuba, Egypt, Ethiopia, Indonesia, Iran, Kazakhstan, Morocco, Madagascar, Malaysia, Peru, Papua New Guinea, Thailand, Turkey, Tanzania, South Africa

			Environment Benefits through Sustainable Management of Production Landscapes					SFM/REDD-plus
<b>4600</b>	Uzbekistan	UNDP	Reducing Pressures on Natural Resources from Competing Land Use in Non-irrigated Arid Mountain, Semi-desert and Desert Landscapes	2.36	2.34	8.23	LD-3	
<b>4616</b>	El Salvador	FAO	Climate Change Adaptation to Reduce Land Degradation in Fragile Micro-Watersheds Located in the Municipalities of Texistepeque and Candelaria de la Frontera	0.57	0.54	5.80	LD-1; LD-3	CCA
<b>4620</b>	Regional (Algeria, Egypt, Jordan, Morocco)	World Bank	MENA- Desert Ecosystems and Livelihoods Program (MENA-DELP)	17.50	8.54	226.20	LD-1	BD; CCM; CCA
<b>4625</b>	Malawi	World Bank	Shire Natural Ecosystems Management Project	5.08	1.08	68.31	LD-1; LD-3	BD; CCA; SFM/REDD-plus
<b>4630</b>	Moldova	World Bank	Agriculture Competitiveness	4.44	4.44	21.00	LD-1; LD-3	
<b>4631</b>	Burundi	World Bank	Watershed Approach to Sustainable Coffee Production in Burundi	4.20	2.20	21.50	LD-1	BD; SFM/REDD-plus
<b>4632</b>	China	FAO	Conservation of Biodiversity and Sustainable Land Management in the Soda Saline-alkaline Wetlands Agro Pastoral Landscapes in the Western Area of the Jilin Province	2.63	0.87	16.80	LD-1; LD-3	BD
<b>4633</b>	China	ADB	Shaanxi Weinan Luyang Integrated Saline and Alkaline Land Management	2.00	2.00	80.00	LD-1; LD-2	
<b>4634</b>	Ukraine	UNEP	Conserving, Enhancing and Managing Carbon Stocks and Biodiversity while Promoting Sustainable Development in the Chernobyl Exclusion Zone through the Establishment of a Research	5.05	1.04	15.00	LD-2	BD; CCM

			and Environmental Protection Centre and Protected Area					
<b>4639</b>	Zambia	UNDP	Strengthening Management Effectiveness and Generating Multiple Environmental Benefits within and around Protected Areas in Zambia	13.30	2.74	44.79	LD-3	BD; CCM; SFM/REDD-plus
<b>4642</b>	Uzbekistan	World Bank	Sustainable Agriculture and Climate Change Mitigation Project	12.70	1.09	75.00	LD-1	CCM
<b>4644</b>	Uganda	UNDP	Addressing Barriers to the Adoption of Improved Charcoal Production Technologies and Sustainable Land Management practices through an integrated approach	3.58	0.90	7.56	LD-2	SFM/REDD-plus; CCM
<b>4645</b>	Zimbabwe	World Bank	Hwange-Sanyati Biological Corridor (HSBC) Environment Management and Conservation Project	5.85	1.80	23.17	LD-3;	BD; CCM; SFM/REDD-plus
<b>4650</b>	Lao PDR	World Bank	Strengthening Protection and Management Effectiveness for Wildlife and Protected Areas	6.83	0.83	17.60	LD-3; LD-3	BD; CCM; SFM/REDD-plus
<b>4945</b>	Cambodia	ADB	GMS-FBP Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin	1.10	1.10	13.30	LD-1; LD-2; LD-3	
<b>4669</b>	Namibia	World Bank	Namibian Coast Conservation and Management Project	1.93	0.76	5.87	LD-3	BD
<b>4698</b>	Honduras (EA)	FAO	Alignment of National Action Programs with the UNCCD 10-Year Strategy and reporting process	0.14	0.14	0.15	LD-4	
<b>4706</b>	India (EA)	GEFSEC	Enhancing capacity for alignment of National Action Programme to 10 year Strategy of UNCCD & for National Reporting to UNCCD	0.14	0.14	0.15	LD-4	
<b>4717</b>	Seychelles	UNDP	Expansion and Strengthening of	1.87	0.65	5.76	LD-3	BD

			the Protected Area Subsystem of the Outer Islands of Seychelles and its Integration into the Broader Land and Seascape					
<b>4720</b>	Angola	FAO	Land Rehabilitation and Rangelands Management in Small Holders Agropastoral Production Systems in Southwestern Angola	3.15	3.15	12.25	LD-1; LD-3	
<b>4732</b>	Malaysia	UNDP	Improving Connectivity in the Central Forest Spine Landscape (IC-CFS)	10.96	1.15	36.50	LD-3	BD; SFM/REDD-plus
<b>4744</b>	Mongolia	FAO	Securing Forest Ecosystems through Participatory Management and Benefit Sharing	3.57	0.90	14.35	LD-2	BD; SFM/REDD-plus
<b>4750</b>	Regional (Ecuador, Peru)	UNEP	Multiplying Environmental and Carbon Benefits in High Andean Ecosystems	3.60	0.60	18.15	LD-3;	BD; CCM; SFM/REDD-plus
<b>4751</b>	Botswana	UNDP	Mainstreaming SLM in Rangeland Areas of Ngamiland District Productive Landscapes for Improved livelihoods	3.18	3.18	16.00	LD-1	
<b>4754</b>	Pakistan	UNDP	Sustainable Land Management Programme to Combat Desertification in Pakistan	3.79	3.79	22.20	LD-2; LD-3	
<b>4761</b>	Kyrgyz Republic	FAO	Sustainable Management of Mountainous Forest and Land Resources under Climate Change Conditions	5.45	2.73	17.10	LD-1; LD-2;	CCM; SFM/REDD-plus
<b>4764</b>	Regional (Mongolia, Russian Federation)	UNEP	Enhancing the Resilience of Pastoral Ecosystems and Livelihoods of Nomadic Herders	4.82	2.50	15.08	LD-1; LD-3;	BD
<b>4772</b>	Colombia	UNDP	Conservation and Sustainable Use of Biodiversity in Dry Ecosystems to Guarantee the Flow of Ecosystem Services and to Mitigate the Processes of Deforestation and Desertification	8.89	2.04	39.46	LD-3;	BD; SFM/REDD-plus
<b>4774</b>	Ecuador	FAO	Conservation and Sustainable Use	2.68	0.57	10.56	LD-1; LD-3	BD;

			of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Buen Vivir / Sumac Kasay) in the Napo Province					SFM/REDD-plus
4778	Albania	World Bank	Environmental Services Project	2.88	1.51	22.57	LD-1; LD-3	CCM; FM/REDD-plus
4779	Bosnia-Herzegovina	World Bank	Sustainable Forest and Abandoned Land Management	5.58	2.21	18.40	LD-3;	CCM; SFM/REDD-plus
4792	Mexico	World Bank	Conservation of Coastal Watersheds in Changing Environments	39.52	3.15	239.87	LD-3;	BD; CCM; SFM/REDD-plus
4806	Global	UNEP	A Global Initiative on Landscapes for People, Food and Nature	1.00	1.00	2.62	LD-1; LD-3; LD-4	
4824	Bhutan (EA)	GEFSEC	NAP Alignment and Report Preparation	0.15	0.15	0.05	LD-4	
4825	Kyrgyz Republic (EA)	GEFSEC	Support to UNCCD NAP Alignment and Reporting Processes	0.15	0.15	0.21	LD-4	
4829	Global <sup>7</sup> (EA)	UNEP	Support to GEF Eligible Parties for Alignment of National Action Programs and Reporting Process under UNCCD	2.83	2.83	2.75	LD-4	
4832	Namibia	UNDP	Sustainable Management of Namibia's Forested Lands	4.45	4.45	22.50	LD-3	
4839	Afghanistan	UNDP	Establishing Integrated Models for Protected Areas and their Co-management	6.58	3.54	40.04	LD-3	BD
4860	Paraguay	UNDP	Mainstreaming Biodiversity Conservation and Sustainable Land Management into Production Practices in all Bioregions and Biomes	6.86	2.51	22.10	LD-3	BD; SFM/REDD-plus

<sup>7</sup> Afghanistan, Angola, Burkina Faso, Burundi, Benin, Central African Republic, Congo, Cote d'Ivoire, Cook Islands, Cameroon, Colombia, Costa Rica, Dominican Republic, Algeria, Gabon, Grenada, Ghana, Gambia, Guinea, Equatorial Guinea, Guinea-Bissau, Haiti, Kenya, Comoros, St. Kitts And Nevis, Lao PDR, Sri Lanka, Liberia, Morocco, Moldova, Mongolia, Mauritania, Niger, Nigeria, Nepal, Nauru, Niue, Philippines, Paraguay, Sierra Leone, Senegal, Sao Tome and Principe, Chad, Togo, Turkmenistan, Uzbekistan, St. Vincent and Grenadines, Vanuatu, Serbia, South Africa, Congo DR, Iraq

<b>4924</b>	Jordan (EA)	GEFSEC	Alignment of National Action Programs with the UNCCD 10-Year Strategy and reporting process, as per obligations to the UNCCD	0.14	0.14	0.15	LD-4	
<b>4932</b>	Regional <sup>8</sup>	UNEP/UNDP	Implementing Integrated Land Water and Wastewater Management in Caribbean SIDS	8.07	2.47	118.01	LD-3	BD; IW; SFM/REDD-plus
<b>4939</b>	Chile	UNDP	Supporting Civil Society and Community Initiatives to Generate Global Environmental Benefits using Grants and Micro Loans in the Mediterranean Ecoregion	3.31	0.17	15.25	LD-1; LD-3	BD; CCM
<b>4952</b>	Rwanda	World Bank	Landscape Approach to Forest Restoration and Conservation (LAFREC)	5.49	2.76	53.53	LD-3	BD; SFM/REDD-plus; CCA
<b>4953</b>	Regional (Cote d'Ivoire, Guinea, Liberia, Sierra Leone)	AfDB	Mano River Union Ecosystem Conservation and International Water Resources Management (IWRM) Project	3.15	0.45	25.00	LD-3;	IW; BD; SFM/REDD-plus
<b>4970</b>	Cote d'Ivoire	UNEP	Integrated Management of Protected Areas in Cote d'Ivoire, West Africa	4.24	0.50	16.05	LD-3;	BD; SFM/REDD-plus
<b>4977</b>	Armenia (EA)	GEFSEC	Harmonization of National Action Plan to combat desertification in Armenia and Preparation of National Report	0.15	0.15		LD-4	
<b>4988</b>	Georgia (EA)	UNEP	Alignment of National Action Programme and Preparation of the Second Leg of the Fourth Reporting and Review process	0.14	0.14	227.00	LD-4	
<b>5009</b>	Lesotho (EA)	FAO	Alignment of Lesotho's National Action Plan with UNCCD	0.14	0.14	150.00	LD-4	
<b>5010</b>	Uruguay (EA)	FAO	Alignment of National Action Programs with the UNCCD 10-Year Strategy and Reporting Process	0.05	0.05	61.76	LD-4	

<sup>8</sup> Antigua And Barbuda, Barbados, Cuba, Dominican Republic, Grenada, Jamaica, St. Kitts And Nevis, St. Lucia, St. Vincent and Grenadines

<b>5018</b>	Bangladesh (EA)	GEFSEC	Revision and Alignment of NAP with UNCCD 10-year Strategic Plan and Framework	0.15	0.15	0.12	LD-4
<b>5039</b>	Albania (EA)	GEFSEC	Land Degradation Enabling Activities	0.15	0.15	0.03	LD-4
<b>Total</b>				<b>447.65</b>	<b>123.96</b>	<b>1,717.44</b>	

### ***FY2013***

<b>GEF-ID</b>	<b>Country</b>	<b>Agency</b>	<b>Project Title</b>	<b>Total GEF Grant</b>	<b>LDFA Amount</b>	<b>Cofinance</b>	<b>LDFA Objectives</b>	<b>Other Focal Areas</b>
<b>4678</b>	Global <sup>9</sup> (SGP)	UNDP	GEF SGP Fifth Operational Phase-- Implementing the Program Using STAR Resources II	71.25	16.90	74.10	LD-1; LD-3;	BD; CCM; IW; CHEM; CD
<b>4775</b>	Ecuador	FAO	Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces	2.46	1.89	12.73	LD-1	CCA; CCM
<b>4847</b>	Bahamas	UNEP	Pine Islands - Forest/Mangrove Innovation and Integration (Grand Bahama, New Providence, Abaco and Andros)	2.24	1.10	5.60	LD-3	BD; SFM/REDD-plus
<b>4922</b>	Global <sup>10</sup>	FAO	Decision Support for Mainstreaming and Scaling up of Sustainable Land Management	3.95	3.95	33.26	LD-1; LD-3; LD-4	
<b>4954</b>	Armenia	World Bank	Community Agricultural Resource Management and Competitiveness (CARMAC)	0.90	0.90	18.30	LD-1; LD-3	
<b>4983</b>	Madagascar (EA)	UNEP	Alignment of National Action Programme to the UNCCD 10 Years	0.14	0.14	0.15	LD-4	

<sup>9</sup> Albania, Armenia, Barbados, Burkina Faso, Burundi, Bhutan, Botswana, Belarus, Cote d'Ivoire, Cameroon, China, Colombia, Cape Verde, Dominican Republic, Fiji, Micronesia, Grenada, Ghana, Gambia, Guinea, Honduras, Jamaica, Jordan, Kiribati, Lao PDR

<sup>10</sup> Argentina, Bosnia-Herzegovina, Bangladesh, China, Colombia, Ecuador, Lesotho, Morocco, Nigeria, Panama, Philippines, Thailand, Tunisia, Turkey, Uzbekistan

			Strategy and Preparation of the Fifth Reporting and Review process					
<b>5005</b>	Vietnam	ADB	GMS-FBP Integrating Biodiversity Conservation, Climate Resilience and Sustainable Forest Management in Central Annamite Landscapes	3.94	1.38	55.55	LD-2; LD-3	BD; CCM; SFM/REDD-plus;
<b>5039</b>	Albania (EA)	GEFSEC	Land Degradation Enabling Activities	0.15	0.15	30.00	LD-4	
<b>5042</b>	Uganda (EA)	UNEP	Support to Alignment of Uganda's National Action Programme and Reporting Process to the UNCCD Ten-Year Strategy	0.14	0.14	0.19	LD-4	
<b>5044</b>	Argentina	UNDP	Sustainable Land Use Management in the Drylands of North-west Argentina	3.61	3.61	19.73	LD-1; LD-3	
<b>5050</b>	Ukraine (EA)	UNEP	Development and Alignment of National Action Programme to the UNCCD 10 Years Strategy and Preparation of the Fifth Reporting and Review process	0.14	0.14	0.15	LD-4	
<b>5057</b>	St. Lucia	UNEP	Iyanola - Natural Resource Management of the NE Coast	2.45	0.27	8.91	LD-3	BD; CCM; SFM/RED+
<b>5069</b>	Grenada	UNDP	Implementing a "Ridge to Reef" Approach to Protecting Biodiversity and Ecosystem Functions within and Around Protected Areas	3.13	1.03	15.43	LD-3	BD; SFM/RED+
<b>5076</b>	Bosnia-Herzegovina (EA)	UNEP	Support to Bosnia and Herzegovina for Development of National Action Programs Aligned to the UNCCD 10 Year Strategy and Reporting Process	0.14	0.14	0.15	LD-4	
<b>5077</b>	Azerbaijan (EA)	UNEP	Development and Alignment of National Action Programme to the UNCCD 10 Year Strategy and Preparation of the Reporting and Review Process	0.14	0.14	0.15	LD-4	
<b>5080</b>	Peru	UNDP	Transforming Management of Protected Area/Landscape Complexes to Strengthen Ecosystem Resilience	9.01	2.27	50.02	LD-3	BD; SFM/REDD-plus

<b>5081</b>	Belarus (EA)	UNDP	Support NAP Alignment and UNCCD Reporting	0.14	0.14	0.37	LD-4	
<b>5085</b>	Panama (EA)	UNEP	Alignment of National Action Programs with the UNCCD 10-Year Strategy and Reporting Process	0.14	0.14	0.24	LD-4	
<b>5104</b>	Russian Federation	UNDP	Sustainable Land Management and Ecosystem-based Climate Change Mitigation in the Altai-Sayan Ecoregion	8.37	3.38	29.50	LD-1; LD-3	CCM; SFM/REDD-plus
<b>5122</b>	Solomon Islands	FAO	Integrated Forest Management in the Solomon Islands	5.85	1.01	19.00	LD-3	BD; CCM; SFM/REDD-plus
<b>5123</b>	Myanmar	FAO	Sustainable Cropland and Forest Management in Priority Agro-ecosystems of Myanmar	6.30	1.09	13.50	LD-3;	CCM; SFM/REDD-plus
<b>5135</b>	Chile	UNEP	Protecting Biodiversity and Multiple Ecosystem Services in Biological Mountain Corridors in Chile's Mediterranean Ecosystem	5.66	1.57	19.35	LD-1; LD-2; LD-3	BD; SFM/REDD-plus
<b>5136</b>	Global <sup>11</sup> (EA)	UNEP	Support to 20 GEF Eligible Parties for Alignment of National Action Programs and Reporting Process under UNCCD (Add-on Umbrella 2)	1.00	1.00	1.00	LD-4;	
<b>5142</b>	China	ADB	Sustainable and Climate Resilient Land Management in Western PRC	3.65	3.65	12.40	LD-3	
<b>5165</b>	Pakistan (EA)	UNDP	NAP Alignment and Strengthening National Reporting Processes	0.14	0.14	0.23		
<b>5185</b>	Tanzania (EA)	UNDP	Support to Alignment of Tanzania's National Action Plan with the UNCCD's 10 Year Strategic Framework and Support National Reporting	0.14	0.14	0.45	LD-4	

<sup>11</sup> Barbados, Belize, Chile, Egypt, Eritrea, Ethiopia, Indonesia, Mali, Myanmar, Mauritius, Maldives, Malawi, Mozambique, Namibia, Rwanda, Sudan, Somalia, Swaziland, Thailand, Vietnam

5186	Regional <sup>12</sup>	World Bank	MENA - Desert Ecosystems and Livelihoods Knowledge Sharing and Coordination Project	1.00	1.00	0.49	LD-3	
5229	Lebanon	UNDP	Sustainable Land Management in the Qaroun Watershed	3.29	3.29	15.30	LD-1; LD-2; LD-3	
5264	Gabon	World Bank	Sustainable Management of Critical Wetlands Ecosystems	7.67	1.13	31.16	LD-3	BD; SFM/REDD-plus
5266	Tunisia	World Bank	Oases Ecosystems and Livelihoods Project	5.76	4.61	57.50	LD	BD
5272	Kenya	UNEP	Scaling up Sustainable Land Management and Agrobiodiversity Conservation to Reduce Environmental Degradation in Small Scale Agriculture in Western Kenya	3.58	2.05	7.20	LD-3	BD; SFM/REDD-plus
5274	Kazakhstan (EA)	UNDP	Mobilizing Support to the NAP Alignment and UNCCD Reporting and Review Process	0.14	0.14	0.47	LD-4	
5276	Brazil	UNDP	Sustainable Land Use Management in the Semi-arid Region of North-east Brazil (Sergipe)	3.90	3.90	16.96	LD-1; LD-3	
5277	Nicaragua	UNDP	Strengthening the Resilience of Multiple-use Protected Areas to Deliver Multiple Global Environmental Benefits	6.19	0.77	20.15	LD-3	BD; CCM; SFM/REDD-plus
5293	Russian Federation	UNIDO	Save the Source: Catalyzing Market Transformation of Breweries from a Major Natural Resource Consuming Industry to a Pro-active Steward for Resource Efficient Cleaner Production	6.39	1.53	30.86	LD-3	IW; CCM
5311	Montenegro (EA)	UNEP	Support for Development of National Action Program Aligned to the UNCCD 10 Year Strategy and Reporting Process	0.14	0.14	0.17	LD-4	
5315	Macedonia (EA)	UNEP	Support for the Development of National Action Program Aligned to	0.14	0.14	0.17	LD-4	

<sup>12</sup> Algeria, Egypt, Jordan, Morocco, Tunisia

			the UNCCD 10 Year Strategy and Reporting Process under UNCCD					
5327	South Africa	UNDP	Securing Multiple Ecosystems Benefit Through SLM in the Productive But Degraded Landscapes of South Africa	4.24	4.24	20.50	LD-3	
5334	Sao Tome and Principe	UNDP	Promotion of Environmentally Sustainable and Climate-Resilient Grid-based Hydroelectric Electricity through an Integrated Approach in Sao Tome and Principe	5.27	2.44	20.39	LD-3	CCM; SFM/REDD- plus
5346	Zimbabwe (EA)	UNEP	Support to Alignment of Zimbabwe's National Action Programme and Reporting Process to the UNCCD Ten-Year Strategy	0.14	0.14	0.15	LD-4	
5347	Yemen	UNEP	Support to the Integrated Program for the Conservation and Sustainable Development of the Socotra Archipelago	4.85	1.87	17.56	LD-3	BD
5348	Cook Islands	UNDP	R2R- Conserving Biodiversity and Enhancing Ecosystem Functions through a “Ridge to Reef” Approach	4.23	0.44	14.29	LD-3	BD; IW
5356	Global (Georgia, Madagascar)	UNEP	Global Forest Watch 2.0 FW 2.0	4.01	0.89	68.30	LD-3	BD; CCM; SFM/REDD
5354	Madagascar	UNEP	Participatory Sustainable Land Management in the Grassland Plateaus of Western Madagascar	1.58	1.74	5.35	LD-1	
5381	Nauru	UNDP	R2R- Implementing a “Ridge to Reef” Approach to Protecting Biodiversity and Ecosystem Functions in Nauru (R2R Nauru)	2.64	0.44	6.35	LD-3	BD; IW
5398	Fiji	UNDP	R2R - Implementing a “Ridge to Reef” Approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate	7.39	0.52	30.22	LD-1; LD-3	BD; CCM; IW; SFM/REDD- plus CCA
5425	Cape Verde (EA)	UNEP	Support to Alignment of Cape Verde’s National Action Programme	0.14	0.14	0.16	LD-4	

	to the UNCCD 10 Year Strategy and Preparation of the Reporting and Review Process			
	<b>Total</b>	<b>208.11</b>	<b>76.34</b>	<b>755.54</b>

## ANNEX 3: PROJECTS WITH ACTIVITIES IN PRODUCTION LANDSCAPES APPROVED UNDER LDCF/SCCF, FY12 and FY 13

LDCF

All amounts in US\$ millions

Agency	Country	Region	Project Type	Project Title	Grant Amount	Co-Financing	Trust Fund	Date of approval
<b>FAO</b>	Cambodia	Asia	FSP	Strengthening the adaptive capacity and resilience of rural communities using micro watershed approaches to climate change and variability to attain sustainable food security	5.61	18.81	LDCF	15-Sep-11
<b>IFAD</b>	Lesotho	AFR	FSP	Adaptation of Small-scale Agriculture Production (ASAP)	4.89	13.35	LDCF	5-Dec-11
<b>IFAD</b>	Togo	AFR	FSP	Adapting Agriculture Production in Togo – ADAPT	6.00	12.22	LDCF	12-Oct-11
<b>World Bank</b>	Malawi	AFR	FSP (MTF)	Shire Natural Ecosystems Management Project	1.65	11.74	LDCF	9-Nov-11
<b>UNDP</b>	Guinea	AFR	FSP	Strengthening resilience of farming communities' livelihoods against climate changes in the Guinean Prefectures of Gaoual, Koundara and Mali	4.20	58.74	LDCF	9-Jan-12
<b>UNDP</b>	Bangladesh	Asia	FSP	Integrating Community-based Adaptation into Afforestation and Reforestation Programmes in Bangladesh	6.27	41.99	LDCF	27-Dec-11
<b>UNDP</b>	Niger	AFR	FSP	Scaling up Community-Based Adaptation (CBA) in Niger	4.18	13.30	LDCF	23-Apr-12
<b>FAO</b>	Niger	AFR	FSP	Integrating Climate Resilience into Agricultural and Pastoral Production for Food Security in Vulnerable Rural Areas through the Farmers Field School Approach	4.18	15.20	LDCF	21-Aug-12
<b>UNDP</b>	Malawi	AFR	FSP	Climate proofing local development gains in rural and urban areas of Machinga and Mangochi Districts - Malawi	6.02	36.65	LDCF	29-Jun-12
<b>FAO</b>	Mali	AFR	FSP	Strengthening Resilience to Climate Change	2.39	9.67	LDCF	7-Feb-13

				through Integrated Agricultural and Pastoral Management in the Sahelian zone in the Framework of the Sustainable Land Management Approach				
<b>World Bank</b>	Rwanda	AFR	FSP (MTF)	Landscape Approach to Forest Restoration and Conservation (LAFREC)	4.50	18.59	LDCF	7-Jun-12
<b>UNDP</b>	Burkina Faso	AFR	FSP	Reducing vulnerability of natural resource dependent livelihoods in two landscapes at risk of the effects of climate change in Burkina Faso: Boucles du Mouhoun Forest Corridor and Mare d'Oursi Wetlands Basin	7.83	21.56	LDCF	21-Aug-12
<b>UNDP</b>	Comoros	AFR	FSP	Enhancing adaptive capacity and resilience to climate change in the agriculture sector in Comoros	10.00	35.10	LDCF	19-Jul-12
<b>FAO</b>	Burkina Faso	AFR	FSP	Integrating Climate Resilience into Agricultural and Pastoral Production for Food Security in Vulnerable Rural Areas Through the Farmers Field School Approach.	4.30	19.57	LDCF	13-Sep-12
<b>UNDP</b>	Lesotho	AFR	FSP	Reducing vulnerability from climate change in the Foothills, Lowlands and the lower Senqu River Basin	9.20	26.00	LDCF	31-May-13
<b>FAO</b>	Nepal	Asia	FSP	Reducing Vulnerability and Increasing Adaptive Capacity to Respond to Impacts of Climate Change and Variability for Sustainable Livelihoods in Agriculture Sector in Nepal	295	9.25	LDCF	2-May-13
<b>FAO</b>	Lesotho	AFR	FSP	Strengthening Capacity for Climate Change Adaptation through Support to Integrated Watershed Management Programme in Lesotho	3.93	7.76	LDCF	7-Mar-13
<b>IFAD</b>	Yemen	AFR	FSP	Rural Adaptation in Yemen	11.03	55.15	LDCF	10-Jun-13
<b>UNDP</b>	Sao Tome and Principe	AFR	FSP	Enhancing capacities of rural communities to pursue climate resilient livelihood options in the Sao Tome and Principe districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL)	4.46	16.28	LDCF	2-May-13
<b>UNDP</b>	Mali	AFR	FSP	Strengthening the resilience of women producer group's and vulnerable communities in Mali	6.12	16.60	LDCF	12-Mar-13

<b>UNEP</b>	Rwanda	AFR	FSP	Building resilience of communities living in degraded forests, savannahs and wetlands of Rwanda through an ecosystem management approach.	6.13	10.84	LDCF	7-Feb-13
<b>UNDP</b>	Afghanistan	Asia	FSP	Strengthening the resilience of rural livelihood options for Afghan communities in Panjshir, Balkh, Uruzgan and Herat Provinces to manage climate change-induced disaster risks	9.96	30.60	LDCF	2-May-13
<b>UNEP</b>	Nepal	Asia	FSP	Catalysing ecosystem restoration for resilient natural capital and rural livelihoods in degraded forests and rangelands of Nepal.	5.85	11.57	LDCF	7-Mar-13
<b>UNDP</b>	Congo DR	AFR	FSP	Building the resilience and ability to adapt of women and children to changing climate in Democratic Republic of Congo	5.28	15.60	LDCF	2-May-13
<b>AfDB</b>	Angola	AFR	FSP	Integrating Climate Change into Environment and Sustainable Land Management Practices	4.84	20.00	LDCF	21-Mar-13
<b>AfDB</b>	Benin	AFR	FSP	Flood Control and Climate resilience of agriculture infrastructures in Oueme Valley	7.88	44.00	LDCF	20-Jun-13
<b>AfDB</b>	Mauritania	AFR	FSP	Improving climate resilience of water sector investments with appropriate climate adaptive activities for pastoral and forestry resources in southern Mauritania	7.26	14.81	LDCF	2-May-13
<b>AfDB</b>	Madagascar	AFR	FSP	Enabling climate resilience in the agriculture sector in the southwest region of Madagascar	6.87	33.00	LDCF	2-May-13
<b>UNDP</b>	Djibouti	AFR	FSP	Supporting Rural Community Adaptation to Climate Change in Mountain Regions of Djibouti	5.99	28.11	LDCF	29-May-13
<b>AfDB</b>	Regional	AFR	Program (MTF)	Rural Livelihoods Adaptation to Climate Change (RLACC)	5.48	43.12	LDCF	31-May-13
<b>UNDP</b>	Haiti	LAC	FSP (MTF)	Increasing Resilience of Ecosystems and Vulnerable Communities to CC and Anthropic Threats Through a Ridge to Reef Approach to BD Conservation and Watershed Management	6.00	25.30	LDCF	20-Jun-13
<b>Total</b>					<b>181.25</b>	<b>734.46</b>		

SCCF

Agency	Country	Region	Project Type	Project Title	Total SCCF Grant Amount	Co-Financing	Trust Fund	Council Approval Date
<b>IFAD</b>	Moldova	ECA	FSP	Climate Resilience through Conservation Agriculture	4.81	13.94	SCCF	10-Nov-11
<b>IADB</b>	Colombia	LAC	FSP	Adaptation to Climate Impacts in Water Regulation and Supply for the Area of Chingaza - Sumapaz – Guerrero	4.64	23.30	SCCF	10-Nov-11
<b>World Bank</b>	Regional	AFR	Program (MTF)	MENA - Desert Ecosystems and Livelihoods Program (MENA-DELP)	3.00	12.00	SCCF	9-Nov-11
<b>ADB</b>	Regional	Asia	Program (MTF)	Greater Mekong Subregion Forests and Biodiversity Program (GMS-FBP)	0.50	5.63	SCCF	9-Nov-11
<b>IFAD</b>	Honduras	LAC	FSP	Competitiveness and Sustainable Rural Development Project in the Northern Zone	3.41	19.09	SCCF	10-Nov-11
<b>FAO</b>	Ecuador	LAC	FSP (MTF)	Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces	1.64	4.45	SCCF	12-Apr-13
<b>World Bank</b>	India	Asia	FSP	Sustainable Livelihoods and Adaptation to Climate Change (SLACC)	8.80	234.00	SCCF	7-Jun-12
<b>UNDP</b>	Zimbabwe	AFR	FSP	Scaling up adaptation in Zimbabwe, with a focus on rural livelihoods, by strengthening integrated planning systems.	4.49	58.61	SCCF	7-Jun-12
<b>World Bank</b>	Lebanon	Asia	FSP	Sustainable Agricultural Livelihoods in Marginal Areas (SALMA)	7.86	26.10	SCCF	7-Jun-12
<b>IFAD</b>	Georgia	ECA	FSP	Enhancing Resilience of Agricultural Sector in Georgia (ERASIG)	5.93	17.25	SCCF	15-Nov-12
<b>UNDP</b>	Namibia	AFR	FSP	Scaling Up Community Resilience to Climate Variability and Climate Change in Northern Namibia, with a Special Focus on Women and Children.	3.49	40.00	SCCF	15-Nov-12
<b>AfDB</b>	Regional	AFR	Program (MTF)	Rural Livelihoods' Adaptation to Climate Change in the Horn of Africa (RLACC)	2.78	24.65	SCCF	20-Jun-13

<b>UNEP</b>	Global	Global	FSP (MTF)	Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries	5.50	34.85	SCCF	20-Jun-13
				Total	<b>56.85</b>	<b>513.85</b>		

## ANNEX 4: PROJECTS APPROVED UNDER THE ADAPTATION FUND, FY12 and FY13

All amounts in US\$ millions

Country	Project Title	Grant	Implementing Agency	Approval Date
<b>Argentina</b>	Enhancing the Adaptive Capacity and Increasing Resilience of Small-scale Agriculture Producers of the Northeast of Argentina - Project document	5.64	Unidad para el Cambio Rural (UCAR)	4/4/2013
<b>Argentina</b>	Increasing Climate Resilience and Enhancing Sustainable Land Management in the Southwest of Buenos Aires Province - Project Document	4.30	World Bank	12/14/2012
<b>Sri Lanka</b>	Addressing Climate Change Impacts on Marginalized Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka - Project Document	7.99	WFP	12/14/2012
<b>Cambodia</b>	Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia - Project Document	4.95	UNEP	6/28/2012
<b>Colombia</b>	Reducing Risk and Vulnerability to Climate Change in the Region of La Depresion Momposina in Colombia - Project Document	8.52	UNDP	6/28/2012
<b>Djibouti</b>	Developing Agro-Pastoral Shade Gardens as an Adaptation Strategy for Poor Rural Communities in Djibouti - Project Document	4.66	UNDP	6/28/2012
<b>Egypt</b>	Building Resilient Food Security Systems to Benefit the Southern Egypt Region - Project Document	6.90	WFP	6/28/2012
<b>Jamaica</b>	Enhancing the Resilience of the Agricultural Sector and Coastal Areas to Protect Livelihoods and Improve Food Security - Project Document	9.97	Planning Institute of Jamaica (PIOJ)	6/28/2012
<b>Lebanon</b>	Climate Smart Agriculture: Enhancing Adaptive Capacity of the Rural Communities in Lebanon (AgriCAL) - Project Document	7.86	IFAD	6/28/2012
<b>Mauritania</b>	Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania - Project Document	7.80	WFP	6/28/2012
<b>Papua New Guinea</b>	Enhancing adaptive capacity of communities to climate change-related floods in the North Coast and Islands Region of Papua New Guinea - Project Document	6.53	UNDP	3/16/2012
<b>Georgia</b>	Developing Climate Resilient Flood and Flash Flood Management Practices to Protect Vulnerable Communities of Georgia - Project Document	5.32	UNDP	12/14/2011

<b>Tanzania</b>	Implementation Of Concrete Adaptation Measures To Reduce Vulnerability Of Livelihood and Economy Of Coastal Communities In Tanzania - Project Document	5.01	UNEP	12/14/2011
<b>Cook Islands</b>	Strengthening the Resilience of our Islands and our Communities to Climate Change - Project Document	5.38	UNDP	12/14/2011
<b>Uruguay</b>	Uruguay: Helping Small Farmers Adapt to Climate Change - Disbursement Schedule, Project Cost Summary, Project Document	9.97	Agencia Nacional de Investigacion e Innovacion (ANII)	12/14/2011
<b>Samoa</b>	Enhancing Resilience of Samoa's Coastal Communities to Climate Change - Project Document	8.73	UNDP	12/14/2011
<b>Madagascar</b>	Madagascar: Promoting Climate Resilience in the Rice Sector - Project Document	5.10	UNEP	12/14/2011
<b>Mauritius</b>	Climate Change Adaptation Programme in the Coastal Zone of Mauritius - Project Document	9.12	UNDP	9/16/2011
<b>Total</b>		<b>123.75</b>		

## ANNEX 5 – DESCRIPTION OF APPROVED PROGRAMS AND PROJECTS

### LDFA STAND-ALONE PROJECTS

#### **4550 Samoa (UNDP): Strengthening Multi-sectoral Management of Critical Landscapes**

The proposed project combines Samoa's STAR resources under the flexibility criterion into one sustainable land management (SLM) project addressing incentives for reducing land degradation on the ground and improving efficiency of multi-sectoral management at landscape level. This is the first time a SIDS addresses Land Degradation issues in an integrated way through a full size project. The proposed project has been designed in a way that the GEF investment will be used for SLM interventions in 80,000 hectares of upland landscapes, including forest management interventions. Project activities will be based on community-based land use plans to be designed in a participatory manner. GEF support will lead to global environmental (e.g. increased vegetative cover in agro-ecosystems, increased carbon sequestration) and local socio-economic benefits through improved livelihoods.

#### **4600 Uzbekistan (UNDP): Reducing Pressures on Natural Resources from Competing Land Use in Non-irrigated Arid Mountain, Semi-desert and Desert Landscapes**

This stand-alone LD project addresses Objective three (LD3) of the focal area strategy (reducing pressures on natural resources from competing land uses in the wider landscape) by focusing on pasture and forestry sectors in non-irrigated arid areas of Uzbekistan. It thereby responds to the needs identified in the National Action Plan to Combat Desertification and is in fully line with other national strategies and plans on environment. The project will contribute to the objectives of CACILM and will be coordinated with ongoing efforts of this program. The project builds on previous GEF investments in combating land degradation in Uzbekistan by widening the scope of action to non-irrigated arid landscapes; i.e. areas which have been largely left out from government and donor intervention. The field level investment in two (2) administrative districts and support for cross-sectoral enabling environment will up-scale integrated natural resource management (INRM) best practices and will also feed into enhanced policy and institutional framework for implementing sustainable management of forests and pastures at the national level. To this end, the project will deliver concrete economic benefits for the local population and wider national and global benefits from decreased soil erosion and increase carbon sequestration, as well as conservation of important species and habitats harbored in arid mountain, desert and semi-desert landscapes.

#### **4630 Moldova (WB): Agriculture Competitiveness**

The baseline project targets improved agriculture sector competitiveness by modernizing food safety and quality management systems and facilitating better market access. The GEF-supported component of this project is fully incremental and aims at enhancing agro-ecosystem climate resilience at community and farm level, promotes crop diversification, and conservation agriculture technologies. Matching grants for smallholders and communities will promote SLM interventions at a scale of 200-250 agro-ecosystem management subprojects. The project will provide regulatory and institutional support and capacity building for sustainable land management (SLM), as well as financial support for piloting SLM. Global environmental benefits will be achieved from increased stability of agro-ecosystems, increased levels of

carbon sequestration, and reduced land degradation including erosion and pollution with agricultural chemicals. Specifically, the GEF funding will support methodological and analytical work for soil quality and land degradation risk-assessment, land quality certification, and standard setting to ensure that the best soil management practices are integrated in the policy and regulatory framework for food safety management.

#### **4633 China (ADB): Shaanxi Weinan Luyang Integrated Saline and Alkaline Land Management**

This LD stand-alone project will rehabilitate degraded land and improve the physical environment by reducing the salinity and alkalinity of 6,800 ha of soils in the project area (Weinan Municipality), and reduce the impact of floods to the local residents of 51 villages. This will in turn improve agricultural production and increase agricultural yield per area by 50%, benefitting approximately 40,000 smallholders. GEF incremental support will enhance the environmental benefits of the project through three major fields of activities: (i) improve management of saline and alkaline soils through rehabilitation of drainage system and introduction of sustainable land and water management best practices; (ii) improve resilience to climate change of agro-ecosystems and reduce flood risk to local people; (iii) improve wetland management and rural livelihoods. The Project is consistent with the key priorities of this plan and in particular the priority activities related to identifying and popularizing best practices for land reclamation to improve the productivity of the Shaanxi provincial ecosystems, as well as its focus on transformation and recovery of desert forest and grasslands in the Yellow River basin. The project is closely linked to the PRC-GEF Partnership on Combating Land Degradation in Drylands and investments are thus fully aligned with UNCCD and NAP implementation.

#### **4720 Angola (FAO): Land Rehabilitation and Rangelands Management in Small Holders Agropastoral Production Systems in South western Angola**

The project aims to improve the livelihoods of very poor agro-pastoral communities by combating land degradation in rangelands in a remote and very poor region of Angola. The project strategy is to enhance the capacity of South Western Angola's smallholders' agro-pastoral sector to mitigate the impact of land degradation processes and to rehabilitate degraded lands by mainstreaming Sustainable Land Management (SLM) technologies into agro-pastoral and agricultural development initiatives. The project targets at least 2000 rural agro-pastoralists or farmers in 5 pastoral communities adopting SLM and better production practices sustaining agro-pastoral productive services in 7,500 ha of rangeland ecosystems; ecosystems based rehabilitation in 500 ha along three transhumance sub-routes; and increased investments (5 USD million/year by the end of the project) through specific budgetary provisions made by the Ministry of Environment, the Ministry of Agriculture, and decentralized administrations for up-scaling SLM into agro-pastoral systems.

#### **4751 Botswana (UNDP): Mainstreaming SLM in Rangeland Areas of Ngamiland District Productive Landscapes for Improved livelihoods**

The project aims to improve livelihoods in the Ngamiland district by mainstreaming SLM in rangeland areas, including through institutions, policies and markets. The project has two main components: 1) rangeland management to improve condition and flow of ecosystem services for livelihoods of local communities, and 2) markets and effective policy and resources governance frameworks to provide

incentives for effective livestock management. The project will improve vegetative cover on an estimated 500,000 hectares through SLM practices, and lead to a strengthened enabling environment for livestock marketing, agriculture, and land tenure.

#### **4754 Pakistan (UNDP): Sustainable Land Management Programme to Combat Desertification in Pakistan**

This LD stand-alone project aims at up-scaling SLM activities to 200 villages in 14 districts of four provinces (Punjab, Sindh, Balochistan, and Khyber Pakhtankhawa) to an estimated total of 800,000 hectares. The SLM activities will alleviate land degradation and increase the resilience to climate change of local communities. The project builds on existing investments to support the implementation of SLM practices so that ecosystem functionality and critical ecosystem services are enhanced at landscape level. As an innovative element, the project will facilitate the generation of community level SLM funds to incentivize rural farmers to adopt SLM practices. The project is fully in line with the LDFA strategy and builds on the important lessons drawn from GEF's earlier investments in the Sustainable Land Management.

#### **4806 Global (UNEP): A Global Initiative on Landscapes for People, Food and Nature**

The LDFA strategy specifically includes a focus on strengthening adaptive management in SLM as a means of increasing the sustainability of global environment and development benefits. A major constraint in this regard is lack of cost-effective mechanisms for most countries and partners to harness innovations in SLM, especially those that strengthen interventions by smallholder farmers and land users. This UNEP/GEF MSP seeks to address this need through a three-year multi-stakeholder initiative to expand and improve landscape-level sustainable land management ([L-SLM]) for combating land degradation and its associated challenges in the context of agriculture and food security. It will support and advance the use of the landscape approach through policy and institutional support, and demonstrating adaptive management in a set of diverse landscapes and country-level contexts. This approach will enable GEF eligible countries with limited LDFA resources to leverage new opportunities for increasing investments in SLM, which will contribute greatly to focal area achievements during GEF-5 and to development of the future strategy. Many stakeholders will be involved by providing input and/or leadership in preparing knowledge products, among them Conservation International, FAO, World Agroforestry Centre, International Union for the Conservation of Nature, UNEP and the International Partnership for Satoyama Initiative.

#### **4832 Namibia (UNDP): Sustainable Management of Namibia's Forested Lands**

The proposed project aims to reduce pressure on forest resources by facilitating the policy and capacity enabling environment for the uptake of improved practices within agriculture, livestock and forestry management in the community forest areas, particularly in 30 hotspots. The strategy aims to increase the productivity of the drylands ecosystem while simultaneously reducing deforestation and securing the global environmental benefits delivered by forest resources. Agroforestry practices will particularly be appropriated to rehabilitate degraded farming systems, protect soils and watersheds, increase availability of feed and shade for livestock, and improve carbon sequestration. In hotspots where overgrazing is the main concern, livestock management strategies will be developed on 150,000 hectares, including live

fencing and integrated fire management systems. The project also includes an institutional component to support the generation and use of knowledge for integrated land use planning and policy reform.

#### **4922 Global<sup>13</sup> (FAO): Decision Support for Mainstreaming and Scaling up of Sustainable Land Management**

This proposed FSP builds on previous GEF efforts to facilitate up-scaling of SLM investments and interventions through increased access to knowledge and tools by affected countries around the world. This includes resources to effectively diagnose the land degradation problem and its impacts, and tools to understand how ecosystem services can be more efficiently enhanced in production systems. The proposed FSP will further expand these opportunities by influencing decision-making on national level investments in SLM. The overall goal is to catalyze actions that will lead to improvements in management of production landscapes, with potential for generating global environment benefits. The project approach will also contribute to implementation of the UNCCD 10-Year Strategy (2008-2018) through improvements in the scientific basis for targeting interventions to combat desertification at scale. This will further enhance GEF contributions toward strengthening implementation of the convention, in addition to country-specific projects financed under the focal area.

#### **4945 Cambodia (ADB): GMS-FBP Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin**

This is a child project under the Greater Mekong Sub-Region Forest and Biodiversity Program, with a specific objective to restore and maintain forest cover and watershed stability functions while providing for sustainable livelihoods and ecosystem services in the Upper Prek Thnot watershed. The project is embedded within a multipurpose landscape approach. Main outputs of this project include: (i) institutions and communities strengthened for biodiversity corridor management; (ii) biodiversity corridors restored, protected, and maintained; (iii) livelihoods improved and small-scale infrastructure support provided in target villages and communes; and (iv) project management and support services operationalized. The project will implement SLM activities in 10 communes in Koh Kong which are predominantly in mountainous areas covered with protected forests, National Parks, and wildlife sanctuaries. Arrangements have been made for Thmar Bang District (in north eastern Koh Kong Province, and adjacent Kampong Speu) to be added to the project.

#### **4954 Armenia (WB): Community Agricultural Resource Management and Competitiveness (CARMAC)**

The project supports complementing and scaling up the baseline project through activities aimed at preventing land degradation and promoting best practices in pasture management in selected Marzs/rayons of the country. It will build upon the World Bank operation in tackling pastures productivity as important elements of food safety, sector productivity and ultimately agricultural competitiveness at the community level. It will help strengthening human, institutional and technical capacities (both locally and nationally) for the implementation of sustainable pasture management activities through preparing and implementing Pasture/Livestock Management Plans, regulating livestock grazing, and providing financial support for the improving/restoring pastures productivity. Furthermore,

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<sup>13</sup> Argentina, Bosnia-Herzegovina, Bangladesh, China, Colombia, Ecuador, Lesotho, Morocco, Nigeria, Panama, Philippines, Thailand, Tunisia, Turkey, Uzbekistan

the GEF incremental financing will support activities aimed at improving decision-making through capacity building among communities, farmers as well as Marz Agricultural Support Centers (MASCs) and the national-level Republican Agricultural Support Center (RASC). GEF financing is expected to generate positive economic benefits for approximately 150,000 rural households and would be used for dissemination of SLM information, including best-practices with the highest potential for replication in the mitigation of land degradation risks. Anticipated global environmental benefits will result from increased stability of ecosystems to increased Biomass -Net Primary Productivity (NPP), and respectively levels of carbon sequestration, and reduced soil erosion.

#### **5044 Argentina (UNDP): Sustainable Land Use Management in the Drylands of North-west Argentina**

The Government of Argentina considers land degradation as a major environment and development challenge nationally, and has consistently leveraged GEF resources to develop and apply long-term solutions. The proposed FSP follows a similar framework, and focuses specifically on the drylands in the Northwest region where land degradation threatens agriculture and livestock production practices. The drylands constitute the Puna, dry inter-Andean valleys and associated scrubland on the plain and plateau of the foothills in Argentina's Northwest and Cuyo regions. The National Government is already working with affected Provinces in the region to invest in a series of development programs, which will serve as baseline investments for the proposed project. The baseline programs are funded by the National Government to specifically address the livestock and agricultural practices from a highly sectoral approach, but with considerable potential to generate global environment benefits. Proposed on-the-ground interventions and landscape level uptake of SLM practices will deliver direct benefits over an estimated 14,000 km<sup>2</sup> of land area. In addition, support to land use planning and to institutional strengthening at the Provincial level will facilitate replication and up-scaling of SLM across 300,000 km<sup>2</sup> of drylands, leading to decreased grazing pressure and improved pastures; reduced water deficiencies and soil erosion, and conservation of hydrological services.

#### **5142 China (ADB): Sustainable and Climate Resilient Land Management in Western PRC**

The PRC-GEF Partnership to Combat Land Degradation in Dryland Ecosystem was launched in 2002 to support the implementation of the country's NAP. Under this GEF-4 program, US\$37 million of GEF funds, including US\$12 million of LD funds were invested through eight (8) child projects, which have leveraged US\$700 million in co-financing. The proposed project builds on these investments to focus on reversing land degradation and improving livelihoods through SLM in six provinces/autonomous regions in western China. The project will seek to scale-up SLM and increase vegetation cover in targeted areas, improve management of degraded lands to support rural livelihoods, and enhance enabling environment and capacity building in two provinces that recently joined the partnership. The increased vegetation cover will result in 1.0 - 1.2 % increase in carbon sequestration over the baseline in the project areas. The project will also ensure that innovative and climate resilient SLM and INRM practices are scaled up through ongoing and new investment projects under the partnership. A specific focus is on the promotion of new investments through PPPs, PES, and carbon finance.

### **5186 Regional<sup>14</sup> (World Bank): MENA - Desert Ecosystems and Livelihoods Knowledge Sharing and Coordination Project**

The "Middle East and North Africa Desert Ecosystems and Livelihood Program (MENA-DELP)" was approved by GEF Council in November 2011 as a "single agency" programmatic approach with the World Bank. The Program was designed in response to demand from MENA countries to invest in harnessing and safeguarding ecosystem services provided by Desert Ecosystems in the region, including potential for contributing to sustainable development. Four countries - Algeria, Jordan, Egypt, and Morocco - decided to utilize their STAR allocations for national projects under the program, which amounted to US\$20 million, plus an additional US\$226 million in co-financing. Tunisia has since engaged as a fifth country through a GEF-4 project that was only recently approved. In order to facilitate regional level integration and coordination of knowledge management and learning, the GEF committed an additional US\$1 million from the LD focal area set-aside funds for an MSP. Through this MSP, the World Bank enlisted the Sahara and Sahel Observatory (OSS), a prestigious regional body, to serve as executing partner for implementing a knowledge management and learning system that will directly support the five participating countries. The investment will strengthen south-south exchanges and help position the countries to expand the Desert ecosystem agenda regionally, with potential for transformational impact. OSS and the countries bring an additional US\$487,000 as co-financing, which is expected to increase as the DELP agenda gets mainstreamed during implementation.

### **5229 Lebanon (UNDP): Sustainable Land Management in the Qaroun Watershed**

The Government of Lebanon is requesting GEF support through this project to remove, in an incremental manner, major barriers to sustainable land management in the Qaroun Watershed. This watershed covers an area of 1,570 km<sup>2</sup>, and is a critical source of water for urban use and food production. Notwithstanding its national significance, the watershed suffers from accelerating land degradation, which is undermining ecosystem functions and services. Land degradation is attributable to historic deforestation, excessive firewood collection, overgrazing, expansion of urban settlements, and inappropriate infrastructure placement. The proposed stand-alone land degradation focal area project is designed to tackle these threats through sustainable land management in the watershed. The project will promote an integrated approach towards fostering SLM by seeking to balance environmental management with development needs. Amongst other things, it will set-up a multi-sector planning platform to balance competing environmental, social and economic objectives in district development plans and associated investments. In doing so, it will reduce conflicting land-uses and improve the sustainability of land management so as to maintain the flow of vital ecosystem services and sustain the livelihoods of local and downstream communities.

### **5276 Brazil (UNDP): Sustainable Land Use Management in the Semi-arid Region of North-east Brazil (Sergipe)**

The Government of Brazil has an excellent track record with leveraging GEF resources to combat desertification. Yet a fundamental barrier to implementing SLM for combating desertification in the country is the land use policy and governance framework, especially within the States. The proposed project builds on the lessons and experience from previous States to advance SLM in the State of Sergipe,

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<sup>14</sup> Algeria, Egypt, Jordan, Morocco, Tunisia

focusing specifically on areas susceptible to desertification. Building on planned and existing baseline investments by the National and State Government to implement the State Action Plan to Combat Desertification, the proposed GEF investment will leverage nearly US\$121.5 million over four years to combat desertification in affected areas of Sergipe State. An innovative aspect of the proposed project is to capitalize on existing national and state commitment to address this challenge in the context of poverty reduction and drought mitigation. Consequently, SLM will be mainstreamed as a tool for enhancing sustainability, while empowering local land users to implement appropriate interventions on the ground with environmental and socio-economic benefits. The land governance framework and commitment by the national and state governments will ensure that successes and gains are sustained, with potential for scaling up to other affected areas.

### **5327 South Africa (UNDP): Securing Multiple Ecosystems Benefit Through SLM in the Productive But Degraded Landscapes of South Africa**

South Africa places a high premium on the role of land and the constituent ecosystems in the quest of a green economy that is defined as "a sustainable development path based on addressing the interdependence between economic growth, social protection, and natural ecosystems". This is the first stand-alone SLM project in South Africa. The project is developed under the Green Economy and the Zero Net Land Loss agendas, with very concrete activities on the ground to show how these overarching concepts can happen. The aim of the project is to provide incentives (capacity, financial, governance) to find sustainable land management solutions and resilient livelihoods in the Karoo, Olifants, and Eastern Cape. The project aims to scale up activities initiated by the baseline projects to increase ecological viability, ecosystem rehabilitation, ecosystem services delivery and resilience. This means to increase sustainable production, advance the local level green economy, and reduce vulnerability to natural and social capita for more than 100,000 households. The project is also in line with key national strategies, notably the Country National Action Program developed under UNCCD, the National Development Plan Vision for 2030 and especially the Presidential National Outcome 10 and the call for advancing the Green Economy.

### **5354 Madagascar (UNEP): Participatory Sustainable Land Management in the Grassland Plateaus of Western Madagascar**

The proposed project aims to reverse land degradation and improve living conditions in the Bongolava Region of Western Madagascar through participatory sustainable management of the grasslands. The project combines scientific and participatory approaches at multi-levels, targeting decisions makers at household, commune, district, and regional level. It also promotes an adaptive management approach, notably promoting conservation agriculture through participative research, enabling farmers to adapt to new challenges and opportunities including climate change. The project is based on three main components related to 1) institutional development and capacity building, 2) implementation of sustainable land management measures, and 3) knowledge management.

## MULTI FOCAL AREA PROJECTS

### **4329 Global (UNDP): Fifth Operational Phase of the GEF Small Grants Programme (SG)**

The project will support implementation of the Fifth Operational Phase of the SGP to secure global environment benefits through community-based initiatives and actions. The program includes 126 eligible countries and leverages GEF resources under multiple focal areas. Because the grants to be provided by the SGP in the 5th Operational Phase have yet to be selected, in each country, SGP can support a strategic approach by ensuring funding only for community and civil society - level grants that are in line with global GEF priorities. Outcomes are defined according the project components and are related to all focal areas, demonstrating linkages with the global GEF strategic approach and contributing to a local-to-global results framework.

### **4479 Guatemala (UNDP): Sustainable Forest Management and Multiple Global Environmental Benefits**

The project seeks to address impacts on forests in mixed agriculture/forest landscapes in the southeastern and western regions of Guatemala through an integrated approach to strengthen forest and land management practices, enhance biodiversity conservation activities and improve carbon stocks within REDD-plus pilot projects. The project is aligned with and will strengthen the National Forest Policy, supports the Municipal Development Plans and contributes to the National Policy on Climate Change. The project will work with indigenous and forest dependent communities and will result in increased carbon stock of 680,418 tons CO<sub>2</sub> over 5 years as a direct effect, 40,176 hectares brought into sustainable management including buffer zones and corridors between existing PAs, and the restoration of 5,160 hectares of threatened dry forest, as well as improving the policy and regulatory framework for managing mixed forest/agriculture landscapes in Guatemala.

### **4541 Global<sup>15</sup> (UNDP): Fifth Operational Phase of the GEF Small Grants Program - Implementing the program using STAR resources**

See details under project #4329

### **4560 Brazil (UNDP): Fifth Operational Phase of the GEF Small Grants Program in Brazil**

The project for the Fifth GEF SGP operational phase in Brazil will be aiming to conserve the Cerrado and Caatinga biomes of Brazil through community initiatives on sustainable resource use, and actions that maintain or enhance carbon stocks and increase areas under sustainable land management. The Cerrado is the most biodiverse savannah in the world, with an area of more than 2 million square kilometers (some 21% of the Brazilian territory). The project will support at least 307 projects initiated by civil society and community organizations (average US\$20,000) and will achieve the following global benefits: 300,000 hectares of Cerrado and 100,000 hectares of Caatinga ecosystems with enhanced biodiversity conservation in community lands; 500 hectares of Caatinga forest ecosystem restored and 500 hectares restored in the Cerrado, equivalent to 37,400 tCO<sub>2</sub>e sequestered in Cerrado and 18,200 tCO<sub>2</sub>e in

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<sup>15</sup> Argentina, Cuba, Egypt, Ethiopia, Indonesia, Iran, Kazakhstan, Morocco, Madagascar, Malaysia, Peru, Papua New Guinea, Thailand, Turkey, Tanzania, South Africa

Caatinga; 80,000 hectares with sustainable agriculture and forest management in the Caatinga avoiding conversion to pasture and monoculture and maintaining environmental services equivalent to 4,370,400 tCO<sub>2</sub>e avoided; 200 hectares in Caatinga and 400 hectares in Cerrado with innovative soil management techniques adopted by communities; and 2,000 hectares with innovative sustainable water management techniques at community level.

#### **4579 Bhutan (WB): Sustainable Financing for Biodiversity Conservation and Natural Resources Management**

The project's objective is to improve the operational effectiveness of the Bhutan Trust Fund for Environment Conservation (BT FEC) through improving conservation management of forests and alpine ecosystems in the high altitude northern areas (HANAS) landscape of Bhutan. The GEF's incremental support will be crucial for ensuring a more impactful role of BT FEC in addressing the country's conservation priorities through a suite of co-ordinated projects funded through the BT FEC. The main effort, the implementation of the activities in the HANAS landscape will be essential to achieve biodiversity and forest conservation, sustainable grazing and land management, and better protected area management. The project is fully in line with the GEF LDFA and BD strategies and priorities. It creates multiple benefits in forest dominated landscapes and is thus eligible for additional SFM/REDD-plus incentive funding on top of the country's STAR allocation. The project creates GEBs in terms of carbon sequestration and avoided emissions as well as improved management effectiveness in protected areas and corridors with populations of key species (i.e. tigers).

#### **4583 Turkey (FAO): Project title: Environmental Land Management and Rural Livelihoods**

This project follows an integrated multi-focal area approach aiming to improve sustainability of agriculture and forest land use management through the diffusion and adoption of low-carbon technologies with win-win benefits in land degradation, climate change, and biodiversity conservation and increased farm profitability and forest productivity. The project will be implemented in Central Anatolia, where arid and semi-arid conditions prevail. Most activities are focused on the Konya Closed Basin, encompassing a production landscape of agricultural lands, pastures, forests, sand dunes, as well as wetlands and water bodies. The basin also harbors important natural sites with high ecological value. The main global environment benefits to be generated include annual sequestration target of 60,000 tCO<sub>2</sub>eq from rehabilitation of 20,000 ha of degraded forest lands; avoided emissions of 20,000 tCO<sub>2</sub>eq/year through conservation agriculture on 50,000 hectares; mitigation target of 90,000 tCO<sub>2</sub>eq/year from improved rangeland management on 30,000 hectares; biodiversity conservation mainstreamed in 80,000 hectares of production landscape including the restoration of natural habitats essential for threatened biodiversity. Total indicative direct and indirect CO<sub>2</sub> benefits over a ten year period is 1.82 million metric tons CO<sub>2</sub>e, which translates to a cost of US\$3.15/tCO<sub>2</sub>e.

#### **4584 Kazakhstan (UNDP): Improving Sustainability of PA System in Desert Ecosystems through Promotion of Biodiversity-compatible Livelihoods in and Around PAs**

This multifocal area project has been identified as a priority initiative in the national stakeholder consultations in Kazakhstan. It is in line with the Central Asia Countries' Initiative for Land Management (CACILM) program in terms of (a) focusing on investments on the ground working through upscaling of best practices in SLM and BD conservation at landscape level and (b) adding an innovative financing

mechanism to the natural resource management tools applied in the region. The project would increase the geographic coverage of globally important desert ecosystems in Southern Kazakhstan in the protected area system by 900,000 ha. The proposed SLM activities would have tangible outputs in terms of rehabilitation and sustainable management of degraded rangelands (85,000 hectares), wetlands (2,000 hectares) and Tugai forests (20,000 hectares). The project would also provide approximately 6,000 local households with a micro-credit revolving facility supported by GEF and co-financed by the Fund for Agricultural Support (FAS) to promote biodiversity-compatible livelihoods in and around PAs. For this activity, a solid baseline exists and GEF's incremental value is to ensure a focus of this facility towards biodiversity protection and sustainable land management.

#### **4590 Honduras (UNDP): Delivering Multiple Global Environment Benefits through Sustainable Management of Production Landscapes**

Honduras continues to suffer a very high rate (2.2%/year) of forest loss largely due to ongoing expansion of cattle ranching; the frontier of which rapidly advances on key biodiversity areas. The project uses export demand for certified products together with agricultural loans from local FIs (dependent on the land's certification) to promote the uptake of management techniques to prevent loss of primary forest and include BD protection and SLM measures. This builds on existing work to stimulate the certified product export market. The project also develops regional land use plans to identify biodiversity corridors, set-asides and restoration areas to increase connectivity. The project will result in 30,000 hectares of land certified to SAN standards to protect and enhance high conservation value areas, with a target of 20% of meat and 15% of milk production from certified sources in the project area. The project will also avoid 3,412 hectares of deforestation, restore 3,169 hectares and improve 6,338 hectares to a silvi-pastoral regime; saving 535,000 tCO<sub>2</sub>e. The project will work with 1,000 small scale farmers.

#### **4616 El Salvador (FAO): Climate Change Adaptation to Reduce Land Degradation in Fragile Micro-Watersheds Located in the Municipalities of Texistepeque and Candelaria de la Frontera**

This is a multi-trust fund initiative in El Salvador, based on using climate change adaptation methods with the objective of reducing land degradation. The focus is on resilience building-activities in development sectors, specifically on addressing disaster risk management, addressing climate threats to the most vulnerable populations, critical ecosystem restoration, and pilot activities to reduce soil erosion and unsuitable land use. Cofinancing in the amount of US\$5.7M is provided, in grant form, from the Ministry of Agriculture and Livestock for this project, and the initiative will build on and complement a number of existing activities.

#### **4620 Regional<sup>16</sup> (WB): MENA - Desert Ecosystems and Livelihoods Program MENA-DELP**

The MENA-DELP aims to enhance the livelihoods in desert ecosystems by optimizing the flow of desert goods and services. The program is composed of a total of five projects with one project per country plus one regional umbrella. MENA-DELP is responsive to GEF strategies and priorities under the Biodiversity (conservation and sustainable use of biodiversity in targeted oases, rangelands, and agricultural systems), Land Degradation (adaptive management practices and ecosystem rehabilitation through knowledge enhancement and enabling activities within key pockets of degradation), and Climate Change Mitigation

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<sup>16</sup> Algeria, Egypt, Jordan, Morocco

(piloting of renewable energy alternatives to traditional approaches at the household level) focal area strategies. In addition to programming its country allocation, Algeria also requested SCCF resources to invest in new ways to help sustain and improve desert livelihoods and diversify economic activities. The program leverages an additional US\$226.2 million in co-financing through investments in four participating countries (Algeria, Egypt, Jordan and Morocco). The individual country projects under the program will build on investments in different production sectors and will improve the sustainability of these investments through an integrated ecosystem management approach. Emphasis is placed on participatory approaches, capacity building and on harnessing valuable local knowledge.

#### **4625 Malawi (WB): Shire Natural Ecosystems Management Project**

This project in Malawi aims to address the interlinked challenges of poverty and a deteriorating natural resource base in the Shire River Basin to reduce the process of environmental degradation and improve the productive potential of natural resources. The proposed GEF and LDCF project is built on important World Bank investments in the Shire River Basin, including planning, catchment management, and water related infrastructures, reaching a cofinancing of US\$72 million for a ratio of 1:11. This integrated multi-focal area and multi-trust fund project combines several GEF BD, LD, and SFM objectives that will help to improve land, wetlands, and forest management on more than 300,000 ha. The LDCF (US\$1.5 million) will support an integrated community flood resilience program in the lower Shire floodplain to reduce vulnerability to extreme weather events. It will help to understand the dynamics of the Elephant Marshes (120,000 hectares) and other wetlands in the lower shire and implement community based activities as a basis for sustainable and climate-resilient co-management. The project will: a) strengthen the institutional capacities and mechanisms for Shire Basin monitoring, planning, management and decision support systems; b) invest in water related infrastructure that sustainably improves water resources management and development; c) reduce erosion in priority catchments and sedimentation and flooding downstream, while enhancing environmental services, agricultural productivity and improving livelihoods; d) improve flood management in the Lower Shire and provide community level adaptation and mitigation support; and e) protect and enhance ecological services in the Basin. The direct beneficiaries are some 230,000 people (50% female) that will benefit from integrated catchment rehabilitation activities and another 200,000 in the Lower Shire that will benefit from improved water management and flood mitigation works.

#### **4631 Burundi (WB): Watershed Approach to Sustainable Coffee Production in Burundi**

The proposed GEF project will assist Burundi to improve the sustainability of selected areas within coffee landscapes. The objective will be achieved by: 1) implementing sustainable land and water management practices, 2) establishing a shade-grown coffee pilot program, 3) promoting sustainable management in the Burundi Forest Nature Reserve, 4) addressing point-source pollution, 5) promoting marketing and commercialization strategies for high-quality coffee, and 6) piloting initiatives that generate alternative sources of income such as agri-tourism and ecotourism. Coffee growing is one of the most important productive activities in Burundi. Coffee is the country's primary export crop, accounting for more than 60% of all of Burundi's export earnings, depending on the year. The coffee sector suffers from low and declining production due to ageing plantations, high intermediary costs, degraded soils and an inadequate incentive framework. The expansion of coffee cultivation to more than 4% of Burundi's land area, and investments in the construction of Coffee Washing Stations (CWSs) from 1980 to 1993, did not translate

into the expected increases in production, especially with the advent of the civil war. This project will invest in a series of activities in support of establishing shade-grown coffee and sustainable land and water management practices in five target sub-catchments from which various environmental and social benefits could be derived. These interventions would allow the promotion of high quality coffee for the international markets and additional sources of income from agri-tourism, eco-tourism and the harvest of non-timber forest products from the trees providing the environmental conditions for the shade-grown coffee.

#### **4632 China (FAO): Conservation of Biodiversity and Sustainable Land Management in the Soda Saline-alkaline Wetlands Agro Pastoral Landscapes in the Western Area of the Jilin Province**

The project aims at maintaining ecosystem services and increasing biodiversity in saline alkaline wetlands / agro-pastoral landscapes of Northeastern Jilin Province. By combining BD and LD resources, the project addresses wetland conservation, native grassland rehabilitation, soil conservation, and conservation agriculture activities at landscape level. The project is implemented in one of the 33 priority regions for biodiversity conservation and addresses 5 of the 30 priority actions identified in the NBSAP. The project will reverse degradation of 154,000 hectares grasslands, rehabilitate 50,000 hectares of wetlands, and support the application of integrated SLW practices in 220,000 hectares of agricultural production land. The conservation of the wetland habitat outside the protected area network will have global and local biodiversity benefits and socio-economic benefits for local communities in a production landscape. The incremental GEF support will improve conservation of wetlands and sustainable use of agricultural lands through efficient management of water resources from the Songhuajiang River.

#### **4634 Ukraine (UNEP): Conserving, Enhancing and Managing Carbon Stocks and Biodiversity while Promoting Sustainable Development in the Chernobyl Exclusion Zone through the Establishment of a Research and Environmental Protection Centre and Protected Area**

This multi-focal area project supports the establishment of the Research and Environmental Protection Center and associated protected areas within and around the current Chernobyl Exclusion Zone (ChEZ). Long-term environmental monitoring and transparency about the impact of the nuclear accident will be an important basis for the international community to better understand the potential for ecosystem rehabilitation. The Research Center, which will support effectiveness of nature conservation, the creation of a full status protected area network within and around ChEZ of proposed size of 110,000 hectares, and the learning, field testing, and dissemination of best practices for habitat rehabilitation are main components of the project. Furthermore, one of the main field interventions of the project is to develop and implement an integrated fire management plan, addressing an urgent and major risk for the ecosystem and the wider environment of the region and health of its inhabitants.

#### **4639 Zambia (UNDP): Strengthening Management Effectiveness and Generating Multiple Environmental Benefits within and around Protected Areas in Zambia**

Zambia is building a significant network of protected areas that might become another model of conservation working in Southern Africa for the benefit of biodiversity and people, securing some of these last great landscapes of Africa. The proposed project provides an integrated land use planning approach with biodiversity and forest management that will deliver high value multiple benefits on a large scale, protecting globally significant biodiversity, forest carbon stocks and critical ecosystem services

such as watershed protection. Zambia's vast Protected Area estate covers 40% of the country's surface area and has the greatest potential to provide these multiple environmental benefits. The project is based on three components to 1) increase the sustainability of Zambia Protected Area system and the effectiveness of its core areas; 2) promote Sustainable land and forest management in targeted Game Management Areas, and 3) establish financial incentives and dissemination of appropriate technologies for sustainable charcoal production and SFM in selected charcoal-producing Game Management Areas. All Global Environment Benefits are estimated and will be measured through the number of hectare under the national park status, the number of hectare of forests under a protection status, recovery in wildlife species, tons of CO<sub>2</sub> emissions avoided over the next 5 years by changing the deforestation rate, adopting SLM and conservation farming practices, and improving charcoal technology.

**4642 Uzbekistan (WB) Project title: Sustainable Agriculture and Climate Change Mitigation Project**

The global environmental objectives of the proposed project are to: (i) promote the introduction of selected renewable energy and energy efficiency technologies of relevance to agri-businesses and farms; and (ii) strengthen capacity for improving degraded irrigated land and water conservation in the project area. As a Climate Change Mitigation-focused project, it is expected to significantly increase renewable energy and sustainable irrigation investments in the agribusiness sector in Uzbekistan - something the government has endorsed strongly and sees as a key intervention for sustainable development for the future. The World Bank is providing substantial co-financing to the project and matching grants for renewable energy investments. While the size of installed energy and technology transferred is unknown today due to the demand driven approach of the financial mechanism the estimated GEB are very positive. The project aims to address the barrier of lack of access to finance through the creation of a financial mechanism and includes a relevant LD component targeting the promotion of SLM activities in the field.

**4644 Uganda (UNDP): Addressing Barriers to the Adoption of Improved Charcoal Production Technologies and Sustainable Land Management practices through an integrated approach**

This project introduces 2 types of new charcoal kilns (200 retort and 400 casamance) while simultaneously establishing community woodlots and increasing vegetation through improved management on 100,000 hectares of woodlands. In addition to reduced CO<sub>2</sub> emissions compared to traditional kilns, there are reduced methane emissions. Other benefits in carbon will be obtained with the reduction in land degradation by at least 20% in demonstration sites. Through the pilot demonstration activities on the ground, the project will also address key-concerns for SLM and SFM as land tenure, land rights and uses. CO<sub>2</sub> benefits for the kilns and land management are estimated at 1,975,000 tCO<sub>2</sub> for the 20 year default period, which is US\$1.76/tCO<sub>2</sub>. Financial mechanisms for purchasing or manufacturing of improved kilns by other producer associations will be developed, and carbon project designs will be developed linked to kilns and sustainable biomass use. The primary project beneficiaries are the local communities involved in charcoal business. Many grass-roots partners are also involved to make the approach feasible and sustainable (microfinance operators, private sector, and NGOs). The project is anchored in the National Development Plan and the Uganda Strategic Investment Framework for Sustainable Land Management developed under the SIP/Terrafrica. The project will be coordinated with

other SLM initiatives involving multiple sector departments, development partners, NGO and CSO, as well as with many other projects on SLM, SFM, and REDD.

#### **4645 Zimbabwe (WB): Hwange-Sanyati Biological Corridor (HSBC) Environment Management and Conservation Project**

Hwange-Sanyati Biological Corridor (HSBC) is one of the four biodiversity hotspots in Zimbabwe. Hwange National Park has not deteriorated as much as other parks in the country due to the proximity to Victoria Falls that is able to bring some tourists to the park. However, Zimbabwe is facing increased challenges with the expansion of agriculture, the acceleration of land degradation, the expansion of invasive species, wildlife poaching, and lack of experiences about sustainable management practices for land use, land use change and forestry issues. A multi-focal area project is an appropriate response to address multiple challenges. Through this project, the GEF is expected to catalyze many different partners to address multiple Global environment benefits and develop an integrated landscape/ecosystem approach in a key biodiversity hotspot within Zimbabwe: HSBC including three national parks, three Safari areas, and five gazetted forest areas. The expected global environment benefits are improvement in biodiversity, enhanced carbon sequestration from improvement in vegetation cover (including forests), carbon sequestration through avoided deforestation and improved land degradation through recovery of indigenous plant species and reduction in siltation. The Project provides three closely inter-related components to improve protected area management effectiveness and the livelihoods of local communities; promote improved land and forest management practices; and support technical and institutional capacity improvement.

#### **4650 Lao PDR (WB): Strengthening Protection and Management Effectiveness for Wildlife and Protected Areas**

This is a child project of the GMS Forest and Biodiversity that follows a two-pronged approach of (i) supporting protected area management, wildlife conservation, REDD and sustainable forest management and (ii) strengthened capacity of institutions mandated with wildlife trade control. The proposed project is consistent with the GEF strategies for Biodiversity, Climate Change, Land Degradation, and SFM/REDD-plus. GEF support would be used to develop and implement an innovative REDD-plus pilot for the voluntary carbon market, by financing feasibility studies for Nam Kading NPA and Xe Pian NPA, and based on this, establish a pilot project at both sites. A pre-feasibility study of the Nam Kading NPA indicates a 60,000 tCO<sub>2</sub> annual emission reduction potential, based upon the assumption that approximately 160 hectares of forest with an average carbon content of 373 tCO<sub>2</sub> per ha is lost every year at Nam Kading NPA, which is an area of 150,00 hectares. Initial findings from a pre-feasibility study for Xe Pian NPA suggest that a REDD-plus project in this area could result in emissions reductions of around 14,800 tCO<sub>2</sub> annually, which was calculated for an area of 240,000 hectares. Based on these estimates, direct and indirect benefits over a 15 year period would be 1.12 million metric tons CO<sub>2</sub>, at a cost of US\$6.08/tCO<sub>2</sub>. GEF support through BD funds is dedicated to institutional strengthening of national agencies to do wildlife conservation and illegal wildlife trade control.

#### **4669 Namibia (WB): Namibian Coast Conservation and Management Project**

The project is designed to contribute to the conservation and management of coastal and marine ecosystems in the Namibian coast through an integrated coastal zone management approach (ICZM). This

project will strengthen the Dorob National Park and Namibian Islands Marine Protected Areas established during the original GEF/World Bank Namibian Coast Conservation and Management (NACOMA) project. The current project will support four components related to 1) the legal, institutional, policy, and planning framework for ICZM, 2) targeted capacity building for ICZM, 3) targeted investments in the Dorob National Park 810,000 hectares and Namibian Islands Marine Protected Areas 500 hectares, including investments in pilot areas (200,000 hectares) to rehabilitate land degradation and improve management, and 4) coordination and reporting.

#### **4678 Global<sup>17</sup> (UNDP): GEF SGP Fifth Operational Phase--Implementing the Program Using STAR Resources II**

Sixty seven (67) countries included under this project have endorsed STAR funds for GEF SGP country programs. Some of these countries have well-established programs and have developed a significant portfolio of projects and have high demands from the communities for project funding. The GEF SGP seeks impact-level results contributing to global environmental benefits through innovation, demonstration and piloting that will be up-scaled by other partners and actors. National level GEF SGP objectives reflected in the revised country program strategies will be consistent with GEF-5 objectives and STAR focal area strategies. National projects are in-line with the GEF-5 strategic priorities, and are the means by which the project will achieve the long-term impact level results. For GEF-5, it is anticipated that the GEF SGP STAR funding for these 67 countries will support at least 1, 195 projects (should the maximum grant amount US\$50,000 be utilized) or as many as 2, 390 projects (at the average grant making of US\$25,000 per project).

#### **4717 Seychelles (UNDP): Expansion and Strengthening of the Protected Area Subsystem of the Outer Islands of Seychelles and its Integration into the Broader Land and Seascape**

The Project was designed to enable the Government of Seychelles to conserve and promote sustainable use of coastal and marine biodiversity in Seychelles' Outer Islands (Coralline Islands). This will be achieved by through expanding the Protected Area State to an estimated 1,152 hectares of land area (plus marine), and improved protected area management effectiveness in targeted sites. The targeted sites are: Goellettes Island and Banc de Sables (27 hectares), South Island Farquhar (420 hectares), South Island (Poivre) (137 hectares), Alphonse (174 hectares), and Desroches (394 hectares). Secondly, it would be achieved through reduction of pressures on natural resources from competing land uses through an integrated natural resource management framework. An operating a GIS-bases system will be established and made available to planners and developers. This system will be used to carry out an ecosystem-wide zoning and the preparation of a Master Plan for the Outer Islands. A 10-year Business Plan will be developed and a transparent and independent finance mechanism will be designed for the mobilization of financial resources for eradication and control of Invasive Alien Species and ecosystem restoration activities.

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<sup>17</sup> Albania, Armenia, Barbados, Burkina Faso, Burundi, Bhutan, Botswana, Belarus, Cote d'Ivoire, Cameroon, China, Colombia, Cape Verde, Dominican Republic, Fiji, Micronesia, Grenada, Ghana, Gambia, Guinea, Honduras, Jamaica, Jordan, Kiribati, Lao PDR, Lebanon, St. Lucia, Sri Lanka, Liberia, Moldova, Marshall Islands, Macedonia, Mali, Mongolia, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Nicaragua, Nepal, Nauru, Panama, Palau, Paraguay, Solomon Islands, Seychelles, Sierra Leone, Senegal, Suriname, El Salvador, Syria, Togo, Tunisia, Tonga, Timor Leste, Ukraine, Uganda, Uruguay, Uzbekistan, St. Vincent and Grenadines, Venezuela, Congo DR

#### **4732 Malaysia (UNDP): Improving Connectivity in the Central Forest Spine (CFS) Landscape**

This proposed project aims to sustainably manage lands and forests in the Central Forest Spine Landscape to secure the critical wildlife habitats, conserve biodiversity and maintain a continuous flow of multiple ecosystem services, including water provisioning, carbon storage and sequestration in Malaysia. The project comes in addition to government efforts to develop master plans in the region to mainstream biodiversity in integrated forest and landscape management system, develop capacities, and diversify financing sources for conservation management. The immediate global benefits are sustainable management of 5,100,000 ha of tropical forests with an array of globally significant biodiversity. The four main indicators are (1) elevating official protection status of 20,000 hectares resulting in high rates of forest carbon, (2) moving 20,000 hectares of valuable forest from state forests or production forests status to protected forests, (3) rehabilitating 4,000 hectares of vital tiger habitat using native species reforestation, and (4) development of viable PES mechanisms through Sustainable Forest Management. The first component will focus to control the illegal wildlife trade by strengthening capacities of the Wildlife Crime Unit (WCU) and existing state level units. An intelligence-based national wildlife trade surveillance system will be operational. Three additional state level WCUs will also be established, intensifying the local presence of enforcement officers enhancing interception and prosecution capacities. The second component will help to materialize the corridors in three main landscapes - Belum-Temengor Complex (354,600 hectares), Endau-Rompin Complex (238,900 hectares) and Taman Negara Priority Corridor (100,000 hectares). The third component will support the establishment of incentives for the conservation of ecosystem services in the form of PES, involving indigenous communities and water and energy utility companies.

#### **4744 Mongolia (FAO): Mainstreaming Biodiversity Conservation, SFM and Carbon Sink Enhancement into Mongolia's Productive Forest Landscapes**

This SFM/REDD-plus project aims at improving participatory forest and wildlife management in 7 Aimags in the northern and central part of the country, securing the flow of multiple ecosystem services and benefits, including biological diversity, reduced degradation, and carbon storage while enhancing ecosystem resilience to climate change. The project will mainstream biodiversity conservation objectives and SFM objectives into productive forest management practices. The project would scale up innovative and proven participatory forest management practices which support community use rights and improve forest management practices to maintain natural forest cover and ensure sustainable harvesting of timber and non-timber products. This will reduce pressure on forest resources and enhance carbon sinks to reduce greenhouse gas emissions. By working at a landscape scale to improve smallholder management practices, the project will maintain natural forests to retain connectivity and wildlife corridors between important biodiversity areas. Main GEBs are: improved SFM and biodiversity-oriented management of 500,000 hectares of conifer forests; 4,758,750 tons of sequestered C in 100,000 hectares of pilot areas; and population numbers and condition stable or improving for Musk deer (*Moschus moschiferus*), taiman (*Hucho taimen*) in target areas.

#### **4750 Regional<sup>18</sup> (UNEP): Multiplying Environmental and Carbon Benefits in High Andean Ecosystems**

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<sup>18</sup> Ecuador and Peru

The high Andean ecosystems of upper montane forest, Paramo and Puna rank high within the environmental agenda of Ecuador and Peru. However rapid land use change and degradation continues due to unsustainable agricultural and forest practices, overgrazing and poor water resource management threaten key ecosystems. The project will strengthen national and local capacities to be able to include environmental benefits in land use planning and policies, improve estimation of and promote soil carbon which is thought to be higher than expected and develop economic incentives for improved practice aligned with cost-effective MRV systems. The project will implement improved management practices with local communities on 6 pilot sites covering a total area of 150,000 hectares in Ecuador and Peru where land-use plans that incorporate biodiversity conservation and ecosystem services valuation will be designed with local participation. SLM and SFM on the ground activities will be implemented in 50,000 hectares of priority sites through PES frameworks to support the uptake of sustainable practices to improve habitat for biodiversity, sustain water flows for downstream users and maintain and improve carbon stocks. Indicative CO<sub>2</sub> benefits of the project are estimated to be 4,312,250 tCO<sub>2</sub>, which translates to a preliminary estimate of US\$1.11/tCO<sub>2</sub>.

#### **4761 Kyrgyz Republic (FAO): Sustainable Management of Mountainous Forest and Land Resources under Climate Change Conditions**

The project contributes to the sustainable management of mountainous silvo-agro-pastoral ecosystems in the Kyrgyz Republic by securing the flow of multiple ecosystem services. In order to achieve that it will influence production practices employed by the forestry and agriculture sectors (including pastures) and will support measures to mitigate CC, such as improving management natural forests, rehabilitating degraded lands and promoting conservation agriculture. The project will also strengthen human and institutional capacities and create an enabling environment among sectors (environment, forestry, agriculture, pasture, and water) concerned with SLM, LULUCF and REDD. Innovations and incentives through participatory monitoring, community driven approaches, and knowledge exchange will be incorporated into the project. The project activities will be implemented in the Chui, Issyk-Kul, Talas, Djalal-Abad and Naryn oblasts and lead to GEBs of (a) 20,000 hectares forestland under improved multifunctional forest management avoiding emissions from forest degradation of 216,640 t CO<sub>2</sub> e/year and (b) improved SLM and agro-silvo-pastoral practices and restoration of 25,000 hectare bare forest and agricultural lands also contributing to carbon storage. The total CO<sub>2</sub> benefits of the project are estimated to be 1.78 million metric tons CO<sub>2</sub> during the 4 years of the project, which is US\$3.06/tCO<sub>2</sub>e. Additionally, indirect benefits are expected.

#### **4764 Regional<sup>19</sup> (UNEP): Enhancing the Resilience of Pastoral Ecosystems and Livelihoods of Nomadic Herders**

The project aims at reducing pasture degradation, sustaining livelihoods of nomadic herder communities, and conserve and enhance the globally important biological diversity and traditional cultural values of rangelands in Russia and Mongolia. The project is unique in addressing the nexus between sustainable land use management, biodiversity conservation and traditional cultural values. The project will cover more than 2.3 million hectares of landscapes and directly involve and benefit 1,500 nomadic herders across both countries (i.e. 500 in Mongolia and 1,000 in the Russian federation), while an additional larger number nomadic herders belonging to 15 different Indigenous People will benefit from

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<sup>19</sup> Mongolia and Russian Federation

dissemination activities and improved ecosystem management. The current loss of traditional pasture lands which nomadic reindeer herders depend upon is clearly resulting in the rapid loss of globally important landscapes and biodiversity. The rationale is that long-term preservation of the cultural and traditional values at the basis of the nomadic herders' way of life is an essential element to the conservation of globally important biodiversity in these vast and remote ecosystems. In turn, positive effects on the rich species diversity (Snow Leopard, Mongolian Saiga, Siberian Ibex, etc.) in these ecosystems can be expected. The project seeks to address land degradation and biodiversity conservation in an integrated way, through the involvement and empowerment of the reindeer herder communities as the key stewards of the conservation of critical productive pasture landscapes. The project is thus fully in line with LDFA objectives and also responds to the Aichi Biodiversity Targets of the CBD by addressing conservation of ecosystems that provide indigenous livelihoods (Target 14) and by including traditional knowledge and local participation throughout the project period (Target 18).

#### **4772 Colombia (UNDP): Conservation and Sustainable Use of Biodiversity in Dry Ecosystems to Guarantee the Flow of Ecosystem Services and to Mitigate the Processes of Deforestation and Desertification**

Dry forests are an under-represented ecosystem in the global protected area estate and at the national level in Colombia and at risk of deforestation and degradation. Two areas in Colombia; the Caribbean region and the Inter-Andean Valley of the Magdalena River have been particularly affected due principally to the expansion of agricultural activities in these landscapes and the unsustainable use of dry forest ecosystems. This project will strengthen the land use planning framework, to better govern the allocation of land to conservation uses, and strengthen institutional capacities within the regional authorities for enforcement. In support of this, the project will develop a geographic information system at the municipal level and will strengthen the capacity of municipal authorities to utilize mapping tools in planning. The project will also implement field-level, practical measures for the conservation of BD in the dry forest, the development of SLM/REDD-plus projects, and sustainable land management. The project will lead to declaration of 17 local and regional PAs and the implementation of management plans in 72,000 ha of tropical dry forest; implement SLM activities (e.g. silvipastoral systems, hedgerows, biological corridors, etc.) in 1,600 hectares of private lands of six watersheds in the project area; and REDD-plus activities will reduce dry forest deforestation in 5 watersheds covering 123,596 hectares avoiding total GHG emissions of 1,797,287 tCO<sub>2</sub> over a 5-year period.

#### **4774 Ecuador (FAO): Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Buen Vivir / Sumac Kasay) in the Napo Province**

Although identified as important areas for biodiversity the PA system and buffer zones in Napo Province of Ecuador continue to be degraded through unsustainable agricultural and forestry practices. Recent studies identified forest loss at 2.1%/year and widespread illegal forest activities. The project will address the three key factors threatening biodiversity and land degradation: landscape fragmentation and deforestation; reducing opportunities for livelihood generation; and institutional capacity for incorporating biodiversity and SLM into development planning. The project will result in the development and implementation of eight (8) Land Use Development Plans with a special focus on creating biological corridors between the existing PAs and remaining forest areas including strategic planning for the Sumaco Biosphere Reserve; development of three incentive mechanisms for

incorporation of conservation practices into smallholders' production systems in 25 producer associations; create four (4) pilot areas to introduce good practices of NR management in traditional production systems over 8,500 hectares; and implement SFM practices over 50,000 hectares including the use of certification and development of biotrade opportunities within five pilot value chains. The project will also result in the reduction of over 400,000 tCO<sub>2</sub> emissions. The project estimates working with over 10,000 rural families in the area and prioritizes women for specific attention in financing incentives.

**4775 Ecuador (FAO): Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces** (*see also under SCCF*)

The proposed project represents an innovative effort to harness the synergies between sustainable land management, climate change mitigation, and climate change adaptation. Specifically, the Government of Ecuador is proposing to implement Climate-smart livestock management (CSLM) to address land degradation and climate change in its livestock sector. The approach integrates both CC adaptation and mitigation practices in the agro-livestock sector, and supports the development of sectorial policies aimed at combating desertification and reducing land degradation, while enhancing the achievement of national food security and development goals. Hence the project is requesting both GEF Trust Fund and SCCF funds for an integrated approach to increase multiple benefits needed in the livestock sector in Ecuador. A total of US\$3.87 million of GEF resources is being requested, including US\$1.47 million from the SCCF, which will be co-financed with US\$12.7 million from the government and FAO. The overall GEF financing will support interventions to reduce soil degradation, increase adaptive capacity to climate change, and mitigate GHG emissions by implementing cross-sectorial policies and climate-smart livestock management, with emphasis on vulnerable provinces.

**4778 Albania (WB): Project title: Environmental Services Project**

The project will expand environmentally, socially, economically and financially sustainable community based natural resource management planning and implementation in erosion prone upland areas, reversing land degradation and sediment runoff, while increasing carbon sequestration and biodiversity benefits. It is in line with LD, CC-M focal area objectives and the Sustainable Forest Management Strategy and is thus eligible for SFM/REDD-plus incentive funding. Concerning the Land Degradation focal area, the project will provide improved agricultural management with increased area of uplands agriculture and pasture under sustainable community management reducing the community vulnerability to climate variability through direct community based investments. Degraded areas of land will be rehabilitated and restored. The project will include innovative sustainable land management practices and increase the vegetative cover in pasture and agriculture. Concerning climate change mitigation, the project will prevent future loss of soil and re-establish forest on degraded/denuded lands, and increase carbon sequestration through improved forest management. Indicative CO<sub>2</sub> benefits are estimated at 993,667 tCO<sub>2</sub>e, which translates to US\$2.90/tCO<sub>2</sub>e.

**4779 Bosnia-Herzegovina (WB): Sustainable Forest and Landscape Management**

The proposed project improves environmental and economic sustainability and carbon sequestration opportunities through enhanced and integrated management of forest, scrub and pasture landscapes. It is fully in line with the objectives of the GEF-5 FA Strategies: CCM, LD and SFM/REDD-plus and is thus

eligible for SFM/REDD-plus incentive funding. The project will help the country implement improved forest management and reforestation of scrub forest and bare land within the forest estate, as well as improved management of agricultural lands, meadows and pastures. The project will develop and test a national system for measuring and monitoring carbon stocks and in particular carbon sequestration. The project will help reduce pressures on forests by working with local governmental units, NGOs, private forest owners, CSOs and local people to rehabilitate and manage scrub forest and bare lands. The projects will also support certification and verification of timber supply chains; and seek ways to ensure conflict resolution approaches to the disputed forest tenures in certain areas. Local benefits and GEBs are: good management in existing forests, reduced wildfire risks, good management practices adopted by local forest managers and stakeholders; enhanced carbon sinks through reduced forest degradation and increased restoration of forest structure and function for local and global benefits. In total, the project is estimated to have 730,000 tCO<sub>2</sub>e benefits, at a cost of US\$7.64 / tCO<sub>2</sub>e.

#### **4792 Mexico (WB): Conservation of Coastal Watersheds to Achieve Multiple Global Environmental Benefits in the Context of Changing Environments**

This project will support the conservation and sustainable management of lands and forests in 16 important watersheds draining into on the Gulf of California and Gulf of Mexico. It is an ambitious, cross-cutting, and synergistic project that will use a variety of instruments (protected area endowments, funding for payment for ecosystem services, technical assistance, and enhanced monitoring) to achieve more sustainable forest and land management to generate global environmental benefits relevant to the GEF's biodiversity, land degradation, and climate mitigation focal areas, while also contributing to the GEF's goals under the SFM/REDD-plus program. Through co-financing, it will also invest in enhancing climate change resiliency of the ecosystems and production landscapes to be invested in. This project is estimated to have 15.43 million metric (MT) tons of CO<sub>2</sub>e in carbon benefits over 20 years at a cost of US\$39.518 million, or US\$2.41 per MT CO<sub>2</sub>e. It aims to create two new protected areas (500,000 hectares), enhance the management and financial sustainability of 12 additional protected areas, and bring 18,600 hectares of forested and non-forested land through the use of PES mechanisms, agro-ecosystem and sustainable forest management sub-projects.

#### **4839 Afghanistan (UNDP): Establishing Integrated Models for Protected Areas and their Co-management**

This multi-focal area project will establish a national system of protected areas to conserve biodiversity and mitigate land degradation pressures on habitats in key biodiversity areas, initially centered in Bamyan and the Wakhan corridor. As land degradation is threatening biodiversity and ecosystem function the project accordingly addresses SLM as a key measure to protect biodiversity, secure ecosystem services and enhance resilience. The project is thus designed as a combined LD & BD multifocal area project, fully in line with both strategies. Major outcomes would be (a) 1.3 million ha under enhanced protection coverage and status and (b) SLM technologies applied in areas surrounding the protected areas (PA) totaling 1.2 million ha. GEBs to be generated are mainly the improved protection status of several globally significant species (Marco Polo sheep, snow leopard) and improved productivity and vegetation cover in agricultural production landscapes. The project is fully in line with national priorities and has a solid co-financing from the national government, USAID, and UNDP.

#### **4847 Bahamas (UNEP): Pine Islands - Forest/Mangrove Innovation and Integration (Grand Bahama, New Providence, Abaco and Andros)**

The lack of a systematic integrated land-use planning and its implementation in land use decision making is considered to be the dominant driver of deforestation, forest degradation and land degradation in the Bahamas. This is particularly the case in the Pine Islands where expanding settlements, subdivision clearance and agricultural drive a deforestation rate of 0.5% per annum with wetlands and mangroves particularly vulnerable. The responsible Government agencies lack the necessary data and management tools and the information on the existence of natural resources and ecosystem services. The new Planning and Subdivision Act and the Forest Act present a unique opportunity to address the barriers to improved land use planning. The project, identified through the NPFE, uses this opportunity to address barriers related to institutional capacity and coordination between the different actors; technical capacity in access to tools, data and methodologies; and economic barriers through the development of sustainable livelihood options for local communities. Within land use planning and forest management the project will improve the existing LUP system to monitor forest area change, forest degradation, develop an inter-agency framework for operational planning and management in the forest sector, and build technical capacities to strengthen Government/Community co-managed forests. The project will also improve management effectiveness of the forest and mangrove reserve network through the development of forest management plans over 52,000 hectares of forest targeted under the 2010 Forest Act, which is 15% of all forests. This will also include the piloting restoration of the degraded Little Abaco Mangrove Ecosystem (50 hectares). The project will also allow for the provisioning of forest ecosystem services through the piloting of alternative livelihoods and the promotion of good management practices among coastal communities. The project is estimated to provide carbon benefits of over 430,000 tCO<sub>2</sub>e through the project lifetime.

#### **4860 Paraguay (UNDP): Mainstreaming Biodiversity Conservation and Sustainable Land Management into Production Practices in all Bioregions and Biomes**

The Government of Paraguay has a long-term vision to foster integrated management of biomes and bioregions, especially forest ecosystems as part of the country's development strategies. A major aspect of this vision is the mainstreaming of biodiversity conservation and sustainable land management in productive practices across the country. The proposed project is designed to support this long term vision by developing and implementing replicable models for mainstreaming sustainable practices within the Upper Parana Atlantic Forest eco-region. The project framework is based on an integrated package of measures, including: strengthening the regulatory framework, implementing innovations for SLM and SFM, and creating incentives for sustainable production practices within the target multiple use landscape. This will result in a mosaic of conservation compatible land uses, with large habitat patches and connectivity, and conservation of small forest patches. In addition to safeguarding biodiversity and ecosystem services in production landscapes, the project will also enhance functional connectivity across the landscape by fostering forest rehabilitation.

### **4932 Regional<sup>20</sup> (UNEP and UNDP): Implementing Integrated Land Water and Wastewater Management in Caribbean SIDS**

Caribbean Small Island Developing States (SIDS) are facing multiple threats of land and water resource degradation, depletion of biological resources and compromised ecosystem functioning due to intensive developmental pressures on very fragile environments. This regional project program resources from the biodiversity focal area (national allocations of US\$8.5 million), land degradation (allocations of US\$2.5 million), IW (US\$9.5 million), and SFM (US\$2.9 million) to under a "ridge to reef" framework which will provide a foundation of Caribbean SIDS to address the multiple challenges of sustainable water, land, forests and biodiversity management and conservation. The project's objective is to realize the implementation of an integrated approach to water, land and ecosystems services management, supported by policy, institutional and legislative reforms, and implementation of appropriate technologies to accelerate contribution to global targets on access to safe and reliable water supplies and improved sanitation, and contributing to improved ecosystem functioning in the Caribbean. This project will build on previous GEF efforts in the region to continue cross-sectoral reforms to protect essential ecosystem services and support their replication through the region. These efforts will include country-level actions and regional approaches for NRM where they are likely to trigger transformational changes in the agriculture and forest sectors and land-use planning.

### **4939 Chile (UNDP): Supporting Civil Society Initiatives to Generate Global Environmental Benefits using Grants and Micro Loans in the Mediterranean Eco-region**

The objective of the project is to develop, demonstrate and mainstream the delivery of globally significant environmental benefits by community-based organizations into the management of critically endangered landscapes in the Chilean Mediterranean eco-region. Funding for the project comes from the biodiversity, climate change and land degradation focal area STAR allocations. Community organizations supported by this project will be sustainably managing 700,000 hectares of globally significant dryland forests and grasslands and 150,000 hectares of agricultural and pastoral lands. The project will avoid GHG emissions by restoring and enhancing carbon stocks in forests and non-forest lands. The project will work to conduct land management activities at appropriate pilot demonstration sites in each of the five agro-climatic zones of the Mediterranean eco-region specifically to adopt practices to reduce carbon stock emissions or sequester carbon such as wildfire suppression or prevention, reforestation, restoration, and improved land use planning. By the end of the project carbon benefits will total approximately 29,200 tCO<sub>2</sub>e, and after 15 years they will reach 139,333 tCO<sub>2</sub>e at a cost of US\$1.9/tCO<sub>2</sub>e.

### **4952 Rwanda (WB): Landscape Approach to Forest Restoration and Conservation (LAFREC)**

This multi-trust fund project proposes a landscape approach to restore and safeguard critical landscapes in Rwanda that provide global environmental benefits and contribute to resilient livelihoods and economic development. The project will secure multiple environmental services by addressing the following components: 1) nation-wide multi-sectoral landscape restoration planning and institutional development; 2) demonstration of land and forest restoration and conservation at the priority landscapes; 3) and landscape level restoration in support of greater adaptation and resilience of local communities to effects

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<sup>20</sup> Antigua And Barbuda, Barbados, Cuba, Dominican Republic, Grenada, Jamaica, St. Kitts And Nevis, St. Lucia, St. Vincent and Grenadines

of climate change. The government of Rwanda made the wise decision to use all their GEF allocations in a single project, leveraging the SFM/REDD-plus incentive, and integrating climate change adaptation with LDCF resources. The LDCF resources will address key NAPA priorities by supporting capacity building of local stakeholders, vulnerability assessments and investments in critically degraded areas, longer term adaptation measures to address the impacts of floods, landslides, and extreme droughts, and adoption more sustainable agricultural practices. The project draws lessons of the previous GEF/WB Integrated Management of Critical Ecosystems Project. It demonstrates synergy with other existing investments such as the “Sustainable afforestation and reforestation management of the natural forests of Rwanda”, a 3-year project financed by the Congo Basin Forest Fund. The project also reflects several partnerships, such as the IUCN providing technical assistance to the government of Rwanda, and the Ministry of Natural Resources of Canada providing financial support through the African Model Forest Initiative (AMFI).

#### **4953 Regional<sup>21</sup> (AfDB): Mano River Union Ecosystem Conservation and International Water Resources Management (IWRM) Project**

The project will be implemented in the Upper Guinea forests covering Sierra Leone, Guinea, Liberia and Cote d'Ivoire with the objective of strengthening the management of trans-boundary natural resources (water and forests) for sustained ecological benefits and improved livelihoods for the forest adjacent communities. The project is built on baseline projects funded by the African Development Bank in the sectors of natural resources management and institutional capacity building at the regional level and by the African Water Facility in the water sector (Mano River Forest Ecosystems Conservation Program MARFOP, and Sustainable Management and Development of Mano River Basin Project). The proposed project is consistent with GEF-5 focal area strategies for biodiversity (BD), land degradation (LD), and international waters (IW), as it will contribute to the conservation of the Upper Guinea Forest ecosystem through the sustainable management of trans-boundary ecosystems. These multiple benefits will be reinforced with the use of resources from the SFM/REDD-plus incentive programme in the vicinity of forested protected areas. This will result in global environmental benefits with the overall preservation of the ecosystem, a net gain in forest area, and improved integrated trans-boundary water management.

#### **4970 Cote d'Ivoire (UNEP): Integrated Management of Protected Areas in Cote d'Ivoire, West Africa**

The project aims to secure multiple global environment benefits by improving the network of protected areas, mainstreaming biodiversity conservation into production landscapes, and adopting integrated landscape and forest management practices with local communities. The project builds on existing support for the national Office and Foundation responsible for protected area management and financing. It will develop and promote an integrated approach to management of protected areas and adjacent agroforestry parklands, create sustainable financing mechanism for the protected areas, and develop alternative economic and livelihood activities for communities in the vicinity of protected areas. Through a pilot approach with one National Park, GEF financing will ultimately help the government to catalyze major investments for scaling-up the integrated practices nationally, restore management planning processes and reinforce the effectiveness of the country's globally important protected area network.

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<sup>21</sup> Cote d'Ivoire, Guinea, Liberia, Sierra Leone

### **5005 Vietnam (ADB): GMS-FBP Integrating Biodiversity Conservation, Climate Resilience and Sustainable Forest Management in Central Annamite Landscapes**

The project aims at integrating biodiversity conservation, climate change mitigation, climate resilience, and SFM in the Central Annamite landscape. The project is implemented under the Program #4649: Greater Mekong Sub-region Forest and Biodiversity. Led by ADB, the program is jointly implemented with World Bank, and WWF as a cooperating partner. The project fills strategic thematic gaps in the Central Annamite landscape and facilitates positive impacts on the larger landscape under the ongoing Greater Mekong Sub-region Program in Laos, Thailand, Cambodia, and Vietnam. It specifically addresses vital biodiversity corridors in the Annamite Limestone landscape in East-West as well as North-South direction. The project focus is on seven PAs and its corridors with a total of 268,000 hectares. Within these areas, integrated forest restoration models will be implemented with the participation of local communities. Additionally, innovative SFM/REDD-plus demonstration pilots will be implemented on roughly 20,000 hectares leading to direct carbon sequestration. GHG emission reductions are estimated with 5.9 million tCO<sub>2</sub>eq.

### **5057 St. Lucia (UNEP): Iyanola - Natural Resource Management of the NE Coast**

This project will finance several of the components prioritized for GEF support through St. Lucia's National Portfolio Formulation Exercise. Most importantly, it will improve land-use planning by mainstreaming biodiversity conservation in St. Lucia's north east coast. It will create a new 5,000 hectare national park. And through sustainable forest management investment, it will restore or protect 1400 hectares of forest land, with a potential carbon benefit of 691,689 tons of CO<sub>2</sub> over 30 years.

### **5069 Grenada (UNDP): Implementing a "Ridge to Reef" Approach to Protecting Biodiversity and Ecosystem Functions within and Around Protected Areas**

This project will advance sustainable development and ecosystem protection in Grenada in important ways. It will result in the creation of five new protected areas covering 12,400 hectares, including the protection of four new marine protected areas, and important concern for GEF. It will take a ridge-to-reef approach to protect watersheds and downstream areas, which will yield important socio-economic benefits for local populations. It will reduce deforestation and protect forest carbon stocks in select watersheds.

### **5080 Peru (UNDP): Transforming Management of Protected Area/Landscape Complexes to Strengthen Ecosystem Resilience**

This project focuses on two large landscapes; the Manu and the Yanachaga PA complexes, which include a range of PA types and their buffer zones in the eastern Andes. The project addresses impacts on the PAs subject to increasing pressure from immigration of people from areas affected by CC-related decline of production and livelihood support systems. The project will support the application of a "macro" landscape approach to spatial planning and environmental management to assist development and conservation initiatives, enhance cross sector coordination, build capacity among land managers to apply resource management practices that optimize environmental benefits; and enhance local communities participation in decisions related to resource management, in order to minimize the risks of conflicts between their livelihoods and the conservation of natural resources. The project will result in the creation

of 100,000 hectares new PAs, increased management effectiveness in nine (9) PAs covering 6 million hectares; improved land management in 6 million ha of buffer zones, 3.7 million tC in avoided emissions and avoided deforestation of 12,000 hectares.

#### **5104 Russian Federation (UNDP): Sustainable Land Management and Ecosystem-based Climate Change Mitigation in the Altai-Sayan Eco-region**

The project objective is to promote sustainable integrated land and forest management in Altai-Sayan Ecoregion (ASE) in Russia in order to reduce pressures on natural resources from competing land uses and to secure conservation and enhancement of carbon stocks. The project will have 2 components: enabling policy environment and strengthened enforcement capacities for integrated land management and sustainable forest management; and investment in demonstrating improved sustainable land and forest management in the Altai-Sayan Eco-region. The expected outcomes of this multi-focal area project include: improved land-use planning leading to reduced land and forest degradation over 5 million hectares of agricultural land and 6 million hectares of forest land resulting in unthreatened provision of such ecosystem services as water supply, flooding control, forage production, and carbon sequestration; and demonstrated improved land and forest management on 1.25 million hectares resulting in: 650,000 hectares of pastures under improved land use management, 650,000 hectares of forest lands under improved multifunctional forest management, 34.8 Mt C stored in productive forestland, and 61.1 Mt C stored in pastureland. An estimated 40 million tCO<sub>2</sub> eq is expected to be sequestered over a 10-year time horizon, at a cost of US\$0.74/ tCO<sub>2</sub> eq. The project's innovative feature is that adaptive management techniques are proposed for testing new solutions for forest and landscape restoration, along with the development of sustainable mechanisms and strong decision maker involvement so that the results will be further used for scaling up to large scale and successful restoration.

#### **5122 Solomon Islands (FAO): Integrated Forest Management in the Solomon Islands**

This project was identified as the first priority within the Solomon Islands NPDF and aims to improve the management of forests in the Solomon Islands through a cross-sectoral initiative to integrate biodiversity conservation, land degradation, sustainable forest management and climate change issues into policy making at national level while concurrently incorporating these issues into livelihood activities of the local communities living in and around the forest. The project combines objectives from BD, LD and CC FAs together with SFM/REDD-plus to provide a forest focused MFA. The project is the first accessing the SFM/REDD-plus incentive in the Pacific in addition to being the largest SFM/REDD-plus among all SIDS. It will increase the Protected Area network by over 70% of the existing area to give an extent of 8.5% of the land area. The project will also result in the rehabilitation of 80,000 hectares of degraded forest to restore ecosystem services thereby recognizing multiple forest values and preventing subsequent degrade or forest loss. The project introduces innovative approaches for the Solomon Islands through the development of sustainable financing mechanism for the PA network and the establishment of a dedicated trust fund. Additionally the project will improve forest MRV tools and produce a national forest carbon assessment and will sequester 2,300,000 tCO<sub>2</sub>e.

### **5123 Myanmar (FAO): Sustainable Cropland and Forest Management in Priority Agro-ecosystems of Myanmar**

The objective of the project is to build the capacity of farming and forestry stakeholders to mitigate climate change and improve land condition by adopting climate smart agriculture and sustainable forest management policies and practices. The project seeks synergies across the CCM and LD focal areas and is consistent with the SFM strategy. It has four components: strengthening of the institutional, policy and regulatory frameworks; demonstration of improved cropland management (ICIM) Practices with Farmers in priority agro-ecosystems of Myanmar; demonstration of models for sustainable forest management and enhancing carbon storage in priority agro ecosystems; and knowledge management, training, & scaling up of SLM and SFM practices. GEF funding will support measures to mitigate CC such as managing natural forests to emphasize natural regeneration through the adoption of new practical silvicultural practices and improved management of grazing and wood collecting in forests that in turn will avoid emissions caused by degradation, increase sequestration through enhanced biomass and improve the productivity of forests. The project will engineer a shift from the current unsustainable practices to sustainable forest and crop management practices. The project design is in line with SFM/REDD-plus mechanisms to include Myanmar's forests in international forest markets. The incentive funding will help to establish a sound policy environment to recognize the value of forest ecosystem function while reducing greenhouse gas emissions from deforestation and forest degradation. The direct GHG emissions savings due to the projects' activities estimated between 1.6 million tCO<sub>2</sub>eq in the short term (4-5 years) to 12.7 million tCO<sub>2</sub>eq in the long term (20 years), which translates to between US\$0.3/tCO<sub>2</sub>eq and US\$2.2/tCO<sub>2</sub>e.

### **5135 Chile (UNEP): Protecting Biodiversity and Multiple Ecosystem Services in Biological Mountain Corridors in Chile's Mediterranean Ecosystem**

Chile is one of only five locations in the world with a Mediterranean ecosystem which is recognized for high levels of plant richness and endemism. Population density and growth of urban areas, conversion to agriculture and tourism-related development are serious threats to this ecosystem, particularly because it encompasses Chile's capital, Santiago. The area is also important for ecosystem services providing the main source of water for the region which is expected to see a 1/3 increase in demand by 2025. Despite ongoing activities led by the Ministry of Environment the incorporation of biodiversity and ecosystem services in development planning and operations is still weak. The project idea is to develop a suite of interventions throughout 30 adjacent Municipalities which will increase connectivity between remaining forest resources and address the competing land use pressures within and around them. The project will support enhancement of Municipal regulations on conservation, upgrading of the existing Municipality environmental management standard to ECOMUNA level by incorporating biodiversity conservation, SLM and SFM, use incentive mechanisms to promote uptake of biodiversity conservation, SLM and SFM among private land owners to develop alternative livelihood opportunities, and support the establishment of conservation districts in public and private lands.

### **5264 Gabon (WB): Sustainable Management of Critical Wetlands Ecosystems**

The main objective of the proposed operation is to improve management of selected critical wetlands ecosystems, through knowledge creation and capacity building of national entities. The structure of the project has been designed to help the Government of Gabon implement the recommendations of the Ramsar Convention and the resolutions of the Conference of the Parties, notably related to improving the

level of knowledge, improving monitoring systems, creating the enabling conditions necessary for managing an effective network of WII Gabon, and developing economic valuation of WII. This project aims to address multiple benefits by proposing a holistic approach to manage wetlands of international importance. This is the first project ever, proposing a multiple trust fund project with the GEF Trust Fund and the Nagoya Protocol Implementation Fund. This project will support a component on Access and Benefit Sharing in continuity of other efforts to reinforce the institutional and operational framework to manage wetlands of international importance. This project is developed under GEF-5 BD, LD, and SFM strategies, including the BD4 objective relative to the implementation of the Nagoya Protocol on ABS. Finally, this project will help to evaluate the economic weight of these coastal wetlands, as well as the Mbe river basin. It will complete another GEF project to develop Payment for Ecosystem Services options for the Mbe river basin.

### **5266 Tunisia (WB): Oases Ecosystems and Livelihoods Project**

Tunisia is home to highly unique oasis ecosystems, covering more than 40,000 hectares and playing an important social and economic role for nearly one million people. They are the most productive environment by providing high value agricultural products market, including dates, which ranks third in food products nationwide. The date palm production accounts not only for the bulk of the agriculture production, but also for most of the manufacturing (storage and packaging dates) and a good portion of the merchant services (trade, transport, etc.). Because of this economic potential, the pressure to expand date production is posing threats to the country's oases, including loss of native biodiversity, land degradation, and depletion of water resources. The objective is to improve sustainable natural resources management and promote livelihoods diversification in targeted traditional oases in Tunisia. By targeting traditional and fragile oasis ecosystems, proposed project will contribute to conservation of the biodiversity (including genetic diversity of date palms), reduction of the severity of land degradation through participatory management approaches, and increasing the efficiency of water management for agriculture.

### **5272 Kenya (UNEP): Scaling up Sustainable Land Management and Agro-biodiversity Conservation to Reduce Environmental Degradation in Small Scale Agriculture in Western Kenya**

The project aims to scale up sustainable land management and agro-biodiversity conservation to reduce environmental degradation in small scale agriculture in Western Kenya. It aims to mainstream sustainable land management (SLM) practices across the productive landscapes around the Kakamega Forest ecosystem through reducing land degradation and improving soil productivity that would lead to increased farm productivity and incomes. The project is at the core mission of the GEF: catalyzing investments at a landscape level to scale up ongoing SLM initiatives in Western Kenya. The project is aligned with the BD, LD, and SFM/REDD-plus strategies. The expected Global Environment Benefits include a significant contribution to sequestering carbon through improved management of existing forests, the protection of an internationally critically freshwater source, and the conservation of a significant tropical ecosystem with a wide range of biodiversity. Total potential carbon benefits as a result of successful restoration, forest carbon stock enhancement and conservation are estimated at 339,240 of CO<sub>2</sub>/yr (151,250 tons of CO<sub>2</sub>/yr from carbon stock enhancement and 159,720 tons of CO<sub>2</sub>/yr from avoided deforestation).

### **5277 Nicaragua (UNDP): Strengthening the Resilience of Multiple-use Protected Areas to Deliver Multiple Global Environmental Benefits**

Nicaragua is one of the poorest countries in Latin America, with a per capita income of US\$1,500, compared to a regional average of US\$8,600. While its biological wealth is close to that of its neighbor Costa Rica, the quality of natural resource management is much weaker. The country is currently losing an estimated 2.1% of its forest cover each year. Degradation of its dry tropical forests is particularly intense, and 77% of this habitat type has already been lost. This is a multi-focal area project that seeks to reverse deforestation trends in selected regions of the country, both inside and outside protected areas. The most innovative aspect is that it will seek to introduce a performance-based compensation mechanism to incentivize farmers and land holders to conserve humid forest covering an area of 30,000 hectares. Given the capacity challenges that the country faces, the interventions in PA management effectiveness and improved land and forest management outside of PAs can also be seen as innovative.

### **5293 Russian Federation (UNIDO): Save the Source: Catalyzing Market Transformation of Breweries from a Major Natural Resource Consuming Industry to a Pro-active Steward for Resource Efficient Cleaner Production**

Brewing processes are characterized by significant environmental footprint as significant quantities of water, energy, fertilizer and land areas are used in both the agricultural industries that provide vital ingredients (barley, rice, etc.) and at the breweries themselves in the beer production processes. Brewery processes are relatively intensive users of both electrical and thermal energy. The project will demonstrate a replicable approach on how Baltika Breweries as a corporate socially responsible industrial player can become a steward in a public private partnership to pro-actively reduce direct and indirect brewery related environmental stress and promote sustainable management of natural resources along the entire supply chain in those regions of the Russian Federation where the Baltika Breweries and its agro-industrial suppliers operate. Further, this investment will be setting an example for other water and energy intensive industries in the Russian Federation and globally. Greenhouse gas emission reductions are expected from a variety of sources: energy efficiency, biomass use, reduced nitrogen fertilization and carbon sequestration. The GHG emissions savings due to the projects' activities are estimated at 43,000 tCO<sub>2</sub> eq per year, which, over 10 years, translates to US\$4.7/tCO<sub>2</sub>e.

### **5334 Sao Tome and Principe (UNDP): Promotion of Environmentally Sustainable and Climate-Resilient Grid-based Hydroelectric Electricity through an Integrated Approach in Sao Tome and Principe**

The project aims to introduce an integrated energy and ecosystem based approach to grid-based hydroelectric electricity generation in Sao Tome and Principe. The project is based on three components to 1) establish a framework for climate resilient on-grid mini-hydro, 2) promote investments in mini-hydro through appropriate catalytic financial incentives, and 3) sustainably manage river basins and forests through SFM and SLM. Innovatively, this project is a pioneer to combine energy requirement with the sustainable management of a river basin in ecologically vulnerable landscapes in a SIDS. The project aims to propose economically viable and proven small scale mini-hydropower technologies with low investment needs and minimal environment impacts.

### **5347 Yemen (UNEP): Support to the Integrated Program for the Conservation and Sustainable Development of the Socotra Archipelago**

This project aims at reinforcing the national capacity to manage and protect the Socotra Archipelago Natural World Heritage Site (WHS) through a sustainable land-use approach that will integrate desertification and land degradation with biodiversity conservation priorities. The project will increase management effectiveness of the entire WHS, and will support the development of a community-based Invasive Alien Species management program. The Socotra Archipelago WHS is a globally significant center of biodiversity, and Socotra is ranked among the top ten continental islands in the world in terms of botanical diversity. Owing to its remote geographic location (480 km south of the Arabian Peninsula and 240 km east of the Horn of Africa) and long isolation, Socotra has a unique assemblage of animal and plant species. It is often referred to as "the Galapagos of the Indian Ocean." The project will specifically focus on the improved design and management of the network of Nature Sanctuaries within the WHS. In addition, this project will develop a community-based Invasive Alien Species management program that has been identified as the number one priority for conservation in the archipelago. This project will render, for the first time, an integrated sustainable land management plan that will bring together conservation and development for Socotra WHS, addressing desertification, land degradation and biodiversity conservation through the development of an integrated Sustainable Land Management plan.

### **5348 Cook Islands (UNDP): R2R- Conserving Biodiversity and Enhancing Ecosystem Functions through a “Ridge to Reef” Approach**

The objective of this project is to build national and local capacities and actions to ensure effective conservation of biodiversity and enhancement of ecosystem functions within and around marine and terrestrial PAs (including community conservation areas). The project will operationalize the management of one of the world's largest protected areas (1.1 million km<sup>2</sup>), which is home to many threatened and endemic species. It will also help develop effective community conservation of 22,900 hectares of coastal and terrestrial areas and support improved agriculture and tourism practices resulting in improved environmental outcomes and livelihoods. Innovatively, Cook Islands used the flexibility option to concentrate their STAR resources in BD allowing for an integrated approach to natural resource management. This is the first time an integrated approach will be adopted in Cook Islands. This project will also work with communities to manage and protect this vast new protected area - also a first in Cook Islands regarding PA management. Sustainability will be ensured through funding from reinstating an airport tax, taxing/establishing PES with tourism operators, and selling international fishing licenses will be explored. By developing community management programs, long term management costs while empowering communities.

### **5356 Global<sup>22</sup> (UNEP): Global Forest Watch 2.0**

Forest loss and degradation continue in many countries, resulting in biodiversity loss, greenhouse gas emissions as well as increasing the risk of desertification and food insecurity. The availability of timely, transparent and accurate information on changes in forest cover is an important element in improving governance and addressing some of the drivers of forest loss and degrades. However, several barriers undermine the availability of suitable forest data and information including dispersed and incompatible

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<sup>22</sup> Georgia and Madagascar

data sources, inaccurate and inconsistent data and where information is available it is often too late to help affect change. Global Forest Watch 2.0 aims to address these barriers in Madagascar and Georgia in a pilot approach in the two countries, building on existing resources, to develop innovative and technically very advanced but user-friendly tools which will allow governments, local communities, the private sector and NGOs to react to and plan with, up-to-date information on forest coverage. Innovatively, GFW2.0 combines various near real-time tree cover loss alert systems, complementary satellite imagery and monitoring systems, a suite of maps and mobile technology, together with networked crowd sourcing to offer transparent and publicly available information on deforestation and forest degradation. By using data renewed on a 16-day basis GFW2.0 will offer near real-time updates on deforestation and forest degradation activities allowing authorities and local communities to respond rapidly. In addition GFW2.0 offers the potential for landscape level planning through the provision of up-to-date forest cover maps and reports. By using a simple interface, GFW2.0 will allow interaction with interested stakeholders and the public who can freely use the results but also add to the information base. GFW2.0 will support the development and implementation of cross-sectoral integrated land use management plans in Madagascar and Georgia that reduce pressures on natural resources from competing land uses, improve management of 15.4 million hectares of forest habitat in Georgia and Madagascar and allow near real time alerts of deforestation activities in 97 protected areas covering 2.2 million hectares. Preliminary estimates of GHG emissions reductions are 6.1 million tCO<sub>2</sub>e.

**5381 Nauru (UNDP): R2R- Implementing a “Ridge to Reef” Approach to Protecting Biodiversity and Ecosystem Functions in Nauru (R2R Nauru)**

Despite biologically rich terrestrial and marine flora and fauna in Nauru, the combination of mining operations and coastal urbanization has had considerable consequences on land, water, and biodiversity conservation status. To reverse the tide, the project manages all activities within a watershed and out to the sea. Therefore, the project supports the development of sustainable coastal and marine managed areas that are integrated with the appropriate sustainable land management practices in upstream watersheds. Innovatively, this project is a pilot project using the Ridge to Reef integrated approach. The project will introduce an integrated resource management at the watershed scale, from the top hill to the sea. The project will support the establishment of Locally Managed Marine Areas (LMMA) over 15% of the Nauru total coastline. The integrated land use plan will contribute to reduce pollution loads by at least 10% on LMMA.

**5398 Fiji (UNEP): R2R - Implementing a “Ridge to Reef” Approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods**

The proposed project in Fiji is a part of the larger Ridge to Reef (R2R) Program in the Pacific Island Countries. The project combines biodiversity, land degradation, climate change mitigation, sustainable forestry and international waters objectives in-line with the country priorities to protect and restore the country's diverse marine and terrestrial ecosystems. Expansion of agriculture, increasing pollution and over-exploitation of biological resources are undermining natural resources that are a habitat for numerous species and natural storage system for carbon. The proposed project will build on the ongoing efforts of the Fijian Government to strengthen the integrated R2R approach to address these inter-related issues. The project will include the following four components: Conservation of Terrestrial and Marine Biodiversity; Conservation, Restoration and Enhancement of Carbon Stocks through Sustainable

Forestry; Integrated Natural Resources Management; and Knowledge Management. Based on the vulnerability, biological importance and strategic locations the project will improve management of existing terrestrial and marine protected areas and will also formally establish 1 terrestrial and 5 new marine protected areas. The project will protect total of 5534 hectares of biologically important land and seascape. In addition, 15,000 hectares will be reforested generating carbon benefits of 322,849 ton CO<sub>2</sub>/yr.

## **ENABLING ACTIVITY PROJECTS FINANCED UNDER THE LDFA** *(Based on Modalities)*

### *Projects under the Direct Access Modality*

#### **4706 India: Enhancing capacity for alignment of National Action Programme to 10-Year Strategy of UNCCD & for National Reporting to UNCCD**

The Government of India formulated the National Action Programme (NAP) in 2001, and various components of the NAP have been part of GoI programs over the past decade. With adoption of the UNCCD 10-year strategy, a review and alignment of NAP to the Strategy is required for synthesis with developments at the global level. The project incorporates enabling activities that will facilitate review and alignment to the strategy, and support in the preparation of the national reports due in 2012 & 2014.

#### **4824 Bhutan: NAP Alignment and Report Preparation**

Bhutan formulated the National Action Programme (NAP) in 2009 and it was approved by the Cabinet Ministers in April 2011. However, during NAP preparation, the alignment with UNCCD 10-year strategy was not done. With adoption of the UNCCD 10-year strategy, a review and alignment of NAP to the Strategy is required for synthesis with developments at the global level. The project incorporates enabling activities that will facilitate review and alignment to the strategy, and support in the preparation of the national report.

#### **4825 Kyrgyz Republic: Support to UNCCD NAP Alignment and Reporting Processes**

Kyrgyzstan formulated the National Action Programme (NAP) in 2000 and now realizes that significant changes have occurred since then in the national and international context. With adoption of the UNCCD 10-year strategy, a review and alignment of NAP to the Strategy is required for synthesis with developments at the global level. The project incorporates enabling activities that will facilitate review and alignment to the strategy, and support in the preparation of the national reports due in 2012.

#### **4924 Jordan: Alignment of National Action Programs with the UNCCD 10-Year Strategy and reporting process, as per obligations to the UNCCD.**

The Government of Jordan elected to use the Direct Access modality for GEF support to its enabling activities under the UNCCD, and the proposed project includes both NAP alignment and reporting review process. The Ministry of Environment will serve as Implementing Agency on behalf of the Government, and will be fully supported by the Ministry of Planning and International Cooperation. The project will play an important role in helping the Government of Jordan to streamline UNCCD priorities in various national strategies and action plans. As a result, the potential for sustainability and for leveraging resources to implement the NAP will be greatly enhanced.

#### **4977 Armenia: Harmonization of National Action Plan to combat desertification in Armenia and Preparation of National Report**

Armenia formulated the National Action Programme (NAP) in 2002 on the basis of 1990-1995 existing data. The country realizes that significant changes have occurred since then in the national and international context. The project incorporates enabling activities that will facilitate review and alignment to the strategy, and support in the preparation of the national reports due in 2012.

#### **5018 Bangladesh: Revision and Alignment of National Action Program NAP with UNCCD 10 Years Strategic Plan and Framework**

Bangladesh needs to revise and revisit the NAP to enable a comprehensive and coherent approach to desertification, land degradation & desertification issues at the national level. The country joined the UNCCD in 1996. With adoption of the UNCCD 10-year strategy, a review and alignment of NAP to the Strategy is required for synthesis with developments at the global level. The project incorporates enabling activities that will facilitate review and alignment to the strategy, and support in the preparation of the national reports due in 2012.

#### **5039 Albania: Land Degradation Enabling Activities**

The country needs to revise its NAP to enable a comprehensive and coherent approach to desertification, land degradation & desertification issues at the national level. With adoption of the UNCCD 10-year strategy, a review and alignment of NAP to the Strategy is required for synthesis with developments at the global level. The project incorporates enabling activities that will facilitate review and alignment to the strategy, and support the preparation of the National Report to UNCCD due in 2012.

#### *Projects under the GEF Agency Modality*

#### **4698 Honduras (FAO): Alignment of National Action Programs with the UNCCD 10-Year Strategy and reporting process**

The Government of Honduras is using the GEF Agency modality to access resources for enabling activities under the LD focal area. The project has been developed in partnership with FAO and will be executed by the National Secretariat for Natural Resources and the Environment (SERNA). All costs are based on guidance and expectations for addressing the UNCCD obligation for NAP alignment and reporting process. FAO is contributing both cash and in-kind, and project management costs will be fully covered from the co-financing.

#### **4983 Madagascar (UNEP): Alignment of National Action Programme to the UNCCD 10 Years Strategy and Preparation of the Fifth Reporting and Review process**

The project aims to assist the Government of Madagascar in aligning its National Action Programme with the UNCCD 10-year strategy, and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place an enabling environment for coordination and sustainable implementation of the NAP.

#### **4988 Georgia (UNEP): Alignment of National Action Programme and Preparation of the Second Leg of the Fourth Reporting and Review process**

The project will assist the Government of Georgia in aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. UNEP will serve as GEF Agency for the project, which will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP.

#### **5009 Lesotho (FAO): Alignment of Lesotho's National Action Plan with UNCCD**

With FAO as GEF Agency, the Government of Lesotho will utilize GEF resources to implementing activities in support of its obligation to the UNCCD for a) alignment of its NAP with the 10-year Convention Strategy and b) for the reporting and review process. The country prepared its current NAP in 1999, and since then a lot of developments of strategic importance to the land management issues have occurred. It is therefore proposing to accommodate such developments in the process of aligning its NAP in order to streamline government investments in its implementation. With regard to reporting, Lesotho will address capacity needs and information resources to generate relevant data.

#### **5010 Uruguay (FAO): Alignment of National Action Programs with the UNCCD 10-Year Strategy and Reporting Process**

The Government of Uruguay opted to work with FAO on enabling activities under the UNCCD. The proposed project will cover activities related to alignment of the country's NAP with the 10-year Convention Strategy and reporting and review process. The country prepared its current NAP in 2005 through a consultative process that involved civil society, national institutions and international partners, but has since faced difficulties with coordinating implementation among the different entities. It has, however, successfully submitted reports to the Convention during the last four reporting cycles, which now needs to be streamlined for the new PRAIS system. The National Environment Directorate (DINAMA), which is the national Convention Focal Point, will establish technical support needed to coordinate an effective monitoring system at national level, and to systematize existing data collection systems and interpretation mechanisms.

#### **5042 Uganda (UNEP): Support to Alignment of Uganda's National Action Programme and Reporting Process to the UNCCD Ten-Year Strategy**

The project aims at assisting the country in aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place an enabling environment for coordination and sustainable implementation of the NAP.

#### **5050 Ukraine (UNEP): Development and Alignment of National Action Programme to the UNCCD 10 Years Strategy and Preparation of the Fifth Reporting and Review process**

Ukraine became party to the UNCCD in 2002 and implemented different measures accordingly. With the adoption of the new UNCCD 10-year strategy and with changes in global priorities in combating land degradation, the need for a review and alignment of the strategy arises. Moreover, Ukraine requires financial support to fully comply with UNCCD reporting requirements. The project will assist Ukraine in

aligning its National Action Plan (NAP) with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements.

**5076 Bosnia-Herzegovina (UNEP): Support to Bosnia and Herzegovina for Development of National Action Programs Aligned to the UNCCD 10 Year Strategy and Reporting Process**

Through the proposed project with UNEP, the Government of Bosnia-Herzegovina will implement activities for aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP.

**5077 Azerbaijan (UNEP): Development and Alignment of National Action Programme to the UNCCD 10 Year Strategy and Preparation of the Reporting and Review Process**

The project will assist the Government of Azerbaijan with alignment of its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP.

**5081 Belarus (UNDP): Project title: Support NAP Alignment and UNCCD Reporting**

Through the proposed project with UNEP, the Government of Belarus will implement activities for aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP.

**5085 Panama (UNEP): Alignment of National Action Programs with the UNCCD 10-Year Strategy and Reporting Process**

The proposed project will enable the Government of Panama to meet its obligation for NAP alignment and reporting and review process. It builds on existing national strategies and plans, which will ensure that outcomes are directly mainstreamed to maximize potential for government investment in implementation of the UNCCD. The institutional framework for implementation also takes full advantage of established entities such as the National Environment Authority and the National Committee on Combating Drought and Desertification to ensure sustainability of outcomes, including capacity for monitoring NAP implementation and for reporting obligation.

**5165 Pakistan (UNDP): NAP Alignment and Strengthening National Reporting Processes**

The project will assist the Government of Pakistan in aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP. In addition, the project includes an innovative element, which will develop an integrated financing strategy (IFS) for sustainable land management (SLM) investments and thus complement GEF-5 investments in Pakistan.

### **5185 Tanzania (UNDP): Support to Alignment of Tanzania's National Action Plan with the UNCCD's 10 Year Strategic Framework and Support National Reporting**

The proposed project will help the Government of Tanzania to fulfill its obligations under the UNCCD for alignment of its National Action Plan with the 10-year Strategy and reporting and reviewing process. This exercise will help to reinforce national capacities and improve the role of Sustainable Land Management in the Development Agenda and the sectoral frameworks. This proposal builds on the current UNDP/GEF portfolio and activities of other partners such as the Global Mechanism. The Country Strategic Investment Framework developed during TerraAfrica will notably provide the basis to develop the process, with the involvement of other donors, partners, and national entities such as CSO, NGOs and universities.

### **5274 Kazakhstan (UNDP): Mobilizing Support to the NAP Alignment and UNCCD Reporting and Review Process**

This proposed project with UNDP will assist the Government of Kazakhstan in aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP. The project includes an innovative element by supporting the establishment of a National Center for Inter-sectoral Coordination (NCIC).

### **5311 Montenegro (UNEP): Support for Development of National Action Program Aligned to the UNCCD 10 Year Strategy and Reporting Process**

The Government of Montenegro ratified the UNCCD on March 2007. Since that time, important efforts are being made by the GoM to implement the Convention. However, the country still lacks a National Action Plan (NAP). Hence the proposed project will help to develop and at the same time align the NAP with the UNCCD 10-year strategy. Montenegro also submitted its first National Report to UNCCD in 2012. Nevertheless, further efforts are necessary to ensure data homogeneity and collaboration between relevant institutions. The project will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP.

### **5315 Macedonia (UNEP): Support for the Development of National Action Program Aligned to the UNCCD 10-Year Strategy and Reporting Process under UNCCD**

The Government of Macedonia is currently developing its first UNCCD National Action Plan. The project with UNEP will therefore enable the government to implement activities for aligning the NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place and enabling environment for coordination and sustainable implementation of the NAP. The project will be executed by the Ministry of Environment and Physical Planning in collaboration with UNEP Regional Office for Europe.

### **5346 Zimbabwe (UNEP): Support to Alignment of Zimbabwe's National Action Programme and Reporting Process to the UNCCD Ten-Year Strategy**

The proposed project will help the Government of Zimbabwe in aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also

support the country to integrate its obligations under the UNCCD into its national and development and sectoral planning frameworks. UNEP and Zimbabwe will use a Country Strategic Investment Framework for mobilizing resources and develop a multi-stakeholder platform.

#### **5425 Cape Verde (UNEP): Support to Alignment of Cape Verde’s National Action Programme to the UNCCD 10-Year Strategy and Preparation of the Reporting and Review Process**

The proposed project will help the Government of Cape Verde in aligning its NAP with the UNCCD 10-year strategy and to comply with UNCCD reporting and review requirements. The project will also support the country to put in place an enabling environment for coordination and sustainable implementation of the NAP.

#### *Umbrella Project Modality*

#### **4829 Global<sup>23</sup> (UNEP): Support to GEF Eligible Parties for Alignment of National Action Programs and Reporting Process under UNCCD**

The full-sized project will facilitate access to US\$50,000 by each of 52 countries for implementing activities related to a) NAP alignment and b) reporting review process under the convention. Each country will also contribute co-financing in-kind and cash to ensure successful delivery of the alignment NAP and reporting requirements. UNEP will administer the funds based on its own internal procedures and will provide technical support in consultation with the UNCCD Secretariat. In lieu of project management costs, an additional US\$230,000 will contribute toward a dedicated Help Desk to ensure that all activities by countries are consistent with UNCCD modalities for NAP alignment and reporting. The project will therefore deliver on GEF commitment to affected countries in meeting their obligations under the convention.

#### **5136 Global<sup>24</sup> (UNEP): Support to 20 GEF Eligible Parties for Alignment of National Action Programs and Reporting Process under UNCCD**

The GEF originally committed to financing 70 countries under this modality of umbrella projects. Building on the full-sized Project involving 50 countries that was approved by the GEF Council in November 2011, this Medium-size Project by UNEP will help twenty more countries to fulfill their obligations under the UNCCD by: 1) aligning their National Action Program to the 10-year strategy and 2) submitting their national reports based on UNCCD impact indicators. Each of 20 countries endorsing the project will receive up to US\$50,000 for implementing their activities under the UNCCD. Participating countries also contributed co-financing in-kind and cash to ensure successful delivery of the outputs and institutionalize the approach in the government development framework.

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<sup>23</sup> Afghanistan, Angola, Burkina Faso, Burundi, Benin, Central African Republic, Congo, Cote d'Ivoire, Cook Islands, Cameroon, Colombia, Costa Rica, Dominican Republic, Algeria, Gabon, Grenada, Ghana, Gambia, Guinea, Equatorial Guinea, Guinea-Bissau, Haiti, Kenya, Comoros, St. Kitts And Nevis, Lao PDR, Sri Lanka, Liberia, Morocco, Moldova, Mongolia, Mauritania, Niger, Nigeria, Nepal, Nauru, Niue, Philippines, Paraguay, Sierra Leone, Senegal, Sao Tome and Principe, Chad, Togo, Turkmenistan, Uzbekistan, St. Vincent and Grenadines, Vanuatu, Serbia, South Africa, Congo DR, Iraq

<sup>24</sup> Barbados, Belize, Chile, Egypt, Eritrea, Ethiopia, Indonesia, Mali, Myanmar, Mauritius, Maldives, Malawi, Mozambique, Namibia, Rwanda, Sudan, Somalia, Swaziland, Thailand, Vietnam

## **PROJECTS WITH ACTIVITIES IN PRODUCTION LANDSCAPES APPROVED UNDER SPECIAL CLIMATE CHANGE FUND (FY12 AND FY13)**

### **4366 Moldova (IFAD): Climate Resilience through Conservation Agriculture**

This project has a strong potential in implementing climate change adaptation measures through reducing runoff, increasing soil moisture retention, and reducing the risk of erosion. The project as designed targets vulnerable farmers, increasing their productivity, and through a set of interventions of both investment and technical assistance, resulting in increased resilience. The project builds on substantial IFAD intervention, which is reflected in the amount of cofinancing presented.

### **4610 Colombia (IADB): Adaptation to Climate Impacts in Water Regulation and Supply for the Area of Chingaza - Sumapaz - Guerrero**

The project aims to strengthen the hydrological buffering and regulation capacity of the upper watershed of Chingaza-Sumapaz-Guerrero and will contribute towards establishment of sustainable water and sanitation systems in a long term for the residents of the Bogota metropolitan area. The project design is sound and it is expected to provide concrete adaptation benefits.

### **4649 Regional<sup>25</sup> (ADB and WB): GMS-FBP Greater Mekong Sub-region Forests and Biodiversity Program (PROGRAM)**

The Regional Program is designed to increase investments for improved management and climate resilience of high priority forest biodiversity conservation landscapes, including protected area systems of the Greater Mekong Sub-region (GMS), recognizing the pressures on these landscapes from development and climate change. The Program Framework Document builds on existing co-operation of the GMS countries and addresses region-wide biodiversity issues requiring larger scale approaches and cross-border landscape conservation. Under the GEF programmatic approach with coordinating agencies (ADB & World Bank), it coordinates one (1) regional and four (4) national projects under an overall set of results and indicators, facilitating synergy between conservation programs. The program is in line with national priorities and programs, with the existing regional priorities of ASEAN and it is strongly supported by the leading international NGOs in the region, namely WWF and WCS.

### **4657 Honduras (IFAD): Competitiveness and Sustainable Rural Development Project in the Northern Zone (Northern Horizons-GEF)**

The objective of the project is to improve climate resilience of the agricultural productive chains in three departments of Northern Honduras. The project will assist in more effectively managing soil and water resources; enhance post-harvest techniques to be more resilient to climate change, and assist in the climate proofing of key infrastructure. The project will also train local staff in mainstreaming climate change adaptation concerns in business development and put into practice climate resilient plans with agro business.

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<sup>25</sup> China, Cambodia, Lao PDR, Myanmar, Thailand, Vietnam

**4775 Ecuador (FAO): Promotion of Climate-smart Livestock Management Integrating Reversion of Land Degradation and Reduction of Desertification Risks in Vulnerable Provinces** (*see also GEFTF*)

The proposed project represents an innovative effort to harness the synergies between sustainable land management, climate change mitigation, and climate change adaptation. Specifically, the Government of Ecuador is proposing to implement Climate-smart livestock management (CSLM) to address land degradation and climate change in its livestock sector. The approach integrates both CC adaptation and mitigation practices in the agro-livestock sector, and supports the development of sectorial policies aimed at combating desertification and reducing land degradation, while enhancing the achievement of national food security and development goals. Hence the project is requesting both GEF Trust Fund and SCCF funds for an integrated approach to increase multiple benefits needed in the livestock sector in Ecuador. The SCCF grant would contribute towards the development of CSLM and its integration across existing land-use and development plans; as well as the transfer of relevant adaptation technologies and practices, particularly drought or flood-tolerant grass species, rotational grassland management systems, and efficient use of rainwater. These pilot investments are well placed to catalyze significant, additional resources and replication thanks to close linkages with new and existing micro-finance services in the targeted areas.

**4901 India (WB): Sustainable Livelihoods and Adaptation to Climate Change (SLACC)**

The SCCF grant will be used to make rural population in six select States in India and their livelihood resilient to climate change. Agriculture and related sectors will be the focus of the project. Investment support will be provided to the poor to practice climate resilient modes of livelihood. The project will also support design of effective adaptation framework at local to higher institutional levels, and provide technical assistance on climate change adaptation. The project is composed of suitable components that would contribute towards the project objective of increasing adaptive capacity of the rural populations in the country, namely: Implementation of community based adaptation measures in select agro-ecological zones in 6 States of India, and technical Support and Institutional Capacity Building. As the SCCF project will be closely integrated into the government led programs such as National Rural Livelihoods Mission, Women Farmers Empowerment Program and Mahatma Gandhi National Rural Employment Guarantee Scheme that aim to support sustainable livelihoods for the rural poor through improved and equitable access to financial services, the ratio of SCCF grant *vis-a-vis* co-financing leveraged will be at 1:29, thus conferring adaptation benefits to US\$234 million investment resilient to climate change.

**4960 Zimbabwe (UNDP): Scaling up adaptation in Zimbabwe, with a focus on rural livelihoods, by strengthening integrated planning systems.**

This project focuses on adaptation in Zimbabwe, focusing on rural livelihoods, and combining baselines such as the national "Irrigation rehabilitation, expansion and development programme" (US\$4 million) and the medium Term Plan allocations to local government and agriculture in southeast Zimbabwe (US\$20 million), with which the proposed project is integrated. The project will work with the relevant authorities responsible for making climate-sensitive investments at the district level, so that planned investments in irrigation, agriculture and others implemented in the baseline are climate-resilient. The SCCF project will also institutionalize climate change adaptation in local planning processes and spending plans.

### **5125 Lebanon (WB): Sustainable Agricultural Livelihoods in Marginal Areas (SALMA)**

The proposed project seeks to increase access to reliable sources of supplementary irrigation in remote, ecologically vulnerable hilly areas using sustainable land and water management approaches. The project takes an integrated approach to climate-resilient water resources management, promoting supply-side measures to enhance upstream water retention, as well as demand-side measures for increased water-use efficiency in agriculture. The project has three main components, namely (i) expanding water storage in small reservoirs and supporting efficient irrigation; (ii) reforestation and afforestation in upstream basins for enhanced water management; (iii) technical assistance and capacity building. More than 70 per cent of the proposed grant would be allocated towards tangible investments under components (i) and (ii). The proposed project is Lebanon's first under the SCCF Adaptation Program (SCCF-A). With a strong baseline of development investments, and thanks to close alignment with Lebanon's priorities for agricultural development and natural resources management, the proposed project is well placed to generate substantial and sustainable adaptation benefits for the country's most vulnerable communities, through proven and cost-effective approaches. Moreover, the project would include targeted capacity building measures aiming to ensure national ownership, adequate coordination and sustainability of the investments carried out. The project is aligned with Lebanon's national priorities for climate change adaptation, as articulated in the National Capacity Self-Assessment and Second National Communication, and it contributes towards the strategic objectives of the SCCF, notably through strengthening vulnerable physical, natural and social assets in response to the effects of climate change and through the transfer of adaptation technologies. The SCCF grant (US\$7.15 million, excluding Agency Fee), would be fully blended with an IBRD loan project, amounting to US\$20 million in indicative co-financing. In addition, the project would build on an IFAD soft loan of US\$4.6 million and an in-kind contribution from the Government of Lebanon of US\$1.5 million.

### **5147 Georgia (IFAD): Enhancing Resilience of Agricultural Sector in Georgia (ERASIG)**

The proposed project seeks to enhance the climate resilience of Georgia's agriculture sector, with a focus on rehabilitating and strengthening the physical and natural assets that underpin agricultural production. The project addresses the urgent needs of smallholder farmers who have been affected by severe weather events in recent years, while building the long-term resilience of agricultural production and rural livelihoods. The project has three main components: (i) investments in drainage and agricultural infrastructure; (ii) landscape restoration and soil erosion control; and (iii) capacity building and weather-index based insurance. 85 per cent of the proposed SCCF grant would contribute towards tangible investments under components (i) and (ii). The proposed project is Georgia's first under the SCCF Adaptation Program (SCCF-A). Thanks to a solid baseline of development investments as well as targeted adaptation planning and capacity building measures, the project is well-placed to have a sustained impact on the livelihoods and resilience of some of Georgia's most vulnerable rural communities. The project pilots an innovative, weather index-based insurance scheme, which responds to a clear demand among smallholder farmers and which, based on IFAD's experience in other MICs, holds considerable potential for replication and scaling up. The project contributes towards the country's 2003-2015 Economic Development and Poverty Reduction Programme and the 2012-2022 Strategy for Agricultural Development, and it is fully aligned with the strategic objectives of the SCCF.

### **5343 Namibia (UNDP): Scaling Up Community Resilience to Climate Variability and Climate Change in Northern Namibia, with a Special Focus on Women and Children**

Climate change has brought about an increase in floods and droughts in Northern Namibia. This directly affects rural farmers, who depend on rain-fed subsistence agriculture for their livelihoods. The Ministry of Agriculture, Water and Forestry, and Regional Councils under the Ministry of Local and Regional Government and Housing and Rural Development are carrying out baseline investments in agricultural development, notably through enhanced access to irrigation and agricultural inputs, such as fertilizers, seeds and machinery. To date, however, these initiatives have failed to adequately consider the effects of climate change. Accordingly, the proposed SCCF project will complement and enhance the resilience of Namibia's Greene Scheme, the Rain-fed Crop Production Programme, and the Food/Cash for Work Programme, with total indicative co-financing amounting to US\$40.5 million. The project is structured around three principle components, aiming to (i) strengthen the capacities of smallholder farmers to implement climate-resilient agricultural production practices; and (ii) reduce vulnerability to droughts and floods through the restoration of wells and harvesting of floodwater for food security; and (iii) mainstream climate change into national agricultural strategy/sector policy, including adjustments to budgets for replication and up-scaling. The project is consistent with Namibia's National Development Plan 4 (NDP4), which sets out a number of development barriers to be addressed, including priority economic sectors such as agriculture. The project is also in alignment with a selection of national strategies, such as the National Climate Change Policy, National Disaster Risk Management Policy and National Gender Policy.

### **4934 Global<sup>26</sup> (UNEP): Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries**

The project will build resilience in vulnerable communities in developing countries by increasing institutional capacity, mobilizing knowledge and transferring best practice adaptation technologies with a focus on ecosystem management. This global project will be based in China and it will leverage a number of existing programs such as the South-South Cooperation, the Poznan Strategic Programme of Technology Transfer, the Global Adaptation to Climate Change Network and others to identify appropriate technologies and knowledge that would enhance the capacity of developing countries to plan and implement effective adaptation actions. The project will also implement on-ground adaptation intervention in three pilot countries in Mauritania, Nepal and Seychelles.

## **PROJECTS WITH ACTIVITIES IN PRODUCTION LANDSCAPES APPROVED UNDER THE LEAST DEVELOPED COUNTRIES FUND (FY12 AND FY13)**

### **4434 Cambodia (FAO): Strengthening the adaptive capacity and resilience of rural communities using micro watershed approaches to climate change and variability to attain sustainable food security**

This project aims to address the need to strengthen the resilience of rural communities using micro watershed approaches to Climate Change to attain food security. The project is well aligned with FAO's comparative advantage and Cambodia's NAPA priorities on the sectors of agriculture and water

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<sup>26</sup>Mauritania, Nepal, Seychelles

resources. Working closely with the Ministry of Agriculture, Forests and Fisheries, the Ministry of Environment, and the Ministry of Water Resources Management, the proposed LDCF project will demonstrate the role of various watershed techniques to reduce climate risks. For this particular component, the LDCF project will invest on 10 pilot micro watersheds, 50 small check dams and other integrated micro watersheds, and other micro watershed management practices. It will also demonstrate climate resilient agricultural practices for increased productivity, and livelihoods diversification through alternative income generation activities. Lastly, the project will integrate CC adaptation into agricultural and food security policies and planning. Focused support will be provided to women in order to improve their livelihoods.

#### **4453 Lesotho (IFAD): Adaptation of Small-scale Agriculture Production (ASAP)**

This project aims to mainstream adaptation in the agricultural sector in Lesotho, namely targeting the vulnerable small producers, through securing technical support, including transfer of innovative practices, technologies, and infrastructure to both better assess and respond to climate change. It would build upon a joint IFAD/World Bank Smallholder Agriculture Development Program, currently under formulation, the main objective of which is to increase productivity and output in Lesotho's smallholder agricultural sector.

#### **4568 Madagascar (UNEP): Adapting Coastal Zone Management to Climate Change in Madagascar Considering Ecosystem and Livelihood Improvement**

The objective of the project is to reduce the vulnerability of the coastal zone to climate change and climate variability in order to increase its contribution to national economic development and poverty reduction. This project addresses NAPA priorities 1-Rehabilitation and/or construction of protective dams and dikes, Priority 4- Adoption of anti-erosion measures, soil rehabilitation and dune stabilization, Priority 5 - Installation of light climate monitoring infrastructure and strengthening of decentralized climate services, Priority 7- Rehabilitation of degraded coastal areas, including through reforestation of folios, mangrove plantation, stone dikes and shoreline management, and tide or wave breaks, and Priority 11 - Development of information, engagement and communication systems. The project will develop institutional capacity to address climate change impacts on coastal zones, and will pilot technologies for resilient protection of coastal assets. The project will also rehabilitate climate monitoring infrastructure and mainstream adaptation measures into national policies and development strategies.

#### **4570 Togo (IFAD): Adapting Agriculture Production in Togo (ADAPT)**

This is the first project that addresses Togo's urgent and immediate adaptation needs in agriculture as identified in the NAPA. The project is well aligned with the country's development policies and plans, related donor-funded initiatives, as well as IFAD's comparative advantage in agriculture and rural development. The present project follows a previous proposal by UNDP that was dropped due to concerns over the Agency's comparative advantage. The LDCF grant of US\$5.35 million builds on an IFAD baseline investment of US\$10 million in value chain development and agricultural productivity. Total indicative co-financing amounts to US\$13 million. The LDCF grant will support measures to enhance the resilience of the baseline investment through three distinct and complementary components: (i) mainstreaming climate change adaptation tools in agricultural production systems; (ii) adapting vulnerable agricultural production systems and diversifying rural livelihoods; and (iii) strengthening

knowledge resources, communication and capacity building associated with climate change adaptation. The project targets the most vulnerable smallholder farmers, with a specific focus on women and youth. With strong linkages to the baseline project and the wider, national framework for agricultural development, the project is well placed to generate significant and sustainable adaptation benefits as well as lessons and good practices for scaling up in Togo and beyond.

#### **4692 Guinea (UNDP): Strengthening Resilience of Farming Communities' Livelihoods against Climate Changes in the Guinean Prefectures of Gaoual, Koundara and Mali**

This is Guinea's second NAPA implementation project submitted for financing under the LDCF. The project will address Guinea's NAPA priorities associated with the promotion of agro-forestry for enhanced climate-resilience in the agricultural sector. The project is also relevant for priorities in fire management and semi-intensive livestock management. Most of the grant will be allocated toward climate-resilient livelihoods in the rural areas, specifically the 15 most vulnerable communities in the targeted prefectures. Other outcomes will include development of agro-hydro-meteorological information and capacity building for development planning. The project is fully integrated into Guinea's decentralized governance structure and sub-national development processes. Overall, the project is well placed to achieve direct adaptation benefits for highly vulnerable rural communities in a cost-effective and sustainable manner. The LDCF grant of US\$3.72 million is coupled with indicative co-financing from UNDP (US\$10 million) and the Government of Guinea (US\$40.23 million) at a total amount of US\$50.63 million. The project contributes directly to the climate resilience of seven baseline initiatives, which present important opportunities to scale up appropriate adaptation technologies beyond the three targeted prefectures.

#### **4700 Bangladesh (UNDP) Integrating Community-based Adaptation into Afforestation and Reforestation Programmes in Bangladesh**

The proposed project aims to reduce climate change vulnerability of the coastal communities in Bangladesh through participative design, community-based management and diversification of afforestation and reforestation programmes. The project builds on the first NAPA implementation project in the country funded through the LDCF. The project demonstrates a strong country ownership and commitment. The baseline project is led by the Bangladesh Forestry Department, which is bringing in a sizeable co-financing to the project. The proposed LDCF project will involve communities in the baseline afforestation activities, and integrate livelihood diversification methods such as fisheries, fruit farming and livestock rearing in the afforested areas. In addition cooperation and communication will be established between the communities and the national level Forest Department and early warning systems will be set up to protect livelihood assets in the coastal areas. The project has been significantly redesigned to ensure country ownership and ensure full coordination with other adaptation activities in the country. The project has steered clear of funding through other multilateral sources such as PPCR to avoid duplication.

#### **4701 Niger (UNDP): Scaling up Community-Based Adaptation (CBA) in Niger**

The proposed LDCF project builds on the achievements of the community-based adaptation program in Niger, aiming to strengthen the adaptive capacity of administrative/technical support services at the commune-level to generate a critical mass of climate-resilient livelihood systems in the vulnerable Maradi

region. The proposed project contributes towards Niger's NAPA priorities on the promotion of climate-resilient income-generating opportunities, water management and control, and the enhancement of the adaptive capacities of smallholder farmers. The LDCF grant (US\$3.75 million) builds on baseline initiatives in agricultural development, rural financial services, and capacity building for adaptation financed by UNDP, the Government of Luxemburg, UNCDF and Care International at a total amount of US\$13.25 million. The project is structured around two components: (i) effective climate risk information and management tools supplied and adopted by commune leaders, extension services and community organizations; and (ii) implementation of locally-designed climate-resilient livelihoods options to build the socio-economic resilience of target communities. Nearly two thirds of the LDCF grant will be allocated towards tangible investments in community-level adaptation measures and hydro-meteorological monitoring. With strong linkages to existing micro-finance institutions as well as larger investments in rural development and adaptation, the proposed project is well placed to achieve lasting adaptation benefits, and to generate best practices for replication and scaling up in Niger and in the wider region.

#### **4702 Niger (FAO): Integrating Climate Resilience into Agricultural and Pastoral Production for Food Security in Vulnerable Rural Areas through the Farmers Field School Approach**

The proposed project seeks to enhance the adaptive capacity of Niger's agricultural and pastoral sectors by mainstreaming adaptation strategies into on-going agricultural development policies and programs. The project would address several of Niger's NAPA priorities, notably in the areas of climate-resilient crop and livestock production and agricultural water resources management. The proposed LDCF grant (US\$3.8 million) would build on five baseline initiatives financed and implemented by the EU, the Government of Niger and FAO, with total indicative co-financing amounting to US\$15.20 million. The project is structured around three distinct components, namely (i) pilot investments in climate-resilient agricultural practices; (ii) capacity building for climate-resilient agricultural practices provided through an existing network of farmer field schools (FFS); and (iii) mainstreaming adaptation strategies across agricultural policies and programming. The project is expected to allow at least 20,000 vulnerable farmers and agro-pastoralists to adopt climate resilient practices. The proposed project is closely integrated into Niger's rural development strategy and is, therefore, well placed to catalyze investments in climate-resilient agriculture and associated extension services at a national level.

#### **4797 Malawi (UNDP): Climate Proofing Local Development Gains in Rural and Urban Areas of Machinga and Mangochi Districts**

The proposed LDCF project seeks to apply ecological, physical and policy measures to reduce the vulnerability of rural and urban communities in Malawi's Machinga and Mangochi districts to the effects of climate change -induced droughts, floods and post-harvest grain losses. The project is well aligned with Malawi's NAPA priorities, as well as other national policies, plans and frameworks for sustainable development and poverty reduction. The proposed project is structured around two main components: (i) ecological and physical demonstration works in climate-resilient land, water and post-harvest management; and (ii) scaling up demonstration activities through baseline programs and local development processes. The project is well placed to introduce best practices for scaling up at the national level. In particular, through strong ties to the Agricultural Input Subsidy Program, which currently

accounts for 80 per cent of Malawi's public expenditure in the agricultural sector, the project holds the potential to contribute to a nationwide shift to climate-resilient agricultural production.

#### **4822 Mali (FAO): Strengthening Resilience to Climate Change through Integrated Agricultural and Pastoral Management in the Sahelian zone in the Framework of the Sustainable Land Management Approach**

The proposed project seeks to strengthen the adaptive capacities of Mali's agro-pastoral sectors to the effects of climate change by mainstreaming adaptation across ongoing agricultural development initiatives within the framework of a national program on sustainable land management. The project builds on and strengthens a network of highly successful farmer field schools (FFS) and agro-pastoral field schools (APFS) by introducing adaptation in the training curricula and introducing adaptation technologies in the FFS and APFS sites. In parallel, the project develops integrated adaptation plans and decision-support systems at the regional level, and mainstreams adaptation in relevant national policy frameworks and plans. Through strong linkages with national, regional and local initiatives in agricultural and rural development, and the innovative use of FFS as a vehicle for building capacity for and scaling up adaptation technologies, the proposed project is well placed to catalyze investments in climate-resilient development at a larger scale and in the longer term. The proposed project would address several of Mali's NAPA priorities associated with agriculture and rural development, particularly the dissemination of climate-resilient seeds, hydro-agro-meteorological services, water management, and the development of an adaptation training package for rural populations. The proposed project is also aligned with the strategic investment framework for sustainable land management (CSI-GDT), Mali's Growth and Poverty Reduction Strategy Framework, the Agricultural Orientation Law, the National Food Security Strategy, and the National Programme on Food Security. The proposed LDCF grant (US\$2.17 million, excluding Agency fee) would build on baseline initiatives associated with agriculture, food security and rural development amounting to US\$9.67 million in indicative co-financing. The baseline projects are financed and implemented by FAO, GIZ, the Government of Spain, CARE and the Government of Mali.

#### **4952 Rwanda (World Bank): Landscape Approach to Forest Restoration and Conservation (LAFREC)**

This multi-trust fund project proposes a landscape approach to restore and safeguard critical landscapes in Rwanda that provide global environmental benefits and contribute to resilient livelihoods and economic development. The project will secure multiple environmental services by addressing the following complementary components: 1) nation-wide multi-sectoral landscape restoration planning and institutional development, 2) demonstration of land and forest restoration and conservation at the priority landscapes, and 3) landscape level restoration in support of greater adaptation and resilience of local communities to effects of climate change. Rwanda is a flexible country under the STAR rules, and the Government decided to utilize all of its allocation for this project. In addition, the project also leverages the SFM/REDD-plus incentive, and integrates climate change adaptation with LDCF resources. The LDCF resources will address key NAPA priorities (2006) by supporting (i) capacity building of local government and communities to respond climate change conditions, (ii) vulnerability assessments and investments in critically degraded areas to address immediate and longer term adaptation measures to address the impacts of floods, landslides, and extreme droughts; and (iii) adoption more sustainable agricultural practices. The proposal draws on lessons of the previous GEF/WB Integrated Management of

Critical Ecosystems Project that closed in 2011, and demonstrates synergy with other existing investments such as the "Sustainable afforestation and reforestation management of the natural forests of Rwanda", a 3-year project financed by the Congo Basin Forest Fund. The project also reflects several partnerships, such as the IUCN providing technical assistance to the government of Rwanda, and the Ministry of Natural Resources Canada providing financial support through the African Model Forest Initiative (AMFI).

**4958 Sudan (UNDP): Climate Risk Finance for Sustainable and Climate Resilient Rainfed Farming and Pastoral Systems**

This LDCF project, Climate risk finance for sustainable and climate resilient rainfed farming and pastoral systems in Sudan has the objective of increasing climate resilience of rainfed farmer and pastoral communities in regions of high rainfall variability through climate risk financing. This will be achieved through strengthening institutional and technical capacity for climate observation, forecasting and early warning, and addressing climate risk to rural livelihoods in the states of greatest rainfall variability through parametric insurance products, and improving access of vulnerable farmers and pastoralists to financial services for climate change adaptation and disaster risk reduction. This intervention appears timely and well-coordinated with the ongoing long-term disaster risk management effort in Sudan. Project management costs are below 5%, and cofinancing includes US\$10 million of UNDP core budget financing.

**4971 Burkina Faso (UNDP): Reducing Vulnerability of Natural Resource Dependent livelihoods in two landscapes at Risk of the Effects of Climate Change in Burkina Faso: Boucles du Mouhoun Forest Corridor and Mare d'Oursi Wetlands Basin**

The proposed project aims to reduce local communities vulnerability to the additional risks posed by climate change in two areas chosen based on NAPA priorities -- the Boucles du Mouhoun Forest Corridor and the Oursi Wetlands Basin. The project consists of establishing a specialized information system that would allow the analysis of geo-based climatic, agro-ecological and hydrological, as well as socio-economic information; training over three hundred people on how to access, and incorporate into development planning the information resulting out of the analyses from the system; demonstration activities that focus on the strengthening of natural assets, and some that focus of strengthening of social assets, with the aim of increasing resilience; and, mainstreaming climate change adaptation into local and regional development planning and finance through inclusion in sectoral policies and plans. The baseline consists of national, bilateral, and multilateral interventions, along with a number of those from the implementing agency, including in agriculture, water, and disaster risk reduction sectors, of which nearly USD 21 million is in grant funding.

**4974 Comoros (UNDP): Enhancing adaptive capacity and resilience to climate change in the agriculture sector in Comoros**

The objective of the project is to strengthen the capacities of vulnerable communities to cope with the additional risks posed by climate change and variability on Comorian agro-sylvo-pastoral systems. The project will put in place a training programme for management of climate risks for agro-sylvo pastoral systems, install climate monitoring equipment, establish a public private partnership aiming to encourage and enable the combination of public and private sector contribution in the provision of institutional,

financial and technical support to promote the integration of climate risks and adaptation options, and provide innovative financial products to finance farmers to make climate change adaptation investments and resilient alternative income generating activities.

**5014 Burkina Faso (FAO): Integrating Climate Resilience into Agricultural and Pastoral Production for Food Security in Vulnerable Rural Areas through the Farmers Field School Approach.**

The proposed project seeks to enhance the capacity of Burkina Faso's agricultural and pastoral sectors to cope with climate change, by mainstreaming adaptation practices across agricultural development initiatives, policies and programming, and by directly scaling up farmers' adoption of climate-resilient technologies through an existing network of farmer field schools. The project would contribute towards several of Burkina Faso's NAPA priorities, notably those on early-warning systems, agricultural water use, as well as resilient livestock and crop production. The proposed LDCF grant (US\$3.81 million, excluding Agency Fee) would build on a range of baseline initiatives implemented by FAO, the Ministry of Agriculture and Hydrology (MAH), the Ministry of Animal Resources (MRA), and the Ministry of Environment and Sustainable Development (MEDD), and financed by a range of bilateral and multilateral donors with total indicative co-financing amounting to US\$19.47 million. The project is structured around three distinct components, namely (i) pilot investments in climate-resilient agricultural practices; (ii) capacity building for climate-resilient agriculture provided through an existing network of farmer field schools; and (iii) mainstreaming adaptation strategies across agricultural policies and programming. The project is expected to allow at least 26,000 vulnerable farmers and agro-pastoralists to adopt climate resilient practices across at least 15,000 hectares. The proposed project is closely integrated into Burkina Faso's National Program for the Rural Sector (PNSR) and is, therefore, well placed to catalyze investments in climate-resilient agriculture and associated extension services at a national level.

**5075 Lesotho (UNDP): Reducing Vulnerability from Climate Change in the Foothills, Lowlands and the Lower Senqu River Basin**

The proposed project would seek to mainstream climate risk considerations into Lesotho's ambitious Land Rehabilitation Programme, with the aim of enhancing the resilience of key natural assets and rural livelihoods. The project is structured around two broad components, namely (i) providing knowledge, skills, institutional capacity building and targeted cash-for-work investments to enable the Land Rehabilitation Programme to fully factor in the effects of climate change; and (ii) mainstreaming climate change adaptation into local and regional development planning and finance. More than two thirds of the proposed LDCF grant would be allocated towards cash-for-work investments carried out at the landscape and farm level over more than 100,000ha. The LDCF grant would build on (i) the Land Rehabilitation Programme (LRP) led by the Ministry of Forestry and Land Reclamation; (ii) the development of rangeland and wetland strategies by the departments of Rangelands Management and Water Affairs; (iii) the implementation of the National Sustainable Development Plan, with total indicative co-financing amounting to US\$26 million. Covering more than 60% of Lesotho's surface and engaging nearly 400,000 workers, LRP offers a unique vehicle for sustaining and scaling up technologies and practices for climate-resilient crop and livestock management, and sustainable land and water resources management. Among several innovative aspects and as a basis for incorporating climate change considerations across LRP investments and, ultimately, the National Sustainable Development Plan, the proposed project would

introduce a cutting-edge hydro-meteorological and agro-ecological information and decision support system, providing a unique knowledge base for adaptation at the national level.

#### **5111 Nepal (FAO): Reducing Vulnerability and Increasing Adaptive Capacity to Respond to Impacts of Climate Change and Variability for Sustainable Livelihoods in Agriculture Sector in Nepal**

The proposed project aims to increase climate change resilience in the agriculture sector in Nepal. The project is in-line with Nepal's National Adaptation Plans of Action (NAPA) and also development strategies such as national Agriculture Sector Development Priority (NASDP). In Nepal, the livelihood of the rural poor are tied to agriculture but the farmers are unaware of the climate change and the impacts it will have on their livelihoods. The project will develop capacity at the local level and at the national level to implement NAPA priorities related to agriculture. The project has a strong focus on training farmers on climate impacts and adaptation strategies they can undertake. It is expected that such activities will contribute strongly towards the sustainability of the project outcomes. The project will invest in small scale physical measures such as seed storage units, livestock enterprises and off season cultivation prioritized in the Local Adaptation Plans of Actions developed by the communities and the farmer groups in the four target districts. The proposed project will build resilience into a number of baseline projects that relate to the different aspects of agriculture such as pest management, forestry and livestock development.

#### **5124 Lesotho (FAO): Strengthening Capacity for Climate Change Adaptation through Support to Integrated Watershed Management Programme in Lesotho**

The proposed project seeks to reduce the vulnerability and enhance the adaptive capacity of rural communities in Lesotho's most vulnerable zones to the effects of climate change through investments in sustainable land and water management practices and resource conservation measures in selected watersheds, and through strengthened and diversified rural livelihoods, with a focus on crop, livestock and agro-forestry systems. The project is structured around four principle components: (i) strengthening the technical capacities of national and sub-national authorities on SLWM and climate-resilient livelihood strategies; (ii) assessing the vulnerability of livelihoods to the effects of climate change at the watershed level; (iii) promoting tested SLWM practices to build resilience to climate change in vulnerable sub-catchments and watersheds; and (iv) strengthening innovative, diversified and resilient livelihood strategies at the community level. The proposed project would directly contribute towards Lesotho's NAPA priorities, particularly through enhancing the climate resilience of livestock production and crop-based livelihood systems. The project is also aligned with Lesotho's Poverty Reduction Strategy, the National Action Plan for Food Security, and the National Vision 2020. The LDCF grant (US\$3.59 million, excluding Agency Fee) builds on several FAO interventions and government programs, planned and underway in Lesotho. Through well-timed and targeted investments in proven technologies, informed by robust downscaled assessments of climate change vulnerabilities, the project will catalyze considerable investments in climate-resilient rural livelihoods and natural resources management, along with enhanced political and regulatory support.

#### **5184 Sao Tome and Principe (UNDP): Enhancing Capacities of Rural Communities to Pursue Climate Resilient Livelihood Options in the Sao Tome and Principe Districts of Cauã, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL)**

In Sao Tome and Principe, cocoa cultivation is an important economic activity. Increasing length of the dry season poses a threat to cocoa production in the country. The proposed LDCF project will develop capacities of key institutions that are responsible for rural development. District and village representatives will be trained on developing and monitoring annual adaptation plans and budgets. At a local level communities will be trained to implement erosion control measures such as terracing, wind break systems and water harvesting measures such as construction of dykes and bunds. Project will invest in cereal banks and food cooperatives to maintain food resources during extreme weather conditions. Through training of the community members and district officials and also by including adaptation in appropriate plans and budgets the project will establish a framework needed to sustain the project outcomes. The project will build on the three appropriate baseline projects, Global Climate Change Alliance, Food Crops Development Project and SATOCAO Villages project. All the baseline projects deal with cultivation of important crops such as cassava, cocoa and work on supporting community livelihood enhancement.

### **5190 Mauritania (AfDB): Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania**

The proposed project seeks to reduce the vulnerability of rural communities through targeted climate-resilient management of water and forest resources. The project introduces proven land and water management techniques, as well as alternative income-generating opportunities to address the adaptation needs of both sedentary and nomadic communities. The project will also contribute towards mainstreaming adaptation across Mauritania's national strategies for water resources and sustainable development. The project is structured around four components: (i) institutional and local capacity building and policy support; (ii) investments in sustainable land and water management, and increased access to water for consumption and production; (iii) promotion of diversified and resilient income-generating activities; and (vi) knowledge management, monitoring and evaluation. The project would contribute towards Mauritania's NAPA priorities in the areas of water resources management and forest conservation. The project is also aligned with Mauritania's Strategic Framework for the Fight Against Poverty (PRSP) 2012-2015, and the National Sustainable Development Strategy.

### **5192 Mali (UNDP): Strengthening the Resilience of Women Producer Group's and Vulnerable Communities in Mali**

The proposed project seeks to enhance the adaptive capacities of women producer groups in the face of climate change in the vulnerable communes of Kayes, Koulikoro and Sikasso in Mali. The project carries out priority investments in climate-resilient water resources management; such as dredging and protecting channels and ponds from erosion, small scale irrigation, and strengthened water governance at the local level. In addition, the project introduces innovative approaches and technologies to diversify and safeguard the livelihoods of women farmers; particularly drought-adapted crops, improved access to agrometeorological information, strategic grain reserves, pastoral perimeters, and dry-season gardening. The project is consistent with Mali's NAPA and contributes towards 7 of the 19 priorities identified, particularly in the areas of water resources management and the transfer of sustainable and climate-resilient agricultural technologies. In addition, the project is aligned with Mali's Strategic Framework for Growth and Poverty Reduction and its National Policy on Climate Change. The proposed LDCF grant

(US\$5.46 million, excluding Agency fee) would build on baseline initiatives associated with agriculture, food security and rural development amounting to US\$16.5 million in indicative co-financing. The baseline projects are financed and implemented by UNDP, UNCDF, USAID and the Government of Mali and they are all associated with Mali's ambitious 166 Communes Initiative, which seeks to raise US\$95 million in an effort to achieve the MDGs in the country's most vulnerable and food insecure municipalities. The initiative offers an important vehicle for scaling up proven, climate-resilient approaches and technologies for rural development.

#### **5194 Rwanda (UNEP) Building Resilience of Communities Living in Degraded Forests, Savannahs and Wetlands of Rwanda Through an Ecosystem Management Approach**

The proposed LDCF project will reduce the climate change vulnerability of the rural Rwandan communities, by enhancing the capacity of national and local institutions to undertake an ecosystem management approach to adaptation. The climate change vulnerability of the rural communities is exacerbated by a high dependence on rain-fed agriculture, widespread ecosystem degradation, and limited capacity of local and national institutions to address the impacts of climate change. The proposed project will demonstrate adaptation interventions to reduce the vulnerability of the communities living in three distinct ecosystems in the country, woodland/grassland, forest slope and wetlands. Through the LDCF project cross-sectoral dialogue will be initiated at the national level to leverage natural resource management to meet climate change challenges. Technical and scientific capacity to formulate ecosystem-based solutions to address major climate change hazards such as drought and floods will be financed through the project. Local and district level plans will be reviewed to identify entry points for addressing erosion, improving water access and livelihood options through better ecosystem management. Appropriate interventions will be implemented in pilot districts that will be identified in the project preparation phase.

#### **5202 Afghanistan (UNDP): Strengthening the resilience of rural livelihood options for Afghan communities in Panjshir, Balkh, Uruzgan and Herat Provinces to manage climate change-induced disaster risks**

The National Adaptation Program of Action of Afghanistan recognizes drought and floods as top climatic risks in this country, and lists water and agriculture sectors as particularly vulnerable to climate change. In addition, these issues challenge the economic and political progress, and put at peril investments in development of this country. This innovative project blends three baseline development projects in Afghanistan with adaptation interventions in order to ensure overall resiliency. The LDCF funding will be used to fully integrate climate change risks and vulnerability in development plans of at least 10 communities, train women on alternative livelihoods, rehabilitating 2000 hectares of degraded land, build storage reservoirs in the ten communities, introduce micro-water harvesting, rehabilitate and improve water canals, and build check dams and other structures in order to conserve water, and enhance groundwater recharge. The four provinces targeted are ecologically different, and thus this project provides a broader opportunity for replication and scaling up in Afghanistan.

### **5203 Nepal (UNEP): Catalysing Ecosystem Restoration for Resilient Natural Capital and Rural Livelihoods in Degraded Forests and Rangelands of Nepal**

The proposed project will be the second LDCF project in Nepal. The project focuses on ecosystem management to minimize climate change impacts in the mid and high hills of Nepal. Communities in these regions are highly vulnerable to climate change because of remoteness of these areas, frequency of severe droughts and floods in the recent past and limited technical capacity of local authorities. The project will prepare the country with the appropriate institutional frameworks and technical capacity to initiate country-wide implementation of adaptation measures through ecosystem management and restoration. With the LDCF funding national level strategy and financing plan on ecosystem restoration for adaptation will be developed. In three districts in the mid-hills and high hills of Nepal, in line with the local adaptation plans of action, forest restoration activities will be undertaken to specifically reduce erosion, increase production of non-timber forest products and increase soil productivity for agriculture. In addition to basing adaptation measures on the local adaptation plans, the project will involve communities in implementation of adaptation techniques such as contouring, agro-forestry, pasture management and management of stocking levels to build adaptive capacity. The project has potential to directly reduce risks due to floods and erosion in the hilly regions, and by setting up national level institutional frameworks it will facilitate the replication of best adaptation practices learned from the project.

### **5226 Congo DR (UNDP): Building the Resilience and Ability to Adapt of Women and Children to Changing Climate in Democratic Republic of Congo**

The proposed project would seek to promote the adoption and adaptation of innovative, climate-resilient livelihood strategies specifically targeting rural women in the provinces of Bas Congo, Kasai Est, Katanga and Bandundu in DRC. The project is structured around two broad components, namely (i) investments in diversified and resilient rural livelihood strategies, particularly alternative income-generating activities, agricultural value-chain development, enhanced agro-meteorological services, and small-scale water saving technologies; and (ii) capacity building and knowledge management support for the adoption and replication of climate-resilient technologies and practices. The proposed LDCF grant would build on the following baseline development initiatives: (i) the USAID Food Production, Processing and Marketing Programme (FPPM), totaling US\$32 million with US\$4 million in expected co-financing; (ii) the UNDP Micro-Finance Support Programme (PASMIF II), totaling US\$14 million with US\$2 million in expected co-financing; and (iii) the AfDB Rural Infrastructure Development Support Project (PADIR), totaling US\$50 million, with US\$4 million in expected co-financing. In addition, the project would strengthen baseline development activities associated with the maintenance of the country's meteorological stations, and the implementation of its Poverty Reduction Strategy in the agriculture sector, with total indicative co-financing amounting to US\$5 million. To ensure the institutional and financial sustainability of the proposed adaptation measures, and to promote scaling up, the project combines pilot investments and technology transfer with relevant capacity building and decision-support services, as well as improved access to micro-finance, particularly among women.

### **5228 Regional<sup>27</sup> (AfDB): RLACC - Rural Livelihoods' Adaptation to Climate Change in the Horn of Africa (PROGRAM)**

The proposed regional program fulfills the eligibility criteria and priorities required to obtain funding from LDCF (for Djibouti) and SCCF (for Kenya), and aims to improve the resilience to climate change of pastoral and agro-pastoral communities in targeted areas in the Horn of Africa, and consequently to increase the adaptive capacity of their livelihoods. The program will build on other on-going programs/projects supported by a number of international development partners and other AfDB-supported projects. The program activities aims to address the impacts of climate risks on rural livelihood by financing adaptation measures and associated advisory services based on both, the traditional knowledge and know-how of pastoral and agro-pastoral communities, as well as improved sustainable technologies and practices. It will promote the community-based adaptation measures in different areas such as: water resources, rangeland management, and livestock health and production. Innovative initiatives are expected to help in protecting households against climate risks, and to promote social and economic inclusion of the poorest groups, as well as in diversification of livelihoods. This program is expected to produce visible and tangible results at the level of grass-roots communities to reduce their vulnerabilities, increase their adaptive capacities, and improve their livelihood. This program will build the capacities of key local stakeholders in mainstreaming climate-sensitive pastoral development into local community development, and, ultimately, into national development policies and strategic frameworks. In addition, this program can serve as a catalyst to leverage additional resources from other development partners focusing their interventions on similar issues, and replicate the approach in other areas.

### **5231 Angola (AfDB): Integrating Climate Change into Environment and Sustainable Land Management Practices**

Angola faces a variety of environmental and social problems resulting from a legacy of an extended civil war, which has given rise to widespread poverty, unsustainable utilization of natural resources, weak regulatory and law enforcement frameworks. The proposed GEF project is targeted to be demonstrative, integrating substantial adaptation interventions that are meant to be complementary to the baseline in a synergistic way, targeting sustainable land management, and adaptation through and ecosystem based approach. Therefore, complementing a baseline project component, dedicated to the establishment of four hard investments infrastructures, the complementary component in the GEF project will create the enabling environment needed for increasing the resilience of these and other infrastructure investments. This will be done namely through institutional strengthening and capacity development, and will include transfer of sustainable land management techniques and practices for resilience, such as natural regeneration techniques, rangelands and agro systems rehabilitation practices, wind breaks and dune stabilization methods, water efficiency and harvesting techniques. The project concept has been developed ensuring a high degree of country ownership and conformity with their programs and policies. Through an integrated approach to addressing vulnerabilities in the agriculture and NR sectors, and increasing resilience of ecosystems, the project will address several of the priority areas of the LDCF, in particular support to capacity building, including institutional capacity, food security, climate-resilient natural resource management, and support to the implementation of Angola's NAPA. Also aligned with

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<sup>27</sup> Djibouti and Kenya

the Angola's Initial National Communication Plan, National Action Plan for SLM, PRSP, NEPAD Environment Action Plan, and the Comprehensive African Agricultural Development Program, the project builds upon a baseline intervention largely financed through an AfDB soft loan of US\$18 million.

### **5232 Benin (AfDB): Flood Control and Climate Resilience of Agriculture Infrastructures in Oueme Valley- Benin**

Crop production is a major economic activity in Benin. The country's agriculture sector is characterized by the predominance of small farms that are highly vulnerable to climate change risks such as flooding and changing rain patterns. These small farms also have limited opportunities for commercialization which constraints their growth and generation of income. The proposed project is fully aligned with the country NAPA, which prioritizes development of Oueme valley hydro-agricultural potential and income generating activities. The LDCF project will be integrated into a baseline project whose objective is to develop suitable production and commercialization infrastructure in the low and medium Oueme Valley. The LDCF grant will allow the baseline infrastructures to be modified or developed in a manner that is informed with the risks of floods in the area. Maps of areas that are vulnerable to floods will be developed, based on which agriculture infrastructures like dykes will be built along with flood resistant grain storage systems. The capacity building and policy reform activities such as training farmers and relevant government officials and inclusion of budget for promotion of agro-hydro infrastructures will contribute towards sustainability of the project outcomes.

### **5233 Madagascar (AfDB): Enabling Climate Resilience in the Agriculture Sector in the Southwest Region of Madagascar**

The project seeks to promote adaptation in Madagascar by ensuring that agricultural water infrastructure planned under a business-as-usual scenario is modified so as to be resilient in the face of climate change; that the vulnerability of the catchment to cyclones and flooding is reduced, and that local agricultural livelihoods are adapted to climate change through water management and health interventions. In Madagascar 76.5% of the population are living under the poverty line, and food insecurity affects about 35% of the rural population, 68% in the south region. The potential of the agricultural sector is not realized, and is furthermore under threat from a recurring exposure to cyclones, which have occurred with greater magnitude in recent years, a trend which is projected by the IPCC to increase in the future. With the LDCF funding, vulnerability of the catchments in southwest Madagascar will be reduced to climate change through catchment management and the strengthening of the physical asset (the agricultural infrastructure) to withstand climate change. The role of the dyke and related infrastructure in water management and irrigation, combined with training for local farmers, will strengthen agricultural livelihoods and reduce their vulnerability to cyclones and flooding. Training of Water User Association and Farmer Associations will support adaptation through strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level. Adaptation technology will also be demonstrated and deployed both in the upgrading of the dyke and associated irrigation infrastructure, and through the water management and agricultural training provided to farmers. Finally, a health intervention will ensure resilience to water-related diseases given the effects of climate change.

### **5332 Djibouti (UNDP): Supporting Rural Community Adaptation to Climate Change in Mountain Regions of Djibouti**

Djibouti suffers from chronic water stress and droughts events have grown more frequent and more intense over the past decades. The country's mountainous areas are particularly exposed to climate change-induced droughts and floods given their limited ability to retain water, low vegetative cover, and steep terrains; combined with high levels of extreme poverty. The Government of Djibouti; in collaboration with UNDP, IFAD, FAO, WFP, AfDB, the World Bank, IGAD and other development partners; is carrying important investments in rural development, notably sustainable land management and water mobilization. Building on and enhancing these baseline initiatives, with total indicative co-financing amounting to US\$28.11 million, the proposed LDCF project will strengthen the enabling environment for climate-resilient development at the national level, and carry out targeted investments that improve the resilience of vulnerable communities in two targeted mountainous areas, Adaillou and Assamo. The proposed project, requesting US\$5.38 million from the LDCF, seeks to reduce the vulnerability of Djibouti's mountainous communities through institutional strengthening and climate-resilient water resources management. The project is structured around three principle components, aiming to (i) strengthen institutional capacities for coordinated, climate-resilient development planning at the national level; (ii) enhance water resources management in targeted mountainous areas for greater efficiency and flood control; and (iii) strengthen drought and flood preparedness at the local level and diversify rural livelihoods. The project will introduce innovative adaptation measures and technologies to enhance the resilience of Djibouti's vulnerable, mountainous communities in the face of climate change. For example, the project will explore scaling up a cost-effective stone mulching technique piloted by JICA and Tokyo Agricultural University. The project is designed to address adaptation in a comprehensive manner, by strengthening the physical and natural assets that underpin rural livelihoods, by introducing resilient agricultural technologies and practices, and by promoting livelihood diversification.

### **5380 Haiti (UNDP): Increasing Resilience of Ecosystems and Vulnerable Communities to CC and Anthropogenic Threats through a Ridge to Reef Approach to BD Conservation and Watershed Management**

Haiti is the only LDC in the western hemisphere. The objective of this project is to ensure that watershed and coastal areas in Haiti are sustainably managed so they can continue to provide essential ecosystem services and products to benefit the people of Haiti and that they and the vulnerable communities dependent on them are resilient to climate change and anthropogenic threats. The project focuses on utilizing ecosystem based adaptation (EBA) to enhance resilience and it will establish the first four marine protected areas in Haiti. This project is a multi-trust fund project combining resources from the GEF Trust fund and the Least Developed Country Fund. Through this project there will be the establishment and management of protected areas in the marine and coastal zone of target watershed, while increasing the resilience to climate threats in key watersheds and coastal systems. The project responds to NAPA priorities watershed management and soil conservation, coastal zone management and natural resource management. It also implements key priorities in Haiti's plans for protected area system strengthening and expansion. In terms of enhancing adaptive capacity the project will strengthen the policy environment, regulatory framework and institutional capacity for supporting EBA, improving mechanisms for environmental decision making in support of EBA. The project will establish a

permanent multi-stakeholder platform to negotiate EBA initiatives at regional and local levels. The project will promote activities which promote climate resilient resource management such as the construction, maintenance and/or restoration of terraces and structures for capturing run-off and promoting infiltration, mulch-based production systems, and agroforestry systems. The project will also assist promote activities to assist ecosystems to recover and become climate resilient. These activities will include reforestation and restoration of vegetation in watersheds and mangroves (to be supported with LDCF resources) to promote water infiltration, regulate stream flows, protect against mass movement and buffer against sea level rise and wave impact. The protection and enhancement of watersheds and mangroves are both essential to the ability of Haiti's marine ecosystems to provide benefits to Haiti's people.

## **PROJECTS APPROVED UNDER THE ADAPTATION FUND, FY2012 AND FY13**

### **Argentina (Unidad para el Cambio Rural (UCAR): Enhancing the Adaptive Capacity and Increasing Resilience of Small-scale Agriculture Producers of the Northeast of Argentina**

Argentina's economy is favored by important natural resources and well-trained human resources. Although agricultural activity shares in less than 6% of the GDP, this activity accounts for a high percentage of exports and is the basis for industrial manufacture of agricultural origin, which is another important export-oriented business. The country has registered a steady growth in the economy after recovering from the economic collapse between 1998 and 2002. However, owing to the size and the productive, social and environmental diversity of Argentina, the scenario is not uniformly distributed, with the case being for the Northeast region of Argentina (NEA) of 14.4%. This project focuses on supporting efforts of all actors on those populations of greater vulnerability to enable them adapt to climate change related impacts. In these terms, the strengthening of food security and access to markets of small-scale producers are part of a key strategy to attain sustainable development of the poorest. The projects also seeks to characterize and map social and production conditions of the area of intervention, including the main indicators of social vulnerability of the region and the results deriving from the assessment of climate variability and climate change.

### **Argentina (WB): Increasing Climate Resilience and Enhancing Sustainable Land Management in the Southwest of Buenos Aires Province**

The Project area comprises the Southwest of Buenos Aires Province (SWBA) involving a direct and indirect intervention including counties (*partidos*) of Puán, Villarino and Patagones, and 9 further SWBA counties, respectively. The Project seeks to reduce climate and man-made vulnerability of the agroecosystems by increasing adaptive capacity of key local institutions and actors and piloting and disseminating climate resilient and sustainable land management practices. It is on an area of 6.23 million hectares, involving 7,796 agricultural, livestock and horticultural producers. The project strategy involves institutional strengthening, training and awareness rising and knowledge management, including development of an information and early warning system (IEWS) to climate change and desertification that will cover the entire SWBA. The IEWS will entail necessary mechanisms to properly disseminate collected data among producers, public officers and institutions with responsibilities in public sector policies. Thus, it is expected to guide production decisions and public policies in order to reduce negative economic impacts generated by climate variability and change throughout the SWBA. An estimated value

of the IEWS impacts was calculated as a benefit to the Project and is included in the economic assessment. The main Project component will implement concrete adaptation measures and sustainable land management practices in productive systems aimed at positive impacts on farmers' productivity and economic performance. For the purposes of maximizing the targeted Project results and promoting their sustainability after Project completion, the Project will carry out training and dissemination activities to promote, scale up, and replicate successful pilot practices.

### **Sri Lanka (WFP): Addressing Climate Change Impacts on Marginalized Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka**

The project targets rain-dependent farming families in two hazard-prone divisional secretary divisions (DSDs) in the Mahaweli Basin identified through vulnerability analysis. The target groups (farm families and farmer organizations) were identified through the databases of the Department of Agrarian Development. The overall objective of the project is to secure community livelihoods and food security against climate change-induced rainfall variability leading to longer droughts and more intense rainfall. To directly address these climate-induced impacts, the project has been designed to develop household food security and build resilient livelihoods for rain-fed farming households, and to build institutional capacity in village, local, regional service delivery to reduce risks associated with climate-induced rainfall variability. The project will deliver tangible impacts on the ground that include increased local availability of food, livelihoods that can withstand current climate shocks, more information on risks and adaptive strategies, better connectivity to early warning and risk forecasting and, importantly, an efficient and informed agriculture extension service.

### **Cambodia (UNEP): Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia**

Rural communities in Cambodia are experiencing falling agricultural productivity as a changing climate leads to more erratic rainfall. These increasingly dramatic fluctuations in precipitation are harming Cambodian farmers and their families by causing more intense periods of drought and floods. In addition to threatening crop yields, the increasingly severe weather is damaging the roads and other infrastructure used by farmers to transport their goods to urban markets. In response, many rural Cambodians are increasingly relying on forest ecosystems for food and income, but the resulting degradation of Cambodian forests is actually reducing the ability of these agricultural communities to adapt by speeding the erosion of the very soil needed to grow crops. The project by the United Nations Environment Programme and Cambodia's Ministry of Environment will aim to increase food supply and reduce soil erosion in Chiork Beungprey, Chom Thlork, Skor Mreach (all in Beung Per Wildlife Sanctuary), Ronouk Khgeng (Phnom Prech Wildlife Sanctuary) and Chop Tasok (Phnom Kulen National Park) by restoring a variety of plant species to at least 1,875 hectares of degraded forests; enrichment planting of rice paddy boundaries and other cultivated areas with multi-use tree species that will enhance crop productivity; trial plots of several drought-tolerant hybrid rice cultivars in order to assess their potential yield and suitability for cultivation; and intensifying and diversifying the productivity of at least 1,907 family agriculture areas (including home gardens ranging in size from 0.2 hectares to 1 hectares) in communities living around the forest sites.

### **Colombia (UNDP): Reducing Risk and Vulnerability to Climate Change in the Region of La Depression Momposina in Colombia**

The Mojana subregion of Depresión Momposina, home to thousands of farming families, has endured multiple cases of severe flooding in recent years. The latest flood, a La Niña event in 2010, came on the heels of large floods in 2005, 2007, and 2008. The flood disrupted the lives and livelihoods of more than 200,000 people in the region, many of whom depend upon corn and rice, cows, water buffalo, and traditional fishing practices to make their livings. The agriculture and fishing sectors face additional pressures from mining pollutants and human activities that have altered wetlands and flows of water in ways that exacerbate flood damage. The project will focus on the municipalities of Ayapel, San Marcos, and San Benito Abad in the effort to minimize destruction from future flooding, which is expected to become more severe as the climate changes, and to protect the biological diversity of a region known for its rich variety of species and ecosystems. Colombia's Ministry of Environment and Sustainable Development, and municipal and local officials, together with the United Nations Development Programme, are planning a wide range of activities to achieve this goal, including the development of hydrological and hydraulic models, climate change profiles, flood-risk maps, and vulnerability assessments, updating the hydro-meteorological network, and designing and operating a local early warning system. The project will also involve the rehabilitation of wetlands, building dikes, unclogging streams to better manage water flows, the diversification of food sources, building homes and public infrastructure to float or to stand on stilts, and a programme directed toward women for making natural-fiber crafts using plant species that thrive in flood conditions. Finally, the project aims to promote replication of successful experiences in ecosystem- and community-based adaptation measures and integrate them into local and regional planning policies.

### **Djibouti (UNDP): Developing Agro-Pastoral Shade Gardens as an Adaptation Strategy for Poor Rural Communities in Djibouti**

Since 2007, the whole Horn of Africa region and Djibouti in particular have been facing a prolonged drought event that has heavily impacted agricultural production and rural livelihoods, especially animal husbandry, the backbone of the pastoralist way of life. A total of 206,000 vulnerable people have been identified in Djibouti as now being affected by drought and its impact. The adverse effects of drought and the increased vulnerability to climate change are high in all rural areas of Djibouti, especially the large, flat and semi-desert plains of Petit Bara and Grand Bara, which are important crossroads for people traveling between the eastern and southwestern parts of the country. The proposed project is intended to incentivize people to move away from risky and maladaptive activities and support them in escaping extreme poverty and avoiding the migration from their lands that may be necessary should climate conditions worsen. The project will support communities develop and maintain shade gardens based on date palms to serve as the foundation for a diversified, climate-resilient agricultural and pastoral economy. The shade gardens will help to limit evaporation and create favorable microclimates for forage and vegetable growth, replicating the traditional practices imported by Yemeni populations in Djibouti centuries ago. They will also provide pastoral herders with alternative means of making their livings. The project will include a micro-financing scheme that will help households generate income and diversify the ways in which they earn money.

### **Egypt (WFP): Building Resilient Food Security Systems to Benefit the Southern Egypt Region**

The World Food Programme estimates that Southern Egypt, a region that is already economically stressed and whose food supplies are under constant threat of disruption, stands to lose a minimum of 30 percent of its food production by 2050 as a result of climate change impacts. These impacts include reduced crop and livestock productivity, increasing crop-water demand and reduced water use efficiency, and increases in pest and disease infestations. In response, the Government has proposed a project that aims to 1) improve the adaptive capacity of the Southern zone in the face of anticipated climate-induced reduction in food production through the introduction and use of water saving irrigation and other adaptation techniques; the establishment of agro-forestry greenhouses and plots with sub-surface irrigation, including nurseries for growing trees and new varieties; and the development of livestock and poultry hubs for selection and breeding of new heat resistant varieties. 2) build institutional capacity at the national, regional, and local levels to enable sustainability and replication throughout the zone and the country to understand climate trends and impacts; replicate adaptation interventions through the training of government technical staff; document lessons learned and best practices; share project results and lessons learned; mainstream new approaches in local and regional planning; and target universities through curriculum. The two objectives are cornerstones of Egypt's National Adaptation Strategy.

### **Jamaica (Planning Institute of Jamaica (PIOJ): Enhancing the Resilience of the Agricultural Sector and Coastal Areas to Protect Livelihoods and Improve Food Security**

Jamaica is a small island developing state in the Caribbean and is particularly vulnerable to hurricanes, floods, storm surges, droughts, and other climate-related hazards. The programme by several Jamaican government agencies seeks to protect the livelihoods and food security of people living in seven of the country's 14 parishes by improving water harvesting and management, as well as erosion and flood control. The programme will also support climate resilient coastal management in Negril. The sites selected for programme intervention will cover seven of the 14 parishes in the country: Westmoreland, Manchester, Clarendon, St. Mary, St. Ann, Trelawny and St. Thomas.

### **Lebanon (IFAD): Climate Smart Agriculture: Enhancing Adaptive Capacity of the Rural Communities in Lebanon (AgriCAL)**

Agriculture in Lebanon is one of the most vulnerable sectors to climate change due to the limited availability of water and land resources and the pressures of population growth and urbanization. Higher temperatures, reduced precipitation and higher evapo-transpiration will decrease soil moisture and increase aridity, which will affect the overall agricultural yield of crops. A decrease in productivity is expected for most of the crops and fruit trees and for grazing animals. The objective of the proposed fully developed project is to support the implementation of climate change adaptation measures in the agriculture sector in three highly vulnerable areas, targeting the poor smallholders of various communities living in these areas. The overall goal of the project is to increase community resilience and adaptive capacity to climate change in Lebanon. The project aims to assist communities in adapting by improving water harvesting and irrigation technologies; setting up early warning systems and integrated production and protection of crops; introducing adapted crop varieties to future climate conditions; introducing risk-coping agriculture techniques; assessing the carrying capacity of rangeland in order to increase their resilience to climate change; improving the management of rangelands used by goat and sheep herders; initiating a pilot climate insurance index for the agricultural sector; and spreading awareness of (i)

expertise, skills, and research results; (ii) facts and information, reports on project impacts and activities, and other data; (iii) awareness or familiarity gained by experience of a fact or situation acquired through the project.

### **Mauritania (WFP): Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania**

Mauritania is a large West African country particularly vulnerable to climate change-induced drought, decreasing rainfall and flash flood. The project aims to improve adaptation in the area of food security in Mauritania by assisting the government in improving technical services at the community level so that village residents, who will be most affected by climate change, can undertake their own analysis of climate change impacts and prepare detailed adaptation plans – including harmonized plans for livestock, land and water management and the overall use of natural resources. The project will also promote climate resilience by protecting threatened resources, such as dunes, community fuel wood forests, and water sources. Finally, villages will be encouraged to explore ways to diversify the sources of livelihood and receive training, coaching, and asset investments to do so. With respect to investments, the project will ensure that the assets created represent the most appropriate choice of technology, allowing the desired production, storage and marketing of outputs by villages and households. This will ensure future sustainability, including repair and replacement with local know-how and resources.

### **Papua New Guinea (UNDP): Enhancing adaptive capacity of communities to climate change-related floods in the North Coast and Islands Region of Papua New Guinea**

Papua New Guinea is susceptible to a host of natural disasters whose impact is projected to intensify with the onset of climate change. Worsening tropical storms, cyclones, drought, and even hailstorms in the highlands have already imposed setbacks to the country, its economy, environment, and basic human development needs. In the North Coast and the Islands regions of Papua New Guinea, home to a total of nearly 2.6 million people, flooding--both coastal and inland--is the most important climate-change related hazard, threatening coastal communities, key economic centers, and provincial capitals. The project, a joint undertaking by the UNDP and Papua New Guinea's Office of Climate Change and Development, will focus on helping both the government and residents of the riverine North Coast and the coastal Islands communities make informed decisions about how best to plan and respond to a coastal or inland flood. The coastal flooding component aims to establish a coastal early warning system for observation, data collection and information management and dissemination in the provinces of the North Coast and Islands Region; coastal flood preparedness and response plans and systems; and a support system for community-led mangrove reforestation and conservation projects. The inland flooding component will focus on river communities and set up early warning systems for observation, data collection and information management and dissemination in the North Coast provinces. It would also establish inland flood preparedness and response plan and systems in Oro Province, as well as integrated riverbank protection measures across four provinces.

### **Georgia (UNDP): Developing Climate Resilient Flood and Flash Flood Management Practices to Protect Vulnerable Communities of Georgia**

Flooding in the Rioni River Basin has exacted ever-greater tolls on the economy and lives of residents, 40 percent of who are impoverished. Between 1842 and 2008, 111 incidents of flooding were recorded in the

basin with losses ranging from US\$200,000 to US\$60 million. The number of flooding events per year has increased in the last decade, with seven events occurring in 2005, six of which were categorized as "strong." With flood frequency and the occurrence of landslides, flash-floods and mudflows projected to increase, the project objective is to help the governments and the population of the Rioni River Basin to develop adaptive capacity and embark on climate-resilient economic development. The project will assist the government by introducing a floodplain policy development process, which will include production of hazard and inundation maps, reviewing and changing land use regulations, internalizing climate change risks into floodplain management and spatial planning, and reviewing and streamlining building codes to flood-proof new buildings. It would also arrange targeted training for those national and local authorities who are responsible for climate risk management in advanced methods of forward-looking climate risk management planning and flood prevention measures, and design and implement a community-based flood insurance scheme that would cover highly exposed villages under municipalities. The project would also design flood management practices such as bank terracing, vegetative buffers, and tree revetments, and seasonal land use appropriate for flood plains (e.g. short-season annual cropping, or seasonal cattle pastures). The project will also include the establishment of a flood early-warning system.

### **Tanzania (UNEP): Implementation of Concrete Adaptation Measures to Reduce Vulnerability of Livelihood and Economy of Coastal Communities in Tanzania**

Tanzania's largest city, Dar es Salaam, is a coastal metropolis prone to flooding. Already, sections of the 2.6-km sea wall that protects this major commercial, administrative and industrial center are severely degraded or completely destroyed. Inadequate drainage systems exacerbate urban flooding during the rainy season, often resulting in traffic jams, and health hazards from water-borne pollution. Climate change is expected to worsen the threat to key infrastructure in Dar es Salaam. The project intends to lessen the negative impacts of sea level rise and changes in precipitation patterns in the Ilala and Temeke Districts of Dar es Salaam. The project aims to reduce the adverse impacts of sea level rise and floods on coastal infrastructures and settlements; rehabilitate coastal ecosystems to enhance ecological resistance to flooding; conduct a baseline study based on coastal vulnerability and an assessment of the economic viability and practical feasibility of adaptation measures; creating and operating a climate change observatory for Tanzania; documenting lessons learned, building district level administration capacity; and producing an Ecosystem-based Integrated Coastal Area Management Plan.

### **Cook Islands (UNDP): Strengthening the Resilience of our Islands and our Communities to Climate Change**

The Cook Islands, a group of 15 small islands scattered over 2 million square kilometers in the southwestern Pacific Ocean, are highly vulnerable to cyclones, drought, coastal erosion, and sea-level rise. The project focuses on the remote Northern Group of Pa Enua, more than 1,250 km from the capital, is made up of seven low-lying, sparsely populated, coral atolls and sand cays, with little arable land. Some of these islands benefit from large, productive lagoons that support the farming of pearls, the country's leading export. They are also the main base for the fishing industry of the Cook Islands. The project was designed to strengthen the ability of Pa Enua, and all Cook Islands communities, to make informed decisions and manage anticipated climate change driven pressures in a proactive, integrated and strategic manner. To accomplish this goal, the programme aims to help strengthen national institutions, enhance coordination of efforts at the national level, and ensure more effective delivery of national

initiatives at island and community level. Another focus will be on ensuring that staff in the relevant national agencies and organizations have the ability to support island and community development initiatives that build resilience to climate change. The programme also plans to produce a framework for the delivery of reliable and targeted information on the impacts of climate change on terrestrial, marine, and coastal ecosystems in the Pa Enua. Each of the 11 inhabited Pa Enua will produce integrated climate change adaptation and disaster risk reduction action plans to guide the implementation of the climate change adaptation and disaster risk reduction measures. Community-based climate-change adaptation and disaster risk reduction measures will be implemented in relation to crop production, coastal protection, fisheries, tourism, and health and water resources management. Lessons learned and best practices will be collated to improve the effectiveness of the initiatives.

### **Uruguay (Agencia Nacional de Investigacion e Innovacion (ANII): Helping Small Farmers Adapt to Climate Change**

The agricultural sector, regarded as the backbone of Uruguay's economy, has been affected by extreme meteorological events in the past decade, with devastating effects. Direct losses in the livestock sector caused by the 2008-2009 droughts were estimated at US\$342 million. The most vulnerable eco-regions to drought in Uruguay are the Basaltic Cuesta in the north and northwest and the East Hills in the southeast and east. The two regions, which when combined comprise 39% of Uruguay, are characterized by shallow soils with low water storage capacity. Around 15,500 livestock farmers, 85% of whom are "smallholders," are located in these two regions. The project seeks to contribute to building national capacity to adapt to climate change and variability by focusing on the vulnerable smallholders in the livestock sector. Integrated livestock management measures, including better infrastructure for water and shadow, improved pasture management and biodiversity conservation, are at the core of the technical options to increase the resilience of small farmers to climate change. The project would finance a higher share of the investment costs for "transition" smallholders and would promote the establishment of recovery schemes at the local level involving grass root organizations.

### **Samoa (UNDP): Enhancing Resilience of Samoa's Coastal Communities to Climate Change**

Samoa is a least-developed country and small island developing state that is highly vulnerable to extreme events including tropical cyclones, drought and flooding. The programme aims "to strengthen the ability of Samoan communities and public services to make informed decisions and manage likely climate change-driven pressures in a proactive, integrated and strategic manner." The bulk of the programme will focus on making improvements to infrastructure in ways that will help Samoan communities adapt to climate change. In addition, village hazard zone relocation plans, taking climate risks into account, will be formulated in at least 15 villages in selected districts. Any new construction will be a result of these consultations on coastal infrastructure and village relocation. Finally, the programme intends to capture key lessons learned and building capacity improvements in ways that will ensure they can be sustained in the future as a core activity of the government.

### **Madagascar (UNEP): Promoting Climate Resilience in the Rice Sector**

Rice production in Madagascar occurs in a variety of areas, from the rain-fed central highlands, to the irrigated and terraced lowlands, and semi flooded coastal zones. Roughly 10 million people in Madagascar, or almost 70% of its population, derive at least part of their economic income from rice. In

the central highlands, where most of the country's rice is grown, rice crops are already vulnerable to land degradation and droughts. Rice grown in the lowlands is subject flash floods and extreme temperatures. Other climate challenges include variability in the onset of rains, delays in rainy seasons, as well as disruptions in the amount of rainfall during the rice-growing season. This project aims to help those in the rice sector increase climate resilience through increased rice production that will withstand projected climate conditions and increased environmental sustainability and ecological services in the rice sector by working with local producers and partners, with the support of decentralized ministries and regional technical partners and supporting the selection of a limited number of optimal integrated rice cultivation models, or systems. The project will also provide the tools for crop modeling and vulnerability analysis, particularly focusing on the rice sector, as well as the development of a climate-based hydrological model for the region, in order to gain a sound grasp of future water availability.

### **Mauritius (UNDP): Climate Change Adaptation Programme in the Coastal Zone of Mauritius**

As a Small Island Developing State, the Republic of Mauritius is particularly vulnerable to the adverse effects of climate change, especially along the coast, where accelerating sea level rise and increasing frequency and intensity of tropical cyclones will likely result in considerable economic loss, humanitarian stresses, and environmental degradation. The programme focuses on combating beach erosion and flood risk in the coastal areas of Mon Choisy, Riviere des Galets, and Quatre Soeurs with a suite of infrastructure and natural protection, including sloped rock mounds offshore that are designed to deflect waves, mangroves and other shoreline vegetation to reduce erosion, and an increased number of public buildings on stilts. The programme will also support monitoring of the link between coastal processes and climate change to assess effectiveness of the coastal protection measures over time and help to develop an early warning system, to be staffed all day, every day, to alert communities to incoming storm surges. Finally, the programme aims to ensure that all policies, strategies, plans, and regulations are consistent in recognizing climate change impacts in the coastal zone over the next 50 years and provide frequent and accessible public information on climate change effects in the coastal zone in ways that facilitate decision-making by policymakers and private individuals and businesses.