

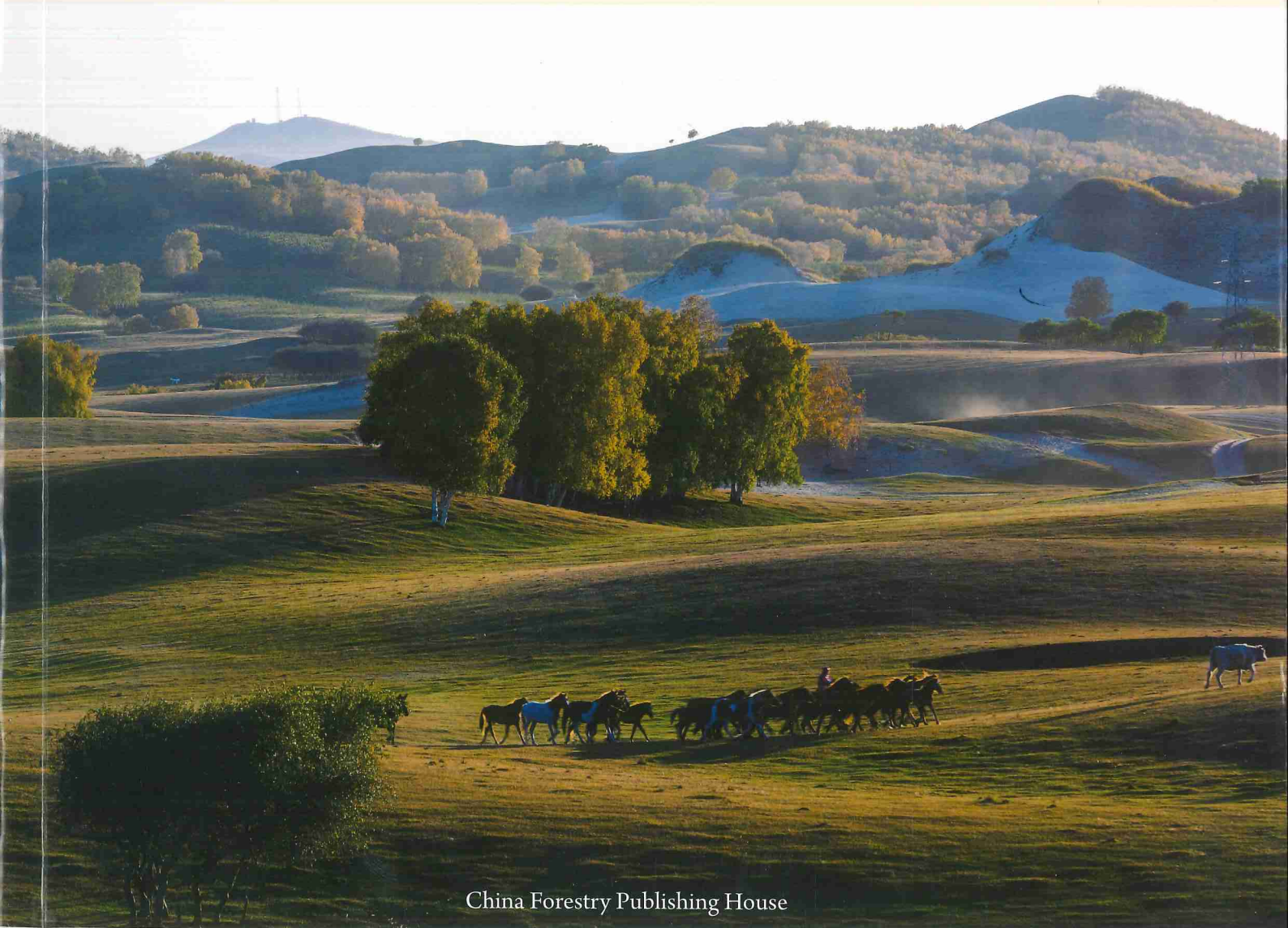


PRC-GEF Partnership
on Land Degradation
in Dryland Ecosystems

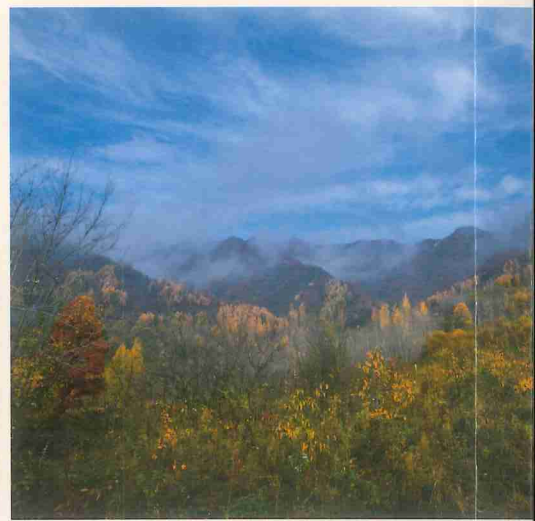
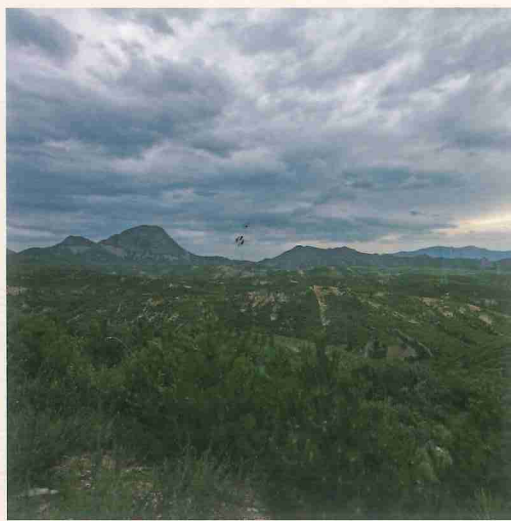
BEST PRACTICES FOR SUSTAINABLE LAND MANAGEMENT IN DRYLAND AREAS OF CHINA III

PRC-GEF Partnership on Land Degradation in Dryland Ecosystems

Department of Science and Technology, National Forestry and Grassland Administration



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Preface

In Western China, there exists three key type of Land degradation (LD) and matched by poverty in the whole region. These three types of LD are Desertification in northwest China in form of Wind Erosion; Desertification in Loess Plateau in form of Soil Erosion by water; and Desertification in South/southwest China Karst Region in form of erosion.

Based on the latest national monitoring results by the end of 2014, China had a total sandified land area of 1,721,200 km² making up 17.93% of the national territory and located in 920 counties.

Loess Plateau is one of the world seriously soil erosion areas and it's total area is about 640,000 km², in which erosion area takes 454,000 km² (of which water erosion takes 337,000 km², wind erosion takes 117,000 km²), and it takes 71% of total area of Loess Plateau.

The total area of LD in south/southwest China Karsts Region (it was called shimohua in Chinese) in form of erosion by water takes 120,000 km², which involves 455 counties in 8 provinces and takes 11.2% of whole China land area, 26.5% of the 8 province of Hubei, Hunan, Guangdong, Guangxi, Chongqing, Sichuan, Guizhou and Yuannan.

Land degradation and desertification can lead to increasing in poverty and deterioration of livelihoods through loss or reduction of vital ecosystem services, such as reduction in agricultural productivity and loss of the resilience of ecosystems to natural disasters, such as droughts and floods that increases the vulnerability of local people. It can also lead to degradation of water resources and reduction in the capacity of ecosystems to regulate water flows. In addition, land degradation can cause damage to infrastructure, such as transportation system. It is estimated that the total economic loss to LD in China costs about 146.879 billion yuan, counting 0.70% of the annual GDP (2006). Poverty are closely related to LD. There are still about 128 million poor people in China (the poverty indicator is that the annual income is less 2300 yuan RMB), which take 13.4% of total farmer in China and 1/10 of total population of China. In 2011, National Poverty Alleviation Office released 592 national poor counties and all of them located in central and Western China. Of which 375 is located in Western China.

Since 2002, Chinese Government and Global Environment Facility (GEF) have launched a Partnership program (PRC-GEF Partnership) to Combat Land Degradation in Dryland Ecosystems. 9 projects have been launched, with a total of \$44.83 million comes from GEF.

Great achievements have been gained from the Partnership on land degradation combating. Since 2013, requested by Chinese government and funded by Asia Development Bank (ADB), the second ten years strategy of PRC-GEF Partnership to Combat Land Degradation in Dryland Ecosystems has been launched. ,

The Strategy will guide a new partnership of agencies involved in sustainable land management to improve the implementation of projects and programmes. Coordination will be through similar arrangements to the previous PRC-GEF Partnership. It will promote climate resilient Sustainable land management (SLM) technologies to further the goal of Green Development, and innovative approaches to both implementation and to funding. The new Partnership will stimulate exchange of experience. Agencies will share a common purpose - namely the goal of improving land and water resources, reducing poverty, increasing incomes and combating climate change in Western China.

The benefits of PRC- GEF Strategy is to improve the land resources, increase incomes and combat climate change. The immediate objective is to bring agencies together in a new and broader Partnership to work to-

gather with innovative and focused approaches, to achieve rapid benefits for people and the land.

The SLM activities promoted under the new Partnership will improve the living conditions of the affected population through sustainably improving the land resources and ecosystems. At the same time it will reduce the vulnerability of ecosystems to the impacts of climate change.

Through implementation under the new Partnership for the forthcoming 10 years, it will improve degraded land; Vegetation coverage will increase; Land productivity will increase; Water resource will be improved; Average income will raise; and over all local people will be benefited.

The ongoing project of “Sustainable and Climate Resilient Land Management in Western China” includes three components. First, SLM and vegetation cover scaled-up to improve the resilience of landscapes and ecosystems to climate change in Inner Mongolia, Shaanxi, Gansu and Qinghai Provinces; second, it will improve management of degraded lands to support rural livelihoods and green development; and third, it will enhance SLM enabling environment and capacity for scaling up of SLM into other provinces under the Partnership, Guizhou and Sichuan.

By using the WOCAT methodology, the Partnership has published two volumes of Best Practices with a total of 45 SLM technologies in the northwest drylands of the China covering the five main SLM groups discussed earlier. SLM approaches for scaling up have also been documented and it includes Farmer Field Schools (FFS), establishment of PPPs (e.g., Build-Transfer-Operate tree planting), and investments in natural resources management.

Cooperation with FAO-LADA project, two volumes of Best Practices for Land Degradation Combating has been published. For Volume I of BEST PRACTICES for Sustainable and Climate-Resilient Land Management in the Western Regions of China, it contained totally 27 technologies (2008), which covers the area of fixation of shifting sand, sand prevention and control along the railway and high ways, Improvement of degraded grassland, soil and water conservation, afforestation in arid and semi-arid areas, agroforestry management, Farming practices for soil improvement, Water saving and catchment, sand industry and utilization of renewable energy. The Volume II of BEST PRACTICES for Sustainable and Climate-Resilient Land Management in the Western Regions of China contains 18 technologies (2013), which covers the areas of soil and water conservation, desertification control, degraded grassland control, salinization control and environment management.

This Volume of BEST PRACTICES for Sustainable and Climate-Resilient Land Management in the Western Regions of China (Vol. III) is the results of the on-going project of “Sustainable and Climate Resilient Land Management in Western PRC” with jointly cooperated with FAO/GEF project of Decision Support for Mainstreaming and Scaling up of Sustainable Land Management (DS-SLM), which was implemented by National Bureau of Combating Desertification (NBCD), State Forestry Administration (SFA) of China. It contains 27 technologies, which can be divided into Soil and water conservation and LD control in Karst Region, Shifting sand fixation, Wetland protection, Afforestation in dryland area, Green development, etc. Special thanks went to the Global Environment Facility (GEF), Asia Development Bank (ADB), Ministry of Finance of China (MOF), Department of Science and Technology, National Forestry and Grassland Administration for their kindly support for the Project and for the publication of this Book.

Eidtor
May, 2018

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