ADB

Terminal Evaluation Report

Project Number: 48116-001
Technical Assistance Number: 8872
Global Environment Facility Project Number: 5142
January 2022

People's Republic of China: Sustainable and Climate-Resilient Land Management in the Western Regions

Asian Development Bank

CURRENCY EQUIVALENTS

Currency unit   –   yuan (CNY)

		At Appraisal (19 December 2014)	**At Project Completion** (30 April 2019)
CNY1.00	=	$0.1609	$0.1474
$1.00	=	CNY6.2156	CNY6.7826

ABBREVIATIONS

ADB	–	Asian Development Bank
CPMO	–	design and monitoring framework
GEB	–	global environmental benefits
GEF	–	Global Environment Facility
ha	–	hectare
IEM	–	integrated ecosystem management
LD	–	land degradation
PPMO	–	provincial project management office
PRC	–	People's Republic of China
SAP	–	strategy and action plan
SFA	–	State Forestry Administration
SFM	–	sustainable forestry management
SLM	–	sustainable land management
TA	–	technical assistance
tCO_2e	–	ton of carbon dioxide equivalent

NOTES

(i)   The fiscal year (FY) of the Government of the People's Republic of China and its agencies ends on 31 December. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2019 ends on 31 December 2019.

(ii)   In this report, "$" refers to United States dollars.

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I.   BACKGROUND

1.   The technical assistance (TA) project for Sustainable and Climate-Resilient Land Management in the Western Regions was aimed to support the sustainable development agenda of the People's Republic of China (PRC), through continued engagement in and support for the PRC–Global Environment Facility (GEF) partnership on land degradation.[1] The project was implemented in six western provinces or autonomous region including Gansu, Guizhou, Inner Mongolia, Qinghai, Shaanxi, and Sichuan, among which Guizhou and Sichuan provinces were newly involved in the partnership.

2.   The GEF's Chief Executive Officer endorsed the project on 11 June 2014.[2] The Asian Development Bank (ADB) approved the TA in January 2015 and signed the Grant Agreement with the PRC Ministry of Finance on 16 December 2015.[3] The project implementation commenced in June 2016 and completed in January 2019 while the grant was closed in October 2019.[4]

3.   At appraisal, the total project cost was estimated at $23,300,776, of which the GEF grant would cover $5,250,776 (including $263,500 of project management cost charged by ADB as the implementing agency to the GEF) and the government's counterpart inputs would include $3.15 million equivalent in cash and $14.9 million in kind. At completion, the GEF grant proceeds disbursed were $4,605,917.82 (92% of the approved amount) while the actual government counterpart inputs included $3.04 million equivalent in cash (96% of the estimation) and $13.21 million in kind.

4.   The project's expected impact was degraded lands restored and local livelihood improved in the project areas in western PRC. The outcome was strengthened capacity of the PRC government to introduce innovations in sustainable and climate-resilient land management. The project included three components:[5] (i) resilience of landscape ecosystems to climate change improved (Inner Mongolia Autonomous Region; and Gansu, Qinghai, and Shaanxi provinces), (ii) management of degraded lands to support rural livelihoods and green development improved (Guizhou and Sichuan provinces), and (iii) enabling environment and capacity for scaling up of sustainable land management (SLM) in Guizhou and Sichuan provinces enhanced. The GEF grant was to fund project activities at 16 project intervention sites covering 25,150 ha of land that

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[1] The partnership covered a country programming framework which sought to combat land degradation, reduce poverty, and rehabilitate dryland ecosystems in the western region of the PRC through an integrated ecosystem management approach. As the implementation agency to the Global Environment Facility (GEF), ADB designed the partnership framework and supported a series of technical assistance to implement the partnership. The partnership has successfully promoted and introduced integrated ecosystem management for land degradation control. Provincial strategies and action plans were mainstreamed into the local development planning to ensure investment and financial flows for ecosystem management and livelihood activities. The first phase of the partnership was implemented in six dryland provinces or regions, namely, Gansu, Qinghai, and Shaanxi provinces; and Inner Mongolia, Ningxia Hui, and Xinjiang Autonomous Regions during 2002-2012. The second phase of the partnership was proposed subsequently to expand to 11 western provinces in addition to six provinces included in the first phase.

[2] GEF. 2014. *Request for CEO Endorsement of Sustainable and Climate Resilient Land Management in Western PRC.* Washington D.C.

[3] ADB. 2015. *TA Report for Sustainable and Climate-Resilient Land Management in the Western Regions.* Manila.

[4] The project start-up was expected originally in February 2015 but was delayed due to prolonged signing of the grant agreement between ADB and the Ministry of Finance and the associated financing agreements between the Ministry of Finance with the six provincial governments. The TA/project completion date was extended for one year from 31 January 2018 to 31 January 2019 as ADB approved in December 2016.

[5] As per the ADB's TA report, the project included another output for the project management support, in addition to the three outputs consistent with the GEF project document.

wouls be scaled up to a larger target area of 2,553,182 ha through various national and provincial investment programs.

5.   The project aligned with the GEF's Land Degradation Focal Area (LDFA) under GEF-5 (2011-2014). The project objective was to restore degradated land and to improve livelihoods in the project areas through sustainable and climate resilient land management in western PRC. It contributed to the LDFA strategic objective (LD-3) of conservation and sustainable use of biodiversity in productive landscapes, with the specific outcomes as follows:

(i)   Enhanced cross-sector enabling environment for integrated landscape management. The project was in line with the provincial integrated ecosystem management (IEM) strategy and action plan, which was established during the Phase-1 of the partnership (for Gansu, Inner Mongolia, Gansu, and Shaanxi), or under the current project (for Guizhou and Sichuan). The IEM strategy and action plan also includes a multi-sector legal and regulatory framework and monitoring system, which has been well promoted and applied in previous programs. Institutionally, an inter-departmental project coordination office guided the project implementation both at the central and provincial levels.

(ii)   Integrated landscape management practices adopted by local communities. Innovative and climate resilient SLM measures and approaches were integrated into investment programs and projects, funded by the central or provincial governments or other donors (e.g. German-loan funded afforestation project in Shaanxi). Integrated approaches or technologies were applied in 16 SLM innovation sites.

(iii)   Increased investments in integrated landscape management. Climate resilient and SLM practices piloted at innovative sites were upscaled to larger areas in the six provinces.

6.   The TA completion report was prepared accordiing to ADB's TA Completion Report Validation Guidelines (2020). The completion report which ADB approved in January 2021 rated the TA project successful.[6] This terminal evaluation report was prepared following ADB-GEF Terminal Evaluation Report Guidance Note for GEF-Cofinanced Project. The project data sheet is presented in the Annex 1.

II.   IMPLEMENTATION

7.   The State Forestry Administration (SFA) was the executing agency,[7] under which the central project management office (CPMO) was established to coordinate with participating provinces and oversee the overall project implementation. The CPMO looked after management of consultants, monitoring and reporting, and communication with ADB. A national steering committee, which was established since the beginning of the partnership (footnote 1) and comprised representatives from 13 national legislative or sectoral ministries and agencies, provided policy and institutional guidance for the project implementation. As the key member of the national steering committee, the country GEF Focal Point served as the project coordinating office to coordinate inter-agency consultation and policy dialogue at national level during implementation.[8] Meanwhile, it also maintained effective communications with the provincial

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[6] ADB. 2021. *TA Completion Report for Sustainable and Climate-Resilient Land Management in the Western Regions of the PRC*. Manila
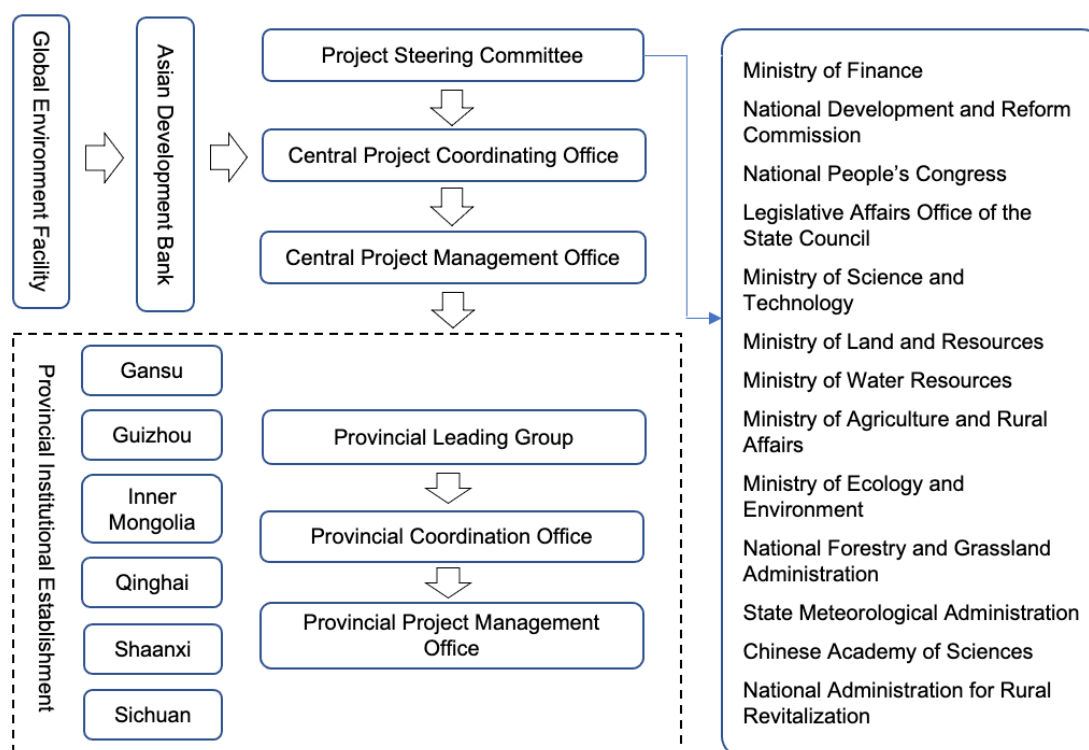
[7] The State Forestry Administration was reorganized as State Forestry and Grassland Administration in April 2018, in line with the government organizational realignment.

[8] Hosted by the International Financial Cooperation Department, Ministry of Finance of the PRC.

finance department and secured counterpart funds to be provided adequately and timely at the provincial level.

8.   The project implementing agencies included the Inner Mongolia Autonomous Region, and Gansu, Guizhou, Qinghai, Shaanxi, and Sichuan provinces. The provincial project coordination office and provincial project management office (PPMOs) were set up under the provincial finance department and forestry administration, respectively for each of the participating provinces. The PPMOs managed their respective project activities, including procurement, disbursement, and monitoring and reporting. A provincial leading group chaired by the responsible vice governor was also established at each of the six provinces to provide overall policy guidance to the project implementation at the provincial level. The indicative organization structure is presented in the following chart.

Figure 1. Organizational Chart for the Project Implementation

9.   As the implementing agency for GEF, ADB signed a Grant Agreement with the Ministry of Finance on 16 December 2015 for the grant administration. The grant proceeds were distributed to two parts for activities of: (i) institutional capacity development budgeting at $2,08,500, and (ii) physical works to support provincial pilots of SLM and green development estimating at $3,170,276. As per the agreement, the first part of the grant would be administered as a delegated TA implemented by CPMO, while PPMOs would implement the second part of the grant to fund works, goods, and non-consulting service activities for provincial capacity development and demonstration works at the 16 innovation sites.[9]

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[9] Under the delegated TA, CPMO was responsible for the selection of consultants unlike the traditional TA, for which ADB selects consultants. PPMOs procured works and goods following the ADB's Procurement Guidelines.

10.   During implementation, a firm was engaged and provided 19 person-months international and 87 person-months national consultants inputs. Totally, 297 person-months of individual consultants were input (106 person-months for CPMO and 191 person-months for PPMOs) supporting project management and institutional capacity development. Goods, works and non-consulting services were procured by PPMOs in accordance with ADB's Procurement Guidelines (2013, as amended from time to time).

11.   **Disbursement.** For the grant proceeds under part 1, ADB made payments to the consultants as per the contracts between ADB and the consultants. For the grant proceeds under part 2, the disbursement was made through the advance account to the designated project account of each province. The advance account for the grant was established initially under the Ministry of Finance in February 2016 and was transferred to SFA in June 2017 to meet the government requirements for establishing the advance account under the executing agency.

III.   RELEVANCE, EFFECTIVENESS, AND IMPACT

A.   Relevance

12.   The project is rated *relevant*, as it was relevant at both appraisal and completion. The project was highly relevant with the government plans and/or programs, particularly those in light of sustainable land management. At appraisal, the project was aimed to support the government 12th Five-Year Plan, 2011-2015, [10] which emphasized the importance of reducing land degradation particularly in the western region. The project implementation overlapped with and fit well into the government National Economic and Social Development 13th Five-Year Plan, 2016–2020, which promoted ecological and environmental protection, green development, climate actions, and inclusive growth. The project was closely aligned with the national Western Development Strategy. The project was also linked to the plans and programs to combat land degradation, covering ecological restoration and rehabilitation, natural forest protection and management, small watershed management, desertification control, and biodiversity conservation.

13.   The project was consistent with the goal of GEF-5 Land Degradation Strategy to contribute to arresting and reversing current global trends in land degradation (LD), specifically desertification and deforestation. It contributed to objective LD-3 on integrated landscapes: reduce the pressure on natural resources caussed by competing land uses in the wider landscape. Specific LD-3 outcomes that the project had contributions to included:

(i)   Outcome 3.1: Enhanced cross-sector enabling environment for integrated landscape management. The project supported development of institutional and regulatory framework and improving SLM investment policies in the two new project provinces (Guizhou and Sichuan). Meanwhile, the monitoring and assessment framework developed by the Partnership enhanced technical capacities for SLM and ecosystem service restoration in degraded lands.

(ii)   Outcome 3.2: Integrated landscape management practices adopted by local communities. The integrated natural resources management tools and methodologies have been piloted successfully at 16 pilot sites for SLM and rural green development.

(iii)   Outcome 3.3: Increased investments in integrated landscape management. SLM investments included government public funding and private sector inputs, and eco-compensation practices.

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[10] The State Council. 2011. *National Economic and Social Development Twelfth Five-Year Plan, 2011–2015*. Beijing.

14.   The project has generated certain global environmental benefits (GEBs) in aspects of sustainable forestry management, land degradation, and climate change. This included improvement of land productivity through restoration of degraded grassland and farmland, expanding of forest land, and increase of carbon stock due to increased forest land and sustainable forestry management. The realization of GEBs was attributed to upscaling SLM technologies and approaches through increased investments in SLM in the four provinces that have participated in the partnership since its inception, and through an enhanced enabling environment for SLM in the two new provinces (i.e. Guizhou and Sichuan) joining the new phase of the partnership.

B.   Assessment of Outputs, Outcomes and Impacts

15.   The project outcomes and outputs were achieved effectively as per the design and monitoring framework (Annex 2). All planned activities for the 16 SLM innovation pilot sites have been implemented effectively and achieved the targets as expected. SLM and climate-resilient management measures were scaled up in national or provincial ecological restoration programs. Institutional capacity for SLM at the local level was strengthened effectively through extensive technical training and awareness improvement.

16.   **Component 1: SLM and vegetation cover scaled-up to improve the resilience of landscapes and ecosystems to climate change in Inner Mongolia AR, Shaanxi, Gansu, and Qinghai Provinces.** At appraisal, the component was expected to achieve 2 outcomes with 5 outputs: (i) outcome 1.1 (4 outputs) to restore degraded, grassland and agro-ecological areas, leading to an increase in average land productivity of 10% on 1,802,231 ha of degraded land; (ii) outcome 1.2 (1 outputs) to promote sustainable forest management on 442,214 ha of land in Qingahi and forested area increased by 1.2% by 2017, leading to total system carbon stock increased by 57,600 tons of carbon dioxide equivalent (tCO$_2$e) by 2023 in Qinghai target area.

17.   At completion, the project supported **r**estoration of degraded grassland and farmland of 1,810,000 ha of land in Inner Mongolia, Shaanxi, Gansu and Qinghai, resulting in an increase of land productivity by 10%. Outputs delivered under outcome 1.1 included: (i) SLM and restoration techniques for combating land degradation promoted under 12 investment projects/programs associated with a total funding about $250.0 million, (ii) SLM approaches and/or techniques promoted at 7 innovation sites, (iii) two public private partnerships developed one for each in Inner Mongolia and Shaanxi, and (iv) two models of pay for ecosystem services developed. The project also promoted SFM on 442,214 ha of land in Qinghai with the forest area increase by 1.2% (outcome 1.2). The improved forestry management and the increased forested area are estimated to increase the carbon stock by 83,782 tCO$_2$e by 2023 in Qinghai. The project activities contributed to three SFM projects with a total funding about $65.0 million.

18.   **Component 2: Improved management of degraded lands to support rural livelihoods and green development.** At appraisal, this component aimed to support establishment of 16 new SLM innovation sites to improve land management in the participating provinces. It would also promote sustainable alternative livelihoods for people living in affected areas, including support for demonstration of green development. The component was expected to achieve 3 outcomes with 8 outputs: (i) outcome 2.1 (4 outputs) to promote SLM at 16 innovation sites covering 25,149.3 ha of land supporting sustainable livelihoods for more than 2,000 people in six provinces; (ii) outcome 2.2 (2 outputs) to enhance community awareness of climate change impacts to promote climate-resilient land management and low carbon production; and (iii) outcome 2.3 (2 outputs) to increase productivity of agro-ecological and forest landscapes through

green development in Sichuan and Guizhou provinces. At completion, 16 innovation pilot sites were established with a total area of 25,149 ha benefiting about 8,200 people (outcome 2.1).[11] Awareness programs were delivered to about 5,000 villagers at the 16 SLM innovation pilot sites, covering aspects of climate change impacts, alternative fuel and energy supplies, and adaptive measures in agriculture farming (outcome 2.2). Green development was demonstrated at three SLM innovation sites in Sichuan and Guizhou, through agroforestry and higher-value crops such as tea trees, decorative plants, and Chinese medicine herbs, contributing to productivity increase on 300,000 ha of land.

19.   **Component 3: Enhanced SLM enabling environment and capacity for scaling up of SLM in new provinces under the partnership** (para. 1). At appraisal, the component was expected to achieve 2 outcomes with 3 outputs: (i) outcome 3.1 (1 output) to strengthen institutional and regulatory framework and SLM policies in Guizhou and Sichuan; and (ii) outcome 3.2 (2 outputs) to enhanced technical SLM capacities in Guizhou and Sichuan. At completion, the institutional and technical capacity for SLM of Guizhou and Sichuan were strengthened effectively. The project supported development of the strategy and action plan (SAP) for land degradation control each for Guizhou and Sichuan provinces, which also included a comprehensive assessment of the provincial legal and policy regime for land degradation, and a framework of SLM monitoring indicators and approaches. Extensive training on SLM approaches and green development livelihoods including study tours were conducted for 2,400 people.

C.   Likelihood of achieving outcomes and impacts

20.   The project is rated *likely* to achieve its outcomes. As per the project outcome (para. 4), it was expected that the project would (i) leverage at least two additional investments to implement SLM, and (ii) support development and implementation of two new SAPs in Guizhou and Sichuan to strengthen the provincial institutional and technical capacity to support SLM. ADB has appraised a $200.0 million loan project to support SFM and ecological rehabilitation in Gansu, Qinghai, and Shaanxi provinces and its approval is anticipated before June 2022. In addition, ADB approved a loan of $300.0 million in November 2018, which is under implementation and supports six provinces (including Guizhou and Sichuan) in the Yangtze River Basin to improve soil and water conservation and agricultural environment following SLM principles. The SAP for SLM was developed each for Guizhou and Sichuan provinces, which also included a comprehensive assessment of the provincial legal and policy regime for land management, and a framework of SLM monitoring indicators and approaches. Both provinces have endorsed their respective SAPs in 2018, of which major guidelines have been taken up and reflected in the new investment projects.

21.   The impact is *likely* to achieve. The project impact was defined as "degraded lands restored and local livelihood improved in the project areas in western PRC." Climate-resilient SLM and green development livelihoods that the project promoted fit well into the government thirteenth Five-Year Plan, 2016–2020. The 16 innovation pilot sites were included as the priority locations for ecological restoration and SLM programs at the provincial level. The provincial institutional capacity development was closely linked to the provincial institutional and policy reforms for ecological civilization, which has been defined as one of the country's top development agendas since 2012 and has been mainstreamed into the government major development programs and policies. Although the project focused on demonstrations at 16 pilot sites across the six participating provinces, the interventions were highly aligned with the government

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[11] The 16 innovation sites included 4 in Gansu, 3 in Inner Mongolia, 3 in Qinghai, 3 in Shaanxi, 2 in Sichuan, and 1 in Guizhou.

programs involving SLM and rural livelihoods and have contributed significantly to the implementation of these programs at the local level. Moreover, SLM approaches and green develoment livelihoods have been further mainstreamed in several major government programs and/or plans.[12] Therefore, the expected impact of the project is likely to be be achieved.

IV. GLOBAL ENVIRONMENTAL BENEFITS AND CATALYTIC ROLE

22. The project's measurable GEBs are mainly related to increases in different types of land cover and soil carbon in dryland ecosystems. At appraisal, the expected global environment benefits (GEBs) would include (i) a total of about 2,553,182 ha of land (target area) under SLM by the end of the project through up-scaling, (ii) habitats protected on a total of about 45,212 ha of land, (iii) improved irrigation flows on about 47,384 ha of land, (iv) increased water availability on about 94,964 ha of rain-fed land, (v) around 57,600 tCO_2e sequestered of afforested land by 2023, and (vi) around 10% increase in productivity on 1,803,321 ha of land by the end of the project.

23. At completion, the land area under SLM through upscaling had reached 2,518,430 ha in six provinces. The habitats on about 61,458 ha have been restored through ecological rehabilitation on forestry land. The water-saving irrigation was promoted on about 55,400 ha of land in Gansu and Shaanxi. The water availability was increased on about 390.067 ha of rain-fed land. Restoration of degraded grassland and farmland were implemented on 1,810,000 ha of land in Inner Mongolia, Shaanxi, Gansu and Qinghai, resulting in an increase of 10% in land productivity. The improved forestry management and the increased forested area are estimated to increase the carbon stock by 83,782 tCO_2e by 2023 in Qinghai.[13]

24. Major catalytic roles of the project covered the following aspects: (i) upscaling SLM approaches through the investments (para. 18); (ii) promoting climate-resilient SLM and green development livelihoods which were extensively demonstrated in the 16 pilot sites; and (iii) strengthening enabling environment of the two provinces (i.e. Guizhou and Sichuan) to implement SLM through supporting SAP development (para. 18).

25. The project also showcased its important catalytic role through knowledge products and sharing. Two case studies were included and published in a United Nations volume for sustainable development goals: A Better World (2018).[14] The other 46 papers which were prepared by either consultants or provincial project staff have been peer-reviewed and published in national or international science or technical journals. The project was showcased at 16 international conferences or events, including the 14th Conference of Parties (2017) of the UN Convention to Combat Desertification, International Ecological Forum (2017), and meetings organized by international development agencies such as International Fund for Agriculture Development, GEF, and Food and Agriculture Organization, etc. SLM and climate resilient measures were documented and published by World Overview for Conservation Approaches and

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[12] These programs or plans include: (i) Rural Revitalization Strategy Plan, 2018–2022; (ii) National Economic and Social Development Fourteenth Five-Year Plan (2021–2025) and the Long-range Objectives through the Year 2035; and (iii) Implementation Plan for the Western Development Strategy during the 14th Five-Year Plan Period.

[13] The estimation was made according to the accepted method for carbon sequestration and afforestation in the PRC, the same method as applied at the appraisal. Li Nuyun. 2007. *Forestry Carbon Sequestration in China*. Beijing: China Forestry Publishing House.

[14] United Nations Conventions to Combat Desertification. 2018. *A Better World: Life on Land*. London.

Technologies.[15] The CPMO prepared 25 and PPMOs developed 70 technical research reports related to the project activities, some of which were taken by the provincial government as a local technical codes or standards for cropping or land management.

V. GEF TRACKING TOOL

26. The GEF LD tracking tool was established with the project identification form. The original tracking tool included five target impacts on GEBs: (i) land cover; (ii) avoided emissions; (iii) carbon sequestration; (iv) biodiversity conservation; and (v) surface and groundwater resources. In addition, an indicator for development benefits was also included. As per the finalized design and monitoring framework of the ADB TA, in which impacts of avoided emissions and carbon sequestration were mainly related to SFM activities in Qinghai (output 1.2.1), these two indicators were combined to track the total carbon benefits. Due to incomplete data caused by the differentiated progress of the project implementation in different provinces,[16] the targeted GEBs were not calculated in the middle of the implementation. Therefore, the tracking tool reported the targeted impacts only for the baseline/appraisal and the completion stages, as presented in the following table.

Table 1. Global Environmental Benefits in the Project Area

Targeted Impacts	Appraisal	Completion
1. Land cover - vegetative cover (ha) (i.e. natural & cultivated cover such as forest, shrubs, herbaceous, crops, etc.)	504,507	629,660
2. Surface and groundwater resources		
(i) Improved irrigation flow - land area (ha)	47,384	55,400
(ii) Improved/increased water availability - land area (ha)	94,694	390,067
3. Avoided emissions and carbon sequestration (tCO$_2$e)	n/a	83,732
4. Biodiversity conservation - habitat protected (ha)	45,212	61,458
5. Development benefits in the project target area – per capita annual income in average (CNY/year)[a]	9,643	13,000

a. The annual income per capita in the 16 pilot sites ranged from CNY3,200 to CNY17,000 at appraisal and CNY5,000 to CNY24,000 at completion.
Sources: the executing agency's project progress reports and the completion report.

VI. SUSTAINABILITY

27. The project outcomes are likely sustainable. The sustainability of the project outcomes are vested in: (i) strengthened insititutional and technical capacity and awareness for climate-resilient SLM in the paritipcating provinces; (ii) mainstreamed and upscaled SLM approaches and mechanisms in government programs and projects; and (iii) continuous and adequate financing resources by the government for ecological restoration and climate change resilience.

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[15] The World Overview of Conservation Approaches and Technologies (WOCAT, www.wocat.net) is a global network on SLM that promotes the documentation, sharing and use of knowledge to support adaptation, innovation and decision-making in SLM.

[16] Different provinces were involved in different projects for upscaling up the SLM practices. In most cases, these projects were part of the national programs and the implementation progress and the availability of data (such as coverage or locations) were various at local level.

28.   In general, risks for the project sustainability are considered low. All the project activities are linked to the government major programs for ecological restoration or rural development at both appraisal and implementation stages. The demonstrated SLM approaches from the 16 pilot sites have been replicated at the government new programs/plans. Therefore, the financial and sociopolitical risks are very low. The government made a substantial institutional reform in 2018, at which administrative functions for forestry, grassland, and wetland were integrated into the State Forestry and Grassland Administration. Subsequently, similar institutional reorganization were also made at provincial and local level. The new institutional establishment allows more effective and coordinated mangement of ecosystems. Moreover, all six provinces have developed their respective SAPs to support SLM and adequate institutional capacity to implement SLM through the previous projects under the partnership or this project. Thus, the institutional and governance risks are low. The facilities and/or works built under the project follow good land management practices, including those having been documented in the WOCAT (footnote 14), which have show very positive environmental impacts and limited enviornmental risks.

VII.   MONITORING AND EVALUATION FRAMEWORK

29.   The project's monitoring and evaluation framework and institutional arrangement is rated *satisfactory*. The project framwork with the achievements of outcomes and outputs is presented in Annex 2, which was adapted from the CEO endorsed project framework. The project framework is generally consistent with the ADB's TA design and monitoring framework while different terminologies were used for the impact and outcomes.[17] The framework was applied effectively for monitoring and reporting the project progress during the implementation. CPMO was coordinated the overall monitoring and reporting which was input by the PPMOs with the assistance of a monitoring and evaluation specialist engaged under the project. The monitoring results were cosolidated and reported semiannually to ADB by CPMO. Meanwhile, ADB complied and reported annual project implementation report as per the GEF Secretariat requirements.

30.   Difficulties were witnessed during the implementation to monitor and/or update the indicators for the GEF tracking tool due to their inadequate linkages with the project framework indicators, which should have established clearly in the project design. In addition, the project implementation had adequate women participation: (i) 3 of 6 PPMOs were headed by a female director; (ii) local women farmers participated fully in planning and implementing pilots activities particularly for development of livelihoods; and (iii) women received technical training effectively.

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[17] The objective as set out in the project framework corresponds the impact statement in the ADB TA report, while its outcomes match with the TA outputs.

ANNEX 1: PROJECT DATA SHEET

I.   Project Identification

GEF Project ID: 5142
GEF Agency Project ID: TA 8872
Country: People's Republic of China
Project Title: Sustainable and Climate-Resilient Land Management in the Western Regions
GEF Agency: Asian Development Bank

II.   Dates

Milestone	Expected Date[a]	Actual Date
CEO endorsement	--	11 June 2014
Agency approval date	--	9 January 2015
Implementation start	1 February 2015	16 June 2016
Midterm review	--	2017
Project completion	31 January 2018	31 January 2019
Terminal evaluation completion	n/a	15 July 2020
First disbursement	--	21 March2016
Final disbursement	--	30 October 2019
Grant closing	30 June 2018	30 October 2019

Source: Asian Development Bank.

III.   Project Framework

Project Component	Activity type (TA or INV)	GEF Financing ($ million)		Cofinancing ($ million)	
		Appraisal	Actual	Appraisal	Actual
1. SLM and vegetation cover scaled-up to improve the resilience of landscapes and ecosystems to climate change in Inner Mongolia, Shaanxi, Gansu, and Qinghai.	INV	1.90		10.11	
2. Improved management of degraded lands to support rural livelihoods and green development.	TA INV	1.95 0.48	4.61	1.40 2.14	16.25
3. Enhanced SLM enabling environment and capacity for scaling up of SLM in new provinces under the partnership.	TA	0.66		4.40	
Total		**4.99**	**4.61**	**18.05**	**16.25**

INV= investment, TA= technical assistance
Note: The financing is exclusive of the project management cost and ADB's TA contribution.
Sources: Asian Development Bank, the executing agency's completion report.

IV.   Co-financing ($ million)

Source	Financing Type	Appraisal	Actual
Government (national and provincial)	cash	3.15	3.04
	In-kind	14.90	13.21
GEF Agency (ADB)[a]	TA	0.40	0.23
Total		**18.45**	**16.48**

[a] The co-financing refers to the contribution of ADB TA 8162-PRC: Integrated Strategy for Sustainable Land Management in Dryland Ecosystems.
Sources: Asian Development Bank, the executing agency's completion report.

ANNEX 2. PROJECT FRAMEWORK

Project Objective: Restoration of degraded land and improvement of livelihood through sustainable and climate resilient land management in six provinces/autonomous regions in western PRC.

The project will support the up-scaling of SLM investments in Inner Mongolia autonomous region and Shaanxi, Gansu, and Qinghai provinces. The project will also start working closely with two new provinces, i.e. Guizhou and Sichuan, to expand the Partnership activities both in scope and depth in improving the environment.

Expected Outcomes	Expected Outputs	Achievements	Rating
Component 1: SLM and vegetation cover scaled-up to improve the resilience of landscapes and ecosystems to climate change in Inner Mongolia AR, Shaanxi, Gansu, and Qinghai Provinces.			
1.1 Restoration of degraded grassland and farmland in three provinces/ ARs, leading to an increase in average land productivity of 10% on 1,803,321 ha of land		**Outcome 1.1:** Restoration of degraded grassland and farmland were implemented on 1,810,000 ha of land in Inner Mongolia, Shaanxi, Gansu and Qinghai, resulting in an increase of 10% in land productivity.	S
	1.1.1 SLM and restoration techniques suitable for different types of degraded land (forest, grassland and farmland) promoted and taken up by at least 11 investment projects under AR/provincial SLM plans with a total funding of $248.4 million through local, national and/or international financing	1.1.1 SLM and restoration techniques for combating land degradation were promoted under 12 investment projects/programs (3 in Inner Mongolia, 3 in Shaanxi, 4 in Gansu, and 2 in Qinghai). Total funding associated was about $250 million.	
	1.1.2 Scaling up of investments in sustainable grassland and farmland management at 7 innovation sites in Inner Mongolia AR (2), Gansu (3), Shaanxi (1) and Qinghai (1).	1.1.2 SLM approaches and/or techniques were promoted at 7 innovation sites: Inner Mongolia (seed forests nurturing, grassland management, intercropping); Shaanxi (kiwi fruit orchard management); Gansu (water-saving irrigation, manure application, agroforestry management); Qinghai (climate resilient farming).	
	1.1.3 Scaling up of SLM on farmland through support to establishment of 2 PPPs in SLM in Shaanxi (1) and Inner Mongolia AR(1)	1.1.3 Two PPPs were developed one for each in Inner Mongolia (nurturing management of Salix shrubs for about 250 ha, including farmers' engagement in development of woods products) and Shaanxi (bio-fertilizer development and trial in 33.5 ha land).	
	1.1.4 Scaling up of SLM through support to establishment of 2 PES mechanisms for sustainable watershed management in Gansu (1) and Shaanxi (1)	1.1.4 Two PES models were developed: (i) small watershed management at the Loess Plateau area in Liquan of Shaanxi covering an area of 729 ha; (ii) rural community engagement in PES at Xinligou small watershed in Kongtong of Guansu.	
1.2 SFM on 442,214 ha of land in Qingahi and forested area increased by 1.2% by 2017. Total system carbon stock increased by	1.2.1 Promotion of tree planting for carbon sequestration on 442,214 ha of forest land in Qinghai Province, taken up by two investment projects on SFM with total funding of $61.1 million.	SFM was implemented on 442,214 ha of land in Qinghai, forest area increased by 1.2%. The improved forestry management and the increased forested area are estimated to increase the carbon stock by 83,782 tCO2 equivalent by 2023 in Qinghai. The project activities contributed to three SFM projects (i.e. afforestation for soil erosion control, ecological	S

57,600 tCO$_2$ equivalent by 2023.		restoration by closing hills, nurturing of young forests) with a total funding about $65 million.	
Component 2: Improved management of degraded lands to support rural livelihoods and green development.			
2.1 Sustainable land management at 16 SLM innovation sites covering 25,149.3 ha of land supports sustainable livelihood systems for more than 2,000 people in six provinces/ARs by 2017		**Outcome 2.1:** Sixteen innovation pilot sites were established with a total area of 25,149 ha for SLM and supporting sustainable livelihoods for about 8,119 people in six provinces/ARs by 2017 (4 in Gansu, 3 in Inner Mongolia, 3 in Qinghai, 3 in Shaanxi, 2 in Sichuan, and 1 in Guizhou)	HS
	2.1.1 Identification and testing of sustainable livelihoods related to innovative SLM practices, multi-functional community forestry and grassland development at 16 SLM innovation sites in six provinces/ARs.	2.1.1 Over 40 different types of livelihoods were supported including: • **Inner Mongolia:** community participation in forestry farms; grassland management, chicken feeding under woods, and organic farming in rainfed lands. • **Shaanxi:** agroforestry for desertification control; ecological approaches to kiwi fruit and blueberry growing; land management for apricot orchards. • **Gansu:** green manure application for Chinese date orchards; green houses for vegetable growing; local chicken feeding under woods; Chinese prickly ash growing. • **Qinghai:** traditional medicine herbs plantation; high-value crops growing (i.e. plateau oats, garlic, beans, potato); cherry plantation; seedling growing • **Sichuan:** growing tea trees, high-value crops and traditional Chinese medicine herbs; chicken farms under trees. • **Guizhou:** Roxburgh Rose tree planation.	
	2.1.2 Development of ecological industries suitable for local communities (e.g. community-based eco- tourism, household business development, etc)	2.1.2 Community based eco-tourism or household small business were developed at seven pilot sites in Gansu, Shaanxi, and Qinghai provinces, including two communities adopting e-commerce to sell local fruits.	
	2.1.3 Improvement of ecological compensation standards of land restoration and livelihood improvement in Gansu and Shaanxi province.	2.1.3 PES trialed at the two sites in Gansu and Shaanxi (refer to output 1.1.4 above) improved local farmers' livelihoods in terms of incomes and labor opportunities.	
	2.1.4 Training of three communities in SLM and sustainable livelihoods through FFS to promote up-scaling of SLM in Guizhou and Sichuan province (2,000 people trained).	2.1.4 farmers' field schools were established and provided training for about 2,018 people on soil testing, techniques of agriculture and crop farming in Guizhou and Sichuan provinces.	
2.2 Enhanced community awareness of climate change impacts leads to reduced vulnerability to climate change and lower-carbon		**Outcome 2.2:** Awareness programs were delivered to about 5,000 villagers at the 16 SLM innovation pilot sites, which covered aspects of climate change impacts, alternative fuel and energy supplies, and adaptive measures in agriculture farming.	S
	2.2.1 Development of guidelines on climate resilient SLM measures	2.2.1 Guidelines were developed and disseminated for climate resilient farming and	

emissions from land management and production models in communities at 16 SLM innovation sites with 3,000 people.	and how to lower carbon emissions from land management

2.2.2 Improvement of the understanding of local communities of adaptive measures to climate change and lower carbon-emissions from land management through training of communities at SLM innovation sites in FFS for further upscaling. | land management and community low carbon living methods. The project also supported evaluation of soil carbon of the three pilot sites in Shaanxi.

2.2.2 Extensive training were conducted in participating provinces, covering SLM practices to support sustainable livelihoods, climate resilient agriculture and farming approaches, and clean energy, benefiting over 10,000 people. Clean energy applicants were promoted in four communities in Qinghai and Sichuan. | |
| 2.3 Increased productivity of agro-ecological and forest landscapes on 307,647 hectares of land through green development in Sichuan and Guizhou |

2.3.1 Development of green products and marketing in three communities with 2,000 people

2.3.2 SLM innovation sites support green development with eco- agriculture, water-saving agriculture, ecotourism, etc. | **Outcome 2.3:** Green development was demonstrated at three SLM innovation sites in Sichuan (2) and Guizhou (1), through agroforestry and higher-value crops such as tea trees, decorative plants, and Chinese medicine herbs, contributing to productivity increase on 300,000 ha of land.

2.3.1 Green products were promoted in three communities of two Sichuan counties covering a total area of 21 ha with 2,100 people.

2.3.2 Ecological and water-saving agriculture were promoted at five sites in Sichuan (3) and Guizhou (2). | S |
| **Component 3:** Enhanced SLM enabling environment and capacity for scaling up of SLM in new Provinces under the Partnership (Guizhou and Sichuan). | | | |
| 3.1 Institutional and regulatory framework and SLM policies strengthened in Guizhou and Sichuan | 3.1.1 Improved institutional framework and investment policies for SLM through development of 2 new Provincial SLM SAPs and formulation/ revision of at least 2 regulations in each province. | A SAP for land degradation control was developed each for Guizhou and Sichuan provinces, which included a comprehensive assessment of the provincial legal and policy regime for land degradation, and a framework of SLM monitoring indicators and approaches. The SAPs were approved for both provinces in 2018. Eight regulations (2 in Sichuan and 6 in Guizhou) were revised or newly formulated. | S |
| 3.2 Enhanced technical SLM capacities in Guizhou and Sichuan |

3.2.1 Provincial SLM monitoring and assessment indicator system aligned with national and regional frameworks.

3.2.2 Technical training on SLM approaches for extension agencies and FFS (2,000 people in the new provinces) | **Outcome 3.2:** Technical SLM capacity in Guizhou and Sichuan was enhanced effectively.

3.2.1 SLM monitoring and assessment indicators were established in line with the national monitoring framework. The project also supported development of community-based SLM monitoring and relevant training to local farmers.

3.2.2 Totally, 39 training on SLM approaches and methods and 9 national study tours were conducted for more than 2,400 local officials and farmers in Guizhou (22) and Sichuan (17) provinces. | S |

AR = autonomous region; FFS = farmer field school; PES = pay for ecosystem services; PPP = public private partnership; SAP = strategy and action plan; SFM = sustainable forestry management; SLM = sustainable land management.
Sources: Asian Development Bank, the Central Project Management Office