

Transformative Solutions and Green Finance: ADB Projects in the People's Republic of China and Mongolia Case Study

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Outline

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- Integration and Comparation
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Background and Introduction

- Environmental degradation and green development has been a common predicament among developing countries due primarily to rapid urbanization and economic development, migration, intensive agriculture production, and tourism growth.
- ADB's developing member countries (DMCs) have joined together to address recent developments peculiar to their respective country situation.
- Motivating stakeholders to engage in pollution control, low-carbon and resilient urban development, natural capital regeneration, green economic diversification, and pastureland/rangeland management is vital.
- ADB and development partners have used innovative green financing mechanisms and nature-based solutions (NbS) to address environmental degradation and support green development.

Background and Introduction

- Select for case study:

The ADB-People's Republic of China (PRC) project	Anhui Huangshan Xin'an River Ecological Protection and Green Development Project
The ADB-Mongolia projects	1. The Aimags and Soums Green Regional Development Investment Program (ASDIP)
	2. The Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)

- The case study and comparisons on these projects intend to analyze effective and innovative solution to serve a demonstrative role for the government with pervasive ecological pressures in ADB's DMCs.

The ADB-PRC Project

Anhui Huangshan Xin'an River Ecological Protection and Green Development Project

Loan's aims	To support the Huangshan municipality to demonstrate water pollution reduction in the Xin'an River Basin through improving urban and rural wastewater management, reducing soil erosion and NPS pollution from agriculture
Features	<ul style="list-style-type: none">• Project Loan Modality, with Financial Intermediary Loan (FIL) component• Innovative green finance mechanisms to reduce rural pollution and complement the ongoing cross-provincial eco-compensation scheme• Supporting the green development of agroecological businesses, through the Green Investment Fund (GIF) and the Green Incentive Mechanism (GIM)<ul style="list-style-type: none">○ GIF provides grant-based incentives to change farmers' behavior and farming practices○ GIF enables financial intermediation to support private sector investment that is linked to green development○ An innovative attempt to encourage farmers and businesses to respectively engage in NPS pollution control and green finance

The ADB-PRC Project

Anhui Huangshan Xin'an River Ecological Protection and Green Development Project

Loan amount	<ul style="list-style-type: none">• Total cost: \$214.38 million, including \$100 million from ADB resources, \$58.88 million co-financing from KfW Bankengruppe.• The Government will finance \$55.5 million.• Contributions from the private sector and the beneficiaries are estimated at \$31.7 million.
Outcome	Improved economic and environmental conditions in the upstream of the Xin'an River
Outputs	<ul style="list-style-type: none">(i) Urban and rural point source pollution management installed(ii) Non-point source pollution control enhanced(iii) Green finance mechanism piloted (FIL component)(iv) Capacity for ecological system and project management strengthened

The ADB-Mongolia Project

The Aimags and Soums Green Regional Development Investment Program (ASDIP)

Loan's aims	To promote green urban-rural linkages, green agri-businesses development, natural capital and rangeland regeneration and soil carbon sequestration
Key Features	<p>Multitranche Financing Facility -3 Tranches over 10 years- with FI component</p> <p>Transformative model to promote green territorial development and green urban-rural linkages where livable human settlements become anchors of green agribusinesses that promotes sustainable, resilient, and high carbon sequestration management in Mongolia's rangeland.</p> <p>FIL component using a blended green finance strategy to support financial inclusion and effectively link sustainable and resilient rangeland management to green, competitive, and economically diversified investments in the agribusiness value chain.</p> <p>Innovative replication strategy and development coordination mechanisms to synergize with other complementary initiatives in Mongolia to maximize its development and climate impact.</p> <p>Benefits</p> <p><u>Climate mitigation impact:</u> 112.40 million tCO₂e, including 94.0 million tCO₂e from carbon sequestered in the soil.</p> <p><u>Adaptation beneficiaries:</u> 552,300, incl 54,000 vulnerable herder households.</p> <p><u>Ecosystem restoration:</u> Low carbon management of 28.8 million ha of rangeland</p> <p><u>Main socioeconomic:</u> 11,400 green direct jobs and 150,000 indirect jobs created.</p>

The ADB-Mongolia Project

The Aimags and Soums Green Regional Development Investment Program (ASDIP)

Loan amount	<ul style="list-style-type: none">• Total cost: \$735.0 million, including \$273.0 million from a blend of ADB resources (including \$3 million ADF grant), \$175.0 million administered co-financing from Green Climate Fund concessional loan (\$130 million) and Grant (\$45 million), \$150 million from European Investment Bank loan and \$30 million from European Union grant.• The Government will finance \$75.3 million.• Contributions from the private sector and the beneficiaries are estimated at \$31.7 million.
Outcome	Advanced green and inclusive agro-territorial development
Outputs	<ul style="list-style-type: none">(i) Climate-resilient, low-carbon, and attractive aimag and soum centers developed(ii) Climate-resilient, high-carbon sequestration, and sustainable rangeland management implemented(iii) Accessible financing for low-carbon and climate-resilient livestock value chains created (financial intermediation loan component)(iv) Institutional capacity and policies for low-carbon and climate-resilient agro-territorial development strengthened

The ADB-Mongolia Project

The Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)

Loan's aims
 To transform vulnerable and highly polluting sub-standard peri-urban of Ulaanbaatar city into low-carbon and resilient eco-district that will provide access to green affordable housing units

Key Features

Modality: Sector loan with FI component

- **Innovative urban PPPP (Public, Private, People Partnership)**, financial and institutional integrated mechanism leveraging financing from public sector, beneficiaries, commercial banks and real estate developers to deliver eco-district urban solution
- **Innovative climate financial intermediary** to leverage private sector resources and support the construction of affordable green housing units and production of green mortgage to support access to the green housing units
- **Green Building facility** to will provide performance-based grants through to qualified private developers for climate change mitigation and adaptation features
- **Smart renewable energy and building performance control and monitoring system**
- **Urban Farming**
- **Innovative Voluntary Land Swapping Mechanism** that will provide housing solution to all residents for in situs redevelopment

Benefits

Climate change cross cutting impacts

Mitigation: GHG emission reductions, Direct: 8 million tCO2e and Total (including indirect – replications effect): 39.59 million tCO2e.

Adaptation: 100,000 total direct beneficiaries and 1,000,000 total direct and indirect beneficiaries from reduced climate change vulnerability;



The ADB-Mongolia Project

The Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)

Loan amount	<ul style="list-style-type: none">• Total cost: \$570.1 million, including ADB's blended loan (\$80 million), GCF (\$50 million grant and \$95 million loan), HLTF (\$3 million grant)• Municipality of Ulaanbaatar (\$35 million)• Commercial banks, developers and beneficiaries (\$307.1 million)
Outcome	Increased access to low carbon and climate-resilient eco-districts and green affordable housing in Ulaanbaatar ger areas
Outputs	<ul style="list-style-type: none">(i) Resilient urban infrastructure, public facilities, and social housing units in ger areas constructed (public sector component)(ii) Long-term financing to developers for low carbon affordable housing, market rate housing, and economic facilities in ger areas and to households for green mortgages increased (financial intermediation loan [FIL] component)(iii) Sector policy reforms implemented and capacity strengthened

Integration and Comparison

Things in common:

The ADB-PRC Project: “Anhui Huangshan Xin’an River Ecological Protection and Green Development Project”	The ADB-Mongolia Projects: “The Aimags and Soums Green Regional Development Investment Program (ASDIP)” & “The Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)”
(1) Integrative, transformative, holistic, ecosystem-based approaches	
(2) Common goals: improved pollution control, low-carbon and climate resilient development, effective management of natural resources, and institutional development and reforms	
(3) Active engagement of key grassroots stakeholders as core to address environmental degradation, green economic development, and resource management, through incentivizing them to change their behavior and management practices	
(4) Green financing mechanisms are employed: <ul style="list-style-type: none">i. Financial intermediary loan (FIL) to increase leverage of private sector financingii. Green incentives mechanism provided to stakeholders (farmers, herders, and ger residents)	

Conclusion

- Inadequate climate responsive solutions and the lack of access to green finance have constrained the governments' actions.
- Active engagement of key grassroot and private sector stakeholders are the core to address environmental degradation and green economic development.

Key Policy Recommendations

- Design projects including high-quality pre-diagnosis, favorable policy and multi-sector collaborative environment, actionable recommendations, and international best practice integrated to escalate impact.
- Engage in nature-resource accounting and undertake solution-based financing mechanisms to promote replicable green paradigm shift.
- Increase access to affordable green eco-housing in Ulaanbaatar's ger areas and disseminate the eco-district PPP mechanisms to other cities/countries.
- Guarantee continued capital flows to support ecosystem health and climate adaption.
- Expand GIRAF through performance grants to herders and low interest loans for knowledge products dissemination.
- Leverage regulatory reforms and capacity building to institutionalize various mechanism for GIMs to build up a fundamental framework for market linkage and certification of green products.

Key Takeaways

- Importance of strategic development phase using in-depth climate and development assessment
- Use holistic framework to appraise development problems and formulate multi-sector and pluri-disciplinary approaches;
- Focus on development and climate strategies, mechanisms and finance solutions rather than infrastructure investments;
- Elaborate public, private, people solutions to leverage private sector investments and promote community participation; and
- Develop strong partnerships and long-term programs that align create synergies between government, development partners, civil society, and private sector initiatives.

Thank You

