Ensuring Sustainability and Resilience (ENSURE) of Green Landscapes in Mongolia

Session II: Training of Trainers on Carbon Accounting Tools & Field Practices, June 23-27, 2025, Ulaanbaatar

PROJECT BRIEF INFORMATION

Project period
7 years (2019-2025)

Implementation Agency
United Nations Development Program
Ministry of Environment and Tourism
Ministry of Food, Agriculture and Light Industry

Funding resource
Global Environment facility

Total budget
7,964,253 USD

Key partners and stakeholders
Local governments, International and other NGOs, Universities, Scientific Institutions, Private sectors and local communities

Project main goal:
to enhance ecosystem services in multiple landscapes of the Khangai mountains and southern Gobi by reducing rangeland and forest degradation and conserving biodiversity through sustainable livelihoods

Outcome 1: Enhanced enabling framework and systemic tools help conserve biodiversity and ecosystem services

Outcome 2: Rangeland, forest and biodiversity are restored and protected areas strengthened at landscape scale

Outcome 3: Sustainable livelihoods provide benefits to local communities and support biodiversity

Outcome 4: Improves knowledge management, M&E supports sustainability and up-scaling

Pilot Landscapes (4 Aimags)

Pilot Landscapes and Ecological Zones
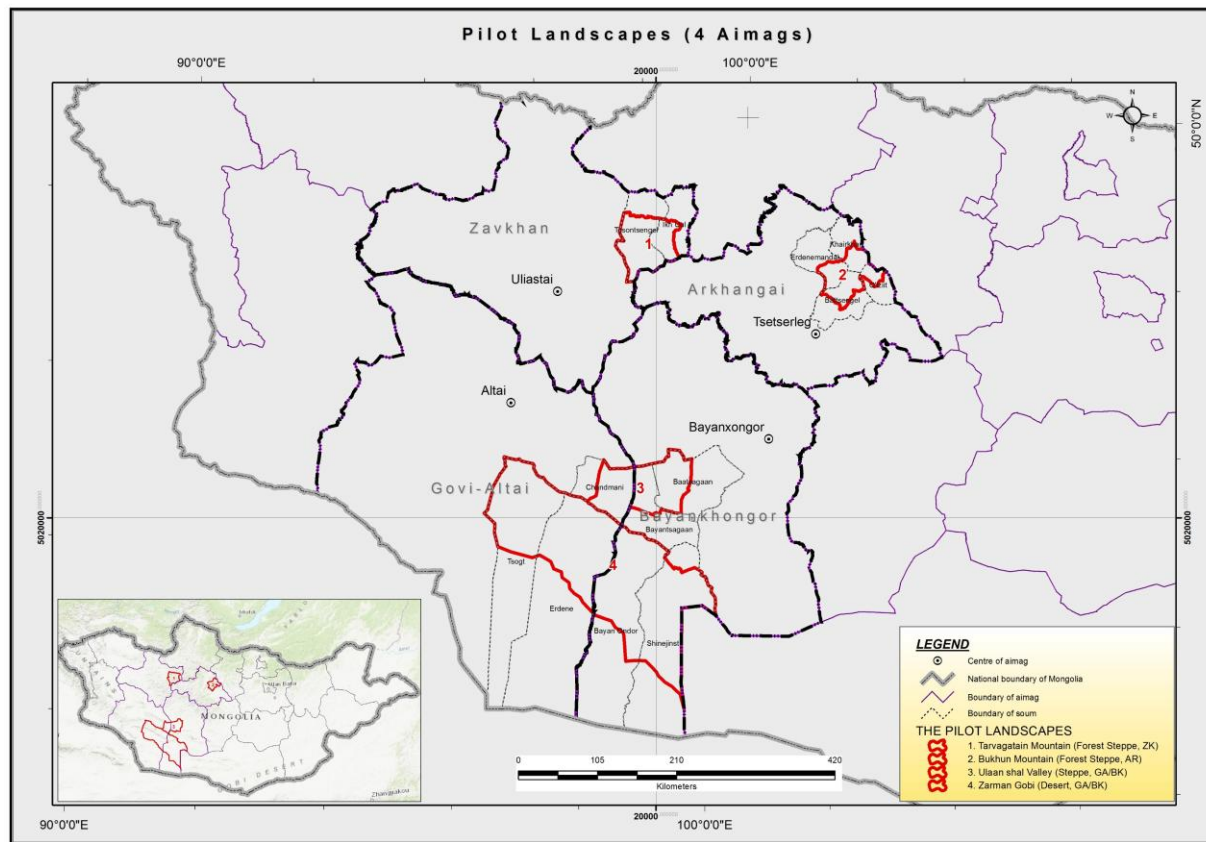
Pilot landscape	Aimag	Soum
Tarvagatain Mountain	Zavkhan	Ikh-Uul, Tosontsengel
Bukhun Mountain	Arkhangai	Battsengel, Erdenemandal, Ulziit, Khairkhan
Ulaan shal Valley	Bayankhongor Gobi-Aljtai	Baatsagaan, Bayantsagaan, Bayan-Undur, Shinejinst
Zarman Gobi		Chandmani, Erdene, Tsogt
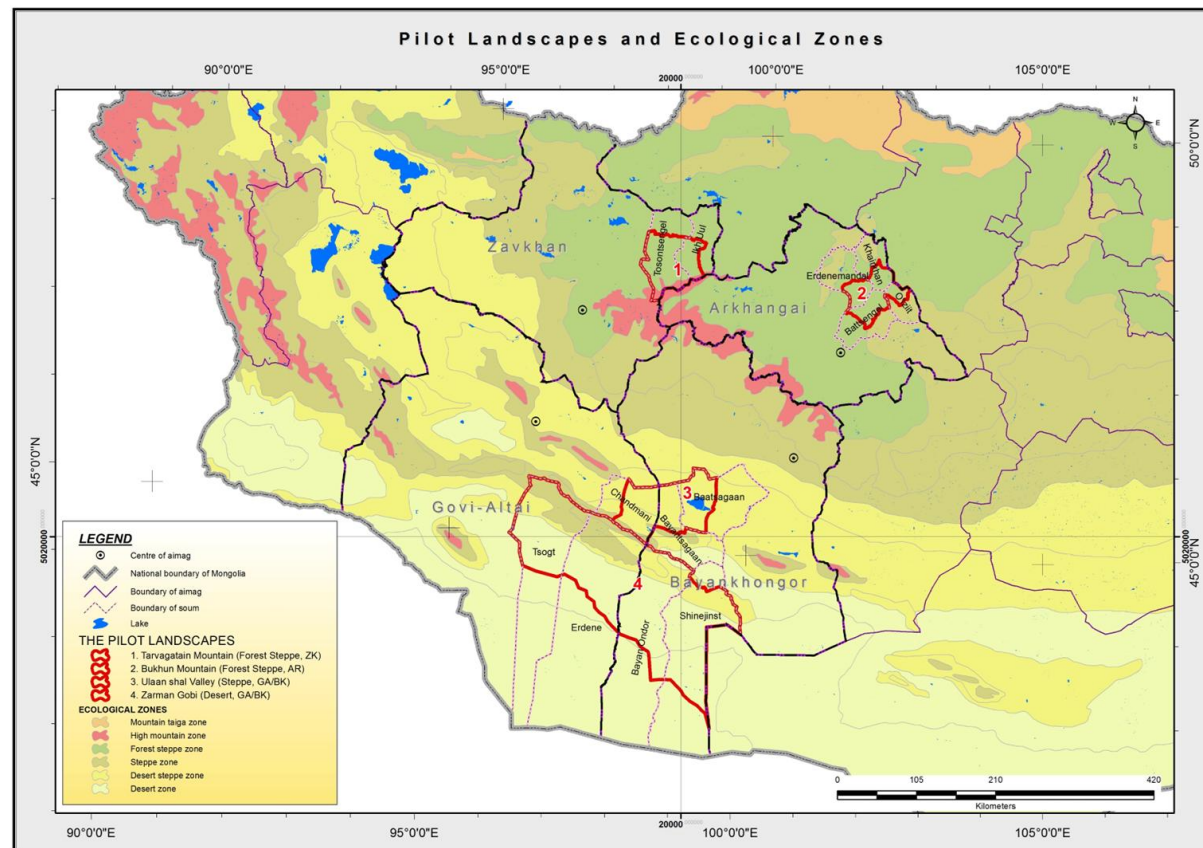
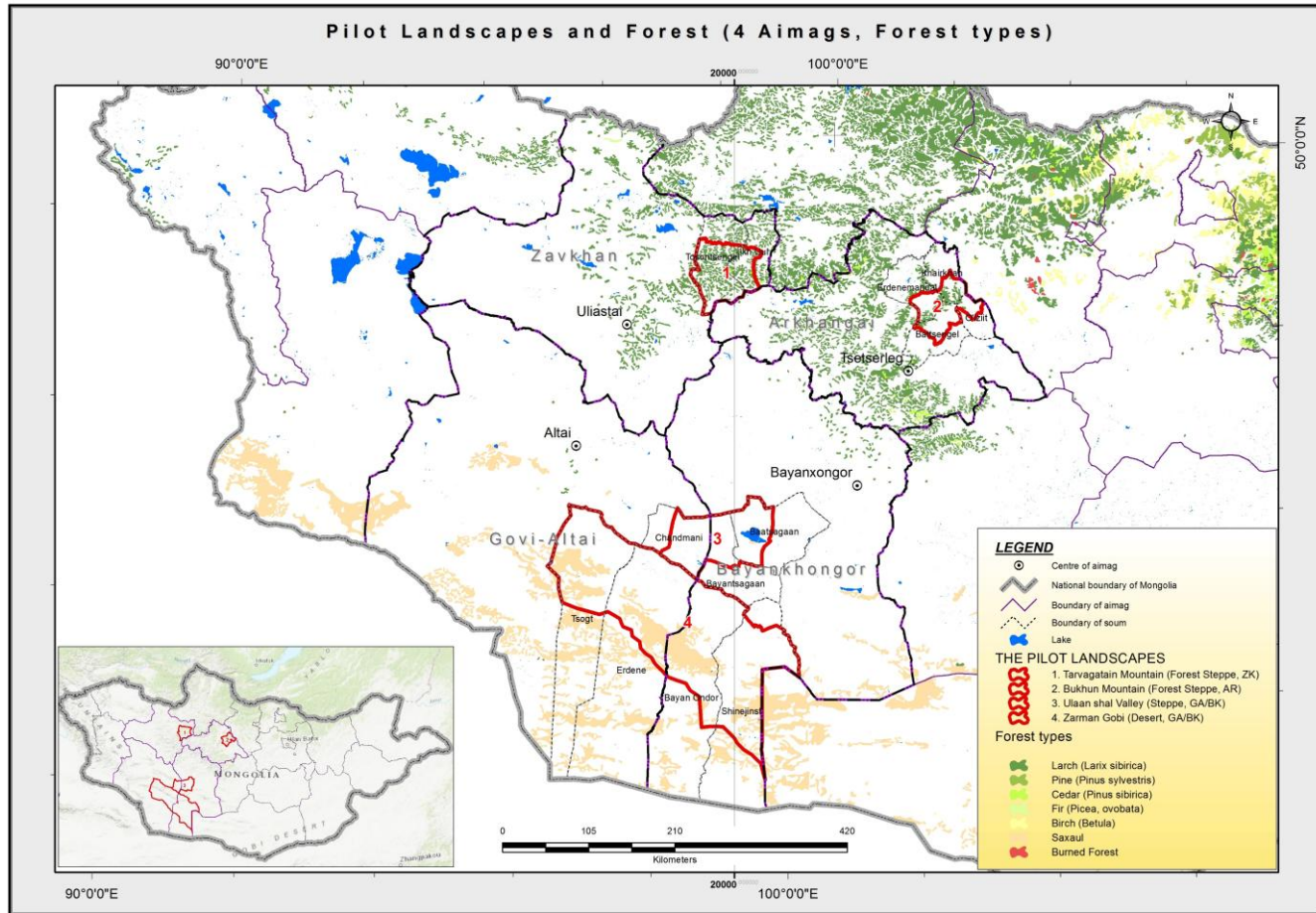| Pilot landscape	Eco-region	Total area, ha
Tarvagatain Mountain	Forest-steppe	503,830
Bukhun Mountain	Forest-steppe	371,880
Ulaan shal Valley	Steppe	810,690
Zarman Gobi	Desert-steppe	3,623,480

Total project area = 39.5 million ha (Netherlands 4.2 million ha)

OVERVIEW OF THE PROJECT BENEFICIARIES and KNOWLEDGE SHARING

49 trainings including online, classroom and practical

372 events of 8 various type

Target goal: 25613 direct Beneficiaries

13164 people from 8360 households

20 new jobs

BOREAL AND SAXAUL FOREST IN PILOT LANDSCAPES

Pilot Landscapes and Forest (4 Aimags, Forest types)

LEGEND
- ⊙ Centre of aimag
- National boundary of Mongolia
- Boundary of aimag
- Boundary of soum
- Lake

THE PILOT LANDSCAPES
1. Tarvagatain Mountain (Forest Steppe, ZK)
2. Bukhun Mountain (Forest Steppe, AR)
3. Ulaan shal Valley (Steppe, GA/BK)
4. Zarman Gobi (Desert, GA/BK)

Forest types
- Larch (Larix sibirica)
- Pine (Pinus sylvestris)
- Cedar (Pinus sibirica)
- Fir (Picea, ovobata)
- Birch (Betula)
- Saxaul
- Burned Forest

Source: TNC (2008)

Drivers of deforestation and degradation

- Forest Fire
- Pest Damage & Outbreaks
- Illegal Logging
- No major land use changes
- Fuel Wood Use

Forest area, ha

Tarvagatain Mountain	20,585
Bukhun Mountain	23,004
Ulaan shal Valley	2,950
Zarman Gobi	44,832

SUSTAINABLE FOREST MANAGEMENT AND RESTORATION

Outputs: Sustainable management and restoration of boreal (20000 ha) and saxaul (25000 ha) forests operationalized in demonstration landscapes with no net loss and degradation
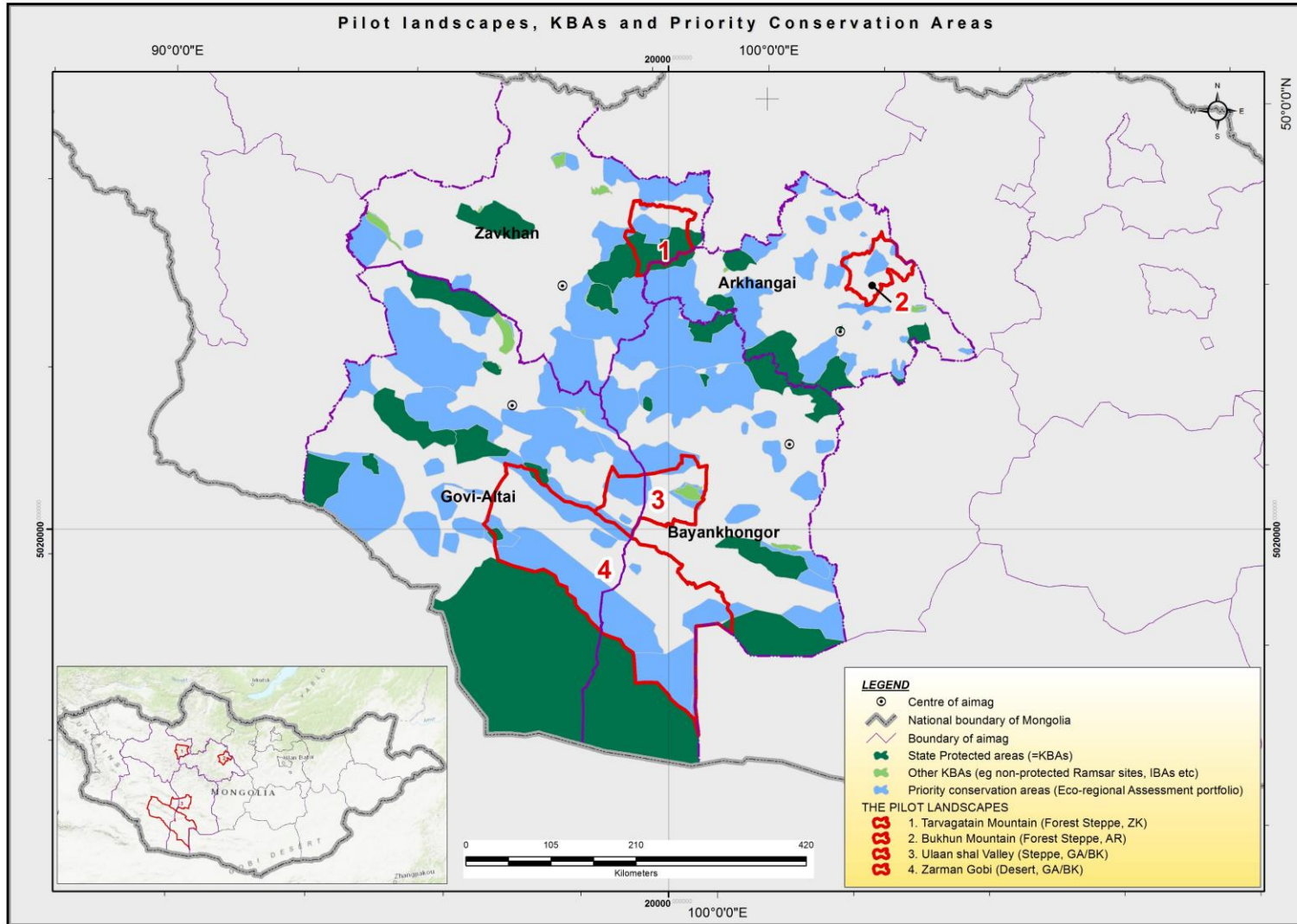
Key activities:

- Forest management plan developed for 9 forest units and 15 forest user groups

- Forest regeneration monitoring: fencing 375 ha of the Saxaul forest, 40 ha of the boreal forest area

- 4 tree nurseries were newly established and equipped.

- Capacity building on SFM: Forest technicians of inter soum forest units (ISFUs), and forest user groups (FUGs) are participated in practical and professional training including tree safe climbing, forest thinning, forest cleaning, production, and marketing Bio-charcoal etc.

BIODIVERSITY AND PROTECTED AREAS IN PILOT LANDSCAPES

Pilot landscapes, KBAs and Priority Conservation Areas

Source: TNC (2017), EIC (2017), World Database of Key Biodiversity Areas (2018)

Key species are:

- **Musk deer** *Moschus moschiferus*
- **Red deer** *Cervus elaphus*
- **Black-tailed gazelle** *Gazella subgutturosa,*
- **Snow leopard** *Panthera uncia*
- **Wild sheep** *Ovis darwini*
- **Red thumb** *Cynomorium songaricum*

BIODIVERSITY CONSERVATION AND PA MANAGEMENT

Outputs: The protected area system expanded (0,9 million ha) and strengthened in key biodiversity areas, particularly in under-represented ecosystems through improved management effectiveness including management and business plans and community participation

Outputs: Best practices operationalized for conserving globally threatened/iconic fauna through threat reduction resulting from community-based management and targeted measures

Key activities:

- A total of 68 springs, wells, and spring sources were protected to increase the water supply for wildlife. Moreover, 4 engineering wells with solar panels were constructed.

- Reintroduction: 12 individuals of Musk Deer, 10 Red Deer, over 300 Marmot

- community-based wildlife monitoring, Volunteer rangers

- Collaring: A total of 12 individuals of black-tailed gazelle, livestock, Argali sheep and Snow leopards were captured and collared with satellite collars

- Master and PhD student grants: 25 research students were awarded training grants.

COMMUNITY LIVELIHOODS IMPROVEMENT

Outputs: Sustainable livelihoods implemented by PUGs and FUGs that increase family incomes and gender equality, by strengthening the value chain for existing products and diversifying into new livelihoods that benefit biodiversity conservation and ecosystem services

Key activities:

- Probiotic dairy production and Fruit and berry plantation in collaboration with local governance and communities

- Small grant project: nature-based solutions

- Best practices: Wool shearing and sorting, Lamb fattening, fodder production

Forest-related indicators and targets

- **Indicator 9**. Area (ha) of saxaul and boreal forests in demonstration landscapes with no net loss or degradation

❖ Saxaul forests: 25,000 ha forest areas in Zarmangiin Gobi and Ulaanshaliin hooloi areas

❖ Boreal forests: 20,000 ha forest areas in Tarvagatain and Bukhen Sharyn Mountains.

- **Indicator 10**.Emissions savings (tCO2-eq over next 20 years) from reduced loss and degradation of 45,000 ha of saxaul and boreal forests in demonstration landscapes.

❖ Saxaul forests: total of -3,215 tCO$_2$-eq of avoided emissions or increased carbon sequestration over the 20 years.

❖ Boreal forests: total of -3,040,800 tCO$_2$-eq of avoided emissions or increased carbon sequestration over the 20 years.

Project intervention in forestry (over 20 years)

- Forest planning and legal enforcement on SFM
- Enabling activities in forest resource conservation and protection
- Capacity building in silviculture practices
- Assisted natural regeneration (fencing of degraded saxaul stands)
- Forest stand treatment through thinning and salvaging
- Tree nursery development and innovation
- Piloting re-afforestation activities in degraded forest areas

Lessons learnt from the project (in forestry)

- Promote the capacity and knowledge of local forest staff and FUGs on forestry practice and silviculture
- Strengthen linkage between forest service unit and FUGs on forest management and planning
- Coordinate annual or operational planning of forest activities with local and soum development plans
- Ownership of project output is still a question mark for local government
- The project life period is too short for the enforcement of SFM criteria and indicators

THANK YOU

Ensuring Sustainability and Resilience (ENSURE) of Green Landscapes in Mongolia

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