

# Turning the Desert into a Forest

The Fruit of 10-Year Effort by the Korea-Mongolia Greenbelt Plantation Project



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БАЙГАЛЬ ОРЧИН.  
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# Mongolia's Barren Desert Becoming a Green Forest.

Mongolia's Gobi desert, located 1,000m above sea level, is rapidly desertifying due to a dry climate with low precipitation and overgrazing. Some of the major sand storms that hit Korea each year arise from this desert.

To turn the desert green, the Korea Forest Service (KFS) made a bold move to join Mongolia's Green Belt National Program, which had received little attention from the world. Since 2007, KFS has dispatched plantation experts to Mongolia, undertaken the Korea-Mongolia Greenbelt Plantation Project, and planted trees with Mongolian experts, based on its successful reforestation experience in once-desolate land of South Korea.

The project has planted around 3000ha of trees, including drought-tolerant Siberian elm (*Ulmus pumila*) and sea buckthorn (*Hippophae rhamnoides*), and Saxaul (*Haloxylon ammodendron*), a rare and endangered native species in the Gobi region. Now the trees planted at the early phase of the project have grown to be four to six meters tall, forming into a forest.

At its initial stage, the project faced many challenges due to the hostile desert environment and lack of experience and knowledge of desert afforestation.

Despite these challenges, Korea and Mongolia brought wisdom together to overcome adversity and turned the desolate desert into a living forest, creating an international success story for combating desertification through tree planting.

The greenbelt project has also raised Mongolians' awareness of the significance of forests and motivated them to push for various policies for forest protection and management, which represents a significant change.





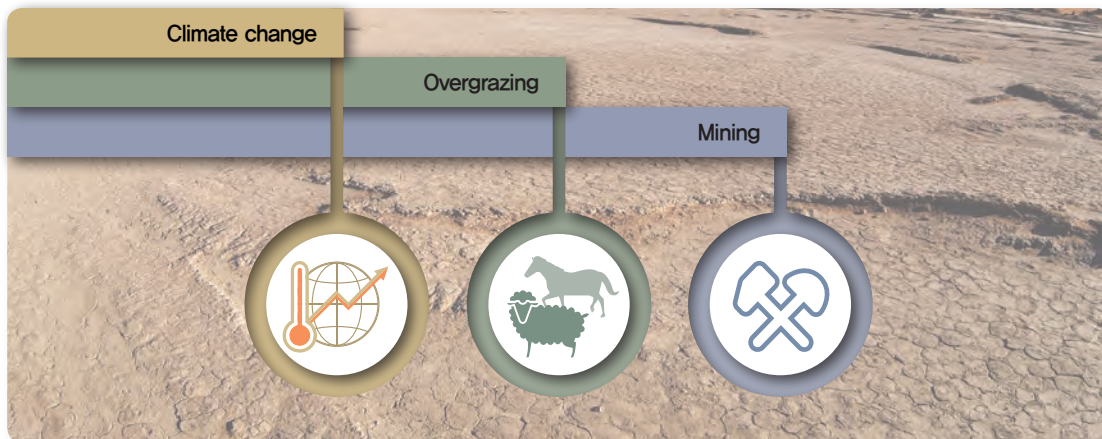
## Why Plant Trees in the Desert?

Mongolia is hit hard by desertification (78 % of its territory is desertified) - Dust and sandstorms (DSS) from the desert adversely affect the Northeast Asian region.

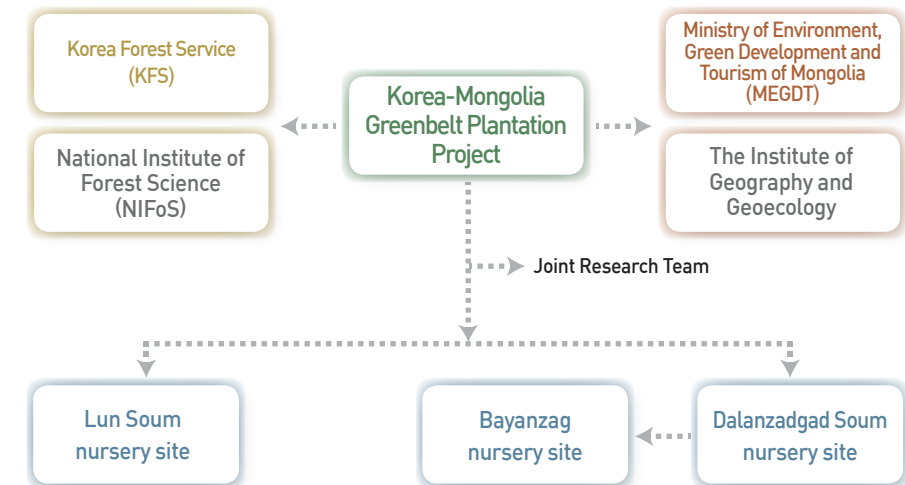
## The Gobi Desert: A Major Source of DSS in Northeast Asia.



## The Spreading Desert



## Trees Planted Together



## A Globally Successful Model Established for Combating Desertification





# Turning the Desert into a Forest

## 01 Afforestation to Combat Desertification

- Creation of greenbelt plantations
- Establishment and management of tree nurseries

## 02 Education & Training

- Education centers for afforestation technology
- Training workshops for Mongolian experts
- Greenbelt training programs

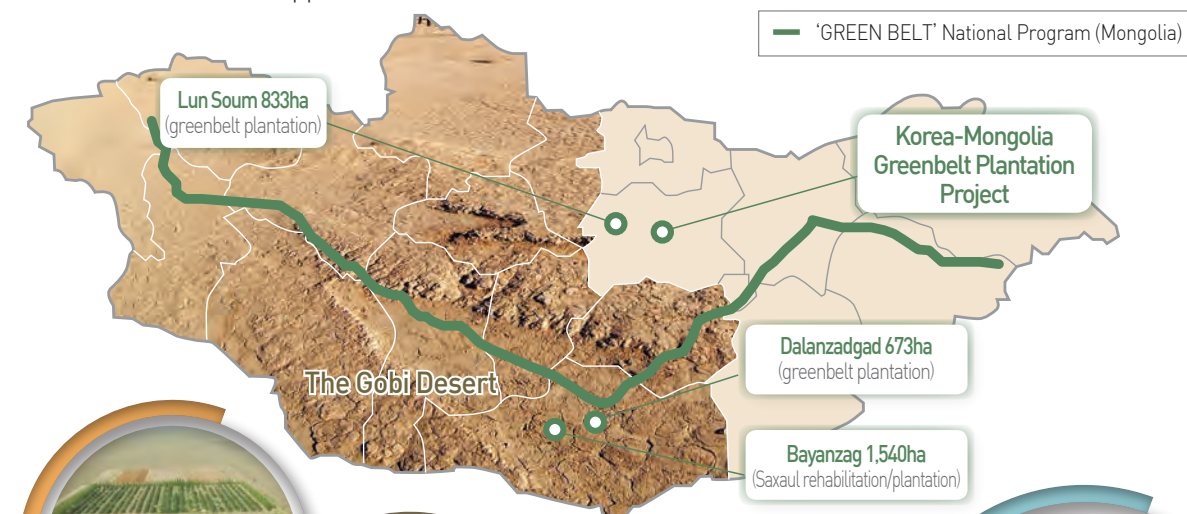
## 03 Collaboration & Joint Research

- Amended soil and pest control
- Research on the rehabilitation of indigenous tree species
- Capacity building on desertification, climate change adaptation, etc.

## 1. Tree Planting for Combating Desertification



- Afforestation area (approx. 3,046ha)



Tree planting to combat desertification



Operation of tree nurseries



Production of seedlings

- Establishment and Management of Tree Nurseries

Nursery Site	Establishment year	Area	Main Tree Species
Lun Som	2007	20ha	Ulmus pumila, Hippophae rhamnoides, Populus spp, Caragana arborescens, etc.
Dalanzadgad	2007	24ha	Ulmus pumila, Hippophae rhamnoides, Tamarix ramosissima, Elaeagnus moorcroftii, etc.
Bayanzag	2013	1ha	Haloxylon ammodendron (bare root seedlings)



## 2. Nurturing the Future of Forests

- Education centers for afforestation technology (2 sites)
- Training for forestry and ecology experts and local residents (7,822 people)
- Invitation to training programs in Korea (148 people)



Education center for afforestation technology



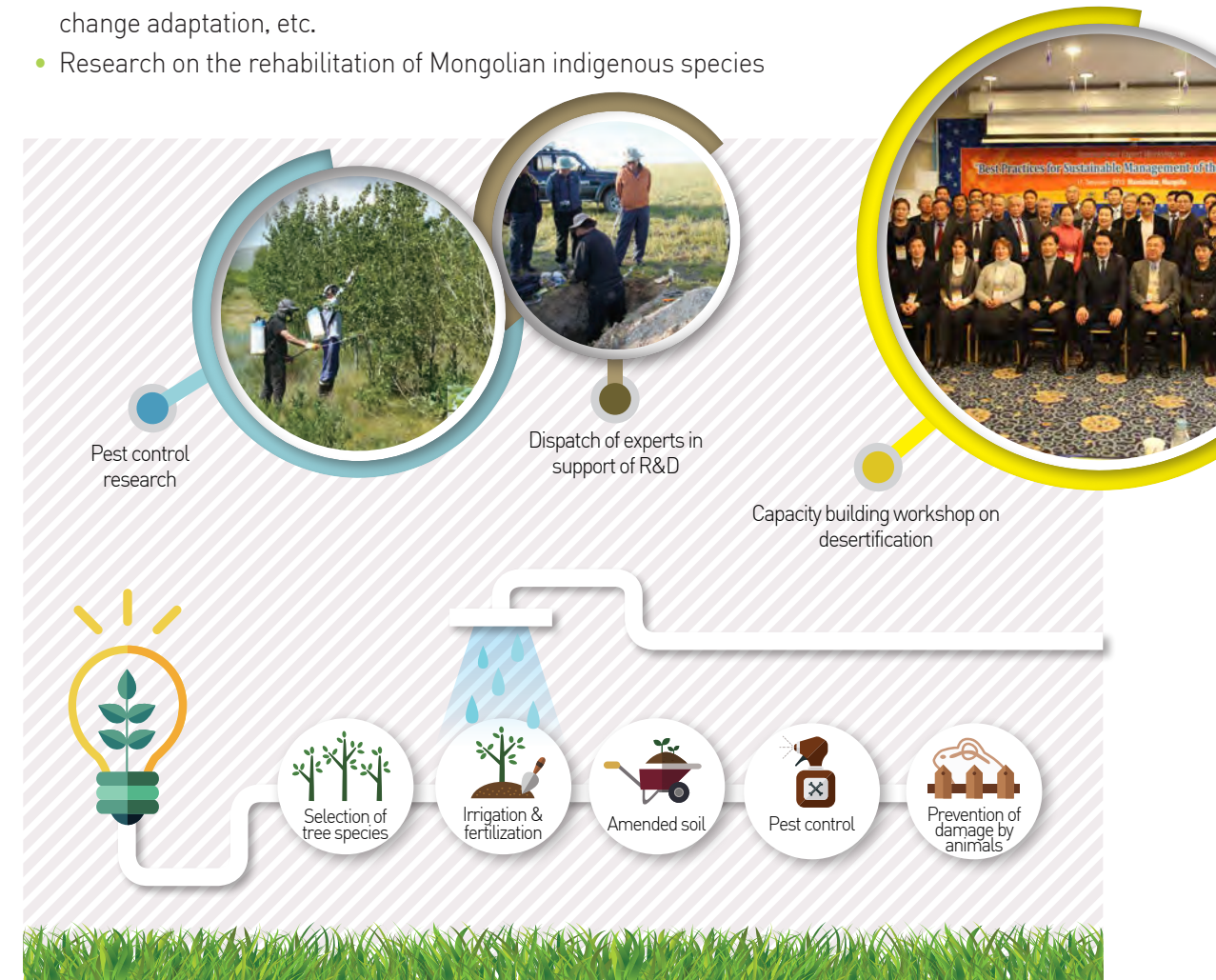
Training for experts and local residents



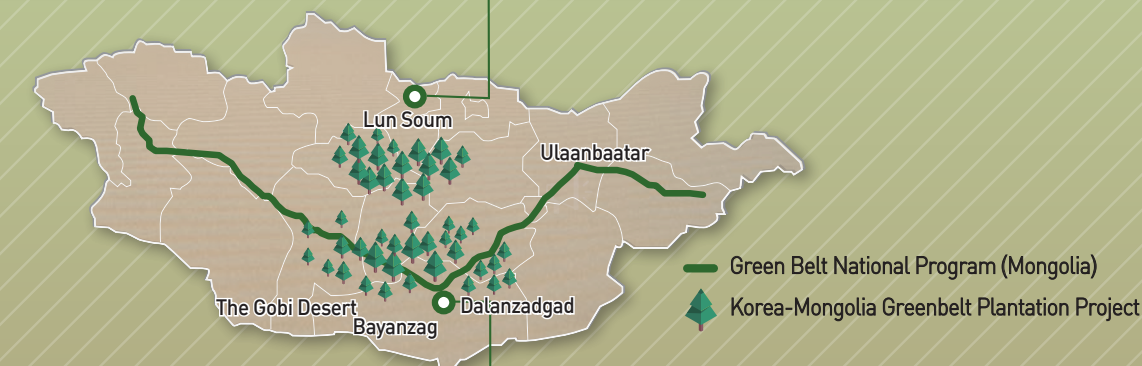
Tree planting education for students

## 3. Research Cooperation for a Better Future

- Joint research for plantation technology development
- Short term/long term dispatch of experts in support of R&D
- Capacity building symposiums and workshops on desertification, Korea-Mongolia climate change adaptation, etc.
- Research on the rehabilitation of Mongolian indigenous species



# 10-year Tree Planting in Mongolia





## Korea-Mongolia Greenbelt Project in Photos

01 Afforestation 02 Operation of tree nurseries 03 Hands-on tree planting program 04 Education center for afforestation technology 05 Capacity building workshop 06 Pest control training 07 Training for Mongolian experts 08 Tree planting event 09 Exhibit on joint tree plantation project / seedling donation ceremony 10 Promotion of the greenbelt project 11 World Day to Combat Desertification ceremony

		04	05
01	02	07	06
03		09	08
		10	11



## Korea-Mongolia Greenbelt Plantation Project for a Better Future

### 1. Mongolia's recognition of tree care and planting needs



- Establishment of the Arbor Day (2010)
- Creation of laws for combating desertification (2015)
- Reinforced roles of forestry organizations (2015)
- Nationwide "Plant One Million Trees" campaign (2015)
- "Plant a Tree" campaign in the South Gobi desert (2015)



### 2. Towards a better future



Korea-Mongolia Greenbelt Project Phase 2 (2017-2021)

- Phased transfer of plantation / capacity building on plantation management
- Creating an urban forest with ecology and recreation in harmony
- A systematic, multi-stage training program
- Joint research for sustainable plantation management
- Stronger cooperation with CSOs for sustainable afforestation





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