

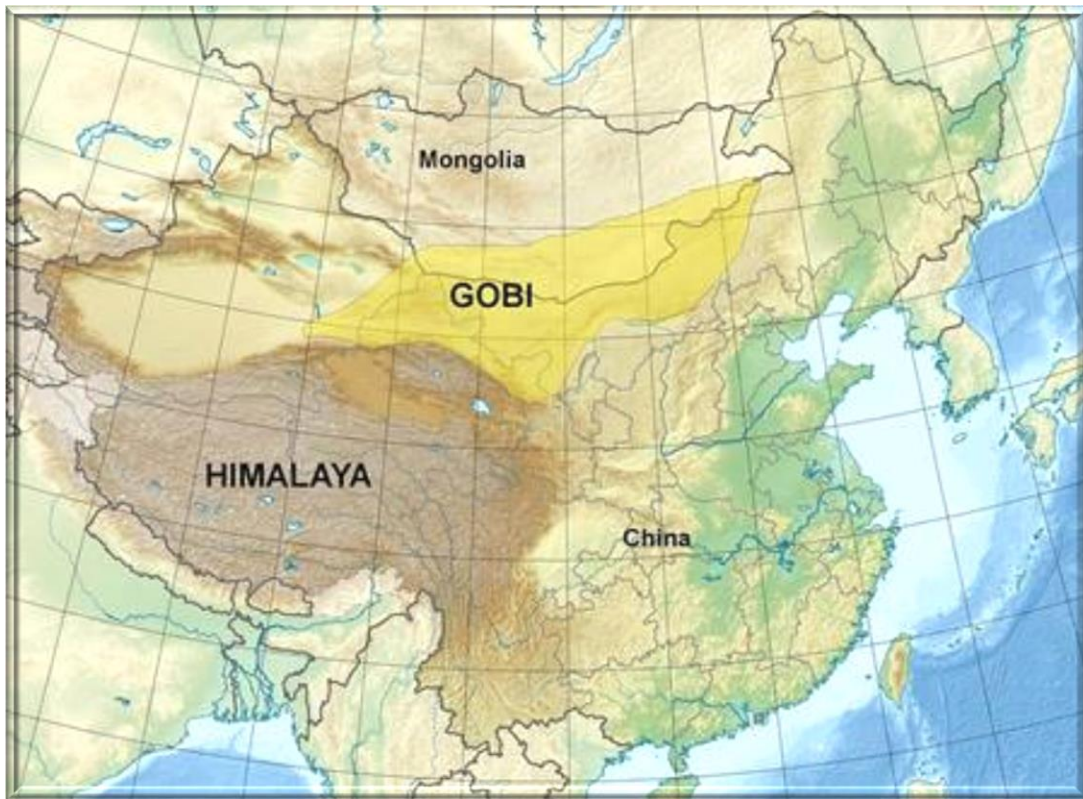
# The Green Great Wall

## Centennial Community Project jointly by Rotary Korea and Mongolia

By Herbert K. Lau (劉敬恒), Founder and Honorary Member

Niislel Rotary Club, Ulaanbaatar, Mongolia

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Sometimes global problems seem so, well, global, especially when it comes to the environment. It can get downright overwhelming when you are constantly bombarded with headlines that scream, “EU Warns of Global Climate Chaos” (*The Guardian*) and, “Pollution in China out of Control” (*Edmonton Journal*). And then there are all the alarming statistics: The World Bank projected that, on average, 1.8 million people would die each year between 2001 and 2020 because of air pollution.

What the desertification problem means for Mongolia is 140,000 sq.km. of unusable territory, 683 streams that have dried up in recent years and a 10% reduction in cliffs compared to 1940. As a matter of fact, the yellow sandstorm is a major health and environmental hazard for the whole northeast Asian region as the desertification continues to expand uncontrollably in the Gobi Desert located at the Greater Mongolian Region.

Lifted by northwesterly winds, some one million tons of yellow sand swarms over northeast Asia as it travels south from Mongolia's Gobi Desert to the Korean peninsula during the annual storms. Along the way, the equivalent of 5,000 truckloads of pollutant-carrying dust falls to the ground below.

For neighbouring countries, however, the clouds of sand of Gobi Desert mean respiratory illnesses and darkened skies, sometimes to the extent that airports must be shut down. Traces of the desert sand have been found in Kansas of the United States too.



*Yellow Dust alert Korea today and tomorrow --- Spring dust particles form above the greater Mongolian region to be blown towards the Korean Peninsula resulting in "Yellow Dust".*

## Centennial Community Project “Keep Mongolia Green”

And who, but the Rotarians, should try to find an answer to this seemingly insurmountable regional problem? In commemorating the Rotary Centennial in 2005, Korean and Mongolian Rotarians took the opportunity to challenge the yellow sandstorm as a way to celebrate Rotary.

To fight the sandstorms and their harmful effects on the environment and public health, district governors in Korea initiated the “Keep Mongolia Green” Project which is to build a forest windbreak “Green Wall” in the Gobi Desert. The “Green Wall” evokes memories of the Great Wall built by the Chinese to keep the Mongols out. This wall, however, is intended to stop the growing desertification affecting Mongolia. With the “Green Wall”, Mongolian Government aims to “protect itself and the whole world from an extremely serious problem: the sand of Gobi Desert, gathered by storms of central Asia and transported towards the east”, with consequences alerted in China and Korea. The “Green Wall” benefits not only Mongolians but Koreans as well, who suffers from the yellow dust and sand storms that are regular unwelcome visitors from the Gobi Desert every spring.

To finance the Project, each of the 16 Korean districts contributed US\$10,000 from its District Designated Fund (DDF). The effort also received a US\$150,000 Matching Grant from The Rotary Foundation of Rotary International. In addition, the Mongolian Government donated 500 hectares of land and US\$50,000 of in-kind labour.

A 3 km long “wall” made of pines, willows, junipers, thorn bushes and other trees, to cross the desert along the border with China. This was the initial part of a planned project by Mongolia that should cost at least 150 million dollars and be completed within 30 years or so.

Mongolian Prime Minister Tsakhiagiin Elbegdorj (Цахиагийн Элбэгдорж) praised the effort as “a great pilot project” in preparation for “a green revolution to solve desertification and sandstorm problems”.

### Rotary-in-Action

The Project was a multi-national, multi-district, and inter-disciplinary effort. The Centennial Governors from the 16 districts in Rotary International Zone 9 (Korea) organized and contributed US\$160,000 from the DDF. All of the total 7 Mongolian Rotary clubs in District 3450 (1. Bayanzurkh 100; 2. Gobi; 3. Khuree; 4. Niislel; 5. Tuul; 6. Ulaanbaatar; 7. Zuunmod) contributed by establishing a steering committee to prepare and oversee implementation of the Project, which has met regularly since October 2004. In May 2005, 94 Rotarians, Rotaractors, and their family members made the long trip from Korea to the middle of the Gobi Desert in Mongolia, to plant trees, erect posts for the wire fences to protect the newly planted trees from animals, and set pieces of stones to fixate sand dunes. About 200 Mongolian Rotarians, Rotaractors and their families joined the action.

Planting 80,000 trees of local origin over 80ha site, starting a couple of nurseries to continue planting in the future, and digging 2 new and refurbishing 5 old wells were the main programs for the largest Matching Grant project Rotary Korea has ever had in its 78-year history.

Invaluable technical support came from the GeoEcology Institute of Mongolia (ШУА-ийн Геоэкологийн Хүрээлэн) and the Northeast Asia Forest Forum in Korea, without their knowledge and experience, the Project would have not been realized.

The Rotary Foundation contributed with the maximum amount allowed for a major Matching Grant (MG#54104), US\$150,000, and the Mongolian Government provided US\$50,000 for labour and administrative expenses making the total budget of US\$360,000 for the Project.

Since May, there have been 4 individual Grant teams from Rotary Korea of District 3600, District 3650, District 3690 and District 3700. Each made a weeklong trip to the South Gobi area to follow up



and ensure the success of the Project; and the result was a survival rate of 80% of young trees, whereas the expected survival rate for the first summer was at the most 70%.

Although trees in Mongolia have a long growing period (Mongolia, on average, experiences only 90-120 frost-free days a year), trees help to bind the loose soil and thus are effective against erosion, help reduce wind, dust and desertification, attract rainfall and help build suitable conditions for biodiversity -- all very important in the (increasingly) desert steppe environment of Mongolia's middle Gobi.

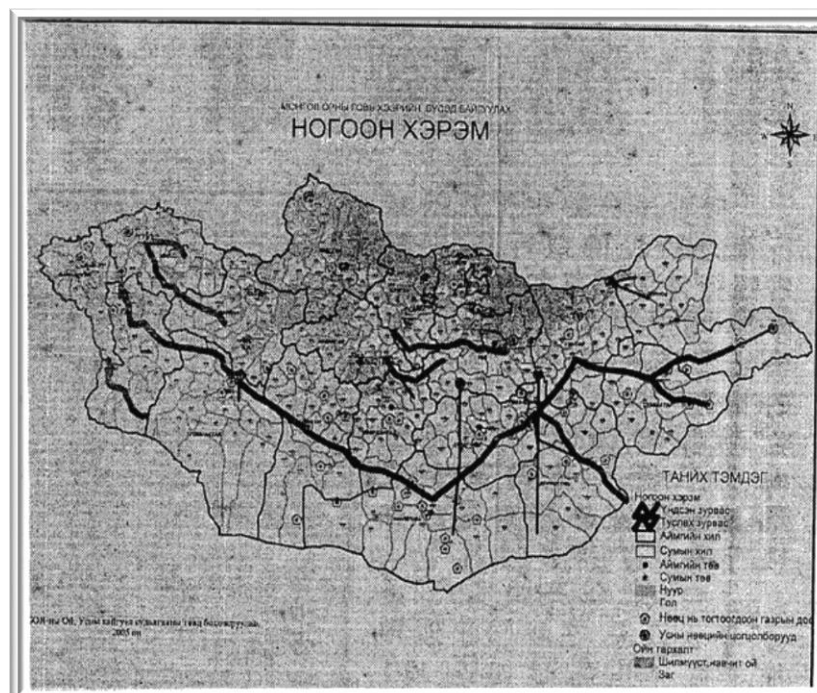
Thus, the "Green Wall" has become an urgent need for Mongolians: already 400,000 trees have been planted in the past three years. Arid desert regions of Mongolia, prone to drought and desertification, are now being changed into lush woodlands.

In October 2008, 《The Rotarian》 magazine gave a pictorial report 《A Tree Grows in Mongolia》 on the progress of the Rotary Action. The full story of 6 pages is reprinted here on Pages 8-13.

### 30-Year "Keep Mongolia Green" Project

In order to alleviate and ultimately solve the serious problems currently facing, the Mongolian Government introduced the long-term afforestation policy and implementation plan of the national "Keep Mongolia Green" in February 2005.

The program is implemented in three phases: the first phase is from 2005 to 2015; the second phase is from 2015 to 2025; the third phase is from 2025 to 2035. This plan will be completed within 30 years, when a Great Green Wall will appear in the eastern and western parts of the country (*see sketch map below*), with a length of more than 3,000 kilometers and a width of 500 meters to one kilometer. The total forest area will increase by 1.6%. The "Green Great Wall" planning committee is composed of Mongolian Prime Minister, Minister of Natural Environment, representatives of state-run and non-governmental organizations, and domestic and foreign experts. Fiscal expenditures are funded by congressional budget funds, loans from international organizations, foreign non-reimbursable aid, donations, and the Foundation for the Protection of the Natural Environment. The total investment is estimated to be 200 million US dollars.



## Korea-Mongolia greenbelt forestation project

In 2008, the Korea-Mongolia greenbelt forestation project began by planting trees in the Lun District of Tov Province, around two hours by car from Ulaanbaatar, and in Dalanzadgad, the capital of Omnigovi Province, or South Gobi Province.

Korea and Mongolia signed a memorandum of understanding in 2006 to support the Mongolian government's greenification program, which aims to prevent deserts from spreading and, ultimately, make the landlocked country greener.

The trees planted in the desert regions are species that are naturally resilient to arid climates, like the dwarf elm, the salt cedar and the saxaul tree. This year, around 600 hectares of trees were planted. By the end of year, a total of 3,000 hectares of trees will have taken root in the Mongolian desert.

Since the project's inception, the Korea Forest Service (KFS) has trained some 200 Mongolian civil servants on afforestation and forest management. The KFS also set up a training center in Mongolia and educated around 5,000 local residents and students about the importance of planting trees.

When the need arises, the KFS dispatches forestry experts to Mongolia to give advice on pest control. Experts from the two countries have also been collaborating on research in areas such as greening practices and anti-desertification activities and technology in Mongolia.



*The once arid Lun District in Mongolia's Tov Province is now being covered with lush trees thanks to the Korea-Mongolia greenbelt forestation project.*



# “Keep Mongolia Green”

## Rotarians Challenge Yellow Sand Storm

by Sang Koo Yun (PDG 3650)

“I will make sure that the trees you planted continue to grow well!” shouted a second grade boy who walked straight toward me out of a crowd of students gathered as I was in the process of explaining to them that, “There is a limit to the number of trees we can plant and ways to maintain them. And it’s up to students like you to look after them and keep planting more to make the dreams of Korean Rotarians for a green Mongolia come true.”

The little boy’s proclamation was the most delightful assurance of the Keep Mongolia Green project’s value - not that a donkey offered by an old nomad and a camel offered by another appreciative native were worth any less. We had a hard time explaining politely why we were not able to accept these gracious gifts, which are the most prized possessions for their households.

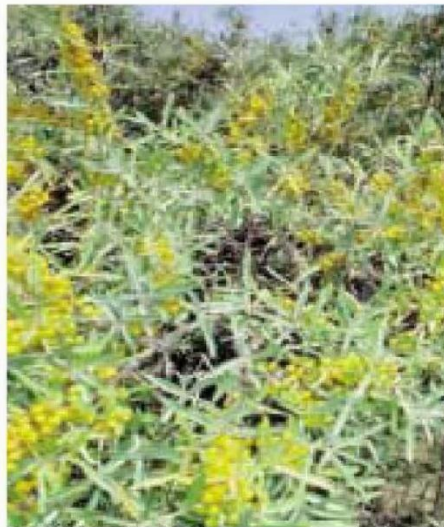
In May of this year, 94 Rotarians and Rotaractors, made the long trip from Korea to the middle of the Gobi Desert in Mongolia, to plant trees, erect posts for the wire fences to protect the newly planted trees from animals, and set pieces of stones to fixate sand dunes.

Planting 80,000 trees of local origin over 80ha site, starting a couple of nurseries to continue planting in the future, and digging 2 new and refurbishing 5 old wells were the main programs for the largest Matching Grant project Rotary Korea has ever had in its 78-year history.

Named “Keep Mongolia Green”, the project



▲ PDG Sang Koo Yun  
▼ *Hippophae, the fruit tree is also referred as “Vitamin Tree”*



▼ (Left) A tree planted by Rotarians, residents and students. Local species were chosen.  
(Right) Rotarians are celebrating The Rotary Centennial

benefited not only Mongolians but Koreans as well, who suffers from the yellow dust and sand storms that are regular unwelcome visitors from the Gobi Desert every spring.

As a matter of fact, the yellow sand storm is a major health and environmental hazard for the whole northeast Asian region as the desertification continues to expand uncontrollably in the Gobi Desert.

And who, but the Rotarians, should try to find an answer to this seemingly insurmountable regional problem? In commemoration of the Centennial, Korean Rotarians took the opportunity to challenge the yellow sand storm as a way to celebrate Rotary.

The project was a multinational and interdisciplinary effort. The centennial governors from the 16 districts in Zone 9 organized and contributed US\$160,000 from their DDF. All of the Mongolian Rotary clubs contributed by establishing a steering committee to prepare and oversee implementation of the project, which has met regularly since October 2004.

Invaluable technical support came from the GeoEcology Institute in Mongolia and the Northeast Asian Forest Forum in Korea; without their knowledge and experience, the project would have not been realized.

The Rotary Foundation contributed with the maximum amount allowed for a major matching grant (MG#54104), US\$150,000, and the Mongolian government provided US\$50,000 for labor and administrative expenses making





the total budget of US\$360,900 for the project.

Since May, there have been 4 Individual Grant teams from D-3650, D-3700, D-3600, D-3690. Each made a weeklong trip to the South Gobi area to follow up and ensure the success of the project; and the result is a survival rate of 80% of young trees, whereas the expected survival rate for the first summer was at the most 70%.

The success of the project won many hearts, and Korean Rotarians have decided to continue to fight desertification and to assist the local people to obtain experience and knowledge in planting trees and to gain hope.

So the dream continues and another major Matching Grant is in the works: the Kharakhorum Horticulture Development Project with about US\$300,000 budget (MG#58099) has been established.

Unfortunately, good things often come with a high price to pay. Last August, several current DGs from Korea visited Mongolia to finalize the new project site. They were very satisfied with the proposed site, Kharakhorum. On the way back to Ulaanbaatar, however, tragedy

struck and a terrifying auto accident occurred. Among the injured was, DG Min-Dong Ahn of D-3740, who was paralyzed below the waist and, is still in the hospital. But his determination has not failed. During my visit immediately after he had undergone surgery for neck fractures, he whispered to me, "Please be sure to make the Kharakhorum Horticulture Project a success." And recently he asserted to the visitors that, "I will go to the planting site even wheelchair bound." What an incredible enduring commitment, in spite of great personal loss! He is truly a living example of "Service Above Self."

Although it seems impossible to make the Gobi Desert green, and one may wonder why anyone would risk his or her own life by going to a remote country like Mongolia to serve others, who else would venture out and have the courage to do such a feat other than Rotarians? Only the Rotarians would share their assets for a dream to be achieved beyond their time, without ever knowing the beneficiaries, in order to promote peace and better lives for the generations to come. ☺



▲ A large billboard on the way to the airport from the capital Ulaanbaatar.



▲ Cheerful Mongolian students are greeting and thanking Korean rotarians

## The spirit of Service above Self tides over the adversity against Governor Mine Dong Ahn and Governor Yeoung Cagn An

"Please inform the district members that there is no need to worry and I will complete the official visit to the clubs in my district even with wheelchair bound" said Governor Mine Dong Ahn of District 3740 lying on a hospital bed. The lower half of his body became paralyzed in a car accident, as the van he was riding in rolled over a ditch during an on-the-site survey.

The survey team of five governors, including Yeoung Cagn An of District 3590, Young Sam Kim of District 3640, Dae Jin Shin of District 3650, Mine Dong Ahn of District 3740, and PDG Sang Koo Yun of District 3650 made a trip on August 9 to Mongolia to go over the site selected in order to build a windbreak forest belt in South Gobi Desert on May 21. The project will be carried onto this year in the designated area in Harholem. The members of the survey team were riding three separate vehicles with Mongolian Rotarians, Mongolian government officials, and drivers.

"I've never seen first-aid treatment like this for forty years. The patients have undergone high-quality treatments and are in stable condition. In the result of this car accident, Governor Yeoung Cagn An almost went in a syncope state. But I am proud that he survived with a strong will," said Dr. Kwang Tae Kim, director of Rotary International.

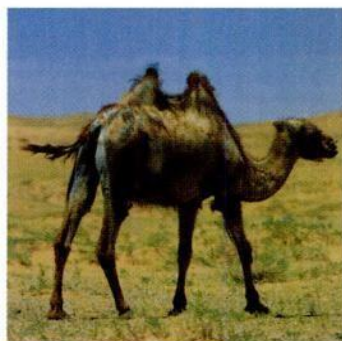
Governor Mine Dong Ahn suffered from a fractured neck and a dislocated disk. In addition, the lower half of his body is paralyzed. He is being treated in Gangnam St. Mary's Hospital. Governor Yeoung Cagn An was in critical condition at St. Mary's Hospital. He was being treated for malfunctioning of the lung. Currently, he is undergoing rehabilitation therapies.

Director Kim, who paid a visit to both governors, said, "Mongolia will become green for sure. Having a strong will of even one person can make a difference. The two governors' willingness to fulfill the project and the spirit of Service Above Self will never be forgotten. 50,000 Rotarians around the world will keep praying for them." ☺



▲ (Top) The site of accident on the way back from Kharakhorum on August 12th  
(Blow) DG Ahn who is paralyzed from the accident but wants to plant trees next spring even in wheelchair





# A TREE GROWS IN MONGOLIA

Rotarians stage a  
green revolution to bring the  
Gobi Desert back to life

TEXT BY DIANA SCHOBURG

PHOTOGRAPHY BY MONIKA LOZINSKA-LEE

Yellow sand storms in the Gobi Desert whip up dust that blankets Beijing and causes Korean residents to wear face masks and close schools; dust from the harsh Mongolian landscape has been found as far away as Kansas, USA. But Rotarians are fighting the sand through the Keep Mongolia Green initiative. Launched by 17 districts in Korea for the Rotary Centennial in 2005, Rotarians planted 94,000 trees in the initiative's first year to create an 80-hectare windbreak forest in the South Gobi. Each year since then, a project in a different area of the country has been added, creating a mosaic of demonstration sites for forest windbreaks and agriculture. "What we saw was basically a hope that it is possible to plant a tree or to grow a tree in the Gobi Desert," said Sang Koo Yun, past district governor of District 3650 in Korea, who has played a lead role in this initiative. To date, 220,000 trees have been planted.







**Below:** Pipes carry water from a tank to the fields at the eco park outside the village of Choir in Govisumber Province. The project is one of five underway in the Keep Mongolia Green initiative, which will be featured in *RVM: The Rotarian Video Magazine*.  
**Previous pages:** New saplings sprout in Karakorum in the Orkhon Valley. It rained more than usual this year, good for growing trees.







**Top left:** Members of the Rotary Club of Tuul, Mongolia, are the host partners for the Choir project, which includes a breeding nursery for the trees in the windbreak and an orchard of rare Gobi trees and shrubs. The Mongolian government has selected the project as a demonstration site for its "Green Wall" initiative, in which it plans to plant a 2,500-kilometer belt of trees to reduce desertification. **Above:** Volunteers from the village work side-by-side with Rotarians. Here, village children visit the fields.





**Top left:** Crops such as potatoes and cucumbers, shown here, are cultivated in fields at the Choir site. **Top right:** Seedlings get their start in new greenhouses. **Above:** A villager tends to the plants. The Choir Eco Park is planned to be a permanent field station for research in ecology and field biology that will serve five provinces. The US\$350,000 project was funded by contributions from 17 RI districts in Korea, seven Rotary clubs in Mongolia, Mongolian governmental agencies, and a Matching Grant from The Rotary Foundation.



**Below:** Eric Erdenebat Rentsen (left), president of the Rotary Club of Niislel, Mongolia, and a professional horticulturist working at the Choir project inspect a plant. The Niislel club will be the host partner for the 2009 Keep Mongolia Green project, creating a model "green village" by teaching the residents of the small community of Erdene, near Ulaanbaatar, to plant trees, vegetables, and flowers.

