Cultivating a Common Future

5-Year Strategy Report of Green Asia Network

Green Asia Network

Cultivating a Common Future

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Contents

Foreword

Every year, 1,200 ㎢ of farmland and pastureland is lost to land degradation. A total of 20,000,000 ㎢ of land spread throughout 110 countries, an extent twice the size of China, has already undergone desertification with drought and land degradation directly affecting 1.5 billion people. According to UN reports, the global population will reach nine billion by 2050 and 100% more arable land is required to support sufficient food production. However, such land is rapidly disappearing.

Climate change has generated an unprecedented range of serious problems, such as threatening biodiversity, causing food shortages, depleting water, instigating conflicts, and triggering a mass migration of eco-refugees.

In Mongolia, the average temperature has risen to 2.1 Celsius over the past sixty years. This is compared with the global average temperature, which has increased 0.89 Celsius over 100 years. This temperature change has had a devastating impact on the country, leading to the disappearance of 1,166 lakes and ponds and 874 rivers and streams resulting in 78% of the country succumbing to desertification. Such environmental changes have brought about mass extinctions (two-thirds of plant and animal-life) and threatened the livelihood of the pastoralist population, which comprises about 40% of the population in Mongolia.

This strategy report serves to present a solution to the climate change crisis. Local communities suffering from climate change need sustainable land management practices that focus on poverty alleviation while also integrating the environment, society, and economy for adaptation to climate change. Since 2000, Green Asia Network has worked with local communities affected by desertification. Together, we have successfully restored the eco-system through land restoration. This work was recognized in 2014, when a distinguished jury of international experts recognized these practices by unanimously agreeing to award Green Asia Network first place in the annual UNCCD Land for Life Award.

With over fifteen years of experience in the field, we've developed effective models and methods that have resolved both environmental problems and the socio-economic distress of the various communities we worked with in Mongolia. We want to offer these practices as they may be worthwhile and applicable to other areas confronting land degradation and climate change. We also encourage those working in other countries directly affected by these problems to share ideas, practices and information. Through this participation and cooperation, we aim to form TerrAsia, a global partnership that will cultivate a common future.

As this is a worldwide problem, we will work together with the international community to respond to climate change, desertification, land degradation and drought. By working together, we can and will save lives and our planet from climate change.

Oh, Ki Chul

Secretary General
Green Asia Network


SPORTS

Cultivating a common future

The Green Asia Network (GAN) brings people together to lead sustainable lives in harmony with nature through sustainable land management activities.

We focus not only on land degradation, but also on empowering local people by training them in forestry practices to manage project sites. We work with them to form cooperatives to manage their communities and promote job creation while pursuing a goal of self-reliance through sustainable agriculture.

Since 2000, Green Asia Network has trained 2,800 locals in Mongolia in forestry practices and sustainable agriculture to restore degraded lands and to improve the livelihoods of 14,000 people. We have also brought together over 25,000 volunteers (21,700 Mongolians and 3,700 Koreans) to work on sustainable land management projects, resulting in the planting of 501,000 trees at six sites (total of 500 hectares) in Mongolia. With the recent opening of Green Asia Network's Myanmar office, we look forward to replicating our success with our new programs in the central region, an area suffering from desertification and land degradation.

Vision
An Asia safe from climate change

Mission
To bring people together to lead sustainable lives in harmony with nature

Core Values –
Harmony –We live and work in balance with the environment
Responsibility –We have responsibility for protecting nature and the planet
Innovation –We continually strive to find new methods and approaches in our work
Solidarity – We bring local communities and stakeholders together in our work
Partnership – We are partners with a variety of actors – both international and domestic

Strategic objectives

- Apply a human security approach
- Achieve climate change adaptation and mitigation

As set out in the 1994 United Nations Development Programme Human Development Report (HDR) and in the 2005 World Summit Outcome, the human security approach aims to address current and emerging threats to the survival, livelihood and dignity of people. These threats may be cross cutting as security includes a universal and interdependent set of freedoms – the freedom from fear, the freedom from want, and the freedom to live in dignity. The 1994 HDR provided seven specific components: Economic, health, personal, political, food, environmental and community dimensions. While this is neither a definitive nor exhaustive list, it demonstrates the interdependent concept of human security. This broad approach recognizes the interconnection between human rights, development, and security, and provides a people-centered, comprehensive, context-specific and prevention-oriented response.[1]

In a world where desertification, climate change, and land degradation affect not only those in developing countries, but also those in developed countries, a human security approach underpins our programs to provide holistic solutions for people and the environment. This involves collaborating on intersecting threats with a variety of partners from international institutions to local actors. To ensure our work has a sustainable effect, we work with those affected by climate change. As partners with the local community, we support their self-reliance and strive to provide the necessary resources to empower them to tackle the socio-economic problems brought on by climate change.

[1] Gomez, O. A. & Gasper, D. (2013). Human Security: A Thematic Guidance Note for Regional and National Human Development Report Teams. United Nations Development Programme Human Development Report Office.

Through our projects and activities, our work concentrates on programs to mitigate food and water scarcity, raise the capacity of communities and alleviate the suffering of environmental refugees. This is achieved primarily by empowering local communities and training them in sustainable land management (SLM)[2] in the rural areas of Mongolia and Myanmar, which are constantly threatened by desertification. In Mongolia, desertification has resulted in an increase in the severity of Asian dust storms that plague Eastern Russia, China, Korea, and Japan. These storms, which originate in the desertified areas of Mongolia and Northern China, mix with pollutants, and travel throughout Northeast Asia causing acid rain, land degradation, crop destruction, and a variety of health problems. While the desertified lands of Myanmar have not contributed to this phenomenon, they have led to poverty for farmers and major crop destruction. As land is integral to people's livelihoods and sustenance, promoting a harmonious long-term coexistence with nature works towards preserving the environment while simultaneously ensuring its future productivity for people.

GAN addresses these problems not only through direct intervention, such as SLM, but also through engaging people with education and outreach. This is done through policy research, environmental education, and eco-tours; all of which seek to change structural and social impediments that threaten people and the environment.

[2] Sustainable land management (SLM) – According to the UN Earth Summit in 1992, SLM is defined as "the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions" TerrAfrica defines it as "the adoption of land use systems that, through appropriate management practices, enables land users to maximize the economic and social benefits from land while maintaining or enhancing the ecological support functions of the land resources."

Case Study: Mongolia

According to the Government of Mongolia, 78% of the country is suffering from desertification, which has been further exacerbated by an increase in the annual average temperature by 2.1°C over the past sixty years. As a result, this has led to the disappearance of:

_ 887 rivers and streams

_ 2,069 springs

_ 1,166 lakes and ponds

Extreme weather frequently visits the country with a devastating effect. This particularly affects the rural population that relies heavily on animal husbandry, which is also a source of land degradation due to overgrazing. From 1999 to 2002, severe winters (called *Dzud* in Mongolian) killed 11 million livestock, leaving 12,000 households as environmental refugees. The increasing severity of desertification also threatens Eastern Russia, China, Korea and Japan as dust from the degraded Mongolian land mixes with toxic pollutants and spreads throughout Northeast Asia, causing health problems, damaging the local environment, and disrupting economic activity by reducing air visibility.

As a response, GAN's activities apply a human security approach by targeting the environmental aspect of this threat as well as interrelated issues, such as those related to the community, poverty, gender equality, health, and food. In order to effectively do this, Green Asia Network has applied its Sustainable Regional Development Model (SRDM), which is based on sustainable land management practices. This model was developed from GAN's experience in restoring degraded land and combating desertification. It has been scaled up and replicated across six sites in Mongolia.

With over a decade of experience, Green Asia Network has found that the most effective method must address both the environmental problems and the socio-economic distress of the local community to be sustainable and successful. Therefore, a cornerstone of the SRDM involves the

active participation and involvement of the community. Through forestry and land rehabilitation, Green Asia Network promotes self-reliance by creating a variety of economic opportunities for locals affected by desertification. While working with us on environmental projects, the local people acquire the skills and knowledge necessary to simultaneously continue forestry projects and earn an income from agriculture and agroforestry. During the duration of their employment with Green Asia Network as field staff, they gain experience and income that later serves to sustain their households and their community. This process ensures the long-term sustainability of Green Asia Network's environmental projects by embedding livelihood opportunities at the core. As many of the local workers at the sites are former eco-refugees or coming from another region, building a sense of community and solidarity remain critical to foster cohesion and maintain participation.

The process begins by recruiting local residents in areas affected by land degradation. Green Asia Network provides participants with a wage and trains them in forestry during the winter months. These orientation sessions include education on Green Asia Network, its activities and the purpose of the projects. Green Asia Network instructors encourage discussion among students as participation is vital to cultivate a critical understanding of the environment. Additional classes offer more specialized and advanced topics, such as afforestation, agriculture and greenhouse management and operation.

Afterwards, the participants are assigned to a field staff. The types of activities they engage in depend on the site's conditions. Green Asia Network has adjusted its SLM practices according to the environmental conditions of its sites. For example, Bayannuur, once known for its fruit tree farming, has suffered rapid desertification. As it is located in the steppes with a nearby depleted lake, Green Asia Network's major activities involve lake rehabilitation, installation of a solar plant system, reforestation, and fruit tree cultivation. This differs from the urban models of Bagannuur and Songino, which focus primarily on urban afforestation, and barren land models, such as in Dondgovi, a city surrounded by barren land where the Green Asia Network staff is specially trained in methods of afforesting barren land.

In order to generate income for the local community, local people engage in fruit tree cultivation and agriculture. The profit from the harvest is saved in a collective fund managed by an informal cooperative. Eventually, this money will serve as the seed money for investment in establishing a community cooperative.

Green Asia Network provides a wage for a limited time; sufficient time for the land to recover for agricultural purposes and for local people to acquire the experience necessary to reap the benefits from cultivating crops to achieve self-sustainability and reliance.

Impact

Increase in grassland production

According to a report by the Japanese National Institute for Environmental Studies, which conducted research on land degradation in Mongolia, grass production in degraded areas was 0 kg, while in reforested areas, such as Green Asia Network's sites, average grassland production was 3.2 ton per hectare.

Elimination of dust sandstorms

Dust sandstorms plague many areas in Mongolia. From 1991 – 2009, such occurrences increased nearly three-fold as grasslands disappeared. This was especially apparent around villages, indicating that they were a source.

After Green Asia Network's activities, a survey was conducted on residents living near the sites and revealed that dust storms no longer affected the villages. For example, at a site in the Bayannuur District, Green Asia Network forested 120 hectares in a village, which eliminated dust sandstorms in approximately 1,200 hectares of land surrounding the activity site. It should be noted that this impact was observed at all of Green Asia Network's sites that suffered from dust storms (six sites).

Land fertility improvement

Root nodule bacteria, a critical component in fertilizing land, was absent when Green Asia Network first surveyed its sites before beginning work. After implementing land restoration projects, a high number of root nodules, up to 0.5 centimeter in size, were found. This has led to an increase in grassland productivity, which established the necessary conditions for people to cultivate crops and undertake additional agricultural work.

Permafrost restoration and water retention

The Japanese National Institute for Environmental Studies conducted research in Mongolia, finding that permafrost covered nearly 60% of the country. However, climate change has brought on rapid permafrost depletion, along with the destruction of top soil by desertification. Both of these changes affect the water retention of soil. When Green Asia Network began preparations for its activities, it found that on average the soil retained 5% water, while 40% evaporated and

55% was lost in run-off. After four years of reforestation and land restoration, the average water retention rate for soil increased to 35%, while both evaporation and run-off fell to 20%.

Improved economic opportunities

Based on Green Asia Network's experience, it takes approximately five years of afforestation work to restore degraded land. Local participants earn income through planting seedlings and raising saplings, which are eventually sold to Green Asia Network for $3 USD per tree. For instance, in Bayannuur and Erdene, approximately 20,000 – 30,000 trees a year are sold, generating $60,000 to $90,000 for the thirty-five participants in those areas.

Participants also work in agriculture, such as fruit tree cultivation. Sea buckthorn and black currant sell for $3 USD and $5 USD per kilogram respectively. Green Asia Network continues to work with the local community to develop business opportunities that enable them to sell their produce directly to customers, allowing sellers to earn a higher profit. Considering the number of fruit trees already planted, this can generate a total of $500,000 USD ($400,000 from sea buckthorn and $100,000 from black currant). All profit earned from these sales will be retained by the local community, and they will decide collectively on how to invest the money.

Sustainability of results

After extensive effort and testing, Green Asia Network's Sustainable Regional Development Model (SRDM) has proven successful in sustainability through its expansion to other areas in Mongolia. Trees have an average survival rate of 80%, and Green Asia Network recently opened an office in Myanmar to apply its best practices and SRDM to combat land degradation in the country's dry zone.

Advocacy, knowledge sharing and awareness-raising

Since 2011, Green Asia Network has contributed to knowledge-sharing by producing a variety of manuals on afforestation and agriculture, which it distributes to partner NGOs to disseminate its best practices. It also runs a variety of educational programs throughout Mongolia, Myanmar and Korea. These are often in the form of eco-clubs and volunteer groups through local universities and high schools. Student participants are taught about the environment and then given the opportunity to volunteer at sites affected by desertification. This provides not only a classroom education, but also hands-on experience meant to foster a deep understanding of the impact of land degradation.

Case Study: Mongolia

Among the most innovative of these programs is the eco-tour, which serves as a powerful mechanism for raising awareness by taking participants to affected areas and showing them firsthand the impact of climate change. This is accompanied with education on climate change and desertification, and an opportunity to work with locals on forestry projects. Participants are diverse with over 600 Koreans and over 3,000 Mongolians taking part annually.

In 2010, Green Asia Network created a sustainable village in Erdene, called 'Sky Village' to apply its accumulated skills and experience. It's composed of a small population (15 households with a total of 60 people) who were formerly pastoralists threatened by climate change. Sky Village serves a secondary function of being an education tool to share best practices and showcase Green Asia Network's SRDM

In addition to these activities, Green Asia Network also employs conventional advocacy strategies that include publishing a monthly magazine in Mongolia to distribute to project sites and working with the government of Mongolia on policy initiatives.

Empowerment of vulnerable groups

Green Asia Network is committed to ensuring that people affected by land degradation have the capabilities and experience to sustain themselves while also nurturing the environment. Therefore, GAN's work is implemented through consultation with local people, approximately 600 of whom are eco refugees. Each month, the local participants and a Green Asia Network project leader gather to discuss current activities and future endeavors and events. At many of the sites, the local people have been brought together from different areas to work on a project; thus, these meetings serve the dual purpose of empowering local people while fostering a sense of community among them. For example, one of the ideas that came from a meeting in Bayannuur led to people coming together to host a local market to sell their fruit harvest and clothes to pay for children's books.

History

1990s

1996 A group of activists with a diverse range of expertise gathers to discuss applying their skills to contribute to society.

1998 These discussions culminate in the formation of the Korean Human Network (KHN), an organization composed of 300 experts united to improve society and challenge the status quo. In its first year, the KHN holds several meetings for NGO capacity building.

1999 As the KHN continues to organize capacity building meetings for civil society, it decides to concentrate its efforts on addressing the most critical problem affecting Asia. Two international symposiums are held with participants from Korea, Mongolia, Taiwan, China and Japan. A group of these participants forms the East Asia NGO Policy Alliance to identify a prevailing problem among their respective countries. Climate change eventually emerges as the predominate threat.

As a result, the KHN feels that informing people about climate change is imperative for capacity building. Through the dissemination of information and the sharing of knowledge, people can be empowered and mobilized to initiate change. At the same time, the KHN leverages its existing connections to expand its network with Asian NGOs.

History

2000s

2000 The KHN obtains its non-profit organization (NPO) status, and directs its attention to combating desertification in Mongolia by launching afforestation[3] projects.

2001 The KHN signs a memorandum of understanding with the Mongolian Ministry of Nature, Environment and Tourism for the Korean-Mongolian-Japanese NGO Cooperation Project on Combating Desertification.

2002 The Korean Human Network changes its name to Citizens Information Center (CIC) as a response to its shift to spread knowledge about climate change among people.

2003 CIC holds the Energy 21 Forum.

2004 Korean Air signs a memorandum of understanding with CIC to provide resources for the establishment of the Forest of Happiness. In return, the CIC trains new Korean Air staff as part of an initiative to strengthen the staff's environmental awareness and corporate social responsibility.

2005 CIC develops the Youth International Exchange Program for Building the East Asian Community with the Korea Youth Center.

[3] Afforestation – Establishing trees or a forest in an area which, historically, has not contained trees.

2006 CIC earns Global Environment Facility (GEF) accreditation.

The District of Baganuur in Mongolia presents CIC with an award for its contribution in combating desertification and in improving local living conditions in the area.

The Mongolian Ministry of Nature, Environment and Tourism requests CIC to begin work on the Greenbelt Bayannuur Project.

2007 The CIC establishes a Mongolian branch in Ulaanbaatar.

2008 The CIC becomes Green Asia Network (GAN) to reflect an expanded focus on addressing environmental problems in Asia.

For its environmental achievements, GAN receives an environmental leadership award from the Mongolia Ministry of Nature, Environment and Tourism and a presidential citation from the Korean president.

Yokohama Tire, Korea International Cooperation Agency (KOICA), and Korea Hope Foundation partner with GAN to offer support.

2009 GAN launches a new project to help the local community generate income through the management of fruit trees. The Korean Ministry of Health and Welfare provides funding for GAN and several volunteers from the Seoul Volunteer Center to visit Laos to learn about poverty and environmental problems.

An annual volunteer group, the Green Asia Keepers, is established with the purpose of educating young people about climate change by visiting local schools and launching various campaigns.

2000s

History

2010s

2010 GAN earns consultative status with the UN Economic Social Council (ECOSOC) and NGO accreditation to the United Nations Framework Convention on Climate Change (UNFCCC).

GAN and KOICA enter a three year contract for official development aid in which KOICA will invest in solar energy systems and afforestation activities.

2011 GAN serves as the co-chair of the steering committee of the Civil Society Organization Network to Combat Desertification of Korea and provides consultation to the United Nation Convention on Combating Desertification (UNCCD) for the 10th Conference of Parties of the UNCCD.

GAN launches a side event, the Youth Green Forum on Action for Combating Desertification, and holds a seminar on Sustainable Land Management (SLM).

GAN organizes a trip funded by the Korea University of Technology for students to provide skills training to the local community in the Philippines as part of a program to relieve poverty.

2012 Dream of a Tree, an Incheon-based theater troupe, tours Incheon schools performing Can *We Save the Earth*, an environmental play.

2010s

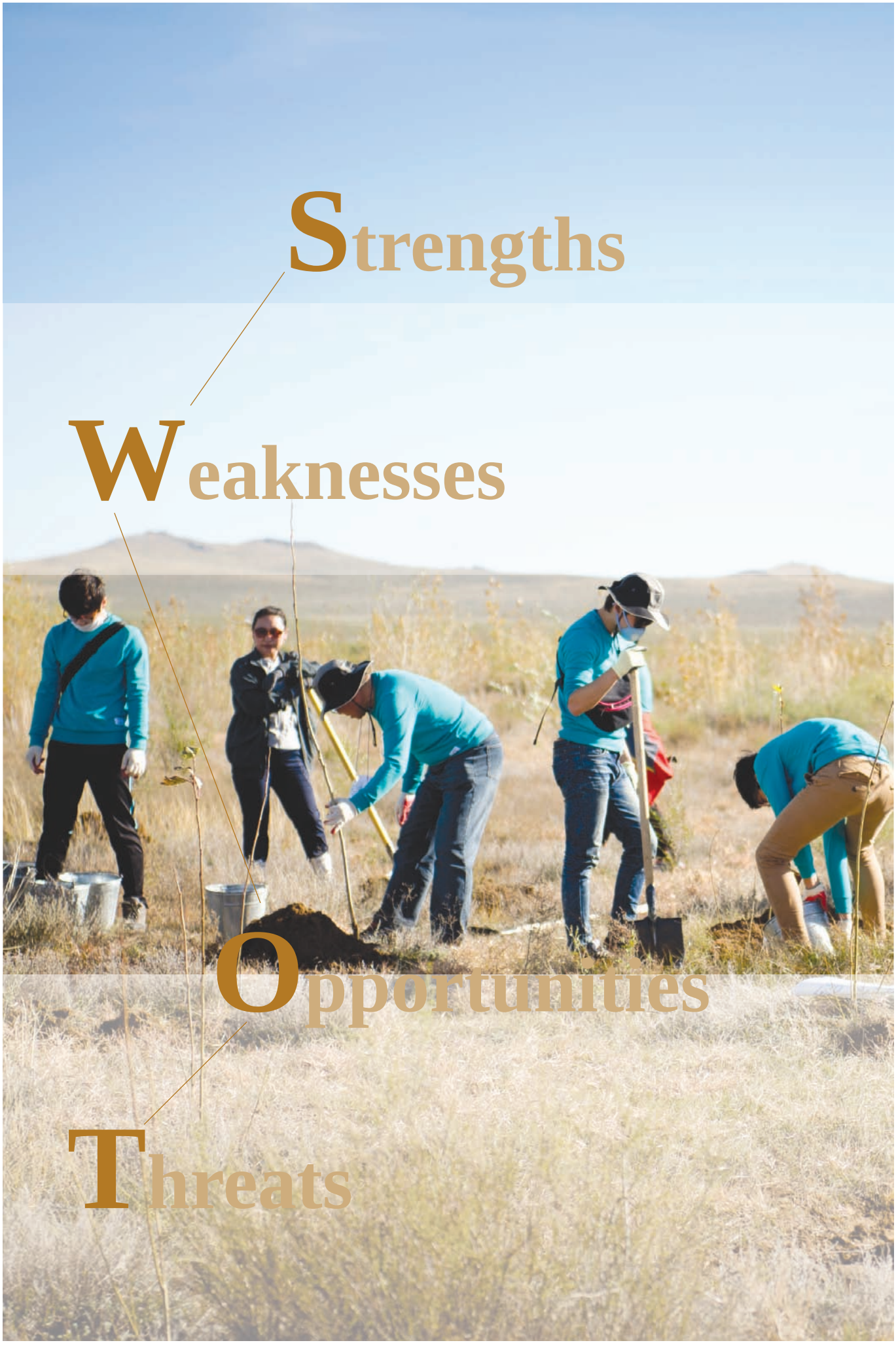
2013 GAN hosts the Green Climate Fund Seminar with the National Assembly of Korea[4].

GAN hosts a seminar on the Direction of Korea's International Development and Cooperation with Myanmar.

2014 GAN opens its second branch in Myanmar to begin capacity building with the local community to tackle land degradation and desertification.

A jury of international experts of the UNCCD Secretariat selects GAN as first place winner for the Land for Life Award in recognition of its impact and scale on improving the lives of people and restoring the environment.

[4] The National Assembly of Korea is the unicameral legislature


Strengths
Weaknesses
Opportunities
Threats

SWOT Analysis

Strengths

The strengths responsible for Green Asia Network's achievements and success include:

- A strong and diversified network of supporters from international and domestic civil society, government, and institutions
- A dedicated staff, systematic communication and a clear division of roles among the headquarters, branch offices and local community; all of which is aligned to realize GAN's vision and values
- A consistent capacity and model for implementing projects from 15+ years of accumulated knowledge, skills and experience in combating climate change
- An on-site presence in affected areas, which provides meaningful impact and strong integration and alignment between GAN's mission and activities

Weaknesses

Through careful reflection and review, Green Asia Network identified the following weaknesses:

- Shortcomings in fundraising capacity that lead to unstable funding
- Weak media network, which hinders publicity on GAN's activities.
- Financial constraints severely limit project implementation

Opportunities

- A greater concern for and participation in combating climate change as the rising severity of climate change has brought greater awareness among people, governments, and civil society
- A high level of attention from civil society due to an increase in Asian dust in Northeast Asia

Threats

- Despite widespread awareness of climate change, the public remains indifferent and states continue to prioritize economic growth over climate change
- Fearing abrupt economic recessions, people and companies continue to focus on their own financial interests rather than on climate change
- Constant bureaucratic reshuffling diminishes the consistency of policymaking as policies tend to change depending on the political party in power

GAN will implement a variety of activities to counter these threats while also addressing its weaknesses and leveraging its strengths to exploit opportunities.

- As a large portion of the threats are associated with GAN's lack of publicity (i.e. lack of funds, low public awareness, etc.), GAN will develop an integrated publicity strategy. This will be reinforced by enhancing and expanding GAN's media network. Both of these will serve as a platform to disseminate information about climate change, the vision of GAN, and its activities

  This includes launching advocacy and publicity programs to increase membership and raise people's awareness of climate change
- To improve financial constraints, GAN will use a variety of fundraising routes, leveraging its wide and diversified network of supporters while gaining additional assistance from a fundraising consulting firm
- As bureaucratic reshuffling and ministry changes can be expected, GAN will employ its political network and redouble its capacity and efforts to lobby politicians and government officers on policy-related matters
- To counter the indifference and economic prioritization of the public, businesses and governments, GAN will increase its consulting, research and education activities (i.e. Eco-tour) to raise awareness and capacity on these different segments to engage, participate and contribute to combating climate change
- Publicity, education and advocacy campaigns will be reinforced with material and information showing the impact of GAN's different field activities
- Lastly, to ensure GAN remains on the frontline of combating climate change, it will expand its best practices on climate change adaptation

Sustainable Regional Development Model (SRDM)

Developed as a response to the initial setbacks Green Asia Network encountered in its first anti-desertification programs, SRDM incorporates an integrated approach to achieve sustainability. Program success relies on the active participation of the community, and in order to gain this support, socio-economic conditions must be addressed. Most of the rural population in Mongolia live below the poverty line and engage in herding to earn income. This has declined to some extent due to the diminishing availability of pasturelands. Therefore, GAN's approach to afforestation involves embedding community empowerment and economic self-reliance in anti-desertification programs.

The process begins by selecting a site threatened by desertification and land degradation. Windbreaks, linear rows of trees planted to prevent soil erosion and promote conservation, are established on the edges of the site. Within the interior, sea-buckthorn trees are reared as a cash crop. As the trees mature, the yields generally increase to about seven kilograms and can sell for $3 USD per kilogram (based on 2013 prices).

Local people are hired to establish and manage the sites. In the winter months, these workers undergo a series of training sessions to learn the necessary forestry skills. The first session provides an overview of Green Asia Network, the purpose of the project, discussions on area-specific environmental threats and lessons on afforestation, agriculture, and vinyl greenhouse construction. This is followed by an annual workshop where the staff and GAN project site managers discuss project details, share ideas and information, and suggest the following year's plan. The GAN managers also conduct project evaluations and worker appraisals to ensure effectiveness and offer monthly capacity-building programs.

In the future, the plan is to encourage community participation and increase employment by organizing a forestry cooperative. Those interested in joining would assume responsibility for rearing 1,000 ~ 1,500 trees in the shelterbelt. After three years, he or she becomes a full member and is given 300 sea buckhorn trees to manage. The revenue from the sale of the harvest is deposited into the cooperative's collective account and saved as seed money for future income-generating ventures.

SRDM is implemented in the following project sites:

Name	School Yard Afforestation Project
Location	Ulaanbaatar
Size	5ha
Duration	2010-Present
Project Type	Afforestation
Inputs	Elm and Willow
Forest Classification	Windbreak and school forest
Partnerships	Incheon Civil Environment Roundtable (2010) Ulaanbaatar Education Administration Ministry of Education, Culture and Science of Mongolia
Description	Planted 5,000 trees at 10 schools, including Erdmiin Orgil School

Name	Afforestation Education Project - Initial Stage of Afforestation
Location	Ulaanbaatar
Size	25ha
Duration	2000-2005
Project Type	Afforestation
Inputs	Poplar
Forest Classification	Windbreak and afforestation of school grounds
Partnerships	Yokohama Policy NGO (2000-2004) Korean Community of Mongolia (2003-2004) Korean Air Lines Co. (2004) Mongolian Branch of Global Civic Sharing (2005)
Description	Planted 23,000 trees on the grounds of the Child Welfare Institution, Dr. Taejoon Lee Commemoration Park, the 32nd School of Ulaanbaatar, and the District of Jargalant Hay Bank

Name	Urban Model of Baganuur
Location	Baganuur
Size	65ha
Duration	2002-2012
Project Type	Afforestation
Inputs	Poplar, Elm and Willow
Forest Classification	Windbreak and flower bed
Partnerships	Korean Air Lines Co. Seoul Volunteer Center Baganuur District Government Baganuur School Ministry of Nature, Environment and Tourism of Mongolia
Description	Planted 77,000 trees in the Korea Airlines Forest & the Forest of Happiness as of June 2011

Name	Steppe Model of Bayannuur
Location	Bayannuur
Size	150ha
Duration	2007-Present
Project Type	Afforestation, lake rehabilitation, and farming
Inputs	Poplar, Elm, Willow, Charchargan (also known as Sea Buckhorn, a type of vitamin fruit tree), Blackcurrant, Apricot, and Acacia
Forest Classification	Windbreak, fruit tree grove, farmland plot, tree nursery, and flower bed
Partnerships	South Gyeongsang Province of Korea, Korea International Cooperation Agency (KOICA) The Citizen's Coalition for Bayannuur District Lake Rehabilitation Incheon Civil Environment Roundtable Yokohama Tires Co. Hope Foundation Christian Solidarity for Environment Galilee Church Hannamu (Yongin Foreign Language High School eco-club) Bayannuur District Government Myclub (Mongolian university eco-club) Ministry of Nature, Environment and Tourism of Mongolia
Description	Planted 155,000 trees in the Asian Forest of Hope as of June 2011, introduced a solar plant system and developed a regional eco-festival and eco-tour

Name	City Model
Location	Songino
Size	30ha
Duration	2008-2009
Project Type	Afforestation
Inputs	Poplar, Elm, and Willow
Forest Classification	Windbreak
Partnerships	Incheon Civil Environment Roundtable Hanuul District Mongolia Forest Administration Ministry of Nature, Environment and Tourism of Mongolia
Description	Planted 22,000 trees in Incheon Forest of Hope as of June 2011

Name	Barren Land Model
Location	Mandalgovi
Size	50ha
Duration	2009-Present
Project Type	Afforestation and development of city garden, and eco-tour and international volunteer exchange program
Inputs	Poplar, Elm, Willow, and Charchargan
Forest Classification	Windbreak and fruit tree grove
Partnerships	Goyang City Government Dondgovi Provincial Government Ministry of Nature, Environment and Tourism of Mongolia
Description	Planted 62,000 trees in Forest of Goyang City as of June 2011

Name	Steppe Exhibition of Best Practices
Location	Erdene
Size	140ha
Duration	2010-Present
Project Type	Creation of eco-village and eco-tour
Inputs	Poplar, Elm, Willow, Charchargan and Blackcurrant
Forest Classification	Windbreak, fruit tree grove, farmland plot, tree nursery, and flower bed
Partnerships	Suwon City Government of Korea Human Mongolia Association, Inc. Korea Forest Service Casstown of Mongolia Erdene District Government Myclub (Mongolian university eco-club) Ministry of Nature, Environment and Tourism of Mongolia
Description	Planted 138,000 trees in the Mongolian Forest of Hope as of June 2011

Name	Steppe Model
Location	Dashinchilen
Size	23ha
Duration	2013-Present
Project Type	Afforestation for combating desertification
Inputs	Poplar, Elm, Willow, and Charchargan
Forest Classification	Windbreak
Partnerships	Incheon Green Environment Center
Description	Planted 25,000 trees

Cultivating a Common Future

5-Year Strategy Report of Green Asia Network

Eco-Tours

Green Asia Keepers

Policy and Research

Green Impact Activists

Eco-Tours

In addition to efforts in the field, Green Asia Network strives to raise awareness about the environment and climate change threats through its eco-tours, which involve bringing together volunteers to visit GAN's project sites to participate in forestry projects and witness firsthand the urgency of climate change response. Participants come from all age ranges and backgrounds.

The basic tour consists of an orientation program in the history and culture of Mongolian or Myanmar, depending on which site the participant will visit. Afterwards, volunteers help the local community with a forestry project, gaining direct experience with combating climate change. As of 2000, over 3,500 Korean volunteers and 21,800 Mongolian volunteers have participated. The success of this has been evident in the positive feedback from participants and the impact it has had on drawing attention to climate change and GAN's field activities.

Green Asia Keepers

GAN believes that young people are essential participants in environmental advocacy. Therefore, it encourages university students in Korea and in Mongolia to join the Green Asia Keepers, a program designed to provide a comprehensive environmental volunteer experience.

The program lasts six months. During orientation, which takes place weekly for the first month, Green Asia Keepers learn about GAN and the environment. Afterwards, they conduct further research on climate change and work together to formulate and implement (if approved), an advocacy campaign. Other activities include visiting Mongolia and touring project sites to participate in forestry work.

Green Impact Activists

The Green Impact Activists, which is a program funded by KOICA through the Korea NGO Council for Overseas Development Cooperation (KCOC), sends dedicated individuals to work on project sites with GAN's field staff. Each participant commits to spend one year in Mongolia or Myanmar. This duration provides intensive exposure in the field while offering Green Impact Activists an opportunity to experience a wide variety of activities, gain an understanding of a foreign culture through intercultural work, acquire forestry skills, and have a positive impact on the environment and the lives of local people.

Before entering the field, participants undergo two weeks of training at GAN. This is designed to provide basic knowledge about GAN and its projects, the

local language, and the environment. An additional two weeks is spent at KCOC learning about international development, international cooperation, cross-cultural skills, and safety and security.

Once the participants arrive in Mongolia and Myanmar in early March, GAN's branch offices offer further training on the customs, language and conditions. They're then sent to different sites and assigned a field manager who will provide training specialized for working at that particular site. This process lasts until November when the cold weather subsides, at which time, the participants will begin work and submit daily progress reports on their activities.

Policy and Research

In addition to its role on the ground, GAN is also dedicated to improving government policy and practice through policy analysis and advocacy. Since its beginning, GAN has engaged a variety of government actors and parliamentary members through dialogue, symposiums, forums, and seminars. These efforts have led the Korean Government to give greater attention to desertification and Asian dust (also referred to as yellow dust), a seasonal meteorological phenomenon in which particulate matter mixes with pollutants and spreads across Northeast Asia. GAN has also worked at the local level, helping municipal governments mainstream environmental awareness and producing guides for policy development.

International Symposium on the Desertification of Asian Dust (2006)

Before 2006, the Korean government had little concern on combating desertification, despite the growing severity of Asian dust storms that afflicted the nation. At the time, the understanding that desertification, a source of Asian dust storms, was largely a product of climate change remained tenuous, if non-existent in Korea. This was reflected in the Korean Government's budget that allocated only $600,000 USD to combat desertification and Asian dust.

In 2006, GAN conducted research on desertification and climate change and organized a symposium to disseminate its findings and report. While most preventive strategies for Asian dust targeted China as the source, GAN found that Mongolia significantly contributed to the situation as a result of desertification, and it presented evidence that climate change induced desertification. This prompted eleven members of Korea's National Assembly, who were in attendance, to investigate further by visiting Mongolia twice that year. Based on these trips and GAN's report, the Assembly Members proposed a $10,000,000 USD increase in the budget to combat desertification and Asian dust. The government's approval of $6,000,000 marks an achievement not only in terms of focusing Korea's efforts on desertification mitigation and expanding the scope to include Mongolia, but also in mainstreaming the problem of Asian dust and desertification among government bodies, the parliament, and NGOs.

Research for the National Institute of Environmental Research (2008)

In 2008 and in 2009, the National Institute of Environmental Research, which produces research to inform government policy, commissioned GAN to research the conditions of desertification in Mongolia and to develop response strategies and models. GAN produced a report in 2008, *Research on the Conditions of Yellow Dust and Response Strategies in Mongolia*, which presented several case studies of anti-desertification programs. It also provided an in-depth study on the influence of climate change on Mongolia and the impact of Asian dust from desertification on Korea and Japan. The report concluded by presenting a variety of mitigation responses. In 2009, GAN produced a second report, *Research on the Development of Alternative Models for Combating Desertification and Yellow Dust Mitigation*, containing comprehensive statistics and information on Mongolia.

These reports marked the first time such research had been produced in Korea and rectified inaccurate knowledge about Mongolia's impact on Asian dust in Korea. Previous estimates by the Korea Meteorological Administration estimated that 24% of the Asian dust derived from Mongolia, but GAN's research found that this was in fact much higher at 50%. The Ministry of Environment of Korea presented GAN's findings during a cabinet meeting, and this brought an expanded focus on addressing the source of Asian dust. No longer was China exclusively seen as the origin as the Korean government readjusted statistics to reflect GAN's findings and dedicated greater attention to Mongolia.

Wonju City Guide Book for Climate Change Response (2008)

The Korean government's increasing interest in desertification spread to municipal governments. In Wonju City, a group of environmentally-concerned professors from the Yonsei University Wonju Campus recommended to the city council to initiate efforts to raise awareness of climate change. Wonju City responded by commissioning GAN to develop an environmental guidebook, the first of its kind for a city in Korea. GAN wrote it not only to educate the public, but also to inform policy development. It continues to be distributed to university and high school students for education.

Gyeonggi Province: Evaluation of Improvement of Regional Energy Project in Gyeonggi Province (2008)

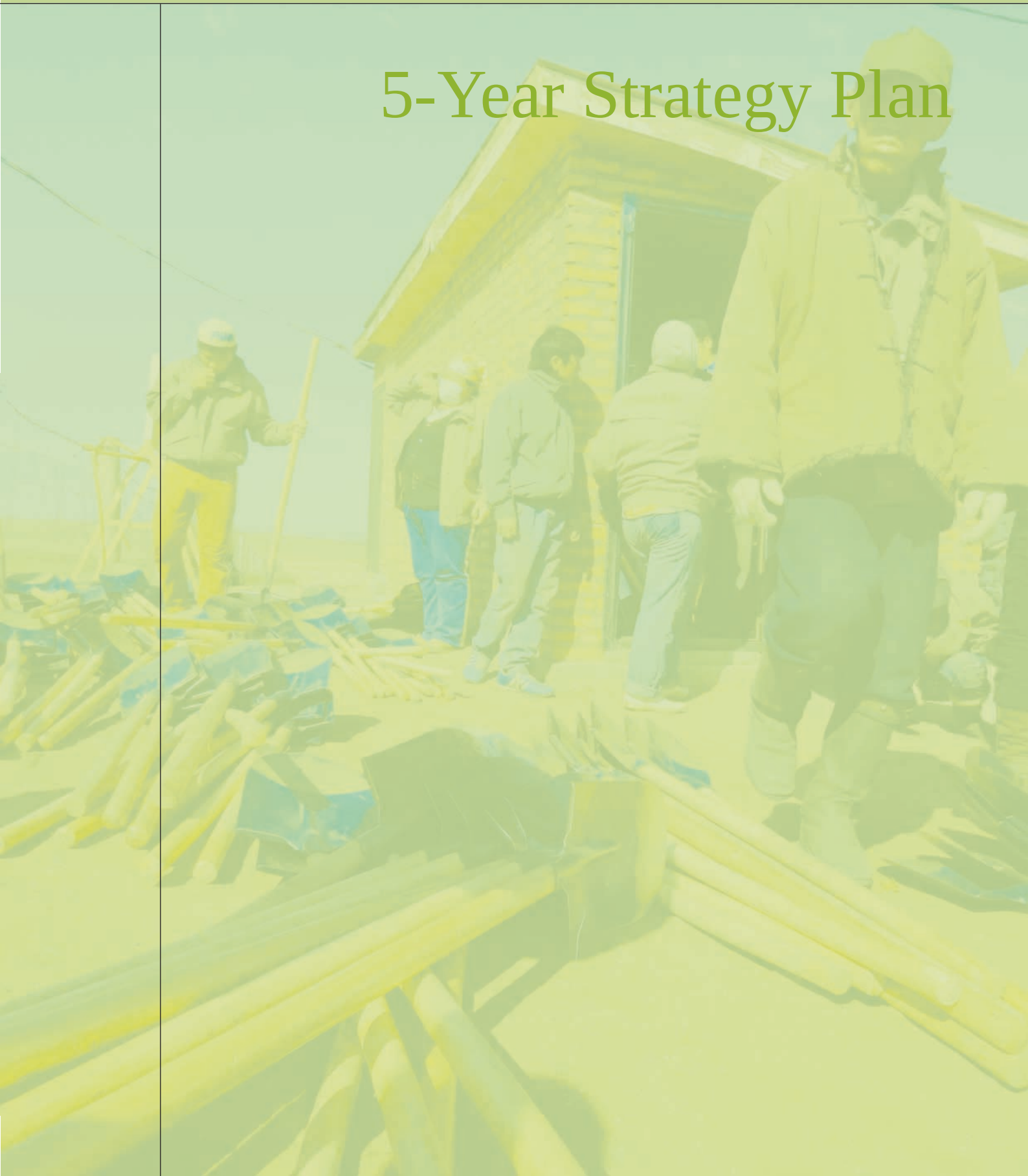
The impact of GAN's research work has gone beyond policy development. After evaluating the implementation of Gyeonggi Province's regional energy project in fourteen cities, GAN uncovered corruption, which it detailed in its evaluation report. This prompted the Board of Audit and Inspection to investigate two districts. It confirmed that two officials had mishandled funds and used cheap components in solar energy systems, causing them to malfunction. After the publication of GAN's evaluation report, these problems were resolved.

Geumcheon District Action Plan for Combating Climate Change (2012)

In 2011, Geumcheon District asked GAN to developing an environmental action plan. GAN studied a variety of policies before developing a general plan, which was later expanded to include a detailed implementation plan. These plans covered 2012-2020 and detailed a wide range of topics, providing a comprehensive response for climate change. The Guemcheon District adopted and integrated these policies, eventually becoming the first district (out of 25 districts) to receive the Evaluation of Environmental Management Award (2013) from the Seoul City Mayor in recognition of its achievement in climate change mitigation. This led other districts to look into the possibility of replicating GAN's work in their policies.

Cultivating a Common Future

5-Year Strategy Report of Green Asia Network



5-Year Strategy Plan

5-Year Strategy Plan

GAN's 5 year strategy is underpinned by the United Nations Convention to Combat Desertification (UNCCD) 10-year Strategic Plan and Framework (2008-2018), which serves as a global framework to strengthen the implementation of the Convention. In 2007, during the 8th Conference of the Parties (COP-8), a global meeting that brings together delegations to address desertification, the UNCCD delegates established objectives and indicators to stem desertification. This strategy serves to align various national and regional activities, policies and programs throughout the world.

The primary focus for Green Asia Network for the next five years will be on developing the foundation of TerrAsia, a regional partnership among civil society, citizens, enterprises, multinational companies and international organizations in the East Asian area (China, Japan, Korea, Mongolia, Myanmar and Taiwan). Modeled after and inspired by TerrAfrica, TerrAsia intends to achieve the similar goal of expanding and scaling up sustainable land management practices across its respective region to build the resilience of land affected by degradation, climate change and desertification.

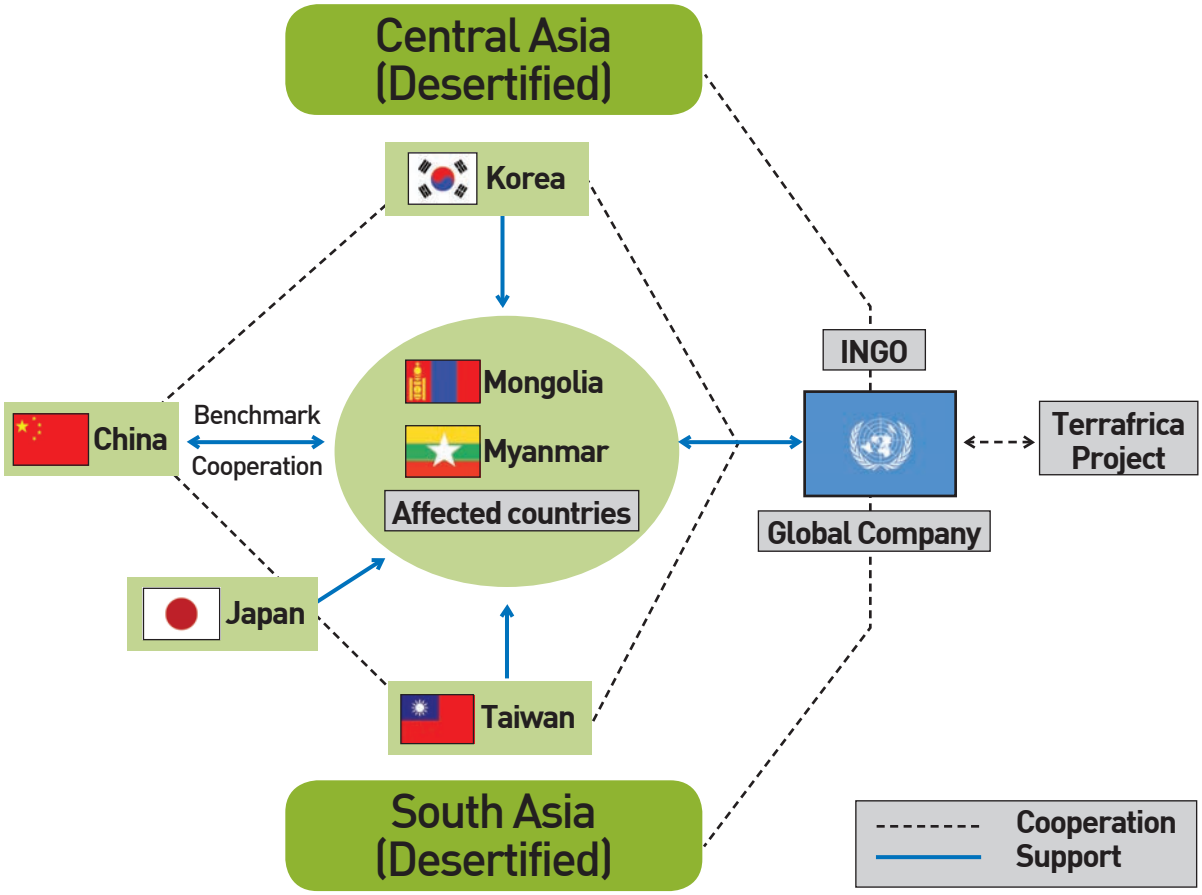
TerrAfrica

TerrAfrica is an initiative formed by 23 sub-Saharan nations, the European Union and several international and inter-governmental organizations that support the improvement and expansion of land management practices by increasing investments, strengthening capacity building for institutions, and enhancing coordination among regional, national and local governments and stakeholders. According to its website, its mission is articulated through three activity lines:

- **Coalition building** - Mobilizes partners in a coalition to advocate a common vision of sustainable land and watershed management (SLWM), share analyses, set the foundations for strengthening and harmonizing policy dialogues and strategies, and improve coordination at all levels.
- **Knowledge and management** - Provides a platform for TerrAfrica partners at all levels to identify, generate, and disseminate targeted knowledge that supports decision-making, informs policymaking, advances mainstreaming, helps secure domestic financing, and supports the harmonization of monitoring and evaluation activities by governments, donors, and civil society organizations. In this way, knowledge will be channeled to support investments on the ground that will be undertaken by governments, donors and civil society.
- **Investments** - Seeks to catalyze the mainstreaming of SLWM and the harmonization/ development of investments on the ground at multiple scales, from the local to the national levels (including potential trans-boundary dimensions). Mainstreaming and unlocking investments are viewed here as inseparable, as the long-term success of investments depends on the scope and depth of the mainstreaming effort.

For more information on TerrAfrica, please visit: http://www.terrafrica.org/

5-Year Strategy Plan



The graph above depicts the relationship between the various actors in the TerrAsia Project. Members (including global companies, intergovernmental bodies, and international NGOs) and the governments of China, Japan, Korea and Taiwan will offer support to countries[5] directly affected by desertification. Air pollution will also be addressed as it has become an increasingly pressing concern in China, Mongolia and South Korea.

Within the next five years, GAN plans to develop action teams to tackle air pollution and promote sustainable land management through field operations in affected areas. These teams will develop and launch programs on the ground. Conference teams, the other core element, will collect the best practices from these activities and share them through international conferences and forums,

[5] Inner Mongolia in China, Mongolia and Myanmar

which serve as a platform to network and exchange information, knowledge and practices that can be scaled and applied throughout the world. These two groups of teams will establish the foundation that governments, intergovernmental bodies, global companies, and civil society can build on.

Looking beyond five years, the action and conference teams will lobby governments to continue developing the foundation until TerrAsia is complete. Much like TerrAfrica, governments will play a vital role in terms of financing, resources, and policy. GAN also envisions connecting with TerrAfrica and including West Asian NGOs to create a global network that can foster sharing and collaboration for sustainable land management practices, knowledge and programs. If successful in these regions, it could potentially grow to include governments and relevant organizations in not only Latin America, but also Europe.

GAN's 5-year strategic plan includes four components (Environment, Economy, Society, Advocacy and Publicity) to provide a holistic response to climate change and desertification. The UNCCD 10-year Strategic Plan and Framework (2008-2018) is fully integrated so as to align with global efforts to combat desertification and enhance implementation of the Convention.

5 year strategic plan for Green Asia Network, 2014~2018

	Strategies
Environment	▶ To enhance the living conditions of affected ecosystems through sustainable land management projects ▶ To generate global benefits through effective implementation of international guidelines ▶ To improve the air quality in China, Mongolia and South Korea
Economy	▶ To improve the living conditions of affected populations by forming a cooperative to improve income ▶ To enhance the capacity-building of the local community ▶ To apply appropriate technology and skills using a communal basis (which consists of blending traditional and innovative knowledge) to cultivate fruit and cash crops
Society	▶ To improve the conditions of affected society ▶ To improve gender equality and children's rights as women and children are particularly vulnerable to climate change ▶ To raise awareness and capacity-building through vocational schools (created in China, Mongolia, and Myanmar)
Advocacy & Publicity	▶ To mobilize resources to support the implementation of the Convention through building effective partnerships between national and international actors using the TerrAsia network ▶ Foster and train local people as instructors, who can then provide peer education to the community

[6] This amount, as determined by the Chinese Government, is the set amount needed to reduce the air pollution related to coal and manufacturing

[7] Total afforest in Mongolia and Inner Mongolia (1,000 + 1200 x .21) + afforestation in Myanmar (500 x 5) = 2,962 tons

[8] Afforestation can lead to an absorption of air pollution

[9] Land restoration has a multiplier effect whereby for every one hectare of land restored results in a reduction of dust sandstorms in more than10 hectares.

Outcome	Impact
▶ Afforestation goals: Mongolia - 1,000ha; Inner Mongolia – 1,200ha[6] ; Myanmar – 500ha ▶ Reduction of CO2 by 2,962 tons in affected areas[7] ▶ Recovery of 2,700ha of ecosystem while also reducing air pollution[8] ▶ Reduction of sandstorms in 27,000ha[9] ▶ Creation of a model that China can extend and apply to other project sites ▶ Reduction in the total area affected by desertification/land degradation and drought ▶ Increase in net primary productivity in affected areas ▶ Increase in carbon stocks (soil and plant biomass) in affected areas ▶ Increase in areas of forest, agricultural and aquaculture ecosystems under sustainable management	▶ Land productivity and other ecosystem goods and services in affected areas are enhanced in a sustainable manner, contributing to improved livelihoods ▶ The vulnerability of affected ecosystems to climate change, climate variability and drought is reduced ▶ Sustainable land management and combating desertification/land degradation contribute to the conservation and sustainable use of biodiversity and the mitigation of climate change
▶ Reduction of eco-refugees by 6,750 people[10] ▶ 30% increase in income for those in the cooperative ▶ Reduction of the number of criminals by 3% (202 people)[11] ▶ Decrease in number of people negatively impacted by the processes of desertification and drought ▶ Increase in the proportion of households living above the poverty line in affected areas ▶ Reduction in the proportion of the population below the minimum level of dietary energy consumption in affected areas	▶ People living in areas affected by desertification/land degradation and drought to have an improved and more diversified livelihood base and to benefit from income generated from sustainable land management
▶ Reduction of eco refugees by 6,750 individuals ▶ Reduction of criminals through the use of vocational schools with an expectation to train 350 people	▶ Affected populations' socio-economic and environmental vulnerability to climate change, climate variability and drought is reduced
▶ Creation of conference and action teams for forming TerrAsia ▶ Increase in the level and diversity of available funding for combating desertification/land degradation and mitigating the effects of drought[12] ▶ Development of policies and measures to address desertification/land degradation, mitigating the effects of drought in seven nations	▶ Increased financial, technical and technological resources are made available to affected developing country Parties

[10] Hire one household for every two hectares. The average household has five members. (2,700 hectares/2) x 5 = 6750

[11] Average crime rate is 3%. Thus, 6750 x 3% = approximately 202 people

[12] For example, if Mongolia (1000ha x $20) + China (1200ha x $10) + Myanmar (500ha x $20) have a minimum total budget of $420,000, then GAN will set aside 10% ($42,000) annually for global alliance development. However, due to annual fluctuations in the budget, the actual amount will vary, although the total percentage allocated will always be 10%.

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www.greenasia.kr