

项目背景

荒漠化是世界性的生态环境问题。在气候变化的全球背景下，荒漠化对内蒙古东部地区的影响也更加直接而深远。而日益恶劣的环境、与劳动不成正比的低收入，正在不断割裂着这土地和生活在这土地上的人。

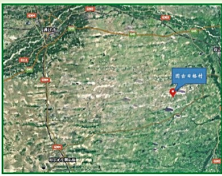
内蒙古通辽市位于内蒙古自治区东部，地处北纬42°15′—45°41′、东经119°15′—123°43′之间，属东北和华北地区的交汇处。南北均为丘陵山地，中部为西辽河流域沙质冲积平原，占全市总面积的70.7%，大部分区域分布着起伏不平的沙丘和沙地，海拔高度200—400m。通辽市属典型的半干旱大陆性季风气候，年平均降水量350—400mm，蒸发量是降水量的5倍左右，由于连年干旱，全市境内河流常年断流，70多座中小型水库干涸，局部地下水位下降，水资源匮乏。

科尔沁沙地是中国面积最大的沙地，也是荒漠化最严重的地区之一，通辽沙地面积4086万亩，分别占总面积和科尔沁沙地面积的45.4%和52.7%，是科尔沁沙地的主体地区。但是与之相应的却是通辽现有约310万人，是内蒙古第二大城市，约占内蒙古总人口的15%。而内蒙古第一大城市赤峰也与之毗邻。

由于多风干燥的气候和不合理的土地利用，通辽地区的土地普遍面临着荒漠化的威胁，尤其对农民的生产生活影响巨大，微薄的农作物收入使得农民不得不选择养殖大量的牲畜，但是牲畜的过度放牧又使得生态环境进一步被破坏、荒漠化加剧，形成了一个恶性循环。因此在农村通过农林复合经营模式的构建，提升当地社区可持续土地管理的意识和能力，同时倡导城市居民关注荒漠化，鼓励农户和城市居民采取实际行动，形成合力，才能更持久地遏制土地荒漠化，恢复沙地生态环境。



项目区基本情况



项目区位于内蒙古通辽市努古斯台镇图古日格行政村，该村分为两个自然村，东图古日格和西图古日格。项目林地全位于东图古日格村。图古日格行政村全在册人口667人，东图古日格为340人。村民绝大多数为蒙古族。东图古日格村共有土地35000亩，其中耕地约有3000亩，其中林地（包括项目林地）3000多亩，其他土地由牧场和沙化闲置地构成。全村土地大部分已经荒漠化或存在荒漠化风险。

面临的问题



气候：
气候干旱，降雨量少蒸发量过大，风势强劲



生态：
荒漠化严重，植被覆盖率低，过度放牧较普遍



社区：
造林护林技术落后，保护生态意识淡薄，经济收入较低

项目目标

- 1、探索适合本地的农林发展模式，改善项目区的荒漠化现状
- 2、提高农民的环境意识和相应的技术能力
- 3、加深城市居民对低碳生活方式和荒漠化问题的认识
- 4、强化项目运作的规范性和科学性

项目内容

活动内容

- 帮助农户开展项目林地规划，讨论并选择适合本土的树种以及种植方法。
- 种植防风固沙林
- 宣传可持续发展的造林护林知识，及编撰林下作业指导手册
- 鼓励农户尝试林下间种
- 访问项目参与农户，支持农户完善林地后期维护
- 在上海地区开展多次主题宣讲会，传播低碳意识
- 组织城市志愿者去内蒙古进行多次植树活动
- 邀请林业专家现场的考察，提供专业的评估和意见
- 定期实地观测林地，形成了常规化林地生长报告
- 秋季组织农户对林地进行了入面积抽样测量，并形成林地年度报告



成长茁壮的杨树和防护林



种植杨树



农户进行田间测量



志愿者亲身参与植树



林业专家进行现场评估



开展林地实地调查



现场活动宣传推广



现场联合布置

项目成果

- 1、2012年有43292棵杂交杨树及樟子松被种植，延缓了6269亩土地的荒漠化速度，并在近4000亩土地上实施了林农间作，每亩增加收益超过200元。其中图古日格村植树81400棵，面积达1100亩。
- 2、支持农户建立护栏网，帮助农户苗木市场的资源渠道，完善护林员制度；通过总结本土经验和其他地区范例，编撰了林下作业指导手册及宣传手册，宣传可持续发展模式。
- 3、公示项目，走访农户，组织农户实地观察林地分享经验，提出建议。宣传环保知识，增强了农户的环保意识，对社区林业可持续发展起到了倡导作用。
- 4、在2012年组织316名参与者参与植树系列活动；项目相关人员已经出席、参加、组织了近50次针对公司、学校等的宣讲、培训、工作坊和会议；已经举办一次摇滚音乐会，出席800余人次，以及一次由珍·古道尔博士发起的倡导绿色低碳环保的招待会，出席人数达400余人次；员工及志愿者已经出席了23次各类现场活动，宣传环保；项目传单已经分发5000余份，广泛的传播了低碳意识，让更多的人民关注荒漠化。
- 5、邀请美国俄勒冈州立大学的林业专家Robin Rose教授参与指导了林地测量、观察、评估工作，并提供一份技术性的报告，评估项目进展，针对存在的问题进行探讨和建议。从4月至11月对项目林地共进行了10次常规观测和1次全面林地测量工作，形成常规林地生长报告3份，林地年度报告1份，对项目林地的情况和存在问题进行记录，成为项目后续管理和改进的重要依据。

项目机构



Empowering people, Rebuilding nations.



1 TRILLION TREE PROJECT 百万植树计划

全球环境基金小额赠款计划

作为全球环境基金资助项目的组成部分之一，小额赠款计划成立于1992年，由联合国开发计划署负责实施。联合国项目事务厅负责执行。小额赠款计划直接向非政府组织和社区组织提供资金和技术，支持他们保护和恢复自然，同时提高人们福祉和生计的流动。小额赠款计划支持的优先领域为：保护生物多样性、减缓气候变化、保护国际水域、防止土地退化以及消除持久性有机污染物和全球关注的化学品。目前，这个计划已经在全球125个国家支持14500多个社区项目。

联合国开发计划署

联合国开发计划署是联合国从事发展的全球网络，倡导变革并为各国提供知识、经验和资源，帮助人民创造更美好的生活。联合国开发计划署在177个国家开展发展援助，通过与合作伙伴一起帮助各国进行自身的能力建设。

在中国，联合国开发计划署致力于促进人类发展，赋予性别平等的权利，共同创造更美好的生活。作为联合国的发展机构，联合国开发计划署利用其丰富的国际经验，帮助中国寻求应对发展挑战的解决之道。联合国开发计划署在中国的主要重点工作是：减少贫困、包容性发展、法治和管理、能源、环境和气候变化。

百万植树计划

上海根与芽青少年活动中心百万植树计划始于2007年，致力于唤起大众环保意识，号召个人参与行动，以减少对自然环境的负面影响。该项目通过在内蒙古种植树木，为个人和组织提供了抵御全球变暖的机会，为当地居民和社会发展建立一片可靠的防护屏障。同时，项目的各个环节都能够帮助当地居民从中获益，兼顾了生态与人文主义救助的双重使命。

上海根与芽计划于2012年顺利完成在内蒙古沙化地区种植1,000,000棵树木的目标，比预期提前两年。种植树种包括杂交杨树、文冠果、樟子松等。全职林业技术管理团队长期驻守当地，与林农密切合作，确保树木的正确种植和养护，并通过一系列的监测和调查，切实维护项目林地的生长，保证林地的生态和经济效益。从2013年起项目将继续向曾第二个100万植树努力。

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上海根与芽青少年活动中心 www.jgi-shanghai.org
百万植树计划 www.mtpchina.org



联合国开发计划署
United Nations Development Programme
全球环境基金小额赠款计划
Global Environment Facility/ Small Grants Programme
百万植树计划
The Million Tree Project

——内蒙古通辽市努古斯台镇图古日格村植树项目
Tree planting project in Tugurige Village, Nugusital Town, Tongliao Municipality, Inner Mongolia, China



Project Background

Desertification is currently one of the largest global ecological problems. With the progression of climate change, the devastation of desertification in eastern Inner Mongolia is becoming much worse. Both the harsh environment and low income in the town are threatening the land and the local residents.

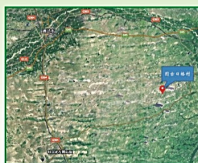
Tongliao Municipality is located in the east of Inner Mongolia, in the area between N 42°15'–45°41' and E 119°15'–123°43', at the junction of northeast and northern China. The area's landscape is very hilly in the north and southern parts, with sandy and loose sediment in the middle which has been generated by West Liao River. This river comprises approximately 70.7% of the total area of this municipality. The rest of the area's landmass is mainly rolling sand dunes and sandy land. Altitudes here vary between 200–400m, and the climate in Tongliao is classified as semi-arid continental monsoon, with an average rainfall of 350–400mm. The evaporation volume is approximately five times the amount of their rainfall, and because of this continuous dryness, the rivers in the area are often cut-off from sufficient water supply, and over seventy reservoirs are in danger or have had problems of running dry.

The Korin Sandy Lands are the largest sandy lands in China, and also one of the areas most effected by desertification. Tongliao encompasses a great portion of the Korin Sandy Lands, with 4086 Mu inside its borders. This sandy area is close to 45.4% of the total size of the town and 52.7% of the total size of the Korin Sandy Lands. Tongliao's population is 3.1 million, 15% of Inner Mongolia's total population, making it the second most populated city in Inner Mongolia.

Due to the dry, windy climate, and overutilization of the land, the desertification process in this area has accelerated, and the dense population further impacts the problem. Both the produce yields and income generated from these depleted lands are so low that it forces the local residents to raise livestock on a large scale to compensate. Unfortunately, the over-grazing from the animals further destroys the eco-system and intensifies desertification, creating a vicious cycle. One of the solutions is to plant trees in the village as part of an economic agroforestry model, which addresses both issues at once. By doing this, awareness for sustainability and the capacity and to utilize and manage the land will simultaneously be increased. Meanwhile, the model encourages and helps urban residents learn about the seriousness of desertification, and to take action in assisting those suffer from it. With a holistic effort, the problems of desertification will be dealt with more roundly and completely, and the healthy ecosystem of the Korin Sandy Lands will be restored.



Project Location



The project has been based in Tugurige Village, Nugusital Town, Tongliao Municipality, Inner Mongolia. This village includes two settlements: East Tugurige and West Tugurige. The project's planting site is close to East Tugurige. The total population of this village is 667 people; among them, 340 live in East Tugurige. Most of the residents here are Mongolian. There are 2,333 hectares of land in East Tugurige; of this, about 200 hectares is cultivated land, 200 hectares is forest land, and the rest is pastures and idle sandy lands. Most of the land in this village is desertified or being seriously threatened by desertification.

Problems



Climate: dryness, evaporation volume greatly exceeding rainfall, strong winds



Ecology: serious desertification, low vegetation coverage, over-grazing



Community: outdated tree planting techniques; low awareness of need for environmental protection, low income

Project Targets

1. Explore an agro-forestry development model that addresses desertification and fits the local situation.
2. Raise environmental awareness and technical capacity for protection among locals.
3. Spread and expand knowledge of desertification and low-carbon lifestyles among urban residents.
4. Strengthen the formality and science of the project's management.

Project Content

Activities

- Help the locals with the planning of tree planting, discussing the selection of species that fit the local environment, and tree planting methods.
- Build large forests to act as windbreakers and will stabilize the shifting sands.
- Advocate sustainable forestry through the spread of knowledge, including creating a guidebook regarding an under-forest economy (developing modern economics and processes based around agriculture and the land).
- Encourage the locals to try an under-forest economy approach.
- Visit local families and support the maintenance of the forest.
- Launch various lectures and workshops in Shanghai to spread ideas of low-carbon lifestyles.
- Organize volunteers from Shanghai to plant trees in Inner Mongolia.
- Invite experts for onsite forest visits, providing project evaluation and recommendations for development.
- Observe and measure the trees regularly, building a long-term regular database for forests.
- Hire locals to assist the autumn forest investigation to generate data for annual forest reports.



Healthy-growing poplars



Planting poplars



Public announcement

Outcomes to Date

1. Planted 432,922 poplars and pines in 2012, covering 418 hectares of land. Nearly 4267 hectares of the trees have been inter-cropped, which generate approximately another 200RMB per Mu of extra income for the locals.
2. Supported the establishment of fencing and a Forest Ranger system. Helped the locale navigate and purchase seedlings. By summarizing local experience and successful cases in other (similar) areas, a guidebook regarding under-forest economy (attached with a calendar) has been created and distributed to spread knowledge of sustainable agro-forestry development.
3. Publicly announced the project in the village, visited several families, organized the farmers to learn and share good ways of maintaining the forests. All these activities have effectively helped to raise the villagers' awareness and initiated the development of sustainable community forestry.
4. Organized tree planting trips for over 316 volunteers of different donors in 2012. The HTP team has attended and organized over fifty lectures/training/workshops/meetings for companies and schools; organized 1 rock (awareness/ fundraiser) concert with over 600 attendees; a large reception with Dr. Jane Goodall, advocating low-carbon lifestyles and environmental protection to 400 corporate attendees; and attended over twenty-three event fairs, distributing over 5,000 leaflets which spread the idea of low-carbon lifestyles and desertification.
5. Invited Dr. Robin Rose from Oregon State University, U.S.A to visit Inner Mongolia, being trained with the most updated measurement methods and investigation work. Dr. Rose provided a follow-up technical evaluation report, giving suggestions on project development and current problems. Between April and November, the on-site team paid ten regular visits to the forest and conducted one full-forest sample investigation. As an outcome of these visits and investigations, three routine forest reports and one general annual forest reports were created, including descriptions of the tree growth, current problem analysis and suggestions, and important references for further management and improvement.



Volunteers planting trees



Evaluation by forestry expert



Forestry investigation



Project promotion



Booth promotional display

Project Institute



GLOBAL ENVIRONMENT FACILITY



SGP The GEF Small Grants Programme



United Nations Development Programme

Empowering people. Rebuilding nations.



THE MILLION TREE PROJECT



百万植树计划

The Global Environment Facility (GEF) Small Grants Programme (SGP)

As a corporate programme funded by the Global Environment Facility (GEF), Small Grants Programme was established in 1992, implemented by the United Nations Development Programme (UNDP) on behalf of the GEF partnership, and executed by the United Nations Office for Project Services (UNOPS). SGP channels financial and technical support directly to NGOs and CBOs for activities that conserve and restore the environment while enhancing people's well-being and livelihoods. SGP supports activities in these priorities - biodiversity conservation, abatement of climate change, protection of international waters, prevention of land degradation and elimination of persistent organic pollutants and chemicals of global concern. With presence in more than 125 countries, SGP has supported more than 14,500 community-based projects worldwide.

United Nations Development Programme

UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. We are on the ground in 177 countries, working with them on their own solutions to global and national development challenges. As they develop local capacity, they draw on the people of UNDP and our wide range of partners.

In China, UNDP fosters human development to empower women and men to build better lives. As the UN's development network, UNDP draws on a world of experience to assist China in developing its own solutions to the country's development challenges. UNDP's main focus areas in China are: poverty reduction, inclusive growth, rule of law, governance, energy, environment and climate change.

The Million Tree Project

The Shanghai Roots & Shoots Million Tree Project, which began in 2007, aims to raise community awareness of the Earth's precious environment while focusing on steps individuals can take to lessen their negative impact on the natural world. The project gives individuals and organizations an opportunity to fight global warming by planting oxygen-producing trees in Inner Mongolia, China. It also encompasses true capacity building as the local population is intimately involved with, and benefits from, every step of planting, maintaining and monitoring the trees.

Shanghai Roots & Shoots has successfully planted the one millorch tree in the Inner Mongolian desert in July 2012, two years ahead of schedule. Full-time forestry staffs stay in Kulun and work closely with local farmers to plant and maintain the trees. Through observation and investigation, they make sure the trees will grow well and do positive ecological and economic impact to the local community. The project will continue its journey towards second million tree forest since 2013.

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Shanghai Roots & Shoots www.gji-shanghai.org
The Million Tree Project www.mtprojectchina.org



联合国开发计划署

United Nations Development Programme

全球环境基金小额赠款计划

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百万植树计划

The Million Tree Project

——内蒙古通辽市努古斯台镇图吉日格村植树项目

Tree planting project in Tugurige Village, Nugusital Town, Tongliao Municipality, Inner Mongolia, China



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