

### Project background and objective

The project site is located in the southeast of Lulong county of Qinhuangdao city. The place features high east and west and low middle with many hills. The Yinma River flows 6km within this township. The main economy is agricultural products including sweet potato, corn, grape, walnut and the main livestock are pig, sheep and chicken. Corn accounts for 50% of total crops and the corn straw are usually open burned in the farm land. Some farmers ever shattered the corn straw as fertilizer. However, due to technical problems, it caused crop underproduction so that farmers lack of willingness to try straw comprehensive utilization any more. The project area is facing the main problems: open burning straw in the farm land is still the main way that the farmers deal with the straw, which has become one of the causes of air pollution in Hebei, Tianjin and Beijing; low level of straw comprehensive utilization; technical support to farmers on straw comprehensive utilization is not enough; the comprehensive utilization cost of straw for individual household is high which hinder the farmers action. The project aims to effectively control straw open burning and reduce GHG emission through establish farmers' cooperative and improve technology level on comprehensive utilization of straw.

### Project Partners

Sino-union Create  
Institute of Biotechnology and Applications,  
Qinhuangdao  
Qinhuangdao City Public Relations



### Project activities

1. Organize press conference and workshop to raise awareness on straw comprehensive utilization;
2. Support to establish a farmer's cooperative to collect and store straw;
3. Train technicians on technologies of straw comprehensive utilization including straw for edible fungus cultivation, straw as feed for sheep and cattle breeding;
4. Mobilize farmers to participate in straw comprehensive utilization;
5. Establish an internet platform for technology sharing and information dissemination.



### Project results

1. Promote the cooperation among local environmental protection bureau, department of agriculture, development and reform commission, counties and districts, villages and townships and the multi-dimensional win-win cooperation of farmers' cooperatives, enterprises, villages, associations and other stakeholders.



2. Support one farmer's cooperative to be established and facilitate another 12's establishment and cooperation, which can collect 30000 tons of straws and equally reduce 31680 tons of CO2.
3. The technology of cultivating edible fungus by straw, converting straw to fertilizer for farmland and using mushroom residue as fruit tree fertilizer are applied. Nearly 40 technical personnel are trained.
4. About 1163 people from 15 villages of 3 counties have watched and learned the technology and 200 households participated in comprehensive utilization of straw.



5. The website for comprehensive utilization of straw is established.
6. Complete the compilation of Guidebook for Comprehensive Utilization Technology of Straw in Northern China Farmers' awareness on climate change has been improved, and GHG emission has been reduced by virtue of technical means.



### The Global Environment Facility Small Grants Programme

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 partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in more than 170 countries and territories, UNDP offer global perspective and local insight to help empower lives and build resilient nations.

UNDP has drawn on world-wide experience for over three decades to assist China both in developing solutions to its own ongoing development challenges, and in its south-south cooperation and engagement in global development. Domestically, our work focuses on Good Governance, Energy & Environment, Poverty Reduction and Disaster Management.

### Sino-union Create

Sino-union Create (herein after referred to as the association), founded on April 5, 2004, is a civil social organization formed by micro business owners, lawyers, bank clerks, young teachers, environmental protection workers and personages of all circles of society. The association has always devoted to the relevant fields of research of ecological environment and industrial development for years and set up a survey team formed by 15 provincial, municipal and district deputies of the People's Congress and CPPCC members in all levels. In recent years, the proposed suggestions and proposals during the period of two sessions attracted the high attention of provincial and municipal governmental departments and satisfactory responses were obtained. Meanwhile, the association is also the partners of World Wide Fund for Nature, Alcoa Foundation, American Forest Foundation, Silicon Valley Community Foundation, United Parcel Service, West Union and other institutions.



## 秸秆综合利用 低碳环保示范

## 项目

Comprehensive Utilization of Straw

Demonstration of Low-carbon and Environmental Protection



联合国开发计划署 (UNDP)  
United Nations Development Programme  
全球环境基金小额赠款计划  
Global Environment Facility Small Grants Programme  
秦皇岛市创业者协会  
Sino-union Create  
秦皇岛市生物技术及应用研究所  
Institute of Biotechnology and Applications, Qinhuangdao

### ★项目背景及目标

项目点位于卢龙县东南部,地势东西高,中间低,多丘陵,饮马河在境内流程 6 公里。主要农业经济种植业如甘薯、玉米、葡萄、核桃,养殖业如养猪、羊、鸡,玉米占种植地的 50%,成为主要作物。秸秆基本上以焚烧回田为主,综合利用的农户以前曾经有过粉碎回田,由于技术问题造成作物大面积减产,农户不愿再尝试秸秆综合利用的事情。项目区面临的主要问题包括:在农田里露天焚烧仍是当地农民处理秸秆的主要方法,这也成为京津冀地区大气污染的原因之一;秸秆综合利用水平低;为农户提供的技术支持很有限;每户单独进行秸秆综合利用的成本高,这些都阻碍了农民采取行动。本项目旨在通过成立农村合作社和提高技术水平,从而有效的控制秸秆露天焚烧和温室气体排放。



### ★协同单位:

秦皇岛市创业者协会  
秦皇岛市生物技术及应用研究所  
秦皇岛市公关广告协会  
美国铝业渤海有限公司  
民建秦皇岛市委

### ★项目活动

1. 召开项目新闻发布会和研讨会,提高秸秆综合利用的意识。
2. 支持成立农民合作社,进行秸秆的收储。
3. 对技术人员进行秸秆综合利用的培训,包括秸秆种植食用菌,秸秆养羊养牛。
4. 动员农户参加秸秆综合利用。
5. 建立一个技术共享和信息传播的网络平台。



项目启动

### ★项目成果

1. 促成了环保、农业、发改、县区、乡镇等部门的协同及农业合作社、企业、基层村、社团等多维度的合作共赢。
2. 指导筹建了一个秸秆利用的合作社,促进了 12 家县区秸秆专业合作社的成立和工作协同,每年回收利用 30000 吨秸秆,减排二氧化碳 31680 吨。
3. 秸秆种植食用菌、秸秆还田、菌糠成果树循环再利用得到了应用,培训了 40 个技术骨干。
4. 三个县十五个村的 1163 人参与了学习和示范观摩,200 户参与秸秆综合利用。
5. 建立了秸秆综合利用网
6. 完成了《北方秸秆综合利用技术指导手册》的编撰。提高了农民对气候变化的认识,通过应用技术手段减少温室气体排放。



UNDP 官员来访

信贷需求调研



项目收蓄



项目压块



食用菌技术试验

### ★秦皇岛市创业者协会

秦皇岛市创业者协会(以下简称本会)成立于 2004 年 4 月 5 日。是由微小型企业主、律师、银行职员、青年教师、环保工作者及社会各界人士构成的民间社会组织。本会多年来始终致力于生态环境与业态发展研究的相关领域,搭建了一个由 15 个省、市、区各级人大代表、政协委员组成的调研团队,近年来在两会期间提出建议和提案始终得到了省、市政府部门的高度重视,并得到了满意的答复。同时本会也是世界自然基金会、美国铝业基金会、美国森林基金会、硅谷社区基金会及联合包裹、西联汇兑等机构的合作伙伴。



气候变化意识提升,成立合作社协商

### ★全球环境基金小额赠款项目(GEF SGP)

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活动。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(UNDP)

联合国开发计划署同社会各界的人们建立伙伴关系,帮助各国克服危机,推动和维持能够改善每个人生活品质的发展类型。在全球 170 多个国家和地区,联合国开发计划署提供全球观点和深入本土的见解,帮助建立民强国盛的国家。三十多年来,作为联合国从事发展的全球网络,联合国开发计划署充分利用其全球发展经验,支持中国制定应对发展挑战的解决之道,并为中国开展南南合作和参与全球发展提供协助。联合国开发计划署目前在中国的重点工作领域为:减少贫困、善治、危机预防与恢复及能源与环境。



秦皇岛市创业者协会电话: 0335-3638963  
邮箱: sunday6195@126.com  
网址: <http://www.straw-win.com/>