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China: Community Afforestation

Converting barren land into natural forest

China

Certification:

Verified Carbon Standard
A VERRA STANDARD

Climate, Community & Biodiversity Standards
A VERRA STANDARD

Background

Around 5% of all global forest area is found in China and this share is growing as China pushes to increase its forest cover. The country has been working to grow its forest stocks in an effort to reduce impacts on soil erosion, air pollution and climate change. Since the 1980s the government has been implementing various laws and programs to protect forests and reduce deforestation.

However, none of these programs extend to the afforestation of barren lands. As one of the countries most affected by desertification, it is vital that incentive is provided to encourage tree planting in these areas, which account for 30% of China's land.

The Project

The project covers a total of 23,700 ha of formerly barren land across the Shuicheng County, Pan County and Liuzhi Special District in Guizhou Province. The ownership of the project land lies with the local village committees who have authorized the project to use the land for afforestation. All afforestation activities are carried out in collaboration and with full consent of the committees and the local villagers, many of whom have profited from income generation opportunities offered by the project activities.

The trees planted are predominantly native species such as Masson Pine, China Fir, Cypresses and Pinus Yunnanensis. The aim of the project is to contribute to climate change mitigation through sequestration of atmospheric CO_2 during biomass growth whilst also contributing to local sustainable development, environmental and biodiversity conservation and enhancement of soil quality.

Key Facts

TÜV NORD
TÜV NORD CERT GmbH
Verified Carbon Offsetting
Certification acc. to TN-Standard TN-CC-020

Location:
Guizhou Province, China

Project type:
Afforestation

Total emission reductions:
▷▷ 347,000t CO_2 e p.a. ◁◁

Project standard:
VCS and CCBS

Project start date:
April 2015

Sustainable Development

By supporting this project you'll contribute to the following Sustainable Development Goals:

1 NO POVERTY

5 GENDER EQUALITY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

13 CLIMATE ACTION

15 LIFE ON LAND

17 PARTNERSHIPS FOR THE GOALS

SUSTAINABLE DEVELOPMENT GOALS

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SUSTAINABLE DEVELOPMENT G⊙ALS

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	SUSTAINABLE DEVELOPMENT G⊙ALS

While focusing on reducing greenhouse gas emissions, all our projects also generate multiple co-benefits. These are supportive of the United Nations Sustainable Development Goals.

1 NO POVERTY
No poverty
The average monthly income of the villagers in the project area is around €230. The project pays approximately €7 per day for tree planting or €25 per month for part-time technicians. For those involved, this provides a significant boost to their normal income.

5 GENDER EQUALITY
Gender equality
The project actively involves women in decision making and employment opportunities. Of all those involved in the project, around 70% are women.
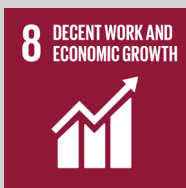
8 DECENT WORK AND ECONOMIC GROWTH
Decent work and economic growth
Over 15,000 people have been employed in project activities. All those employed by the project receive training. In addition to this, tree planting reduces risk of landslides that could affect agriculture and lead to reduced crop yields.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Industry, innovation and infrastructure
Parts of the project are located in mountainous regions, where communities are often isolated with restricted access. The project supports the construction and improvement of roads to increase mobility for these communities.

10 REDUCED INEQUALITIES
Reduced inequalities
The project area is home to around 30 ethnic groups, including Han, Yi and Miao. The project provides opportunities for all, regardless of ethnic background, gender or wealth, and promotes equality.

13 CLIMATE ACTION
Climate action
By reforesting barren lands, the project contributes to increasing the carbon sink. Degraded lands are poor at sequestering carbon dioxide, so the increase in both the quality and quantity of vegetation will significantly impact local sequestration.

15 LIFE ON LAND
Life on land
Improving soil quality will help to prevent local erosion and desertification. Reforestation will also reduce the risk of mudslides, which are common in the region, which contains over 70 rivers.

17 PARTNERSHIPS FOR THE GOALS
Partnerships for the goals
The project supports closer interaction between communities, individuals and other actors for the common goal of increasing forest cover. In addition to this, the new and improved access roads will increase social cohesion among isolated communities.

Technology brief – how it works

Carbon circulates within a cycle, consisting of the atmosphere, the plant, plant litter and the soil. Deforestation breaks this cycle with a multitude of negative effects. Firstly, burning biomass directly increases the amount of carbon dioxide in the atmosphere. Secondly, it reduces the biosphere's absolute capacity to fix carbon. Thirdly, the removal of plant cover accelerates the rate at which carbon fixed in soils is respired into the atmosphere. Lastly, the erosion of soils impedes the long-term recovery of vegetation on degraded areas.

Planting trees is an effective way to reverse these effects and remove carbon from the atmosphere for several decades. Carbon dioxide drawn from the surrounding atmosphere is the main input of any plant's photosynthesis process. The outputs are water, oxygen and carbohydrates. The latter are built into the plant's fibre thereby fixing carbon in the plant's biomass.

Project Standard

The Verified Carbon Standard (VCS) is a global standard for the validation and verification of voluntary carbon emission reductions. Emissions reductions from VCS projects have to be real, measurable, permanent, additional, unique, transparent, and third-party verified. Assessed against the background of the total volume of emission reductions, VCS is the globally leading standard for voluntary carbon offsets.

The Climate, Community & Biodiversity (CCB) Standards were launched in 2005 to foster development of, and investment in, site-based projects that deliver credible and significant climate, community and biodiversity benefits in an integrated, sustainable manner.

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