



Beneficiaries galore – the next generation Photo by: Stefanie Thiedig



## Areas of Expertise:

- Economic Policy and Structural Reform
- Legal Reform
- Financial Sector Reform and the Insurance Industry
- Vocational Training and Continuing Professional Education
- Social, Environmental and Product Safety Standards
- Sustainable Supply Chain Management
- Consumer Protection
- Environmental and Climate Policy
- Electro Mobility and Sustainable Transport
- Energy Efficiency and Energy Policy
- Low Carbon Strategies in Urban Area
- Natural Resources Management
- Disaster Risk Management

## GIZ – Partner for Sustainable Development

### Who We Are

As a German federally owned enterprise, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is a global service provider in the field of international cooperation and professional training for sustainable development. GIZ operates in more than 130 countries with approximately 17,000 staff members worldwide. We offer our partners in developing, emerging and industrialised countries tailor-made and effective solutions in all fields of sustainable economic development as well as environmental and climate protection.

### What We Do

With almost 30 years of experience in Sino-German technical cooperation, GIZ works within the framework of the Sino-German partnership for the mutual benefit of both countries. Our portfolio includes policy advice, technical expertise, knowledge transfer, capacity building and organisational development support in those areas where German know-how and technologies are world-leading. We provide our services through experienced German, international and Chinese experts as well as German partner institutions.

### Who We Work For

In China, GIZ operates primarily on behalf of the German government and is currently commissioned by a number of German federal ministries – such as the Federal Ministry for Economic Cooperation and Development, the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry of Economics and Technology. We also work for German federal states, the European Commission, the Asian Development Bank as well as clients from the Chinese public sector. During decades of successful technical cooperation in China, GIZ has developed close ties with Chinese and German government institutions. Building upon these networks, we also offer solutions for private sector clients in China to address sustainability issues.

Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Low Carbon Land-use Project

Bernhard von der Heyde

Tayuan Diplomatic Compound  
House 5, Entrance 2, Apartment 102  
1 Xindong Road, Chaoyang District  
100600 Beijing, PR China

T +86 10 8532 4845  
F +86 10 8532 4847  
E bernhard.heyde@giz.de  
I www.giz.de/china

Dr. Ute Schmitt  
Resident Country Director China  
GIZ General Representative

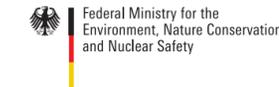
GIZ Office China  
Sunflower Tower Room 1100  
37 Maizidian Street, Chaoyang District  
100125 Beijing, PR China

T +86 10 8527 5180  
F +86 10 8527 5185  
E giz-china@giz.de  
I www.giz.de

## Low Carbon Land-use Project

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

On behalf of



of the Federal Republic of Germany



"Forests & the World" – Land-use in education

Photo by: Stefanie Thiedig



Clean air – public goods require joint actions (SPIEGEL) Photo by: Bernhard von der Heyde

## Context

The 12th Five Year Plan charts China's path towards a low-carbon economy. Strategic components are international cooperation in line with the principle of common but differentiated responsibilities and the establishment of an emissions trading system. This includes develop-ing greenhouse gas (GHG) emission statistics to advance measurement, reporting and verification (MRV). Key goals in land-use are emission reduction in agriculture, forest carbon sequestration and land conservation standards in mining, supplemented by low-carbon pilot projects and product labeling.

Justification and design of the project are directly derived from these climate policy goals. Its overarching goal is: Decision makers avail of sectoral approaches to GHG-reducing land-use options for policy-making.

The Ministry of Commerce (MofCOM) is the executing agency. Implementing agencies are specialized units of the Ministry of Agriculture (MoA), the Ministry of Land Resources (MoLR) and the State Forestry Administration (SFA) under the overall policy guidance of the National Development and Reform Commission (NDRC). Partners are local governments, the private sector and NGOs.



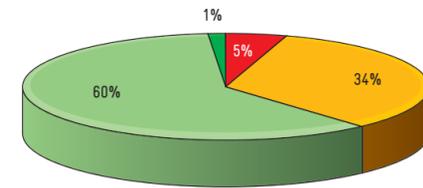
Evidence for real & permanent GHG reductions Photo by: Stefan Mann

## Approach

In terms of change management, the project pursues a two-way avenue. This is based on international benchmarks such as the Verified Carbon Standard (top-down) and good practice of land-users for learning and innovation (bottom-up). The focus is on GHG-emission reducing methods in agriculture, forestry and mining. The approach is framed around four outputs:

- GHG reduction: demonstrate GHG-mitigating measures in agriculture and forestry incl. participatory MRV-procedures and performance baselines;
- GHG accounting: identify GHG-inventory systems incl. the quantification of GHG reduction goals in line with China's institutional setting;
- Incentives: develop product carbon labels and business models in agriculture and forestry in support of the eventual trading of emission certificates;
- Post-mining landscape reclamation: identify GHG-reducing measures for restoring open-pit mines incl. compilation of a technical guideline.

These measures are being demonstrated at reference sites in selected provinces at county level. Generating operational evidence is pivotal for effective policy development.



Data and statistics – indispensable ingredients for carbon management



GHG reduction in intensive agriculture Photo by: Bernhard von der Heyde

## Capacities

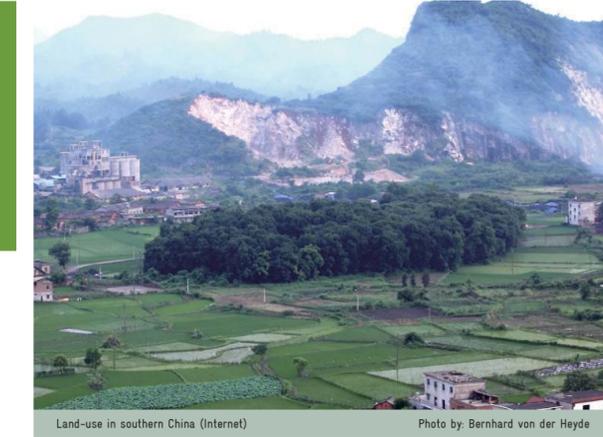
The project's training program is derived from salient land-use issues, such as over-fertilization of food crop production and short-rotation plantation management in fragmented collective forests as well as post-mining landscape management. Addressing the capacity needs of the project's diverse stakeholders, the program comprises three modules:

- Kick-off event: foster a common understanding on GHG-reducing land-use options among the project's diverse stakeholders;
- Workshops: impart technical skills for GHG-reducing methodologies required for climate-smart agriculture, sustainable forest management (SFM) and post-mining landscape management;
- Study tours: showcase current approaches to GHG-reducing land management in Germany and Europe;
- Conference: disseminate and share lessons learned at national level.

This package is complemented by on-the-job training at selected sites. Framed around two consultation missions each year, the project's national and international consultants serve as trainers for its counterparts.



GHG reduction in post-mining reclamation Photo by: Bernhard von der Heyde



Land-use in southern China (Internet) Photo by: Bernhard von der Heyde

## Impact

Testified by the 12<sup>th</sup> Five year Plan, China will take far reaching steps to voluntarily reduce her ecological footprint, thus assuming international responsibility as an emerging economy. Hence, benchmarking conventional land-use management with international GHG accounting concepts is at centre stage. Pursuant to this logic, the project will produce three outcomes at three levels by distinguishing the specific needs of its stakeholders:

- Operational: GHG-reducing land-use methodologies that produce robust figures required for the envisioned national cap and trade system;
- Governance: transparent regulatory frameworks that consistently deliver incentives required for the wide replication of climate friendly land-use options;
- Policy: recommendations for China's climate change goals as relates to the United Nations Framework Convention on Climate Change (UNFCCC).

Replicating the emissions-reducing land-use methods beyond their pilot application is of global significance: 100 MtCO<sub>2</sub>e savings in nitrogen fertilizer on 120 mill. ha of arable land; increase of timber stocks till 2030 from 70 – 90 m<sup>3</sup> on 20 mill. ha (10% of China's carbon emissions in 2005) and restoration of 37 mill. ha mining land.