# TNC Forest Carbon



Xiaoquan ZHANG Senior Scientist for Climate Change, TNC China Program 17/05/2012, Bonn



# Outlines

- Achievement in China's forestry sector
- Forest mitigation ambitions
- Challenges/barriers
- TNC forest carbon mission
- What was done by TNC?
- What is on-going by TNC?
- Outlook



# Achievement in China's forestry sector

- Forest area increased by 70% in last 30 years, 3.6 Mha per year in last 10 years
- Forest volume stock increased by 46% in last 30 years, 0.2 billion m<sup>3</sup> per year in last 10 years







# **China's Mitigation Ambitions**

	2005-2020	2011-2015
forest area increase by	40 Mha	12.5 Mha
forest stock increase by	1300 Mm <sup>3</sup>	600 M m <sup>3</sup>



# **Challenges/barriers in China's Forestry Sector (1)**

- Poor forests quality:
- Low volume stock: 86 m<sup>3</sup>/ha for all forests, 49 m<sup>3</sup>/ha for plantation
- Slow growth rate;
- A large scale of mono-culture and even-aged plantation;
- Poor environmental service (soil conservation, biodiversity, etc.): few forests can provide sound environmental services.

#### **Main drivers:**

- Over-emphasis numerical target of forest area, insufficient attention to quality
- Poor planting quality due to investment far from need: 250 US\$/ha, now up to 500 US\$/ha
- No funding for follow-up management;
- Natural disturbance (snow storm, drought, wild file, pest insect, etc)
- Traditionally unsustainable use of community forests

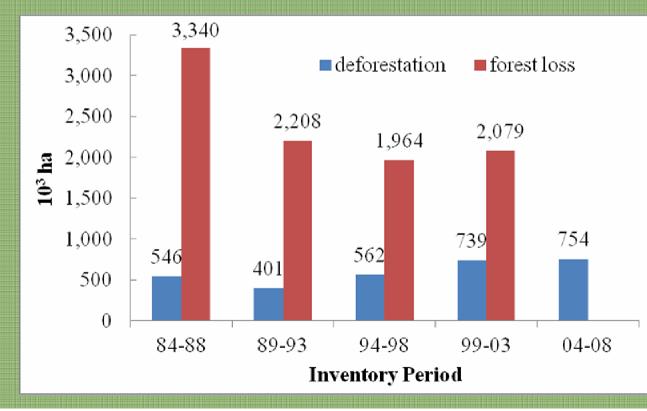


# Challenges/barriers in China's Forestry Sector (2)

- Limited good land available for forestation
- 13% of available lands with good site conditions;
- 52% with poor site conditions;
- 2/3 in Inner Mongolia and Northwest China: arid and semi area;

#### More difficult and higher cost to increase forest area

- High pressure for forest protection: conflicts between economic development and forest conservation;
- Pressure of MRV/ICA





# **Challenges/barriers in China's Forestry Sector (3)**

- Vulnerable to natural disturbance esp. under changing climate: 17.6 Mha of forests suffered from natural disaster annually, of which
- 50.5% from forest pests;
- 17.4% from wildfire; and
- other climatic disasters.





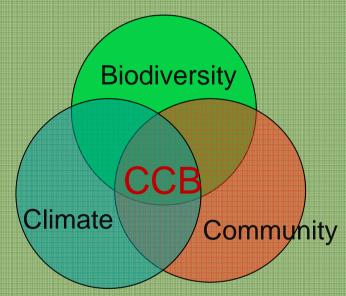
#### **TNC** forest carbon mission

Demonstrate nature-based approach following CCB (climate,

community and biodiversity) to

 Improve forest quality in terms of timber and environment service (incl biodiversity)

- Provide Community co-benefit
- Enhance mitigation and adaptation to climate change
- Leverage policy efforts
  - ✓ Pilot forest carbon accounting system: MRV/ICA/REDD+
  - Leverage forest policy through demonstration projects
  - Consultancy on land-based carbon trading





# What was done by TNC China (1)

- Tengchong in Yunnan: 1st AR project with the world 1st CCB gold medal certification
- Northwest Sichuan project: 1st AR CDM project with CCB gold medal certification
- Involvement of other AR projects
  - 2 AR projects in Guangxi with WB: incl. the world 1st AR CDM project
  - 1 AR project in Inner Mongolia
  - 1 AR project in Liaoning
  - 2 AR CDM methodologies: 1st and 6th AR CDM methodology





# What was done by TNC China (2)

- AFD Rural Carbon Project:
  - Methodology approved by Panda Standard in April 2012: <a href="http://www.pandastandard.org/downloads/downloads\_cn.html">http://www.pandastandard.org/downloads/downloads\_cn.html</a>





# What was done by TNC China? (3)

- Policy:
- AR CDM methodologies/guidance/guidelines/tools: AR WG member
- Intl compliance: lead reviewer of Annex I GHG inventory, FM reference level and national climate change communication
- Panda Standard (PS): technical consultation in the development of PS rules, technical panelist
- Green Carbon Foundation: technical consultation, technical panelist
- FSC: Technical panel for FSC China



# What is on-going by TNC China? (1)

#### On-going AR projects with CCB

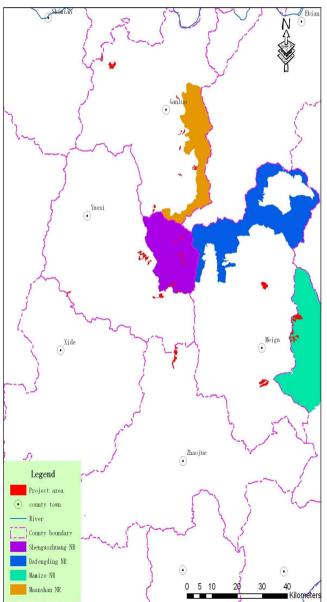
1 CDM AR project in Southwest Sichuan: 4266 ha with Novartis

1 CDM/PS AR project in Inner Mongolia: 2191 ha with Disney

1 PS AR project in Southwest Sichuan: 500 ha with

Disney

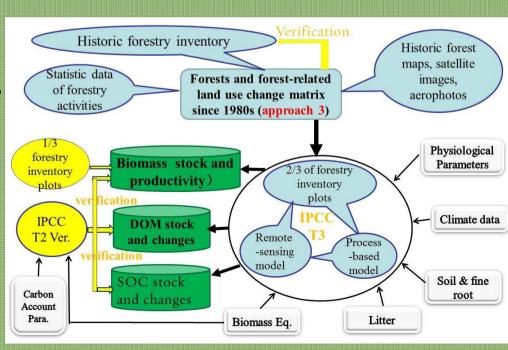






# What is on-going by TNC China? (3)

- FSC China standard
- Forest Carbon Accounting in Pilot Province (Sichuan)
- One of 4 pilot provinces under SFA
- Reliable accounting of LUCF following Tier 3 approach and Tier 3 method
- Comply to MRV/ICA
  - Support China to participate REDD+, incl. methodological approach for reference level





### Outlook

Nature-based project demonstration, with expansion to

- Landscape approach
- Improved forest management
- Wetland restoration
- Revegetation
- Biochar

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