





# **An Overview of Carbon Forestry in China**

Haijun Yang

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GEORG-AUGUST-UNIVERSITÄT Göttingen



Abteilung für Waldinventur und Fernerkundung





Climate Targets of China and Forestry Action plan

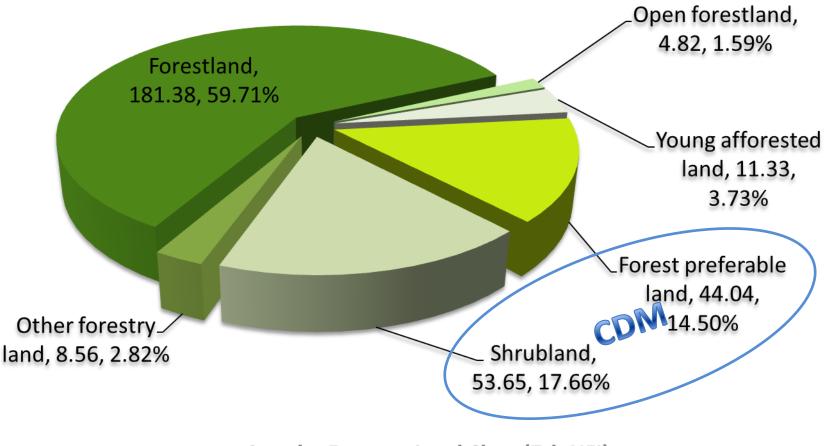
- Voluntary national climate targets by 2020
  - Reduce carbon intensity by 40% to 45% of 2005 levels
  - Plant 40 million ha of forests increase forest stock
    by 1.4 b. m<sup>3</sup> compared to 2005
  - Increase the share of non-fossil fuels to 15%
- Forestry Climate Change Action Plan

Phases	Afforestation	Forest cover	Forest stock	
1 (by 2010)	4 Mha/Yr.	20%	13.2 b. m <sup>3</sup>	
2 (2011-2020)	5 Mha/Yr.	23%	1.4 b. m <sup>3</sup>	
3 (2021-2050)	47 Mha	26%	→SFM	





### Pathway\_Expanding Forest Area



Area by Forestry Land Class (7th NFI)





### Pathway\_Improving Forest Management (REDD+)

- Area of existing forests (8th NFI)
  - Total: 208 Mha forests (5th)→forest cover:21.63%
  - Plantation: 69 Mha (1st)
- Condition of existing forests
  - Low carbon sequestration capacity
    - Standing volume of all forests: 85.88 m<sup>3</sup>/ha
    - Average standing volume of plantation: **49.01** m<sup>3</sup>/ha
- High vulnerability to adverse climate change impacts

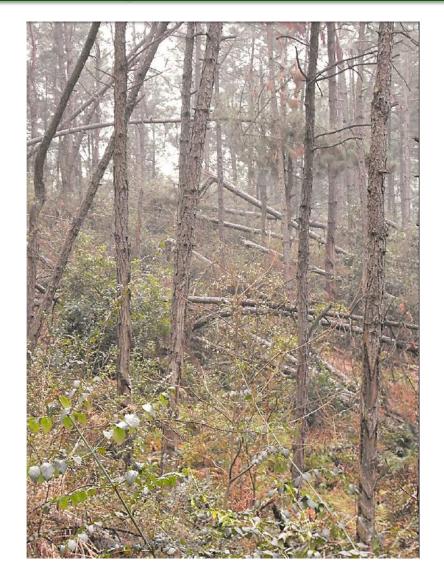




## Climate Change Vulnerability





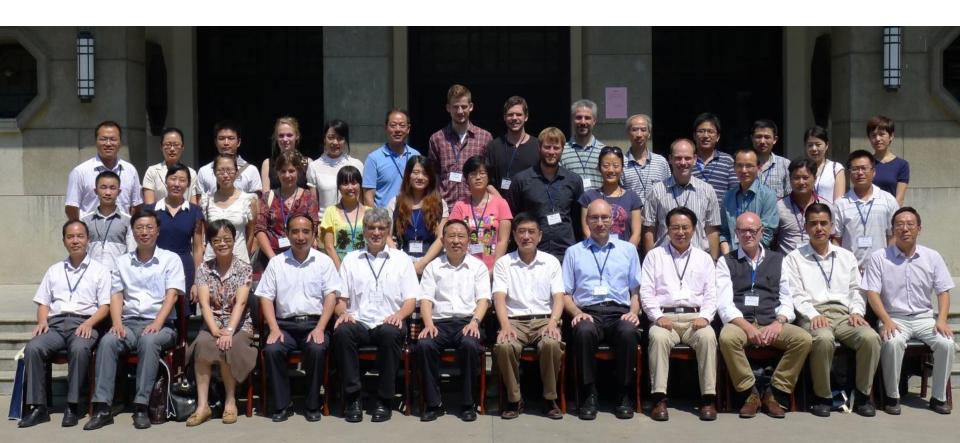






#### Solution?

## Our Lin<sup>2</sup>Value Team is working on it for solution! Welcome to visit our Lin2value homepage: <u>www.lin2Value.de</u>







#### Carbon Forestry Actions (1)

- Expanding forest area
  - Continue to implement A/R, key forestry programs
  - Continue to promote voluntary tree-planting campaign
- Improving forest management
  - Collective forest tenure reform (2008-2013)
  - Forest tending subsidies (pilot regions  $\rightarrow$  entire country)
  - Built 15 model forest management bases
  - Launched a pilot program for sustainable management in 200 towns (forestry farms), taking lumbering as the center of the management





#### Carbon Forestry Actions (2)

- Forest carbon monitoring system (MRV of REDD+)
  - Forest carbon inventory system in 17 Pilot provinces/cities since 2009
  - Expanded to the entire country in 2013
- Development of standards and methodologies
  - Panda standard (PS)
  - Forestation of degraded land using species including bamboo
  - AR-AM0001 (reforestation of degraded land)

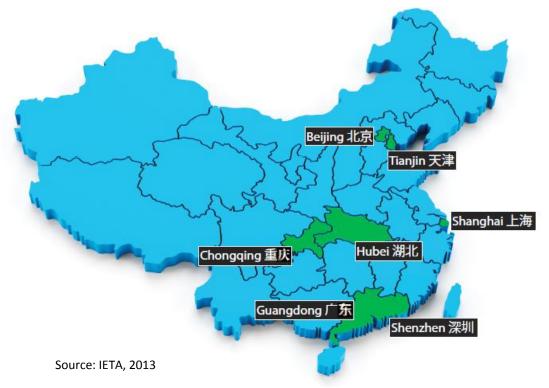






### **Domestic Carbon Trading Pilots**

- 7 pilot provinces and cities
  - Shenzhen, Shanghai, Guangdong in operation in 2013
  - The rest in 2014







## **Compliance Carbon Market Projects**

## • REDD+

- Preparatory phase for readiness (EU I-REDD+ Project in Yunnan)

## • AR CDM projects

No.	Titel	Buyer	Est. Redu. (tco <sub>2</sub> e/Yr.)	Appr./Reg. Date
1	Facilitating R. for Guangxi Watershed management in Pearl River Basin	BioCarbon Fund, IBRD	20,000	12.05.2006 10-11.2006
2	Reforestation on degraded lands in NW Guangxi	Biocarbon Fund, IBRD	70,272	30.10.2008 15.09.2010
3	AR on degraded lands in NS Sichuan		26,000	10.09.2008 16.11.2009
4	A/R on degraded lands in SW Sichuna	Novartis Pharma AG	40,214	23.01.2013 05.02.2013
5	Small-scale A. for desertification combating at Kangping County, Liaoning	Keio Uni. Japan	1,124	26.02.2009

(Source: http://cdm-en.ccchina.gov.cn)





### Voluntary Carbon Market Projects

- Panda project
  - Bamboo afforestation project in Xishuangbanna, Yunnan
     Province
- China Green Carbon Foundation projects/Programs
  - Online tree planting program
  - AR projects
  - Carbon neutral programs







Voluntary payment for green carbon! http://wzdsb.66wz.com/system/2009/12/05/101546779.shtml)





## Advantages and Challenges

## Advantages

- High public awareness and strong political will
- Experience in activities eligible for CDM and REDD+

## Challenges

- AR Difficulties and low REDD+ enthusiasm
- SFM Training and Capacity building
- Low-level subsidies, logging quota/ban
- Labor force and load access
- Difficult access to carbon markets
  - Costly project development v.s. Smallholders+forest farms
- Risks of carbon markets (uncertain carbon prices)





### Conclusions

- Huge potential
- Favorable national circumstances
- A variety of challenges
- More an opportunity than a challenge
- Long way ahead to go







### Thank you!

Let us do not forget to remove our workshop carbon footprints for a successful green workshop!

# TERIMA KASIH! DANKE SCHÖN! 谢谢!