





### EFFECTS OF FOREST CARBON MITIGATION ON SOIL AND WATER

## GUANGZHOU, CHINA

# **OCTOBER 18-20, 2015**

There is widespread interest in the use of forests to manage carbon as a climate change response strategy. Approaches include avoiding deforestation and protecting existing forests, establishing new forests (afforestation, reforestation), managing existing planted and natural forests (forest management), and substituting fossil fuels through either wood products or bioenergy production. Carbon markets and payment systems are developing or being implemented in various parts of the world.

The scale of activity that may result from carbon markets and other environmental policies may be large, and this may result in extensive changes in land-use. These changes in land-use may in turn have either positive or negative effects on soils and water. On the positive side, forest carbon mitigation may allow substantial progress to be made for various United Nations treaties such as the Convention for Biodiversity and the UN Convention for Desertification and the Millennium Development Goals, by providing finance on a hitherto unseen scale. On the negative side, carbon mitigation may compete with food production and water supplies.

The International Union of Forest Research Organizations (IUFRO) has recently established a Taskforce on Forests, Soil and Water Interactions, and it is thus timely to examine how emerging forest carbon mitigation activities will affect the management of soils and water. Invited speakers will make presentations grouped into four sub-themes; (1) an overview of forest carbon mitigation and environmental markets, (2) approaches to forest carbon mitigation, (3) impacts of carbon mitigation on watershed hydrology and (4) carbon mitigation in soils. This will be followed by a facilitated panel discussion that develops an integrated view from the meeting. Keynote speakers will come from China, Australia, Brazil and international organizations.

The Symposium is jointly sponsored by IUFRO, the Chinese Academy of Forestry and Murdoch University.

#### **PROGRAM**

### 18 October, 2015

Visit to Heshan Forest Ecological Station, Chinese Academy of Sciences, Heshan City, about 60 km from Guangzhou City.

### 19-20 October, 2015

Venue: Research Institute of Tropical Forestry, Guangzhou

Introduction to meeting and IUFRO Taskforce Chair of Forests, Soil and Water Interactions; Prof. Richard Harper, Murdoch University

### Session 1: Forests, carbon and environmental service markets

Discussion on international, national and sub-national approaches to carbon mitigation, and environmental service markets. Role of forestry within this framework, including learnings from early actions and future trends.

### **Session 2: Forests and carbon mitigation**

Discussion on forests and carbon mitigation including afforestation, reforestation, forest protection and avoided deforestation, and bioenergy and wood products. A broad overview of the synergies and trade-offs that may flow from mitigation.

## Session 3: Impacts of carbon mitigation on watershed hydrology

Discussion on the reported likely implications from forest carbon mitigation on watershed hydrology including watershed protection, improvements in water quality and competition for water. Presentations will include global and regional reviews.

### Session 4: Carbon mitigation and soils

Examinations on the role of forest soils and carbon mitigation, followed by papers that examine the impact of soil carbon mitigation on nutrient management, the effects on soil physical properties, and land stabilization and phytoremediation.

### Panel Session – Effects of Forest Carbon Mitigation on Soil and Water

A convened session that will consider the main points arising from the preceding discussions and develop an integrated view on the likely impact of widespread forest carbon mitigation on forest soils and water and also the wider agenda of forests interacting with other land use.

**Convenors**: Prof. Richard Harper, Murdoch University

Prof. Liu Shirong, Chinese Academy of Forestry;

Prof. Xu Daping, Research Institute of Tropical Forestry, CAF; and

Prof. Bernard Dell, Murdoch University.

### **Registration Fee**

The contact person for registration is Dr Haibin Ma (mahaibin76@163.com).

The fee is \$US100 per person, payment at registration. This will include the field trip, conference welcome reception (18 October), conference dinner (19 October), lunches and morning and afternoon teas. It will also include transfers between the airport, the conference venue and the hotel. Payment can be made on arrival at the meeting.

### Venue

The workshop will be held at the Research Institute of Tropical Forestry (RITF), Chinese Academy of Forestry, in Guangzhou, Guangdong Province. For more details about RITF: www.ritf.ac.cn/ritf-en/index.htm

Address: No.682, Guangshan 1 Rd., Tianhe District, Guangzhou, China

#### Accommodation

Reservations will be made at Landmark International Hotel in Guangzhou Science City, which is approximately 12 km from RITF. For more details about the hotel: www.landmarkhotel-sc.cn/en-us/about hotel.html

The current hotel cost is RMB 720/night including breakfast (payment direct to hotel).

Address: No.1, Lanyue Road, Science City, Guangzhou, China

Tel.: 0086-20-61022888 Fax: 0086-20-62215679

### **Transportation**

The organizers will provide an airport pick-up and the transportation between the meeting venue and the hotel.

If that does not work, the transportation between the airport and hotel will be as follows:

1.By taxi: RMB150--RMB180 2.Airport Express Shuttle

Airport Station: Luogang 8A1 Line Price: RMB 27

From Hotel to Airport First Shuttle 6:30 Last Shuttle 19:50 From Airport to Hotel First Shuttle 7:30 Last Shuttle 21:20