Collective Forestry in China

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Fast Facts on China

- **Land Area**: 9.6 Million km² (USA: 9.37 million km²)
- **Population**: 1.3 billion (USA: 270 million)
- **GDP**: US $1,410 billion, annual rate 9-10% (USA: ~3-5%)
- **GDP/capita**: US $1,090
- **Mobile phones/100 persons**: China 21 (USA 54)
- **Diverse Climate**: north to south: temperate-subtropical-tropical
- **Various topography**: plateau, range, plain and coast
Supply & Demand Challenges for China’s Forests

Demand: High pressures from fast growing economy and Huge demands by big population

- Fast economic growth has created need for resources (lumber for housing and structures, paper, etc.)
Supply: With less resources to use, how will China feed its growing wood demand?

Each year natural disasters:
• Affect 200 million people
• Cost 100 billion yuan (US$12.05 billion)
• Illegal logging and over harvesting are blamed for worsening these disasters
• Public Policy--big changes in 1990s to curb over harvesting
• But this means less wood to feed domestic needs

Source: Ministry of Civil Affairs
China’s Forests

Compared to other countries, China’s has fewer, less dense forests.
• China’s forests have low standing volume, due to previous overcutting and young plantation ages

Forest cover per capita:
    China---0.128 ha
    USA---0.84 ha
    World---0.60 ha

Volume/ha:
    – China: 78.06 m³
    – USA: 118 m³

Standing volume
    – 11.3 billion cubic meters

Canopy density: 0.54

Stocking/per capita: 0.52 m³
• Forest area: 257 million ha
• Coverage 17% of total land area (US 31%)
• Forests provide 3% of the total jobs, 4% of GDP, 40% rural firewood
Forest Ownership

• All forests in China are state owned—there are no privately owned forests.
• However, private interests can own the rights to land - e.g. managing and harvesting rights.
• State forestry bureaus are local arms of the national forest administration.
• Top-down policy and regulatory control.
Forestry ownership

State and Local Ownership

State-owned forests

- State-owned forest enterprises
- State-owned forest farms

Collective forests (CF)

- Collective forest farms
- Individual forests or woods

State owned forests are natural areas, reserves, and some plantations

Collective forests are plantation and second-growth forests (working forests)
Forest Industry

- Annual consumption: 330 million m³ (2002)
- Annual timber production 60 million m³

- Imported wood and wood products in 2002:
  Volume: 114 million m³ (2002) (34% of the total consumption)
  Value: U.S. $10.6 billion
  Sources: Indonesia (14.77%), USA (11.42%), Russia (10.35%), Malaysia (7.66%) and Canada (6.11%).

- Exported wood products in 2002:
  Value: U.S.$ 2.8 billion
  Many exports are products created from imported raw materials (furniture)
Harvesting

China plans to annually reduce the amount available for harvest in natural forest areas and to rely more heavily on plantations.

- In 1995, harvested 67.7 million m³ in natural areas. This reduced to 44.3 million m³ in 2002 and will decrease by 5 million m³ annually.

Areas currently available for harvest are only:

- 12.66 million ha (only 9.8% of total)
- stocking 2.28 billion m³ (22.6% of total)

Most of China’s plantations are young but will be mature enough to harvest in upcoming years.
Role and Importance of Collective Forests in China

- What are collective forests
- Distribution
- Forest products and benefits
- Local industry
Collective Forests

- **Collective Forests** are not well understood outside China, but are important to China’s forestry sector.

- **About 2/3 China’s population is rural** and they rely on **collectively owned** land as a primary source of income and long-term security.

- **Collective forests have existed for over 50 years** in various forms. Land reforms have been occurring to restructure collective forests and legitimize the rights of landusers.
Management of Collective Forests (CFs)

- **The basic unit for managing community property is the village** (local government). Remember, there is no private property in China.
- Since 1981, **villages have allocated CFs to individuals & households**
  - While the land is owned by the village, the trees are owned by the lessee/contractor
- **Households (families) lease small plots** that are managed for timber, special products (berries, mushrooms, medicines), and fuelwood
- **Additional areas are available for long term lease.** These can be taken up as investments for generating income by individuals, families, or companies (share-holding cooperatives)
- **Public areas also exist for all people to share** and are managed jointly by the village. Permits can be obtained to use these areas to gather firewood, foods, etc.
Collective Forests are Vital to Rural People

- Households and individuals manage the land they contract for. Most of this land is in rural areas (69% in mountains and highlands – where 2/3 of the total population lives)
- CFs provide products for farmers’ livelihoods, including timber, fuelwood, fruits, and vegetables
- CFs provide job opportunities
- CFs are being used to develop new industries for rural areas, such as ecotourism & flower industries
- CFs play a very important role in increasing rural economic development and contributing to farmers’ income
Distribution of Collective Forests

- The CF total area is 89.75 million hectares, accounting for 58% of the nation’s total forest area.

Forest Categories of Collective Forestland

- Timber production forest: 57.8%
- Protective forest: 12.2%
- Fuelwood forest: 4.4%
- Orchards: 20.8%
- Bamboo: 4.4%
- Forest for special purposes: 0.4%
Collective forest area is greater in the south and east than in north and west (in general, more forests and population are distributed in these areas as well)
Many provinces’ forestry sectors are largely based on CFs, not state forests.
Collective forests are central to China’s forestry sector

- In 2002, 81% (6.32 million ha) of plantations in China were collectives.

- 46% (20.52 million m³) of the total national timber production comes from collective forests.

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The role of CFs in timber production is growing
Employment of Local forest companies and Rural Processing Enterprises (1996-2002)

Forestry jobs are important to local and rural communities

World Forest Institute  http://wfi.worldforestry.org
Output of non-wood forest products from CFs in southern 10 provinces

CFs are also important for non-timber forest product producers (medicines, foods, fruits, etc).
Many Policies & Programs Related to CFs

- In the 80s & 90s China suffered devastating floods, worsened by soil erosion from overlogging.
- As a result, unprecedented funding and policies were made to create conservation areas, protect existing forests, create new plantations, and combat environmental problems.
- These programs convert farmland to forestland in marginal areas, reduce natural forest harvesting, combat illegal logging, and desertification.
- Policies will greatly impact China’s CF as many of these ecologically sensitive areas are located in rural areas.

*Photo shows windbreaks created with natural materials to reduce sand movement and prevent desertification*
Example: Natural Forest Protection Program (NFPP)

- **NFPP covers 17 provinces and is to last from 2000 to 2010. Its main activities include:**
  - natural forest logging ban
  - improved management
  - artificial plantations to supply fiber
  - aerial seeding
  - mountain closure—villagers in highland areas ordered to plant trees, not agricultural crops

- **About US$12 billion was budgeted for NFPP, with a forest area of 72.9 million ha (37% in CF areas)**

As a part of NFPP, villagers are required to convert marginal land on high slopes from agriculture to forestry.
Example: Forest Ecosystem Compensation Policy

- Launched in 2001, 11 provinces will be compensated for the loss in income from conversion of farmland to forestland—660 counties and 24 Natural Reserves
- Forest area affected: 13.33 million ha (64% in CFs)
- Compensation payments to farmers: US$ 9 per ha
- The amount of the fund: US$ 120.7 million per year
Future Issues for China’s Collective Forests

• The government’s new forestry programs will likely have severe impact on local and rural economies dependent on collective forests

• Farmers’ property rights and interests in collective forests need to be protected
  – Without ownership of the property, the stability of property rights is very important

• With China’s inclusion in WTO, there will be greater pressure on the state to reform badly performing sectors—massive layoffs could be destabilising
  – Can China use collective forests to develop poverty-stricken rural areas?

• The new emphasis on plantations hold potential for development of collective forests, forest products and related industries
Thank you!