Desertification combating in China

- Governmental efforts and technical transfer

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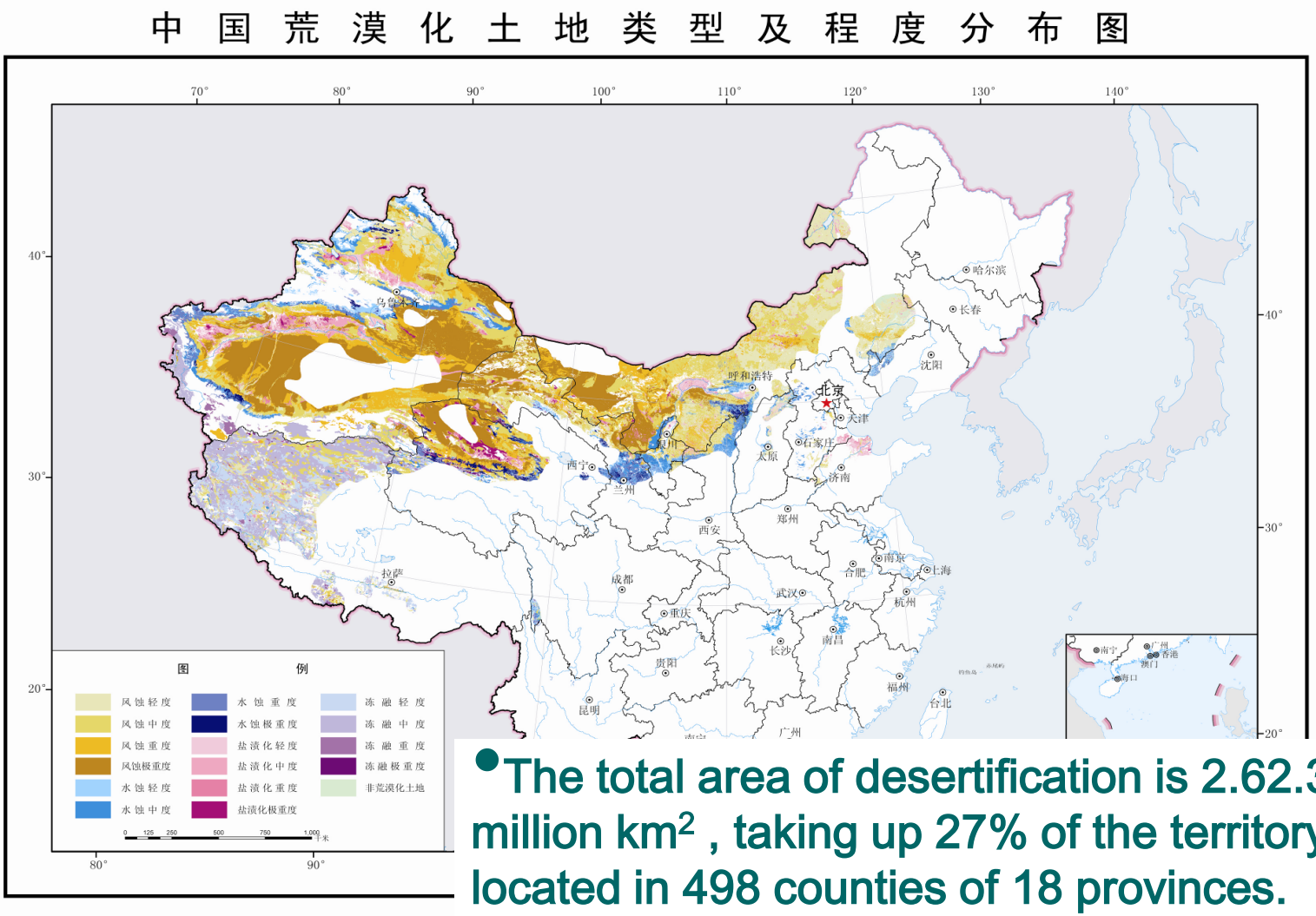
Desertification Distribution in China

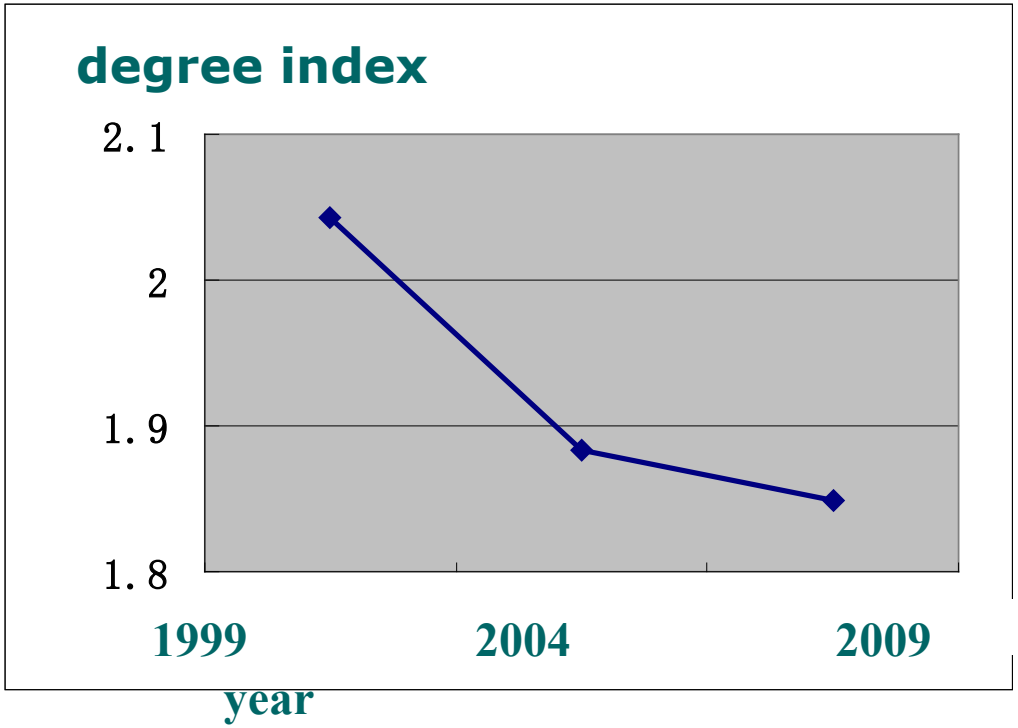


- The total area of desertification is 2.62.37 million km^2 , taking up 27% of the territory, located in 498 counties of 18 provinces. (SFA 2010)

The change of the average degree index of land desertification

year	1999	2004	2009
average degree index of land desertification	2.04227	1.8834579	1.849336

The average degree of desertification in China is decreasing since 1999.

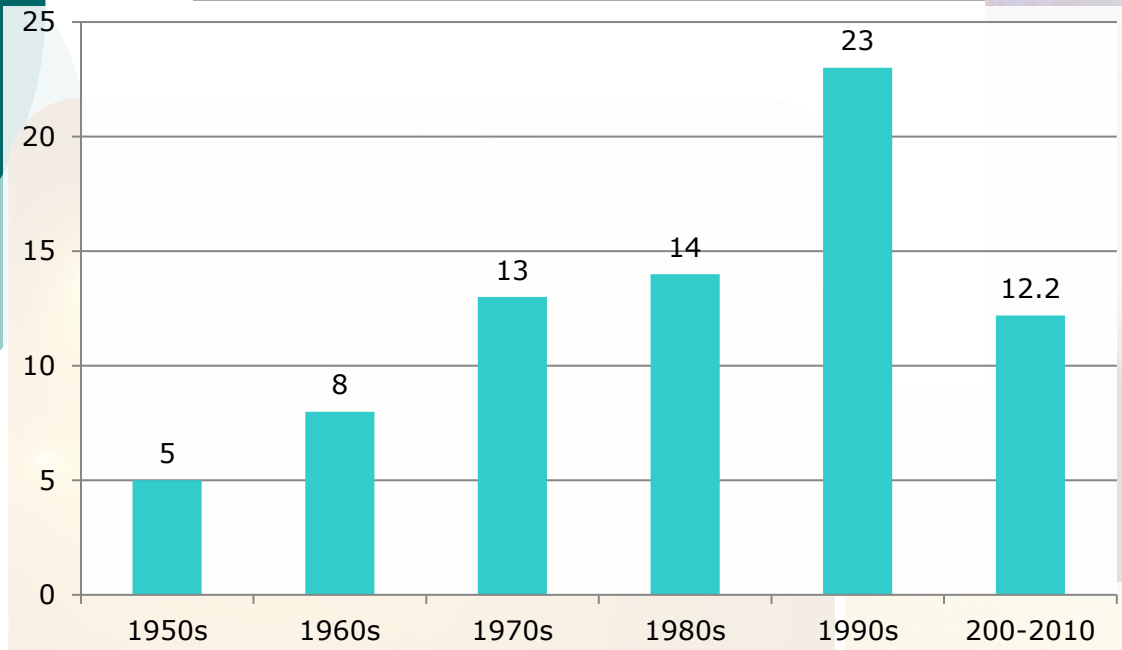


1994-1999,annual increase of sandy desertification 3436km²

Third round national desertification monitoring

Annual reverse of 1283km² sandy desertification

Annual Average Dust and Sand Storms (DSS) in China in 20th Century and recent 10years

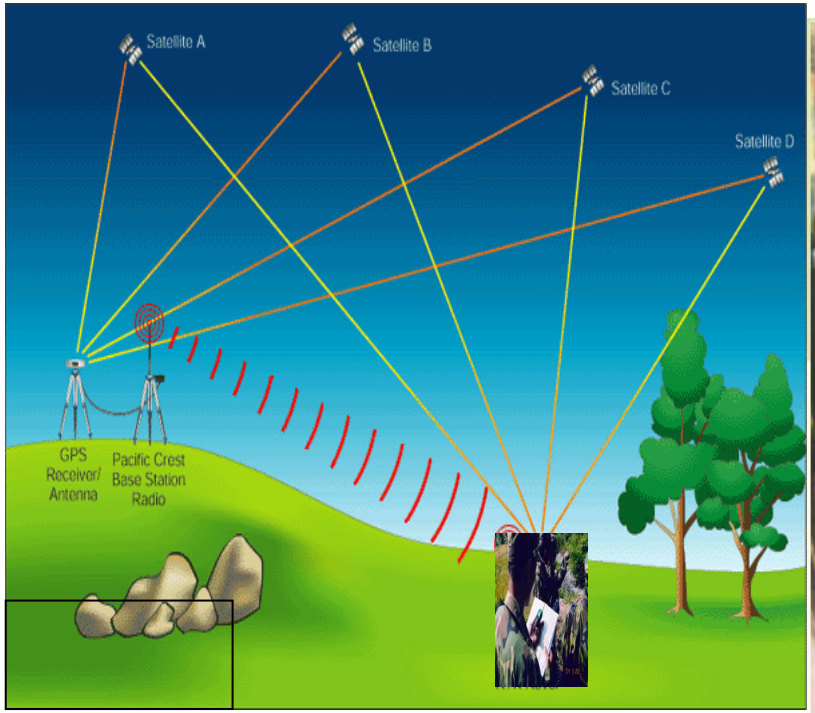


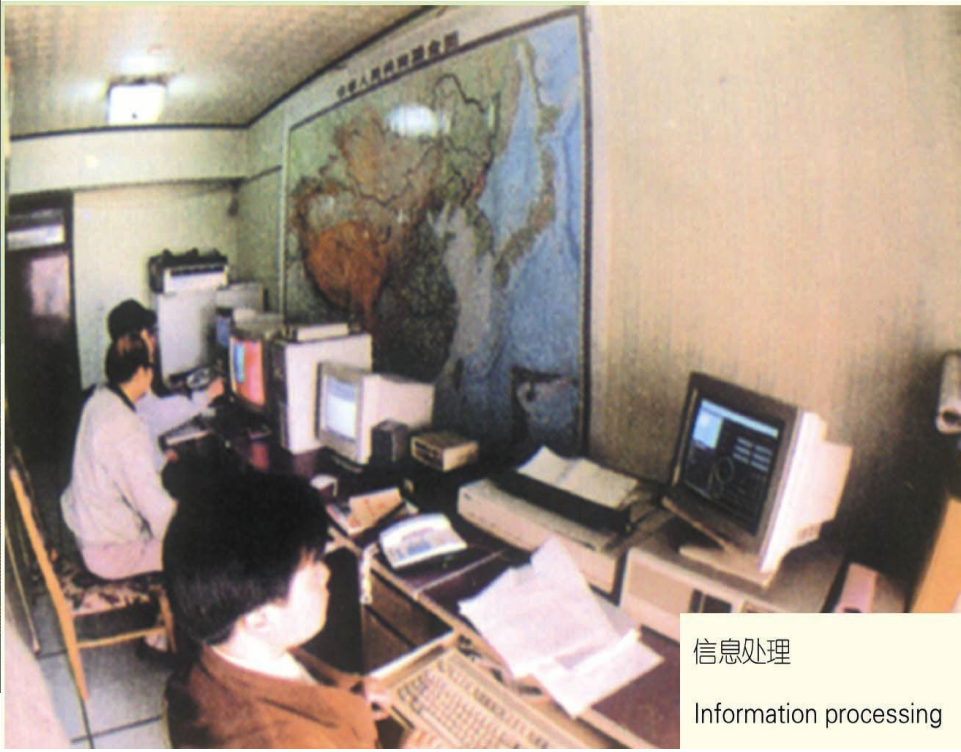
Governmental efforts –Basic principles

- Integrated desertification combating into State social and economic development plan
  - **Taking action based on laws,**
  - **Applying scientific based approaches**
  - **Integrated management and cross-department cooperation ,**
  - **Governmental efforts supported by social mobilization and all stakeholders participation**

Strengthen Scientific support to provide basis of national Programming

- Monitoring and assessment system
- Dissemination of best practices



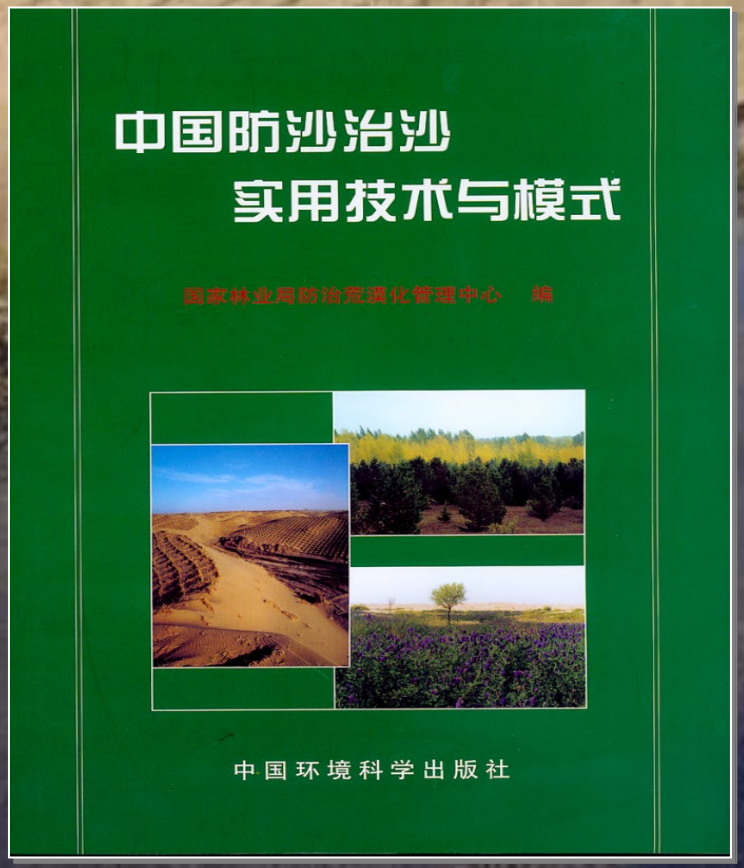


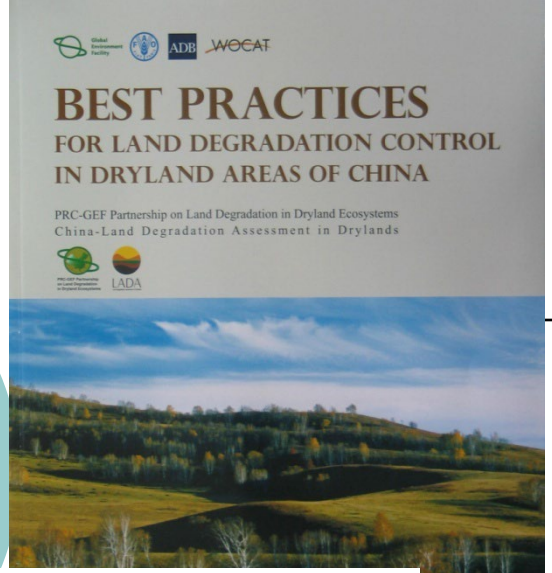
信息处理

Information processing

Expert consultation for scientific decision-making

- Compilation of best practices

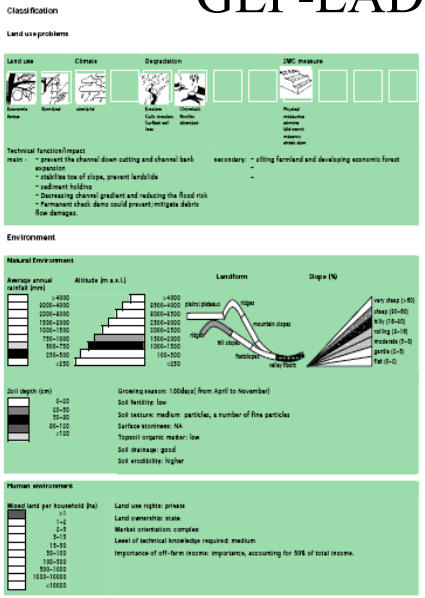


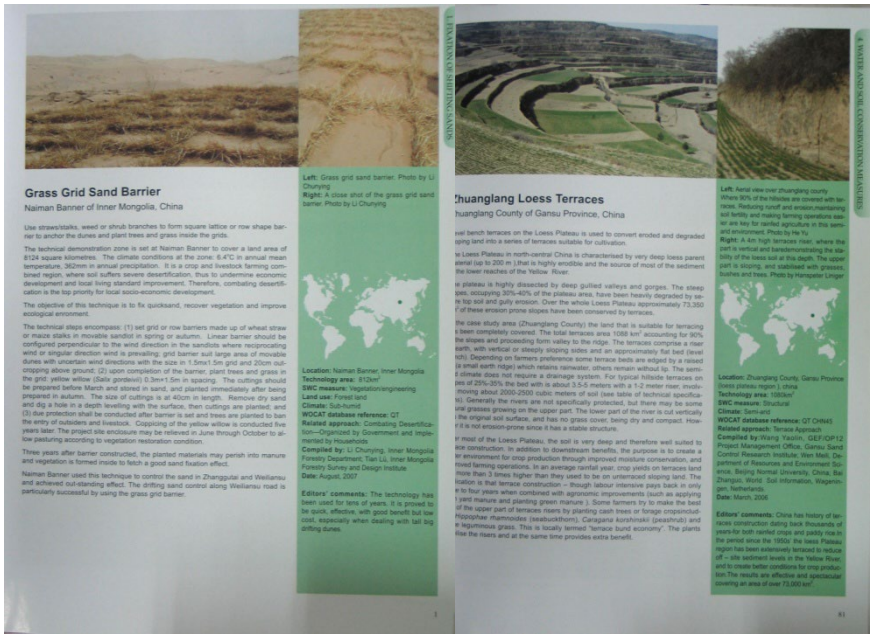


- 49 cases were collected from 10 provinces and compiled as a book
- covering 10 subcategories and 5 categories of techniques
- including sand dune fixation, re-vegetation, soil erosion control, agro-forestry and utilization of natural resources
- Financed jointly by GEF-China and GEF-LADA project

Check Dam

Xifeng County, Gansu Province, P.R.China





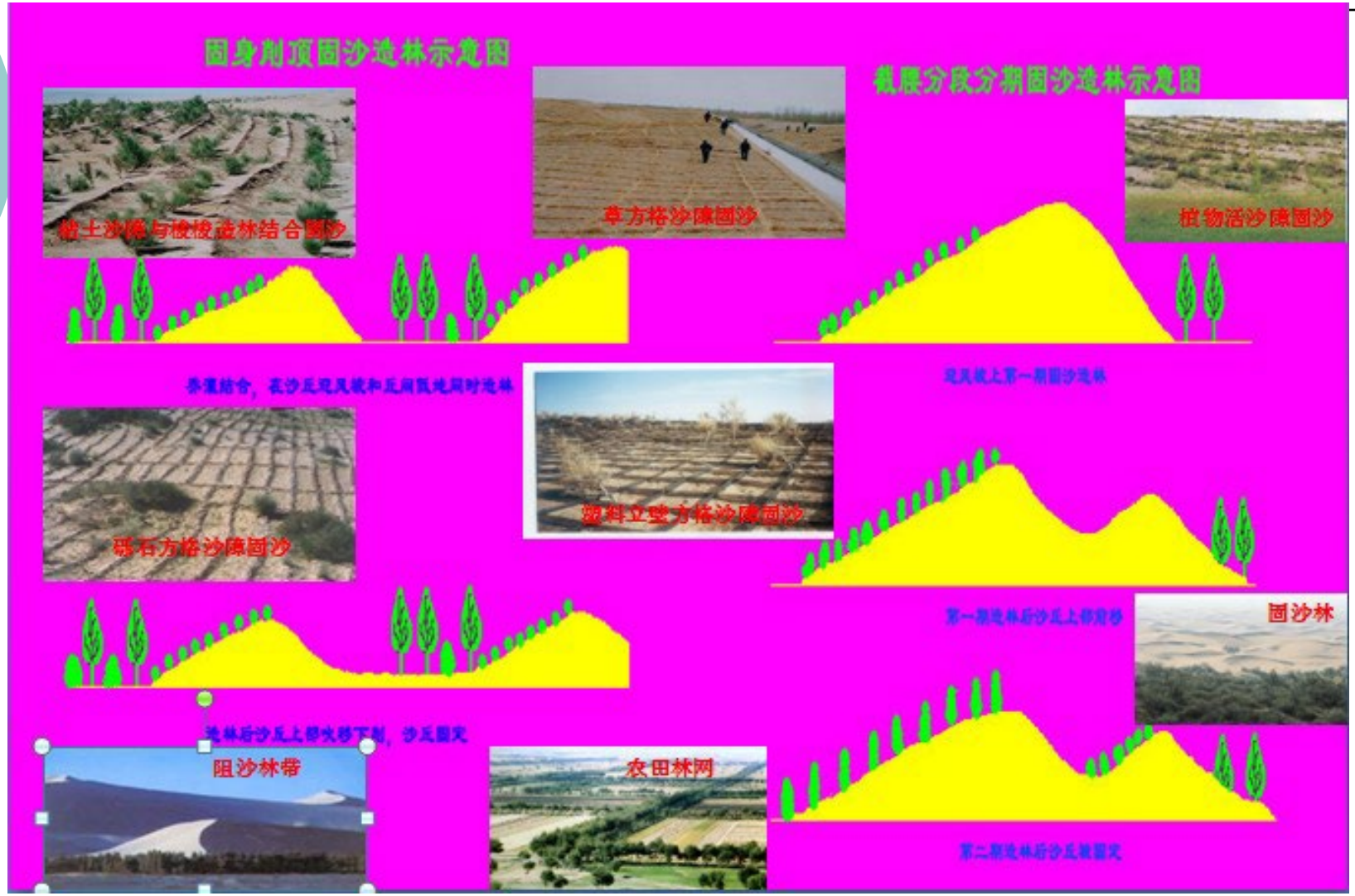
Grass Grid Sand Barrier

Naiman Banner of Inner Mongolia, China

Zhuanglang Loess Terraces

Zhuanglang County of Gansu Province, China

Sand barriers and windbreaks



Selection of indigenous species

Fiber bag mulching tree planting

Aerial seeding

Run-off Interception

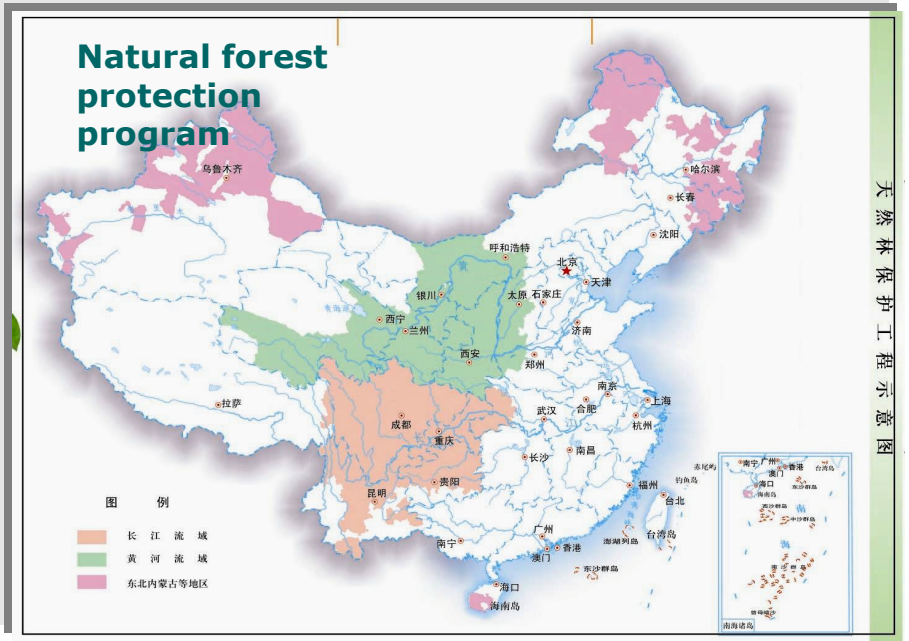
Desert vegetation processing and utilization

- Implement effective protective measures and leave abundant room for self-restoration of the ecosystem
- Implemented well designed projects to increase forest and grass coverage
- Put in place a benefit driven system to mobilize the active participation of the whole society

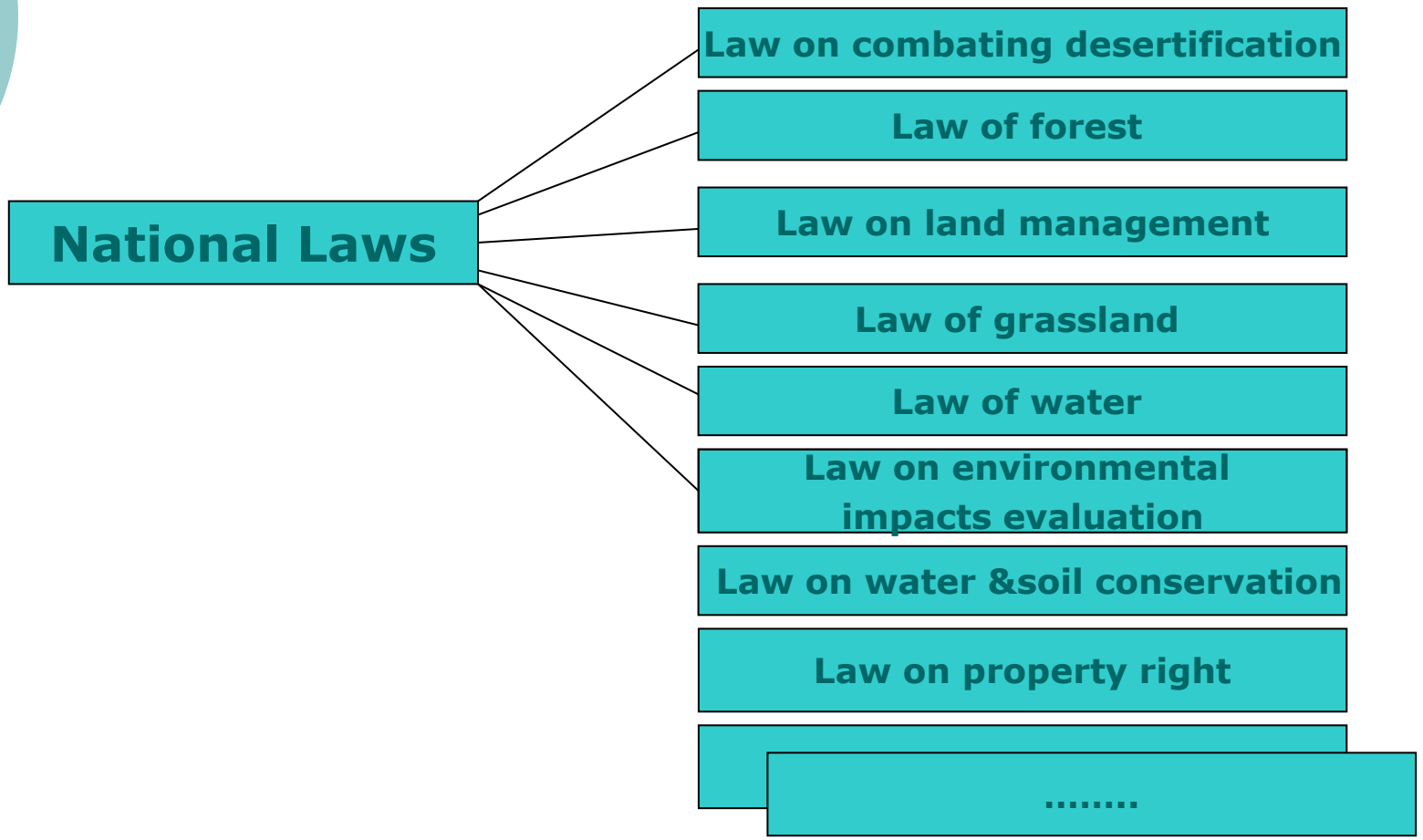
- Implemented well designed projects to increase forest and grass coverage

Governmental invested key projects for ecological improvement

- **Central Government budget invest**
- **Local governments implementation**
- **Farmers participation**
- **Low input**



Law framework based regulatory measures to control unsustainable land use



Regulatory policy to regulate un sustainable economic practices:

Restriction on over cutting, over grazing

Grassland ecological protection and construction.

Water utilization and water saving policy

Environmental impact evaluation system

Put in place a benefit driven system to mobilize the active participation of the whole society

- Governmental payment and provision of ecological good (PES, Forest ES, GrassES)

  Ecological improvement project, Land use Transition, Forest management,

  - Market system for Forest ecological payment
- Market based sustainable commercial forest management

  Collective forest property right reform 70years land use right,

  Logging permission for sustainable use

By incentive policy driving

Private investment

- 2007年温家宝总理接见全国治沙劳模
- Premier Wen Jiabao met with working models in 2007

- Farmers participation

Government payment

Compensation and subsidies to farmers

- Grain for Green

  Duration 8years+ afforestation,25provinces

Soil erosion &flood

- ✓ Cropping easement slope land and sandy land at the Yellow river basin and Yangtz River basin
- ✓ Reforestation: Plantation structure: 7:3 (ecological: economical)

Compensate loss of farmers

- ✓ Grain compensation:

  2150kg/ha/year Yangtz River

  1500kg/ha/year Yellow River
- ✓ Cash subsidies :750yuan/ha/year
- ✓ Cash for seedlings: 750yuan/ha/year

Second phase: the second 8-year, all cash payment

- Forest Ecological Benefit Compensation Fund

  Duration 10years+ management

Improving forest ecosystem services

Water heads, natural reserves and post afforestation management

- ✓ Forest protection and management

  Refforestation, tending, fire, pest disease

Compensation to input of organization, collectives, individual farmers

- ✓ Cash payment: 75yuan/ha/year

Xu,et al 2006. Liu, et al 2006.

Sustainable management of commercial forest

Targeting: Commercial forest (70% commercial : 30% ecological in southern China)

sustainable forest management SFM (local) Vs SFM (Int.)

Objectives: sustainable development of timber and wood production not compromising ecological security, improving income of local forest farmers

- Collective forest property right reform
- Empowerment and return forest property right to farmers
  Land use right 70 years
  Forest property right
  ownership, management, gaining profit

- Logging permission system reform
  Logging quota application – Sustainable forest management program based on year of tree +market demand

- Timber procurement by forestry department--- market based
- Services provided to individual farmers in land transfer, pest and disease control

- Loan and credit support for forest farmers

Establish mechanism that combine incentives with accountability and heighten the sense of responsibility of all Levels of Local governments

- Agreement between provincial and central government on annual target of the land degradation control.
- Reporting and evaluation and assessment of the performance and effectiveness of provincial governments.
- Linking desertification control with leading governor's official term evaluation.
- Punishment and reward.

Agreements conclude between central and provincial governments, to whom liable would be placed if they fail to accomplish the task of combating desertification.

- **Ensure Coordination among various departments and full participation of the Whole society in the fight against desertification.**

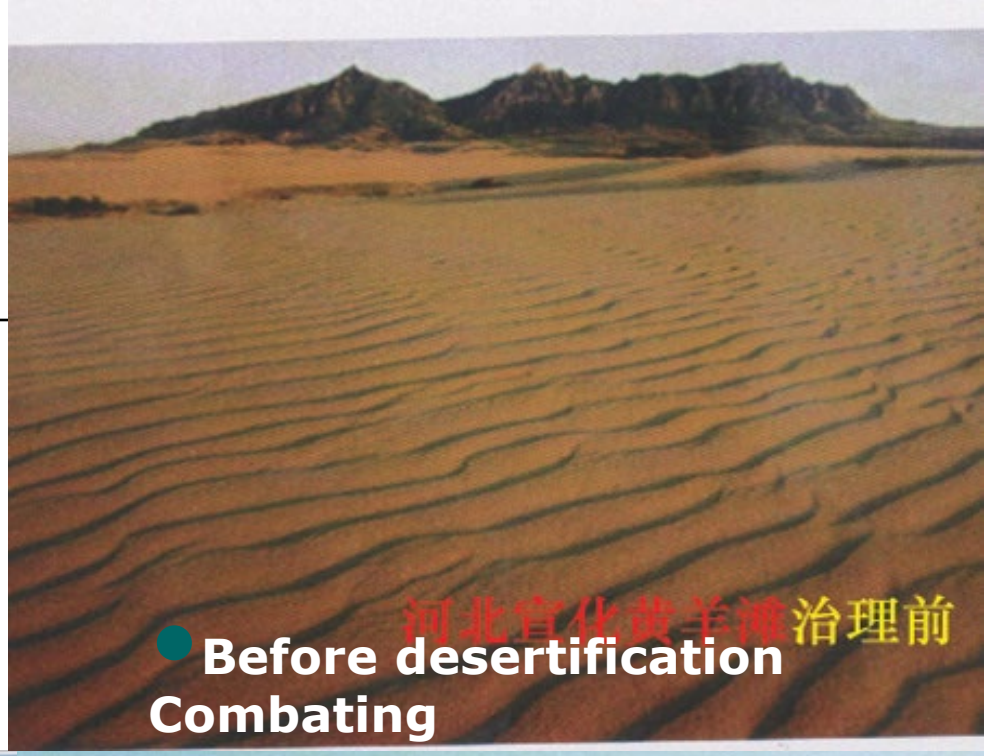
CCICCD 19 ministries

- **State Forestry Administration**
- **Ministry of Foreign Affairs**
- **Ministry of Finance**
- **National development and reform commission**
- **Ministry of agriculture**
- **Ministry of water resources**
- **Ministry of environmental proetection**
- **State council leading office for poverty alleviation**
- **Ministry of science and technology …….**

IV. Improvements made

- Ecological improvement
- Diverse income generation
- Capacity building
- Awareness raising

Ecological condition improved



- Before desertification Combating

- In the course of management

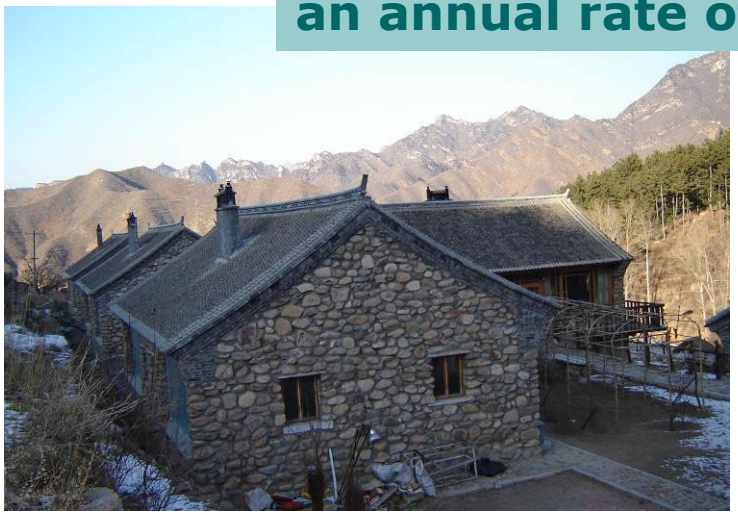
- 林草植被盖度增加20%以上
- 20% Increase of Forest-Grass Coverage
- After desertification Combating

- Take Beijing and Tianjin Sand Wind source control project for instance, it makes a completion of total 5.76 million hectares of forestry management, forest coverage rate increased from 12.4% in the beginning to the current 17.1%;

- "Three North" Shelterbelt achieve the accomplishment of 24.67 million hectare forest conservation areas, forest coverage rate has seen an mount up from 5.05 percent in 1977 to the present 10.51%.

Livelihood improvement and income generation

- **Rural poverty population decreased at an annual rate of 6.8%.**



Capacity building

Awareness raising

V. Technical transfer

LADA project Supported Asian workshop on land assessment

Stakeholders meeting and field investigation in Wengniute County

Seminar under China Africa Forum

- June 17, 2011 opening seminar for African countries on combating desertification
- Field trip in Hebei

- 13countries,33Governmental officers
- 3weeks lectures and field trip
- Policy and technical seminar

- Training workshop hosted by China Forestry Academy under UNEASPEC project on NEA DDS mitigation for Mongolian

- 1week training
- Lectures + field trip
- Policy and technical courses

- Opening ceremony

Attended by CCICCD and Mongolian committee to combat desertification

Visit waste water Treatment Plant

Experiencing Mongolian culture ecotourism

- Losing session
- Award of certificate

•Bilateral training similar natural condition
Focus on common issues ,
Base for piloting project


Thank you.