



GREATER MEKONG  
SUBREGION  
CORE ENVIRONMENT  
PROGRAM

# **GMS Core Environment Program**

## **Xishuangbanna Biodiversity Conservation Corridors Project**



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# I. Local Context

- ❑ The national territorial area of this prefecture covers an area of 19,125 km<sup>2</sup>, governing Jinghong City, Menghai City and Mengla City. The permanent population of the prefecture is 1,157,000, with 13 nationalities including Dai, Hani, and Jinuo etc, the minority occupies 77.6% of the total population.
- ❑ GDP of the whole prefecture: 30.6 billion yuan.
- ❑ local financial budget income: 2.88 billion yuan.
- ❑ tourism income: 22.8 billion yuan.
- ❑ pre capita disposable income of urban residence : 21,478 yuan
- ❑ rural per capita net income : 9,155 yuan.



Xishuangbanna borders on Laos and Burma, adjoining with Thailand, having better edge of international location, which is the bridge and link to connect Southeast Asia



China biological diversity accumulation area, species gene bank, forest ecological museum, one of the 25 hot spots of biological diversity protection

- ❑ UN Biosphere Reserve Network Member
- ❑ Nationally Designated Eco-Demonstration Region
- ❑ National Scenic Spot



**Animal species of more than 2,000, occupying one quarter of the nation**

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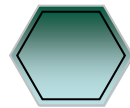
**Plant species of more than 5,000, occupying 1/6 of the nation**

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**Nature reserve covering an area of 383,000 hectares, occupying 20.1%**

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**The forest coverage rate of the whole prefecture is 78.3%**

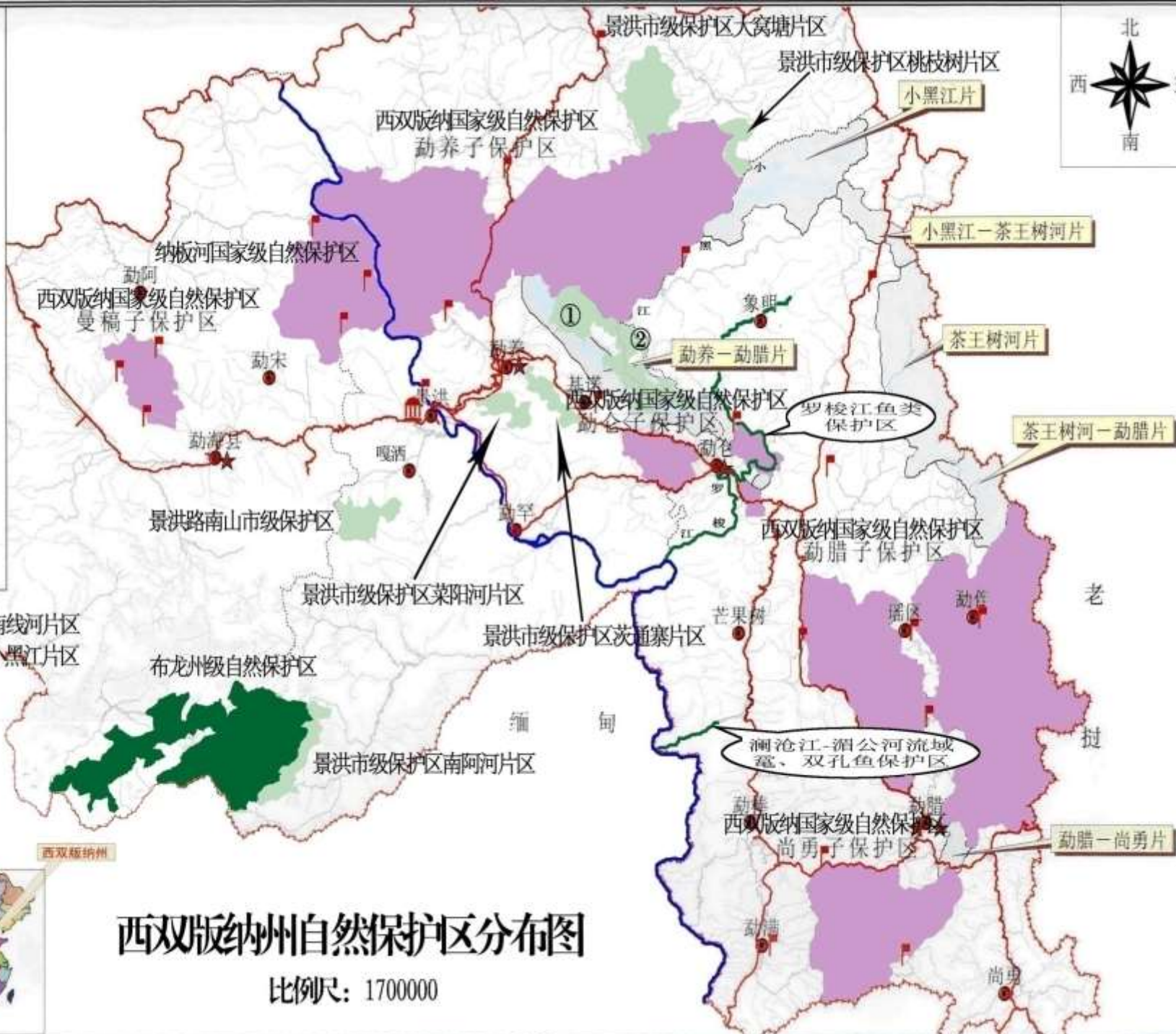
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# 图例

- 管理机构**
- 管理局
  - 管理分局
  - 管理站
- 保护区**
- 市级保护区
  - 州级保护区
  - 国家级保护区
  - 生物走廊带
- 边界**
- 公路
  - 国界
  - 地州边界
  - 县界
  - 河流



- ①景洪市级保护区南线河片区
- ②景洪市级保护区小黑江片区



## 西双版纳州自然保护区分布图

比例尺: 1700000

To implement the “eco-prefecture” development strategy, the following actions were taken, as required by "Xishuangbanna Agreement about Biodiversity Protection of Yunnan Province":

- ▣ Developing “Plan for Implementing Yunnan Biodiversity Conservation Strategy and Action in Xishuangbanna ”
- ▣ Establishing “Xishuangbanna Tropical Rainforest Conservation Foundation”
- ▣ Initiating “Wildlife-caused Accident Insurance”

## **II. Xishuangbanna Biodiversity Conservation Corridors Project**





# 1. Project phase I and supplemental

- **Duration: 2007-2012**
- **Project budget: 5.67 million Chinese Yuan**
- **Focus area: Nabanhe-Mangao corridor,  
Mengla-shangyong corridor**

## Main project activities

- (1) **Poverty reduction:** supported by village development fund the project piloted livelihoods alternatives enabling biodiversity conservation and poverty reduction models;
- (2) **Land use planning and mgmt.:** tested corridor design and demarcation process at two corridors; studied related policy and legal framework ;
- (3) **Restoration of ecological connectivity:** carried out biodiversity assessment; demonstrated ecological restoration means; encouraged the establishment of Mengsong Nature Reserve through a robust feasibility study;
- (4) **Capacity building:** conservation awareness of public and conservation capacity of relevant dept. enhanced through project implementation, training, workshops and outreach events, etc.

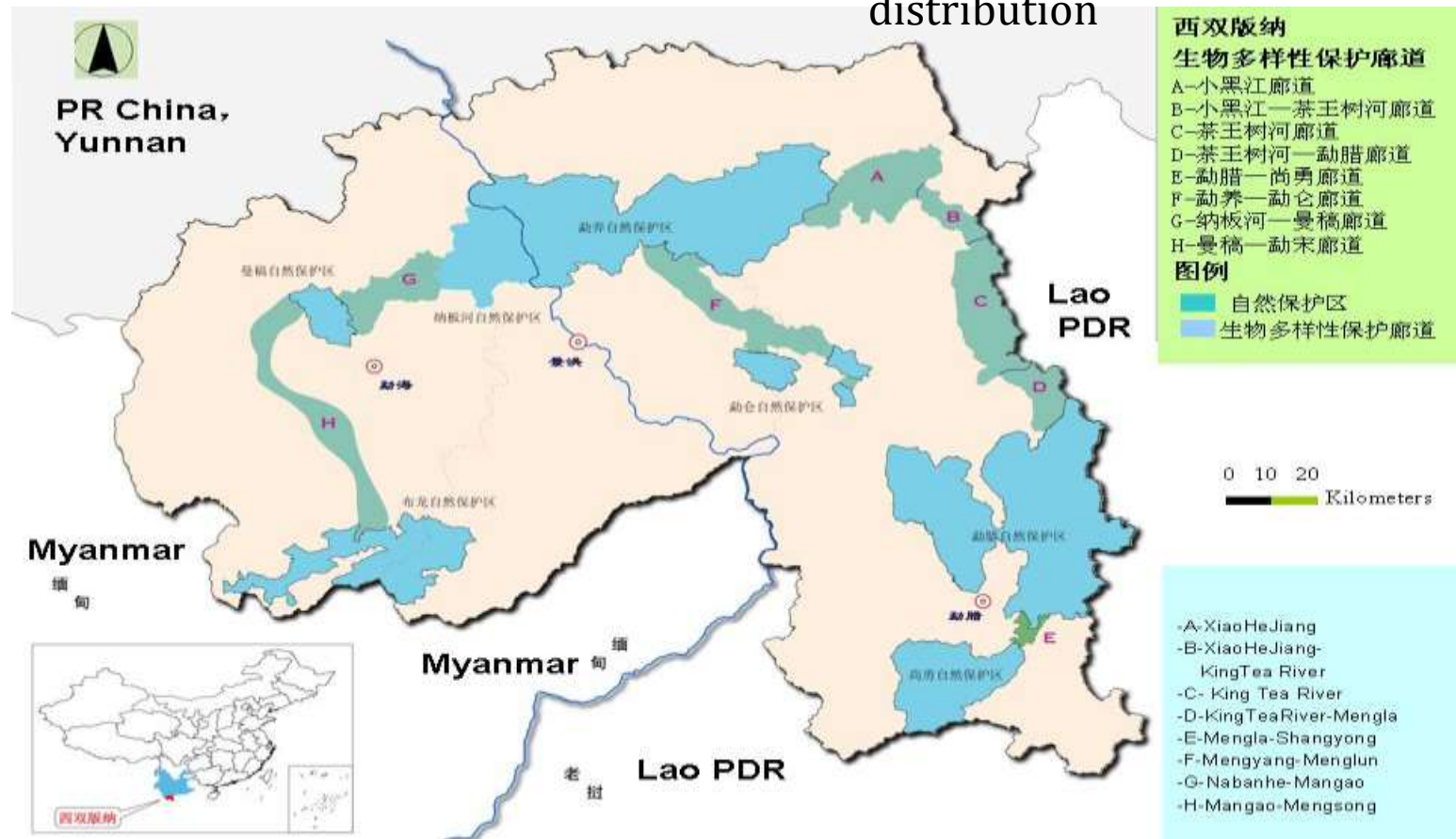
## Main Results of Project Phase I (incl. supplemental)

- ❑ Completed more than ten baseline surveys or studies;
- ❑ Identified necessary corridors for improving connectivity of nature reserves of XSBN and future necessary and possible legal settings for corridor management explored
- ❑ Completed the design of 3 corridors: Mengla-Shangyong, Nabanhe-Mangao and Mengla-Mengyang corridors



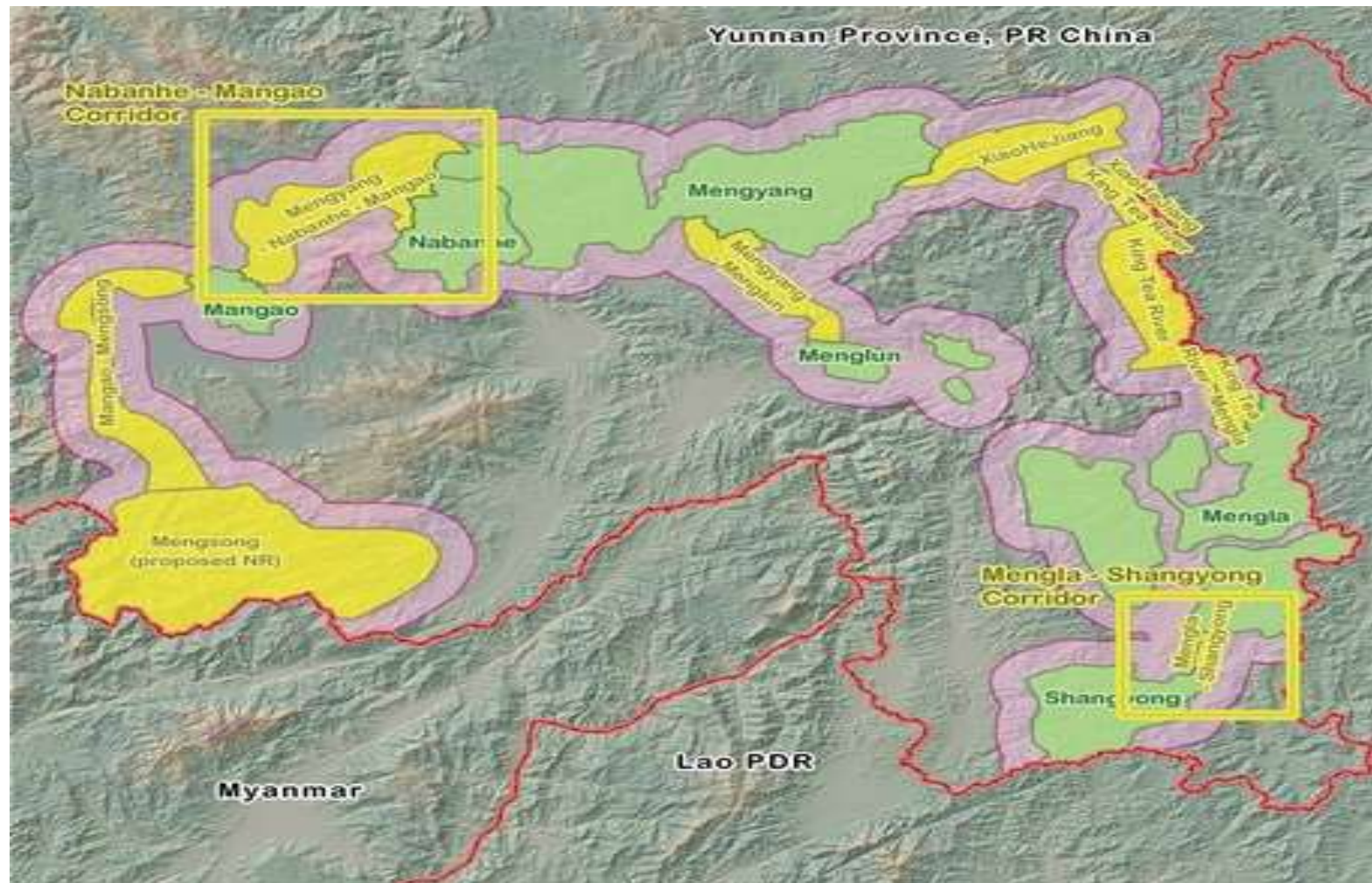
# Main Results of Project Phase I (incl. supplemental)

## Corridor distribution



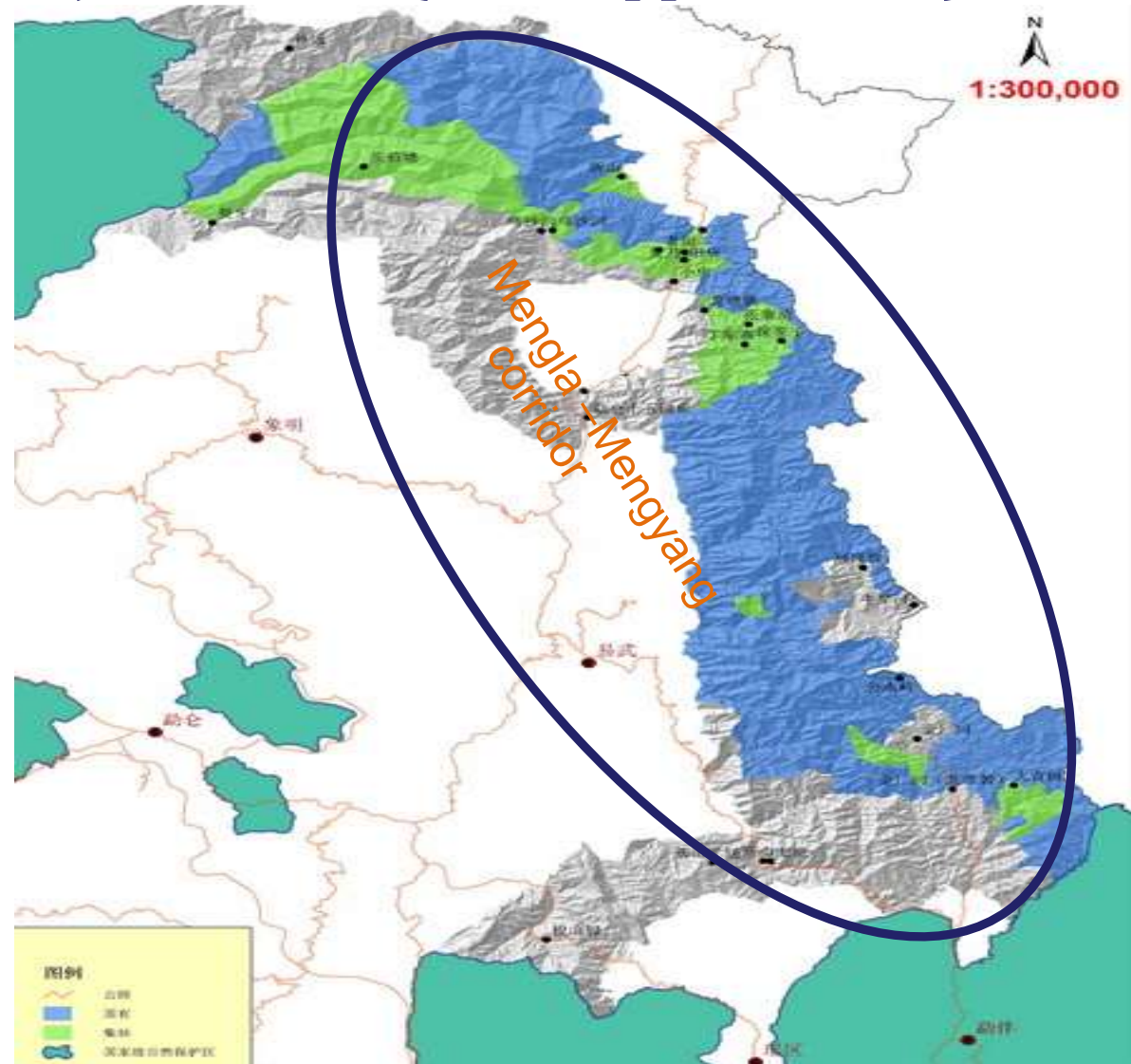


## Main Results of Project Phase I (incl. supplemental)





## Main Results of Project Phase I (incl. supplemental)





## Main Results of Project Phase I (incl. supplemental)

- Facilitated the establishment of Bulong Nature Reserve by the prefectural government through a feasibility study carried out by the BCI project
- Supported to the “Integrated Scientific Survey of Bulong Nature Reserve”



## Main Results of Project Phase I (incl. supplemental)

- ▣ Designed ecological restoration plans for priority areas in 3 corridors , and restored 714.6ha by enclosure and 230ha by human-aided methods , upgraded 40ha farm land through vertical agro-forestry and 2,000mu tea plantation through cross-planting of local cash crop species in Mengla-Shangyong and Nabanhe-Mangao corridors
- ▣ Piloted village development fund (ca. 1 million in total) supported livelihoods alternatives in 19 villages located in Mengla-Shangyong and Nabanhe-Mangao corridors



## Main Results of Project Phase I (incl. supplemental)

- ❑ Carried out the climate change vulnerability analysis of XSBN pilot corridors;
- ❑ Provided trainings/awareness raising on village forest patrol, livelihoods supportive skills, project management, and biodiversity conservation to villagers, general public, and governmental staff
- ❑ Environmental advocating through organized theme writing and painting competition in schools
- ❑ Multi-channel and multi-form environmental education and propaganda delivered (posters, project briefs, publications, TV reports...)
- ❑ Organised regional exchanges and international conferences which promoting country dialogue and mutual learning



Theme reports

Project reports



## 2. Project Phase II

- **Duration: March 2014-December 2015**
- **Project budget: ca. RMB1.75 million yuan, of which ADB project fund 1.15 million, local counterpart fund 0.75 million yuan**
- **locality: Nabanhe-Mangao corridor**

## Project objectives

- ❑ **To legalize corridor approach**
- ❑ **To demonstrate corridor establishment and community conservation model**

# Project activities

- ▣ **Institutionalization of corridor conservation and management**
  - confirm NM corridor boundary and develop boundary maps
  - develop NM corridor land use maps
  - develop corridor management rules
  - carry out demonstration of biodiversity conservation and livelihood at two pilot villages
  - awareness raising, training and dissemination of corridor and guideline
  
- ▣ **Demonstration of community level corridor development**
  - select one priority and one sister pilot village
  - develop village development plan for the priority pilot village
  - pilot priority activities
  - test VDF supported activities in the sister pilot village

## Project activities

- **China-Laos transboundary conservation**

Survey the distribution, habitats and migrating routes of Asian elephants in the China-Laos joint conservation area, and develop a conservation plan for Asian elephant in this area

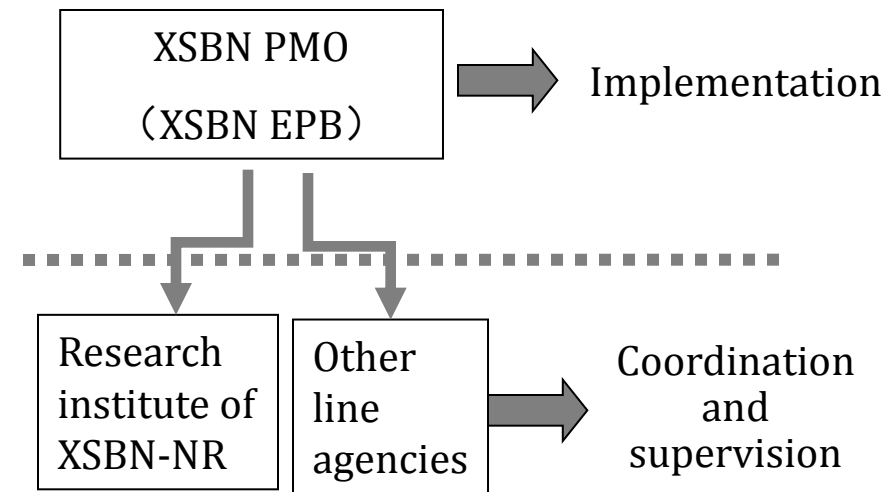
- **Project management and dissemination**

Establish project leading group and project management office for coordination, implementation and dissemination of the project.



# (1) Project management

- Project leading group headed by the director and deputy director of XSBN EPB established.
- PMO established at the ecological conservation.



XSNB PMO



## (2) Institutionalization of corridor conservation and management

- Ongoing field survey carried out by XSBN-NR research institute which is required for demarcation of the pilot corridor .



Villager interview



- Relevant policies and plans studied;
- Social, economic, land use, and other data collected in 18 villages;
- Completed the boundary survey and started making land use map and demarcation map.



Natural forest in the corridor



Land use in the corridor

## Develop corridor management rules

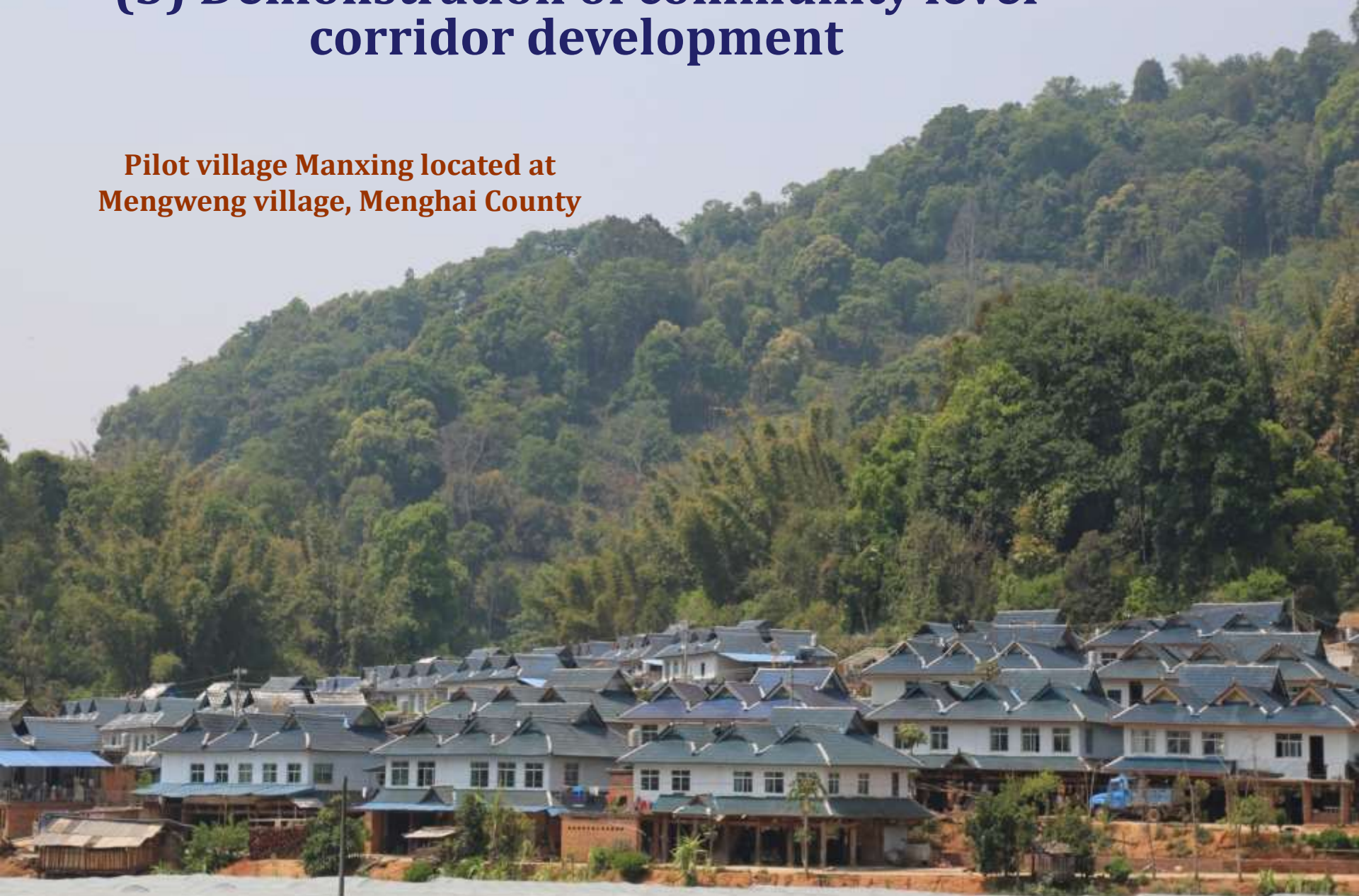
- ❑ “Corridor management rules” that is to officially recognize the status of corridor, to set the management structure, and to regulate the activities in the corridors was developed and hopefully to be endorsed by the prefecture govt.



Draft corridor management rules

# **(3) Demonstration of community level corridor development**

**Pilot village Manxing located at Mengweng village, Menghai County**



## Demonstration of community level corridor development - Selection of pilot villages

- Candidate villages in the pilot corridor were assessed based on the phase I experiences and project objectives
  - Manxing village located in Menghai County was selected as the priority village to demonstrate integrated community approach to conservation.
  - Bonglong Old Village was selected as the second pilot village to further test livelihoods alternatives with VDF support



## Demonstration of community level corridor development -village planning

- Expert of Oxfam HK was invited by PSU to provide assistance to the village planning



- Through participatory planning process, the project team together with local villagers identified priority interventions needed to develop Manxing a model community that contributing to the corridor development and environmental protection.





# Demonstration of community level corridor development – Village development fund

- An implementation plan developed;
- VDF management committee established by the villagers;
- Total VDF in Manxing: 100,000yuan
- 50yuan per household as membership fee to be added to pool
- Currently 95,000yuan borrowed by villagers
- Sister pilot village Bonglong to further consolidate experiences achieved in Manxing



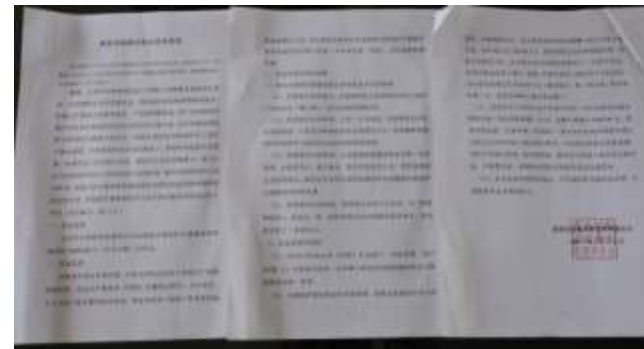
VDF  
implementation  
plan





## Demonstration of community level corridor development – Village development fund

- ❑ VDF mgmt. model tested in project phase I was adapted;
- ❑ Village committee members were selected by villagers in the village meeting;
- ❑ The committee responsible for the VDF management;
- ❑ VDF mgmt. guidelines was agreed by villagers;
- ❑ Any borrowing to be discussed in the village meeting.



VDF management guidelines



Borrowing contract and evidence of pay-back





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## Demonstration of community level corridor development – Ecological restoration

- Restoration: planted *Abies holophylla* 210mu, pine tree 70mu, valuable tree species 200mu



Distribution of seedlings



Intercropping at maize field

## Demonstration of community level corridor development – Rural environment improvement

- ▣ **Solid waste collection and disposal system:** one collecting truck, 10 collection tank and one furnace for 5 villages includes Manxing, total 0.65 million Chinese yuan invested by YEPD.



Waste tank



Waste collecting truck

## Demonstration of community level corridor development – Rural environment improvement

- ❑ Artificial wetland wastewater treatment system for Manxing
- ❑ 900-meter long mud-slide preventing wall
- ❑ Village greening
- ❑ Alternative energy



Wetland wastewater  
treatment system



Mud-slide preventing wall and  
solar energy-saving lamp

# Demonstration of community level corridor development – Eco-tea garden demonstration

- Demonstration of eco-tea garden supported by Yunnan Biodiversity Conservation Fund



Survey report on ecological situation of Manxing



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# Establishing eco-tea garden model



Distribution of seedlings and fertilizer



Cash crops intercropping in tea garden



Village nursery



Biodiversity in the tea garden

## Demonstration of community level corridor development – Practical trainings

- ▣ Practical trainings organized for 29 villager representatives:
  - Pig farming, hedgehog breeding, wild pig domestication
  - Planting of tree species of high economic value, eco-tourism, rural pollution prevention and control



# Demonstration of community level corridor development – Practical trainings



Seedling



Tea processing



Eco-tea garden



Intercropping of dendrobium  
in old tea tree forest



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# Demonstration of community level corridor development – Livelihoods development



Distribute and explain how to energy-saving stove



Traditional bee keeping



On-site training on animal farming



Bamboo rat breeding



## (4) Transboundary cooperation

- ▣ Collection of first and second hand data on distribution, habitats and migratory routes of *Elephas maximus* in China-Laos joint conservation area;
- ▣ Development of joint conservation plan .



Survey the elephant habitats



Cross-checking the population of elephants



Identifying the areas where elephant live

## (5) Project management and dissemination

- ▣ Guidance were provided by NSU and PSU During project implementation,
- ▣ Trained village officials of pilot and surrounding villages
- ▣ Organized project propaganda and awareness raising events



NSU and PSU visit to pilot village



Project mobilization and training



Project newsletter



# Project management and dissemination



Information board in Manxing village

posters



Propaganda slogan on walls

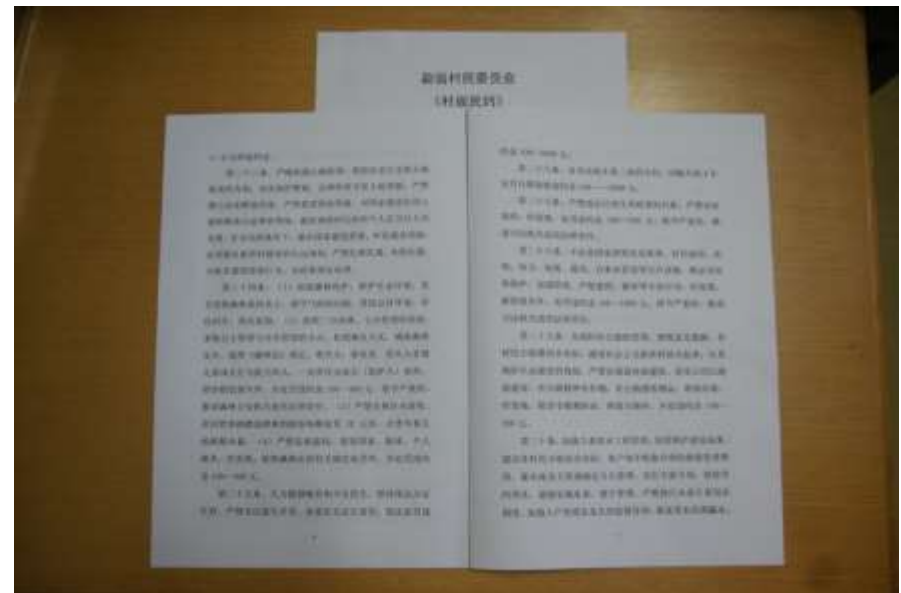


Distribute project poster and gadgets



# Project management and dissemination – village self-administration

- ▣ A code of conduct was developed to regulate villagers' behaviors particularly those concerning forest conservation, farm land conservation, protection of drinking water, village infrastructure and sanitation, etc.
- ▣ Implementation of the code of conduct was overseen by the villagers and any violation will be punished.



Code of conduct



## Institutionalization of corridor conservation and management – forest patrol and conservation

- While managing own collective forest, Manxing village signed contract with Menghai Forestry Bureau to take the responsibility to manage state forest. A patrol station and patrol team was set up, and scheduled patrol is performed.



Signing state forest mgmt. contract



Patrol station and patrol team



Patrolling in national forest

## Workshops/Exchanges

- ❑ Consultation workshop on value chain development held in XSBN in March 2015, with ADB experts Andrew McNaughton and Teo Dang Dong's support and facilitation.



Understand eco approach to dendrobium farming



Group photo



Discussion in the workshop



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- Experience and information sharing between Guangxi and Yunnan project implementers: XSBN project team participated in workshops of Guangxi CEP project.



- Guangxi project team visited pilot village of XSBN.

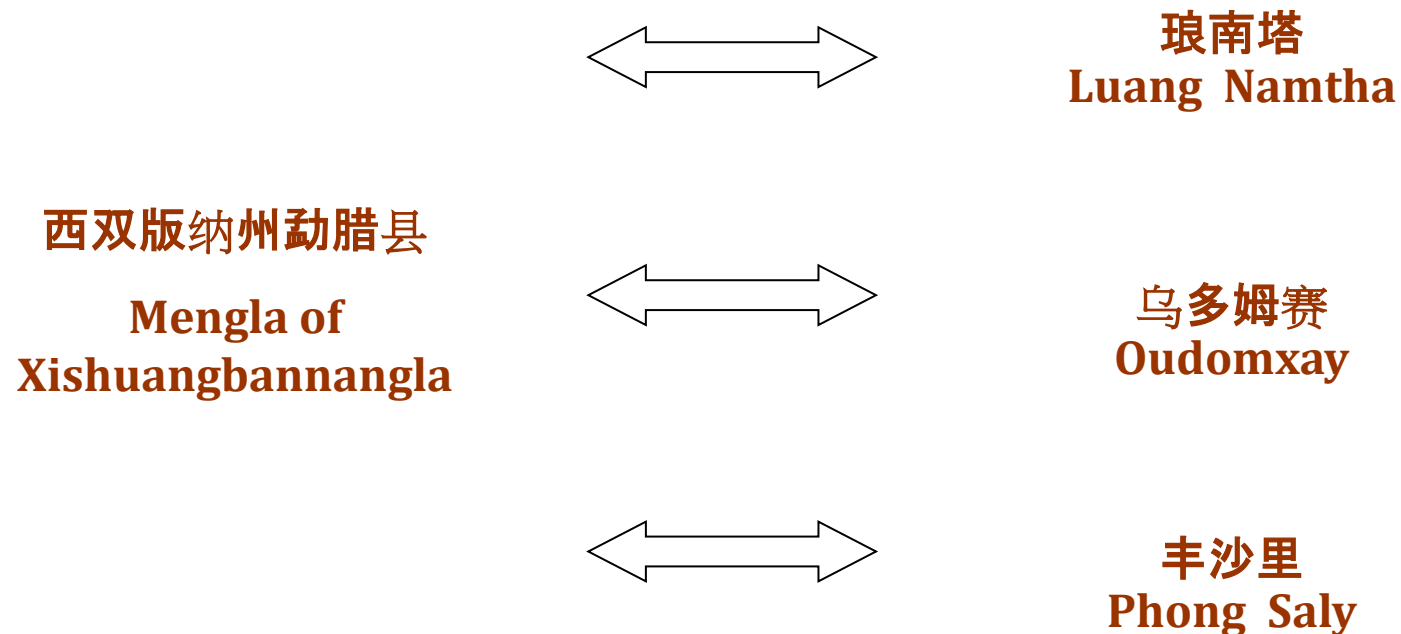


### **III. Transboundary environmental exchange and cooperation**





# 1. China-Laos joint conservation area





# China-Laos Cross-border Joint Conservation Area



## Activities

- ❑ **Establishing China-Laos cross-boarder cooperation mechanism**
- ❑ **Conservation staff capacity building (skills training)**
- ❑ **Social and economic survey**
- ❑ **Biodiversity survey**
- ❑ **Joint patrol and monitoring**
- ❑ **Dissemination**
- ❑ **Awareness raising and education of communities along the boarder**

## 2. Transboundary cooperation in project phase II

- **Strengthen joint conservation within the existing China-Lao joint conservation area**
  - Project supports first and second hand data collection on the distribution, habitats and migratory routes of *Elephas maximus* in China-Laos joint conservation area, and development of joint conservation plan .
- **Expand the scope of China-Laos environmental cooperation**
  - From biodiversity conservation to wider environmental conservation fields
  - From one partner to several partners.

## Visit of Department of Natural Resources and Environment Luang Namtha Province of Laos to Xishuangbanna

- On May, 2014, Department of Natural Resources and Environment Luang Namtha made an exchange visit to Xishuangbanna on environment protection. Xishuangbanna Municipal Solid Waste Treatment Plant and Domestic Sewage Treatment Plant, rubber mill waste water treatment project, pilot village of rural environmental comprehensive were visited and a meeting with local agencies was held.





## Visit of Department of Natural Resources and Environment Luang Namtha Province of Laos to Xishuangbanna



Visit Asiatic Elephant Museum



Visit patrol boardwalk



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## Visiting Department of Natural Resources and Env. Luang Namtha Province of Laos

- On May, 2015, a delegation consists of Yunnan Environmental Protection Department and Xishuangbanna Environmental Protection Bureau visited DoNRE Luang Namtha of Lao PDR





## Exchange and communications



Visiting plant in  
Luang Namtha



Communicating with village  
representatives in Luang Namtha



Meeting with school in Luang Namtha



# Visiting Luang Prabang Province of Laos



Meeting

Group photo



### 3. Context of transboundary environmental cooperation

- Implement China "One Belt and One Road" Strategy
- Lay foundation for the environmental protection communication and cooperation between Yunnan Province and neighbouring counties
- Implement the state good-neighborhood policy
- Explore referential experience of cross-border cooperation

## Bridging and linking the GMS countries

- Promote environmental cooperation with northern Lao provinces by using the geographical advantage in the Greater Mekong region.
  - Promote the development of “China-laos cross-border joint conservation area”
  - Promote and expand the cross-border environmental protection with Laos to a wider scope

## Cooperation priority areas

- ❑ Cross-border biodiversity protection;
- ❑ Rural environmental improvement;
- ❑ Cross-border water pollution prevention and control;
- ❑ Environmental industry and techniques;
- ❑ Environment education and public awareness raising;
- ❑ Environmental management capability building;
- ❑ Other cooperation areas agreed by both sides.

## Ways of cooperation

- ❑ Exchange relevant environmental information and materials;
- ❑ Exchange visits of experts, scholars and delegations ;
- ❑ Organize seminars, training courses, and symposiums etc together;
- ❑ Jointly carry out pilot projects;
- ❑ Other cooperation means agreed by both sides.



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# COMMON MISSION BRING US AND TIE US TOGETHER



**To make Xishuagnbanna the pilot model of environmental cooperation in the Greater Mekong Subregion, and make Xishuangbannna- the emerald on northern tropic bright forever.**

## **Ecological view of Dai nationality:**

**Water comes from forest**



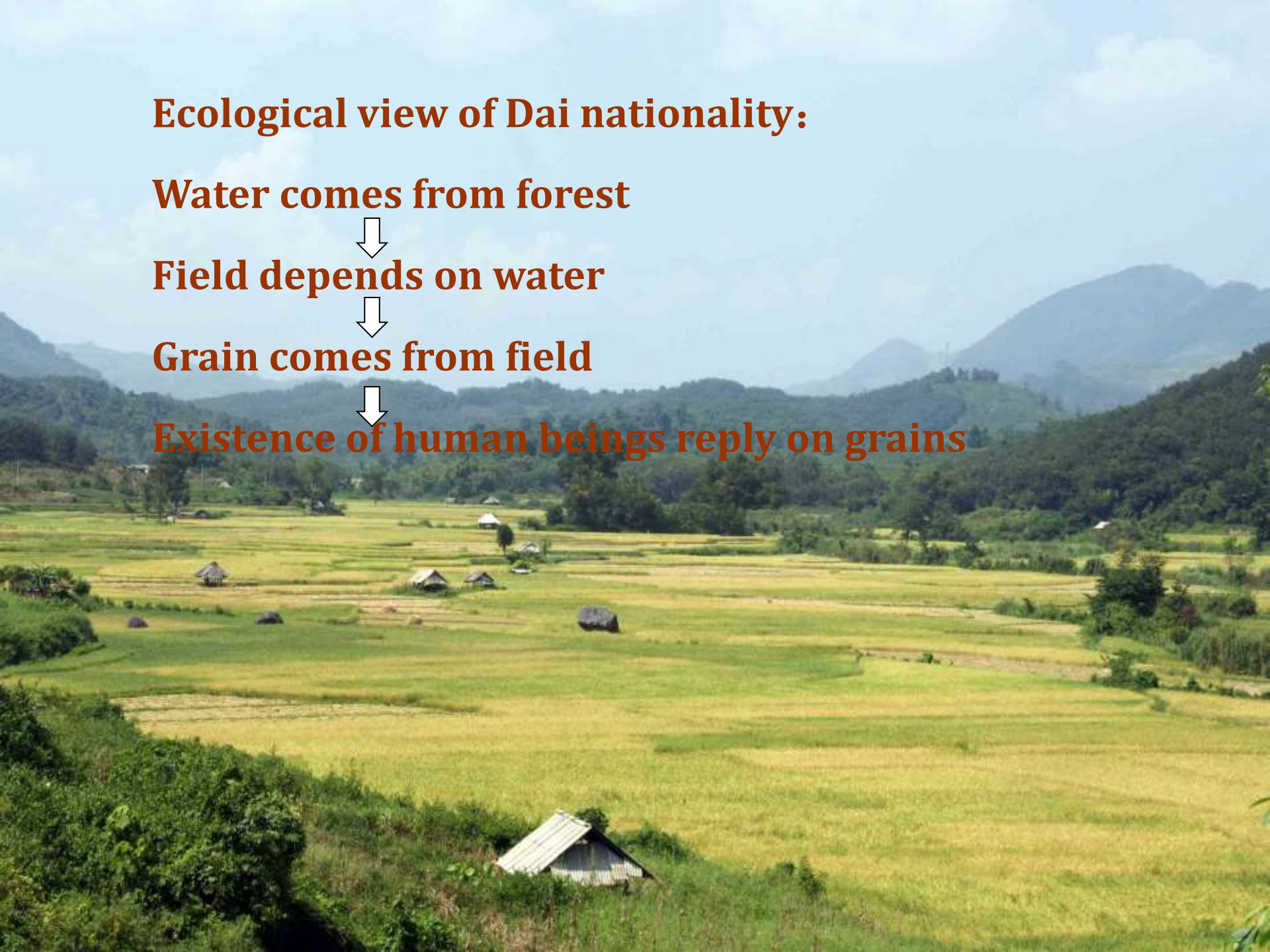
**Field depends on water**



**Grain comes from field**



**Existence of human beings reply on grains**





**Thanks !**

