YUNNAN:
LANCANG-NUJIANG
Mekong-Salween
Gender Dynamics and Adaptation to Climate Change

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Asia Commons Insight
YUNNAN LANCANG-NUJIANG
GENDER AND ADAPTATION

Regional-level context in Lancang-Nujiang

ICIMOD: Himalayan Climate Change Adaptation Programme (HICAP)

Double exposure: How do communities adapt to climate change within context of parallel risks from socio-economic changes?

- Coping Mechanisms
- Autonomous Adaptation
- Planned Adaptation
- Transformational Adaptation (scale, new, planning)
GOAL: COMMUNITY BASED RESILIENCE IN CONTEXT

- Restored and diversified natural resources for sustainability
- Responsive institutions grounded in the local context
- Expansive and improved sustainable livelihood options
- Sound gender dynamics and gender equity
- Farmer-driven decisions
Gender and Adaptation

Regional/Network Political Ecology

Key questions for adaptation network mapping:
- Development trajectories
- Multi-scale governance
- Local institutions and knowledge
- Vulnerability differentiation: ethnicity, gender, class
- Tipping points for transformation: drought
YUNNAN DEVELOPMENT PATHS

- Economic status: $1975 per cap GDP
- Annual growth rate 2011: 13.7%
- Primary: 17.9%, Second: 43%, Tert: 39.1%
- Mountains percentage: 94% (av elevation: 1980m – ranging 6740m to 100m; mtns 84%-plateaus 10%-basin 6%)
- Forest coverage: 47.5%
- Cultivated land: 10.7%
- National ethnic/provincial ethnic: 8%/33% (25 of 56 minorities)
- Key crops: tobacco, rubber, tea, coffee, mushrooms, herbal
- Aid agencies/presence strong
YUNNAN CLIMATE CHANGE

• 30% of water resources in eastern Himalayas from melting glaciers, snow and ice (lower than Indus, Tarim)

• 300-500 million people in Lancang-Nujiang basin
YUNNAN CLIMATE CHANGE

- From 1961 to 2006, the annual average temperature in Yunnan has increased by 0.64 °C; winter mean and max temp increase
- Length of growing season increased (15 days in Tibetan plateau)
- Flash floods and extreme rainfall run-off in winter
- Drought in summer Doubling of the area affected by annual drought in Yunnan in the last few years
- Freq and magnitude of extreme weather events up
- Wet areas wetter, dry areas dryer
- Estimated that average losses caused by meteorological disasters may account for 6% of the provincial GDP, and up to 10% in the most serious disaster years.
- Climate change challenges vary depending on elevation; uncertainty in future pattern of runoff
YUNNAN DEVELOPMENT PATHS

Late 1990s to early 2000s:
- Go West 1998
- Cancel Agricultural Tax
- Rural Land Contracting Law 2002
- Forest Tenure Reform 2000
- New Socialist Countryside 2005

Early 1990s
- Fiscal Decentralization
- Organic Village Law

1980s
- Household Responsibility System

LIBERALIZATION-DECENTRALIZATION
Yunnan Development Paths

Contradictory developments: negative

- Regional development policy: coastal priority
- Fiscal decentralization
- Western Region Development Plan 1998 (infrastructure/SLCP/NFPP)
- Labor migration schemes
Contradictory developments: positive

- Organic village law/agricultural tax
- Poverty alleviation
- Forest Tenure Reform
- Tourism industry
- Western Region Development Plan 1998
- Compulsory 9-year education 2005
- Strong central government when crisis
- Intense international NGO/aid presence
YUNNAN ETHNIC CONTEXT (33%)
YUNNAN ETHNIC CONTEXT
FOCUS: YUNNAN

Seven Counties

- Diqing (11)
- Nujiang (10)
- Dali (12)
- Baoshan (4)
- Lincang (8)
- Pu’er (7)
- Xishuangbanna (16)
VIGNETTES: PREFECTURES
Diqing Tibetan Autonomous Prefecture
Area: 23,870 km² (3380m)
Population: 330,000 (14/km²; 3 counties)
Ag Production: 1.17 bill Y; Rural Annual Per Cap Income: 3,347 Y
Tibetan: 33.12%
Lisu: 27.78%
Han: 16.39%
Naxi: 12.81%
Bai: 5.14%
Yi: 3.29%
Hui: 0.42%
Pumi: 0.42%
Miao: 0.07%
Nu: 0.07%
Derung: 0.04%
Nujiang Lisu Autonomous Prefecture
Area: 14,704 km²
2000 census: 490,000 (33/ km²; 4 counties)
Ag Production: 1.05 bill Y; Rural Annual Per Cap Income: 2,005 Y
Population:
Lisu 47.13%
Bai 26.97%
Han 13.13%
Nu 5.42%
Pumi 2.92%
Yi 1.99%
Derung 1.11%
Naxi 0.43%
Tibetan 0.37%
Dai, Hui, Zhuang less than 0.1%
Baoshan City Prefecture

Area: 19,637 km² (1640m)
Population: 2.5 million (127/ km²; 5 counties)
Ag Production: 12.6 bill Y; Rural Annual Per Cap Income: 3,627 Y

Han 86.8%
Yi 4.5%
Bai 4.2%
Dai 2.2%
Pu’er City Prefecture

Area: 45,385 km$^2$ (1306m)
Population: 2.36 mill (52/ km$^2$; 10 counties)
Ag Production: 10.81 bill Y; Rural Annual Per Cap Income: 3,456Y

Lahu
Hani
Wa
Yi
Han
Government Policies on Adaptation

- National Climate Change Programme 2007
- Since 2008, drought relief programmes at all levels of government
- Meteorology info/SMS messaging to local level
- 2009 Drought Relief Ordinance (special budget; risk reduction/emergency relief)
- 2010 Natural Disaster Salvation Ordinance
- Measures to improve water use efficiency (investments in infrastructure; tariffs)
- Water saving technology and improved seeds
- Improving farmer income through temp urban jobs, grain for green, strengthening farmland use rights
Government Policies on Adaptation

- Provision of hazard loans through People’s Bank of China quotas for commercial banks
- Agricultural insurance from central govt budget (but requires 50% input from provinces)
- Local drought relief teams; creation of Water Saving Society
- Water user associations strengthened to promote irrigation in villages
- Action Programme on Climate Change in Yunnan calls for considering climate change in socio-economic planning
- 2010 Yunnan as one of five Green GDP Priority Provinces for experimenting with climate change programme
Diqing: Gender and Adaptation

- Rising temperature and reduced precipitation
- Rainy season used to be July/Aug but now in last 3-4 yrs moved to Sept-Oct
- Thunderstorm increases/landslides
- In past 30-40 years timberline has increased from 4200 m in 1960 to 4350 m today
- Changes in glaciers: hard to see them in summer Jun-Oct period now
- Height of crops increased but production poor; more pests
- Influence on cordyceps – hard to find-short window to find them, and on matsutake production
Diqing: Gender and Adaptation

- Changes in quality of grasslands resulted in adjustment of grazing time (10 days shortened) and sites
- Introduction of economic crops: grape and walnuts
- Women control over seed choice to address new climate conditions (water, pests)
- Forage grass reduction in production and disappears earlier in season; affects animal husbandry over winter
- Milk production reduced
- Greater need for irrigation/river water as rainwater reduced
- Ecological migration promoted
- Effect on cultural life: rituals etc. Food and drink culture.
Diqing: Gender and Adaptation

- Climate Change Vulnerability and Impact Assessment
- Centre for Tibetan Regional Sustainable Development, YASS; Dr. Lun Yin and team
- 2009
- Hongpo Village
- Sisters Association: survey of agro-pastoral, NTFP, herbs in climate change
- Climate Field School together with Deqin Tibetan Medical Association and Hongpo Women’s Association (plant investigation)
GOING FORWARD:

- Too heavy reliance on Western standards of gender-equity practice
- Meaningful decentralization: inclusive governance
- Greater government fiscal support
- Community management
- Western Region Development Plan: forests
- Land contracting law/policies
- Work through major influential institutions: Party School, Minorities organizations
- Gender equity policies on adaptation