

# **Socio-Economic Impact Monitoring of Rural Electrification Projects in Yunnan and Tibet Autonomous Region A China Case-Study**

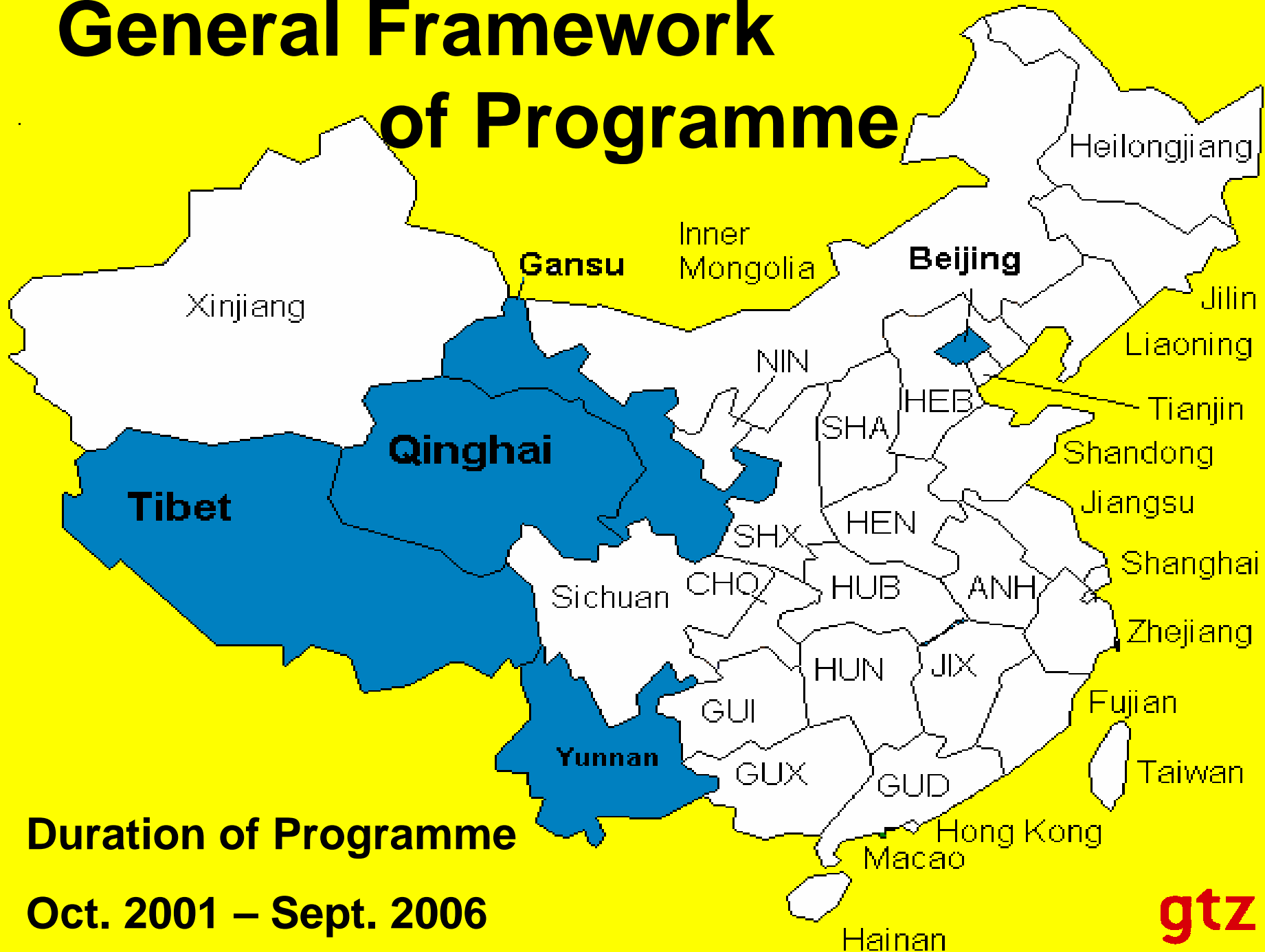
**21<sup>st</sup> EU PV Solar Energy  
Conference and Exhibition  
September 6, 2006 Dresden**

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# Outline of Presentation

- General Framework of Programme
- Monitoring Objectives
- Approach and Methods
- Selection Criteria for Interviewer
- Key-Facts Tibet Baseline - Study
- First Impacts in Tibet & Yunnan
- Conclusions & Outlook

# General Framework of Programme



**Duration of Programme**  
**Oct. 2001 – Sept. 2006**

# Monitoring Objectives

- Poverty Alleviation
- Environmental Sustainability
- Education and Health Services
- Income Generation
- Gender
- Migration
- Institutional

# Approach and Methods

- Modified questionnaires on the bases of Energy Poverty Gender (ENPOGEN) Study
- Basic Principle - aiming at a depiction of the individual HH as a whole acc. to one family member interviewed – remained unchanged
- Guidelines for interview between head of village and foreign social science expert elaborated

# Selection Criterias for Interviewers

- Sound & comprehensive knowledge about the region
- Multilingual capability
- Educational background
- Preferably women
- Experience with Statistical Social Science Software Programme
- Experience with face-to-face interviews

# Key-Facts Baseline Tibet (09/2004)

Village	total No. HH	No. of HH interviewed	% of total HH	Type of HH			Type of electricity supply
				Poor	Middle	Rich	
Deser	78	30	38,5	11	16	3	No electricity
Sangin	63	35	55,5	12	8	15	Village PV/Wind-System, SHS
Tashi Donglam	107	30	28,0	7	15	8	Village PV-System
Gunko	33	26	78,8	9	14	3	Village PV/Wind-System
Numa	89	35	39,3	9	16	10	Grid
<b>Total</b>	<b>370</b>	<b>156</b>	<b>42,2</b>	<b>48</b>	<b>69</b>	<b>39</b>	--

# Impacts in Tibet (07/2006)

- Usage of Electrical Household Appliances for (Information, Communication, Entertainment) increased by 47%
- Limited capacity of RE-Systems does not allow productive use, but restaurants and shops = income increased by 5%
- Reduced working hours for kids, but for women/men unchanged
- School absence of kids (6-14 years) reduced from 32% to 6% and (15-19 years) from 67% to 24%



# Impacts in Tibet (07/2006)

- Candles/Batteries replaced as main energy supply source
- Dissatisfaction among SHS users, due to poor technical reliability and Village-Power-Systems due to limited time to use electricity
- Expenditures for candles / batteries reduced but compensated by fees to be paid for electricity
- Remaining dry cells (torches) are still carelessly being thrown away

# Yunnan - Economic Impacts (08/2005)

- Possession of TV-Set increased from previously 18,8% to 59,2% of all HH
- 15% of HH use electricity for productive purposes
- Increase of cash income from 100-200 € to 200-250 €

# Yunnan - Social Impacts 08/2005)

- 100% satisfaction with lightning conditions compared to 13,8% in 2002
- 85% school attendance compared to 71%
- Work-load for women/men decreased to 7-10h/day compared to 11-15h/day before
- Intention to migrate dropped to 3% compared to 15%

# Yunnan - Environmental Impacts (08/2005)

- Consumption of dry cells dropped from previously 77,5% to 25,4%
- Wax candle consumption decreased from previously 75% to 7%

# Conclusions & Outlook

- Short, mid and long-term impact
- Direct / Indirect Impact of Energy
- Health Improvement
- Environmental Sustainability
- Social Changes

# **Thank you for your attention !**

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