# Active Forest-Management by Local Non-Foresters: a Mongolia field experience

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### **Geographic Basics North Mongolia**

- Big sky country largely flat – pastoral societies!!
- Trees and forests: riverine (poplar, willow, elm); and mountain slopes, north and west facing on steeper slopes (pine, larch, birch) - all slow growing





#### **Temperature & Rainfall**



High elevation, extremely continental climate, large temperature range -35°C winter to +35°C summer Rainfall 300 – 400mm, highly variable, summer maximum, dry winters, spring and autumn snow Fires and browsing are main other influences

# **Project setting**

- \$4m 3 year GEF SFM project implemented by FAO
- Supporting 100 FUGs in 5 northern provinces to conserve & manage forests assigned/designated to them
- Working with/through provincial and district forest offices with usually one professional forester plus technicians
- Trying to collaborate with private forest companies
  & deal with individuals with political connections
- Sporadic international donor activity/support (mainly GIZ)

# Key points on forest ecology

- Riverine trees often regenerate by suckering
- Elsewhere, fire climax ecology, moist on N&W slopes
- Natural regeneration succeeds on 8 to 10+ year cycles, when major fire damage and good seed years coincide. Tree planting largely unsuccessful
- Natural regeneration profuse, 20,000+sph, costly to thin, produce has no commercial value
- Dense stands, natural mortality, pests and diseases, little ground and shrub vegetation. Dead standing trees → crown fires

#### Socio-economic structure

- Extensive summer grazing, small semi- permanent winter settlements
- Forest used for fuel, fruit, fodder medicinal plants
- Herders required to protect forests for free, only allowed to collect dead wood on ground; 10 to 15 families but ca 3,000 (up to 5,000) ha of forest. (Cf. Africa!)
- Combing this with forest structure, it is clearly not sustainable and forest is in slow retreat, hastened by global warming (2° since 1940)

# Legal & Policy context (2016)

- 'Common/accepted knowledge' (even amongst senior forestry officials) that it was illegal for nonforesters to cut a live/'green' tree
- Pushed by NGOs and media, with an additional 'unpatriotic' narrative
- Grants provided by central government to professional forest companies to do early/'uncommercial' thinnings – no checking, typically not done – marking (not} done by officials

## **Project solution**

- Employ/task national legal experts to establish true position
- Train herders to do two (pre-commercial) thinnings using simple stick-thinning and hand tools
- Give them the produce free for fuel, fences and animal shelters, *etc*.
- Commercial forest value improved, risk of pests, diseases and fires reduced
- Biodiversity value increased, including shrub and ground layers → more fruit, fodder, *etc*.
- Herders' livelihoods improved

# FUGs thinning training

- Programme
  - $\rightarrow$  Science
  - → Legal
  - → Health and safety
  - → Practical: marking & removals
  - → Test/certificate
- Trainers
- Participation

# One week FUG training course

Training Purpose:		Training specific objective:
1	Conducting Forest Thinning & Cleaning	Make the preparation for forest thinning and cleaning operation
		Choose the type of forest thinning and cleaning
		Selection of the methodology of forest thinning and cleaning
2	Defining Forest Thinning Intensity	Defining the Forest Thinning Intensity
		Marking cutting trees
		Demarcation for forest thinning
		Conducting variety type of forest thinning
		Conducting forest thinning treatment for younger $\ young$ growth $\ trees$
3	Adhere law & policy	Conduct assessment for artificially planted forest
		Conduct forest inventory with artificially planted forest
		Procedure on Conducting Forest Thinning
		Procedure on Conducting Forest Cleaning







### 2016 & 2024 photos







### 2016-2024 changes/observations

- Light sunlight penetrates to soil surface
- Production increment increases and also ultimate value
- Biodiversity richer within former over dense stands
- Pests predator populations increase
- Fires fuel load decreased, dead tree removal reduces risk of crown fires
- Materials -> benefits for FUGs for fuel, fencing and animal shelters

### **Current situation**

- FUGs now getting pre-commercial-thinning contracts & grants -now increased:
  → Was 35 US\$ equiv. per hectare
  → Now 140 US\$ per hectare
- Thinning 'cutting to care' increasingly being
  - explained in media & understood/accepted
- Thinning training being mainstreamed <u>https://www.youtube.com/watch?v=mj1iCLT5hc4</u>

### Wider relevance...

- The situation we faced in Mongolia not unusual in fact the norm?
  - → Community/local entities being given/gaining ownership and/or management and/or protection responsibilities for areas of forest – but unable to do some basic required forest management activities themselves because nobody in community has necessary qualification/certificate
  - → Policies around the world (finally) recognising local communities as often being best-bet stewards of forests has resulted in huge transfers in terms of areas of forests, management rights and responsibilities...
  - → ..without being legally able themselves to do basic forest management operations (such as thinning and controlled burning) which are required in order to fulfil original/bigger picture policy objectives!

### 'Paraforesters'?

