

Graduate School Life and Environmental Sciences,  
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**WETLAND MANAGEMENT AND WATERBIRD  
CONSERVATION OF MONGOL DAGUUR STRICTLY  
PROTECTED AREA AND BUFFER ZONE, MONGOLIA**



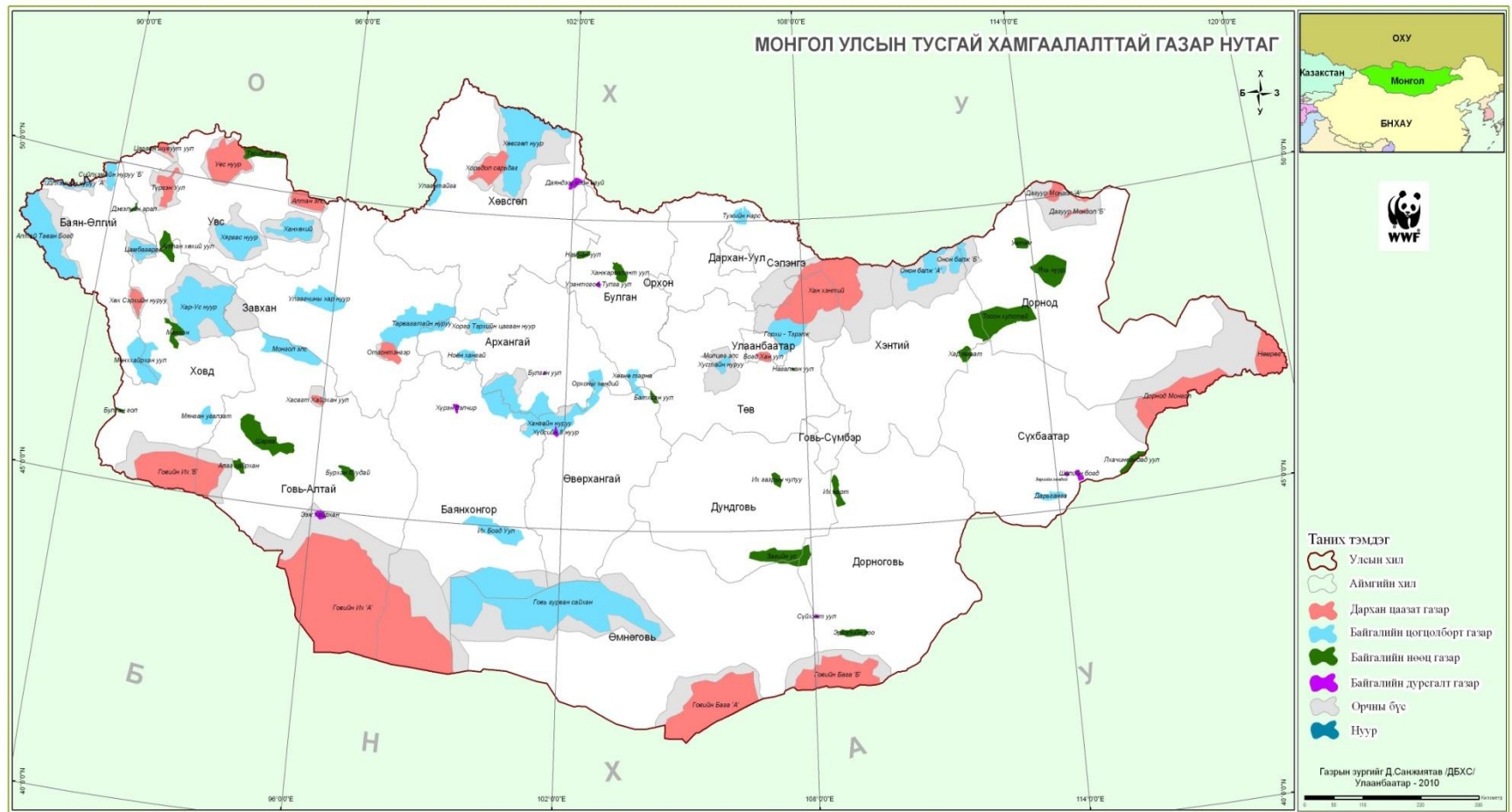
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- ✧ General background on the Protected Areas in Mongolia
- ✧ Research objectives and methods
- ✧ General information of study area
- ✧ Tentative findings and further activities

# STATE SPECIAL PROTECTED AREA SYSTEM IN MONGOLIA



Nowadays **84 sites**, covering **26.7 million ha (17.0%)**, have been designated as protected areas ([www.mne.mn](http://www.mne.mn); [www.econet.mn](http://www.econet.mn)).



Category	Zone	Activities prohibited					
		Changing natural features (Mining, digging, harvesting wood etc)	Hunting trapping or disturbing destroying	Commercial use of resources (plants, water)	Construction of building	Fishing	Traditional nomadic herding
Strictly protected area (SPA)	Core	✓	✓	✓	✓	✓	✓
	Conservation	✓	✓	✓	✓	✓	✓
	Limited	✓	✓	✓	✓	✓	
National park	Pristine	✓	✓	✓	✓	✓	✓
	Tourism	✓	✓	✓	✓		
	Limited		✓	✓	✓		
Natural reserve		✓	✓	✓	✓	✓	
Natural and historical monument		✓	✓				



# BUFFER ZONE

- ☞ Buffer zones shall consist of those areas established to minimize, eliminate and prevent actual and potential adverse impacts to Strictly Protected Areas and national parks, to increase public participation, to secure their livelihood and to establish requirements for the proper use of natural resources.

(Law on Buffer zone, Mongolia)

Manag ement body	Central	
	Local	

# CHALLENGES

**1. Climate change:** During the last 50 years, the average annual temperature in Mongolia has increased by 0.7°C (UNEP 2002), with some regions experiencing drought. The water levels of many steppe lakes have fallen in recent decades, with some wetlands completely disappearing.

## **2. Human induced:**

**Overgrazing:** Livestock numbers around the lakes are increasing, and this is resulting in overgrazing and land degradation. (N.Tseveenmyadag, 2002)

**Disturbance:** Concentration of cattle and people increase much around few remained wetlands. Big part of geese clutches are predated by dogs and destroyed by horses and cattle. (Oleg Goroshko, 2007)

**Steppe fires,** usually set in spring and early summer, which can be very destructive to nesting birds and can have devastating impacts on wetland vegetation.

**Mining:** Near the Ulz river basin is located mineral exploration, targeting gold. Over the last three years, the Ulz River has ceased to flow in several places, and, as a result, some small lakes have dried up. (N.Tseveenmyadag, 2009)



# CHALLENGES



drought



# RESEARCH OBJECTIVES AND METHODS

## Objectives:

- To find the natural resource utilization by local people
- To identify what were the threats for the waterbirds caused by the local people
- To find some solutions, especially how local people and their knowledge can help conserve the wetlands in this area.

## Methods:

1. Secondary data collection
2. Primary data collection:
  - Questionnaire survey to:
    - Herders living nearby lakes (54 HH)
    - Herders ( 20 HHs)
  - Open-ended interview to key informants from relevant government and non- government organizations

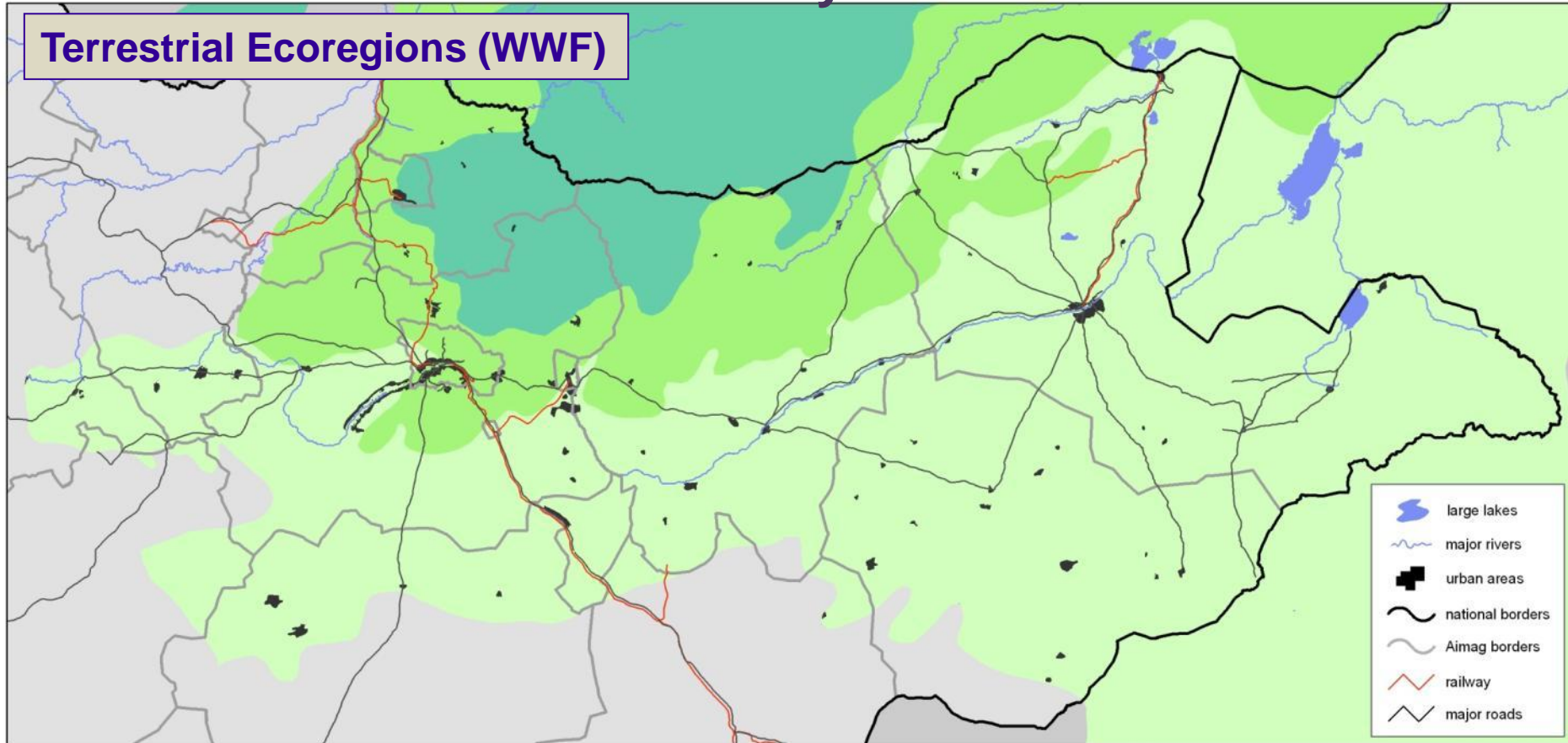


Questionnaires is divided into the following parts:

- ... Family structure
- ... Livestock (Income and sale)
- ... Labor input
- ... History of herding
- ... Property
- ... Perceptions on the surrounding environment
- ... Knowledge on the environment

# Study area

## Terrestrial Ecoregions (WWF)



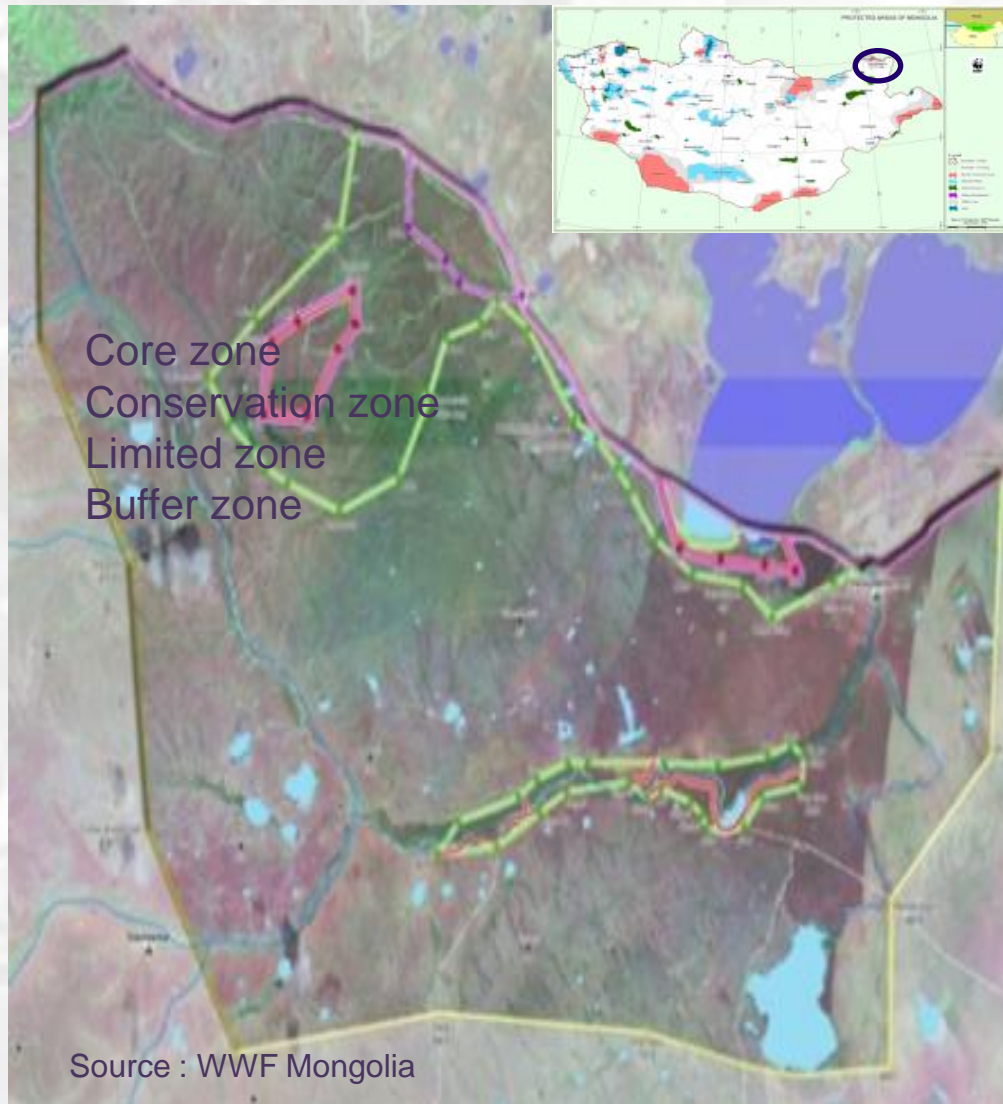
- Trans-Baikal Boreal Forest
- Daurian Forest Steppe
- Mongolian - Manchurian Grasslands

## Mongolia-Manchurian Grasslands:

887,000 km<sup>2</sup> total  
320,000 km<sup>2</sup> in Mongolia



# BACKGROUND OF STUDY AREA, MONGOL DAGUUR SPA



**Total area: 103 016 ha**

- Established : 1992
- Total area: 103016 (ha 250000 ha including buffer zone)
- Located: in Northeastern part of Mongolia , Dornod province
- Include: 3 soums (district)
- Most inhabitants-herders

## *Internationally importance:*

- Joint Mongolia-Russia-China International Protected area DAURIA: 1994
- International Network of areas for the protection of Northeast Asian cranes: 1997
- RAMSAR site: 1997
- Man and Biosphere Reserve (UNESCO): 2005

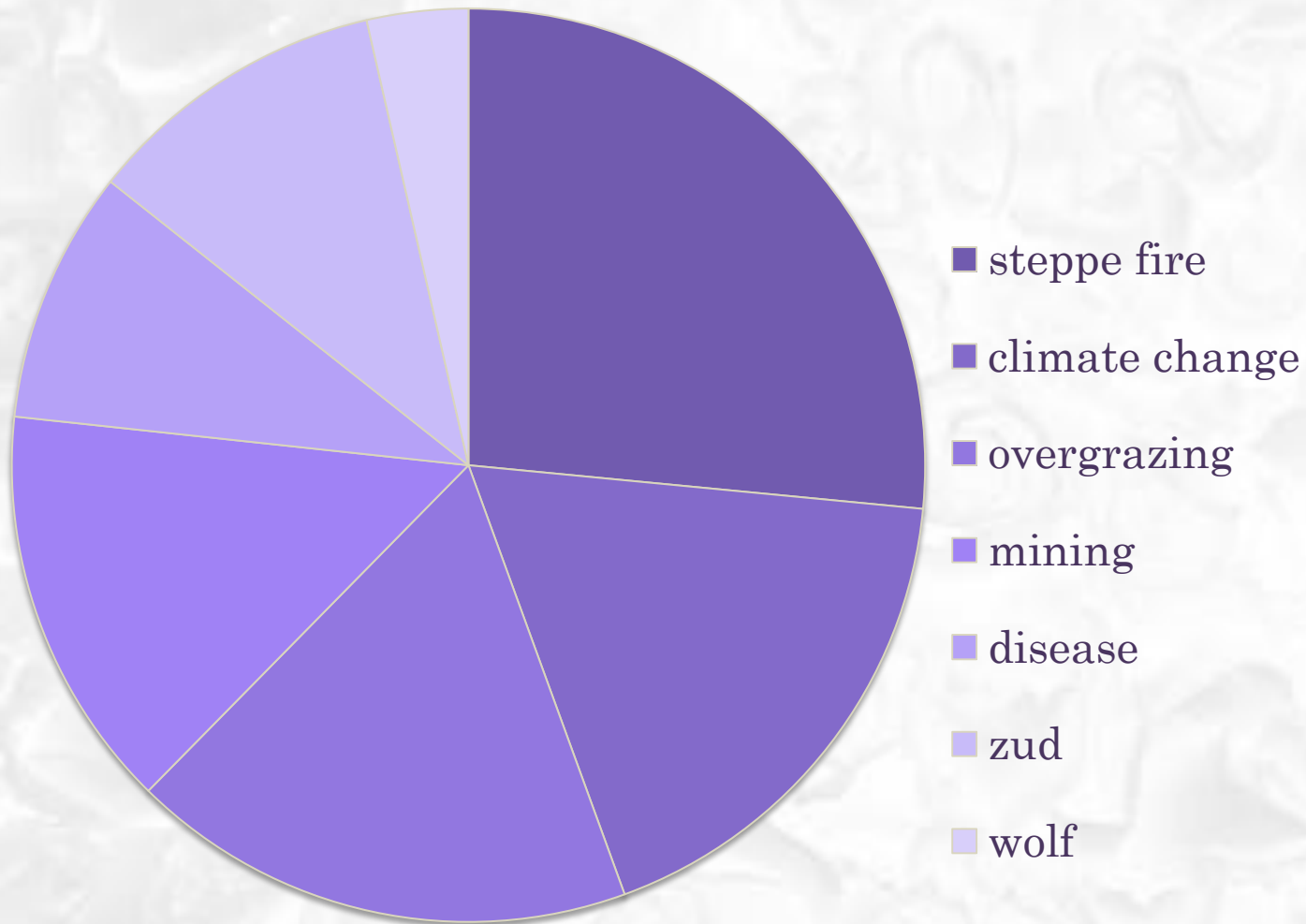




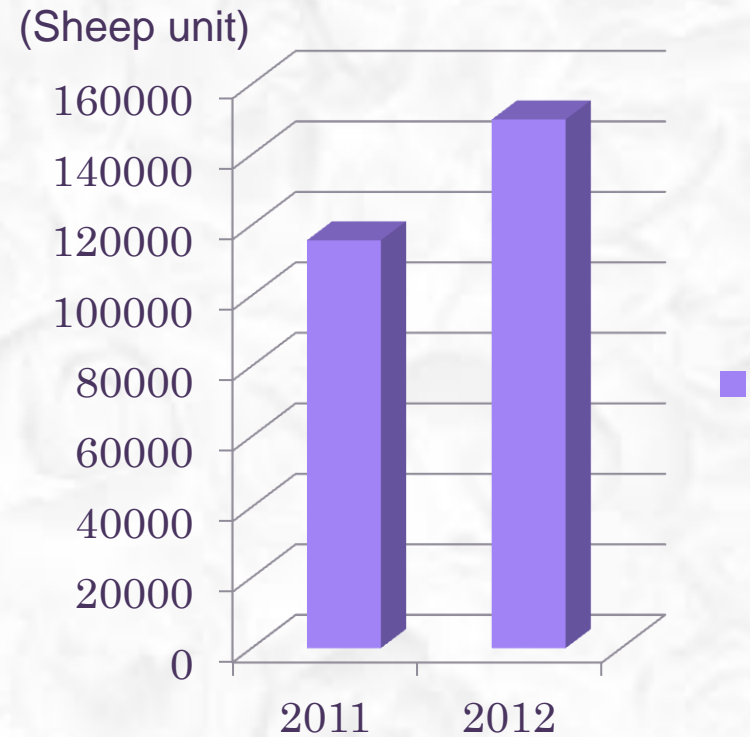
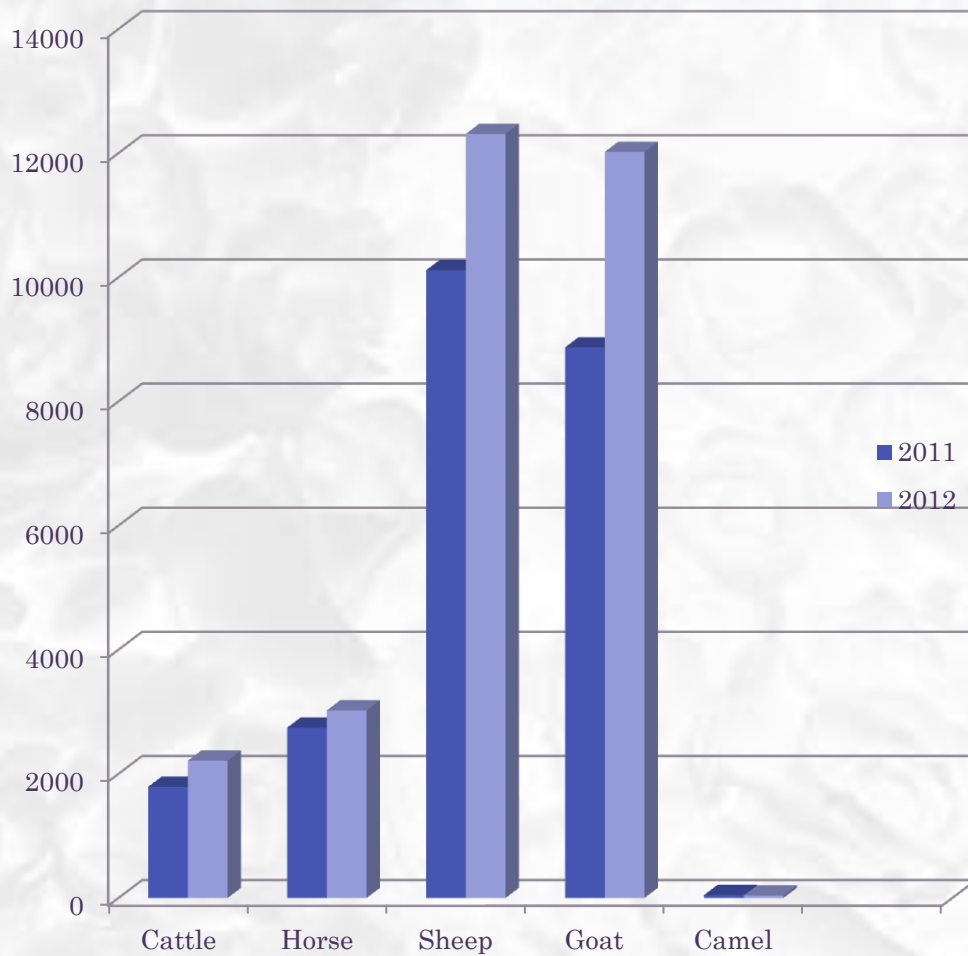
Photos: EMPAA, B.Delgermaa

# TENTATIVE FINDINGS

## 1. Main problems in this area (N=74)



## 2. NUMBER OF LIVESTOCK OF THE STUDY AREA (N=74)





### 3. WATER CONDITIONS (N= 74)

Camp site	Water for livestock		Water for household	
	drinking	Other	drinking	other
Spring	well, spring		well	
Summer (end of May)	well, spring, river,	lakes, river	Well, spring, river	river
Autumn	well		well	
Winter	well and snow		Well, snow and ice from the river	



Most of livestock like to use open water

Galuut lake, buffer zone of Mongol Daguur SPA



Head of spring, limited zone of the Mongol Daguur SPA

## FURTHER ACTIVITIES

✂ To analyze all collected data's

- Economic activities
- History of herding
- Perception on the PA's and environment
- Family structure...etc

✂ Study on Wetland Conservation Management



A close-up photograph of two vibrant red lilies. The flowers are in full bloom, with their petals curled back and long, slender stamens extending outwards. The background is a soft, out-of-focus green, suggesting a garden setting. The text "THANK YOU FOR ATTENTION !" is overlaid in the center of the image in a white, serif font.

THANK YOU FOR ATTENTION !

Category of State Special Protected Areas	Zonation and Prohibited activities
<p><b>Strictly Protected Area</b> territories taken under state special protection, upon consideration of the state of conservation of the original conditions and features of their natural zones, in order to represent specific traits of the zones and scientific importance, and to ensure environmental balance.</p>	<p>1) pristine (core) zones – research only; 2) conservation zones – research and conservation measures; 3) limited zones – tourism, traditional religious activities, and some plant gathering are permitted / hunting, logging and construction are prohibited. Mining is explicitly prohibited in all zones. Buffer Zones are required.</p>
<p><b>National park</b> taken under state special protection whose natural original conditions are relatively well preserved and that are of historical, cultural, scientific, educational and ecological significance.</p>	<p>1) Special zones 2) Travel and tourism 3) Limited use zones</p>
<p><b>Natural Reserve</b> consist of areas taken under state special protection in order to create conditions for the conservation, preservation, and restoration of certain natural features and natural resources.</p>	<p>Prohibited any activities for commercial purposes that change the natural original condition and which are likely to have negative environmental impacts such as the construction of buildings, the digging of land, the use of explosives , the exploration and mining of natural resources, the hunting and trapping of animals, or the harvest of wood and reeds.</p>
<p><b>Natural and historical monument</b> consist of land taken under state special protection for the purpose of preserving the heritage of formation as well as historical and cultural traces in their natural state.</p>	<p>Within an area extending 0.1-3.0 km of natural or cultural and historical monuments, it is prohibited to construct buildings that degrade the view and scenery, to plough or dig land, to use explosives, to explore or mine natural resources.</p>