



## ISAP2014 Parallel Session

### APPLICATION OF THE INDICATORS OF RESILIENCE IN SEPLS IN MONGOLIA モンゴルにおけるレジリエンス指標の適用



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## Challenges faced in the sustainable use of pastoral landscapes

### 草原ランドスケープの持続可能な利用における課題

- Pastoral ecosystem is a major SEPL in Mongolia  
草原はモンゴルの重要な生産ランドスケープ
- Mongolian SEPLs as ecosystem management based on people living in one locality joined together for ecosystem management  
管理には地域住民の協力が必要
- Pasture land occupies 115,5 mln ha or 73,8% of the country's territory are home to about 175,000 herder families with more 45 million animals (2014).  
草原(国土の73.8%)には17万5千世帯と4500万頭の家畜が居住
- About 90% of Mongolian pasture land is overgrazed and degraded (NAMEM, 2014)  
モンゴルの草原の90%は過剰放牧により劣化

## Challenges faced in the sustainable use of pastoral landscapes

### 草原ランドスケープの持続可能な利用における課題

The pasture land ecosystems are under challenges due to:

草原ランドスケープの危機:

- ❖ policy and legal changes;  
政策や法律の改正
- ❖ manmade commercial pressures, such as infrastructure, industrial and mining activities, land degradation by urbanization and overgrazing due to increased animal numbers  
インフラや都市開発、採鉱、過剰放牧など人為的・経済的圧力
- ❖ climatic patterns, such as *dzud*, (extreme cold and heavy snow in winter season) and droughts; and  
*dzud*と呼ばれる寒波・豪雪や、渇水などの気候の変化
- ❖ extinction of plant species' and wild animals  
野生の植生や動物の絶滅

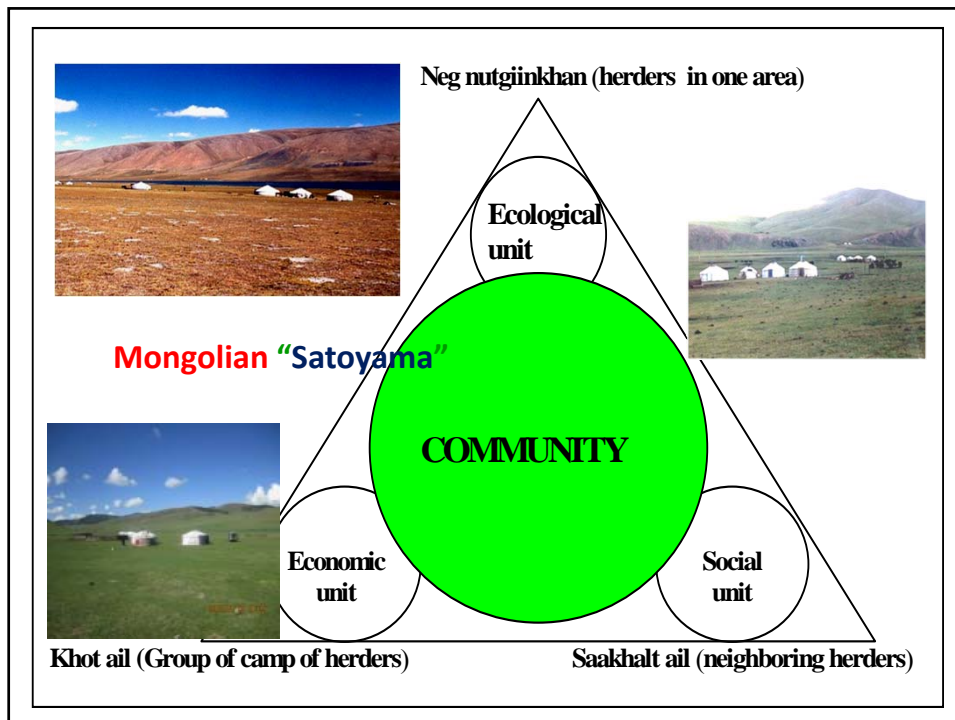
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## The process of development of the Indicators of Resilience in SEPLS in Pastoral Landscapes

### 草原ランドスケープ用のレジリエンス指標ができるまで

- 4 sites, representing different ecosystems of Mongolia are selected for SEPL assessment  
モンゴルの生態系を代表する4サイトを選定
- The community-based pasture management arrangements are used for the SELP assessment  
コミュニティによる草原管理体制に基づき、SATOYAMAイニシアティブのレジリエンス指標を使って試行
- The previous and the new draft Satoyama indicator framework was used for SEPL assessment in pastoral Landscapes





## Resilience and recovery of pastoral landscapes 草原ランドスケープのレジリエンスと再生

Due to recovery speed and ability, pasture land can be divided according its resilience in 3 main categories:

草原は、その回復力により3種に分類できる:

- High resilience (高レジリエンス)
- Medium resilience (中レジリエンス)
- Low resilience (低レジリエンス)

There are 5 main types of pasture land on its ability to restore

## Resilience of pasture in Arjargalant community, Khotont

### ホトンの草原のレジリエンス

(Rate of recovery is medium, up to 3 years)

		
<p><b>10 years ago</b>  <i>Medium degradation</i>            10年前（中度の劣化）</p>	<p><b>Previous year to the Zhud in 2010</b>  <i>Higher degradation</i>            2010年（重度の劣化）</p>	<p><b>Current, 2013-2014</b>  <i>Resilience high, recovered in 2-3 years</i>            現在（2-3年で回復）</p>

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## Preliminary results so far..

### これまでの結果

- ❑ Success of Community based ecosystem management depends on the favorable legal atmosphere, restoring traditions and local knowledge and the participation of all social groups at community level
- ❑ SEPL in pastoral agriculture is dynamic, and changing over time, climate variations, human made pressures
- ❑ SEPL in Mongolia has its own characteristic such as based on four seasonal livestock pastures, with seasonal mobility
- ❑ We suggest some specific indicators/scoring questions to the Satoyama Indicators framework
- ❑ More attention to the policy and legal environment
- ❑ "neg nutgiikhan" / "neg usniikhan" or people living in one locality, as "Mongolian Satoyama"

コミュニティ生態系管理には法的背景、伝統知識の活用、人々の参加が重要であり、モンゴルの草原ランドスケープは常に気候や人為的要因によって変化している

Thank you very much! ☺  
ご清聴ありがとうございました

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