

Community-Based Natural Resource Management and Boundaries: A Case Study of the Mongolian Rangelands and Resilience Project (MOR2)



Arren Mendezona Allegretti
Colorado State University



Outline



- ❧ Introduction
- ❧ Conceptual Framework
 - ❧ Boundaries and Landscapes
- ❧ Physical Landscapes
- ❧ Research and Institutional Landscapes
- ❧ Cultural Landscapes
- ❧ Participatory Mapping
- ❧ Process Linkages and Implications



Introduction



- ❧ Mongolian Rangelands and Resilience (MOR2) project
- ❧ NSF funded project at CSU
- ❧ Team of CSU scientists from different disciplines including ecology, hydrology, geography, remote sensing, soil science, and rangeland management
- ❧ Mongolian partner institutions involved

Project Goals



- ❧ advance understanding of the role of CBRM institutions in building the resilience of coupled systems to climate change



Community-Based Natural Resource Management?



❧ “a process by which *landholders* gain access and use rights to, or ownership of, natural resources; collaboratively and transparently *plan and participate in the management of resource use*; and achieve *financial and other benefits from stewardship*” (Child & Lyman, 2005).



My Position and Approach



❧ Constructivist Approach

“Our perceptions of the world come from our experiences with the world and our experiences are shaped by culture”

Ross et al., 2011

❧ Shifts in project direction and advisers



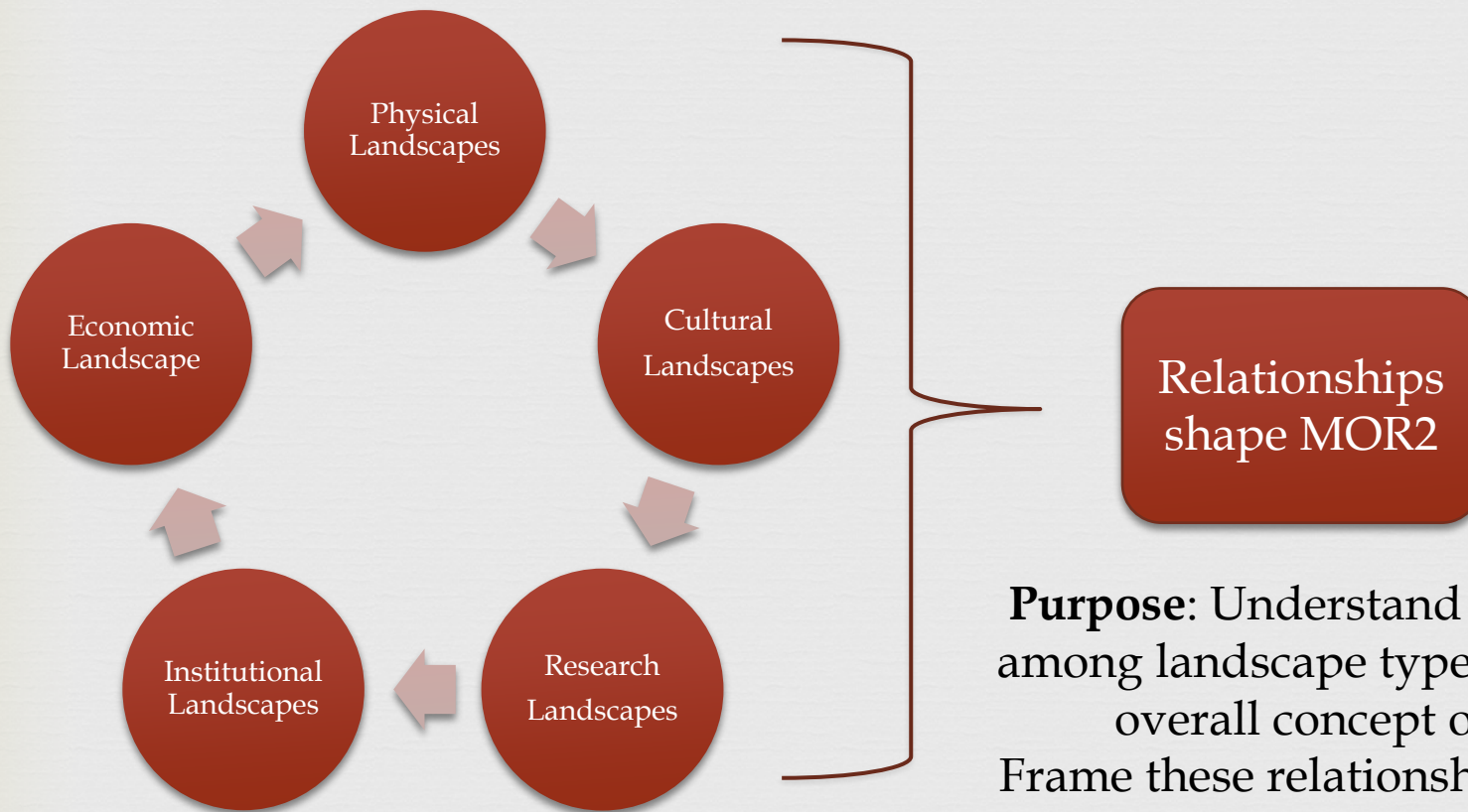
My Position and Approach



- ❧ Mongolian Field Season, 2011,2012
 - ❧ Participatory Mapping with Herders (2012)
 - ❧ Ecological Rangeland Health Inventory (2012)
 - ❧ Interviews with Partners and Core Members at CSU (2011, 2012)
 - ❧ Annual Meeting and Ecological Training Evaluation (2011, 2012)

Examining my own assumptions and project assumptions influences “project methods and expected outcomes”

Conceptual Framework



Purpose: Understand relationships among landscape types, MOR2, and overall concept of CBRM
Frame these relationships in light of field experience and participatory mapping

Landscapes & Boundaries



❧ Landscapes

- ❧ geographic area encompassing natural resources, institutions, political boundaries, and human behavior (e.g., norms, ways of life, kinship patterns, sense of places)

❧ Boundaries

- ❧ Inherent in landscapes
- ❧ encompass human-landscape interactions that may be “fuzzy” or well-delineated through formal or informal norms influencing human behavior

Physical Landscape



- ❧ Land locked country between Russia and China
- ❧ 72% of land is categorized a “rangeland”
- ❧ Semi-arid ecosystems
- ❧ Non-equilibrium and equilibrium systems





Forest Steppe



Mountain Steppe



Steppe

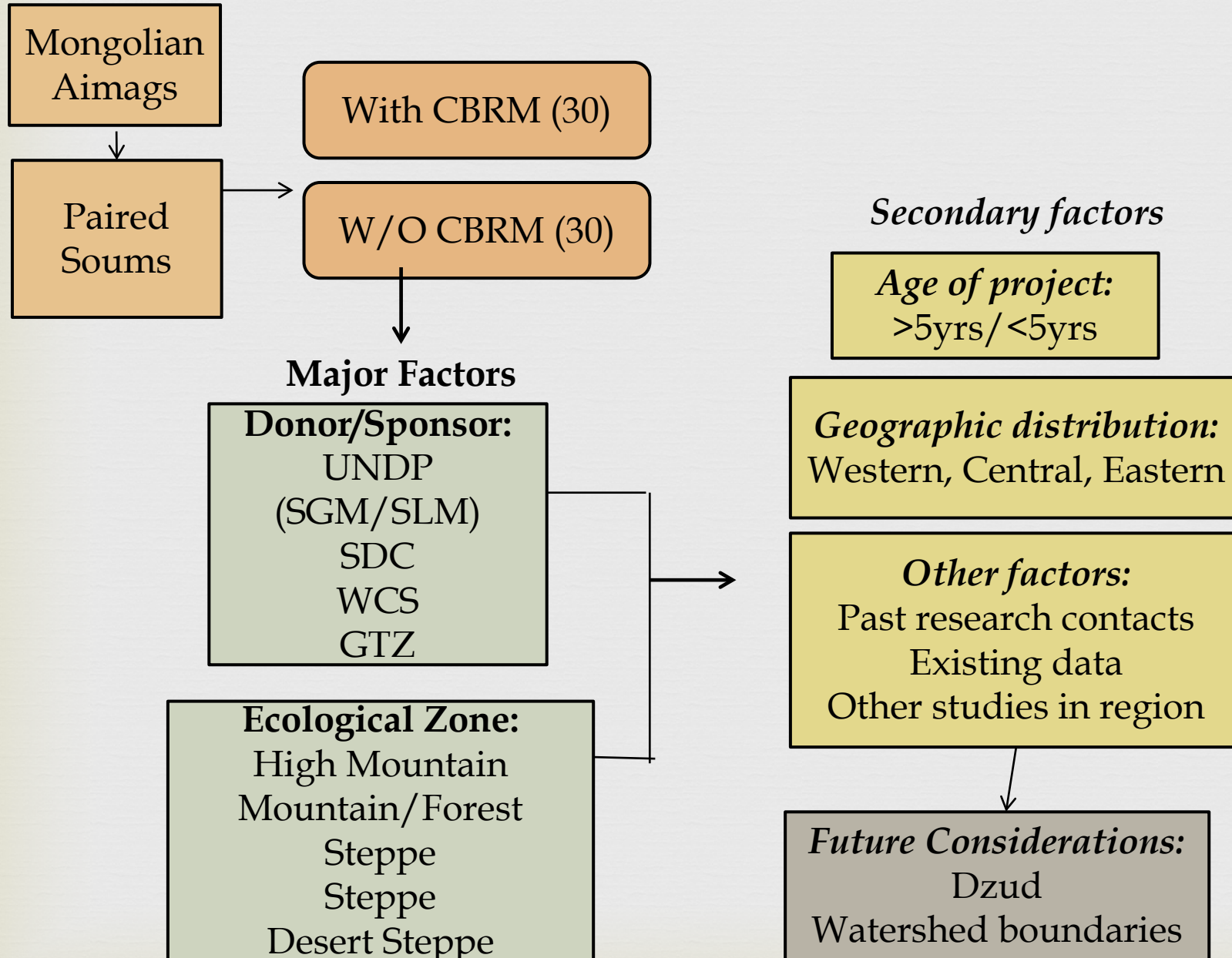


Desert Steppe (Gobi)

RESEARCH LANDSCAPE



Study Site Selection Process – 28/10/2010 (for further detail refer to 24/10/2010 memo)

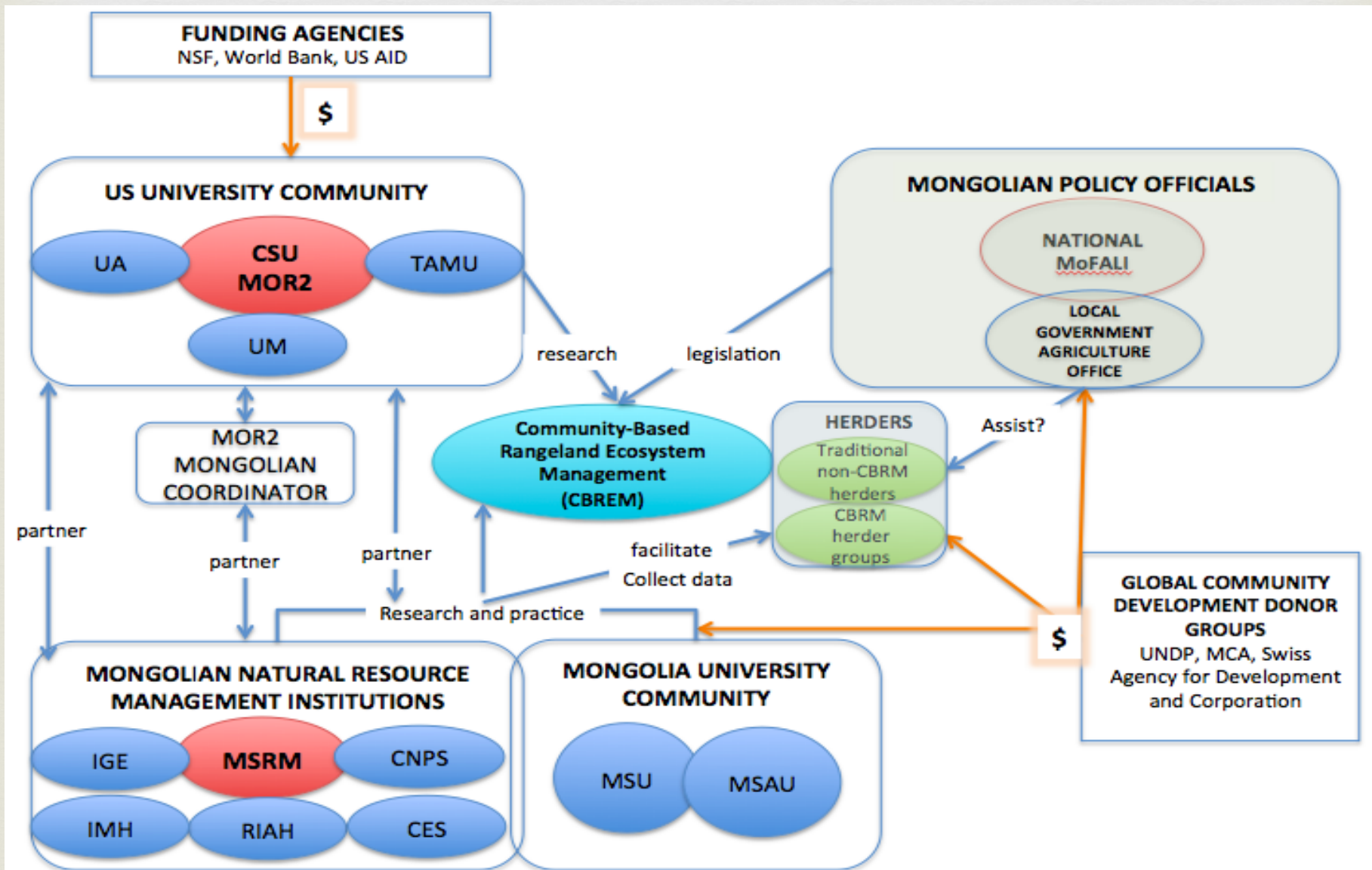


RESEARCH LANDSCAPE



- ❧ MOR 2 project aims, study sites, and epistemologies influenced by people and their experience
- ❧ People involve core team at CSU and Mongolian partners collecting the data. These are the “stakeholders” of the research landscape where academic resources (funding, pubs, etc). are negotiated through a translator and often virtual environment.
- ❧ Have a more in-depth understanding of Core CSU team than Mongolian partners and different communities at “study sites.”
- ❧ Can't **decouple research landscape from relationships and history** (similar to decoupling relationships, history, and cultural landscape)

RESEARCH LANDSCAPE



RESEARCH INSTITUTIONAL LANDSCAPES



❧ Institutions

“formal and informal rules, norms, and repeated patterns of interactions among people that guide individual’s behavior with respect to the environment and other people.”

Fernandez-Gimenez & Le Febre, 2006

❧ “Formal” CBRM groups

herder groups facilitated by international donors to collectively manage and delineate their pastures

- New pasture boundaries, access rules, and consequently herding practices are influenced by decision-making of pasture groups
- New Hierarchy: Association of Pasture User Groups (APUG) and Pasture User Groups(PUG) determine pasture boundaries that can conflict with previous boundaries

INSTITUTIONAL ↔ CULTURAL LANDSCAPES



- ❧ Formal CBRM institutions backed up by international donor groups can influence herding practices intimately tied to culture and “tradition”
- ❧ Traditional practices are not frozen by are dynamic practices shaped over changing institutional and political regimes
- ❧ Question: Did not “CBRM-like groups” exist before the formalization of CBRM in late 90s and early 2000s?

INSTITUTIONAL ↔ CULTURAL LANDSCAPES



❧ Assumptions:

- ❧ Colonial and capitalistic factors underlie reasons for forming CBRM groups.
- ❧ It is important to be cognizant of these factors when evaluating the “success” of implementing CBRM in Mongolia from a research and management framework.

“The Great Social Experiment”

Cultural landscape



- ❧ Herding practices – mobility, diversity, flexibility, and reciprocity (Fernandez-Gimenez & Le Febre, 2006)
- ❧ Sense of places – *Otor and Nutag*
- ❧ Reacting quickly and taking advantage of changing situations, particularly with non-equilibrium systems

Herders' Rights Grounded in History

Changes in pastoral land tenure





Mongol Empire 1206-1227

- Wide-ranging seasonal migration
- Clans chiefs signal direct movement
- Chinggis Kahn and successors grant fiefs for political loyalty



Tibetan Buddhism Introduced 1586

Manchu Period 1691-1911

- Monasteries become dominant and political force
- Pasture use controlled by powerful llamas
- Long distance migrations, frequent moves
- Grazing prohibited in some areas

Collective Era 1960-1990

- All herders became a waged employer and were responsible for specialized single species collective herds (Jamsranjav, 2009)
- The collective or *negdel* controlled pasture use and allocated pasture
- All land was state owned
- Seasonal moves and *otor* enforced. Otor is the movement to greener pastures, for fattening of livestock and avoiding drought
- Emergency reserve pasture areas
- Scientific management of livestock in transformed an extensive, nomadic pastoral economy into an intensive sedentary one (Rosenberg 1977).
- Transportation, water supply, schools, telecommunication, and hospitals provided

Privatization (1992-Current)



- ❧ State herding collectives were dismantled
- ❧ All collective assets, including livestock were privatized by 1993.
- ❧ Pasture land still remained under state ownership
- ❧ Result? No regulatory systems and herders were free to move freely
- ❧ Incentives to turn to herding and herder #'s increased



Initial Effects of Privatization (1992-1999)



- ↑ poverty & wealth differentiation
- ↑ # of herders
- ↓ terms of trade
- ↓ social services
- ↑ out-of-season & year-long grazing +
- ↑ trespassing & conflict

ECONOMIC LANDSCAPE

Privatization & Market Economy: 1992-1999

- ❧ Weak or no regulation of movement
- ❧ New land law, but pasture provisions not widely implemented
- ❧ Urban-rural & rural-urban migration
- ❧ Declining mobility?
- ❧ Cashmere prices and transportation influence herder movement



(Fernandez-Gimenez 2002, Fernandez-Gimenez & Batbuyan 2004)

1999-Present



- ❧ 1999-2003 drought and dzud kill 30% of livestock
- ❧ Informal CBRM-like herder groups evolved spontaneously in response to needs of herder communities (Schimdt, 2006)
- ❧ ~ 12 donors and NGOs helped organize over 2000 community-based “herder groups”
- ❧ Land Law revised in 2002 to permit possession of campsites; still no pasture possession
- ❧ Pastureland legislation introduced into Parliament in fall 2007

So where does CBRM stand?

- ❧ Dependent on cultural, institutional, ecological, and research landscape
- ❧ MOR2 is trying to figure this out...
- ❧ Complex social boundaries between members and non-members of CBRM organizations (Upton, 2008)



SOCIAL AND SPATIAL BOUNDARIES



- ❧ Perceived “hardening” of CBRM groups’ boundaries
- ❧ Non-CBRM members can be excluded from membership due to wealth and kinship differences and ‘optimal size of herding groups.
- ❧ Resolving issues of group and resource boundaries
- ❧ Donor support involved mapping and delineation of herder’s territories
- ❧ Social CBRM boundaries have spatial implications for grazing locations, winter camps, and herding practices

Participatory Mapping



- PURPOSE: To get an in depth understanding of social, political, physical, and institutional landscapes and boundaries through participatory mapping
- Undurhireet and Ikh Tamir have both CBRM herder groups or PUGs (*Khesig*)
- Donor groups include Swiss Agency for Development Cooperation (SDC)
- CBRM group formation
Ikh Tamir: 2005
Undorshireet: 2007



Linkages



Loose or Flexible

CNRM group
membership

Non-members
behavior

Semi-arid system

Precipitation

Steppe resilience

Water resources

Social boundaries can be
porous or flexible

Mobility of herding

Winter camps and
corresponding pastures
(pooling resources)

“social and spatial exclusion linked specifically to the recent development-led Institutional transformations and associated incremental changes in norms and rights of pasture use”

-Upton, 2008

Thank You

