MINISTRY OF ENVIRONMENT AND TOURISM

Meeting report

Date of meeting:	October, 28 2016
Requested by:	Division of Climate change and international cooperation, Ministry of Environment and Tourism
Subject:	Presentation on Rangeland health and grazing impact monitoring system in Mongolia by the SDC project, “Green Gold”
Participants:	Ms.Saruul (MET), Mr.Gerelt-Od (MET), Ms.Narangerel (MET), Mr.Hans Hoffman (ADB-TA), Mr. Mohns (ADB-TA), T.Erdenejargal (ADB), Mr.Kevin Gallagher (FAO), Ms.Tuvshin B.(FAO), Mr.Klaus Schmidt-Corsitto (GIZ), Ms.Chuluunkhuu B.(GIZ), Ms.Bilguun E.(GIZ), Ms. Kristina Sonnihson (GIZ), Ms.Suvd (GIZ), Mrs.Enkhtsetseg (KfW), Mr Galragchaa (KfW), Mr Daniel Valenghi (SDC), Ms Bulgamaa (SDC), Ms Bayarmaa (SDC), Burmaa D.(SDC), Ms. Otgonchimeg (ALAGC), Bayarjargal Yu.(TNC), Mr.Dickinson (UNREDD), Mr.Khishigjargal (UNREDD), Mr.Metcalfe (UNREDD), Ms Heang Thy (UNREDD), Ms Narantsatsral (UNREDD), Mr Bilguun (UNREDD), Ms Gombosuren (UNREDD), Mr Batchuluun (UNREDD), Mr Enkhsaikhan (ITG), Ms Enktuvshin (WCS), Ms Onon (WCS).
Distribution list:	all participants and invitees

The brown bag lunch meeting took place from 12:00 to 13:00 on October 28th 2016 in the “Khaan” conference hall of the Ministry of Environment and Tourism (MET).

An applied research component leader of SDC-Green Gold project, Ms. Bulgamaa D. gave a presentation on “Rangeland health and grazing impact monitoring system in Mongolia” (see annex). As the presenter explained, *Rangeland health monitoring system* is run by the National Agency for Meteorology and Environmental Monitoring (NAMEM) as an ecosystem health monitoring tool. An online database has been operationalized. Another monitoring system called *Rangeland management and impact monitoring* is being managed by the Agency for Land Affairs, Geodesy and Cartography (ALAGC) as a tool for measuring impacts of the land management. Currently, 65 % of rangelands in Mongolia are altered with respect to the plant species composition of the reference communities. Mongolian rangelands are classified into 25 zones as per their ecological potential, specific to distinct soil-landform units within natural zones. Based on the recovery concept, rangelands are divided into 5 classes: 52% in Class I (less altered); 25% in Class II (altered but can be recovered 3-5 growing seasons); 15% in Class III (with recovery time of 5-10 seasons); and 7% in Class IV (recovery time of more than 10 seasons). More than 90 % of entire altered rangelands can be recovered in 10 years.

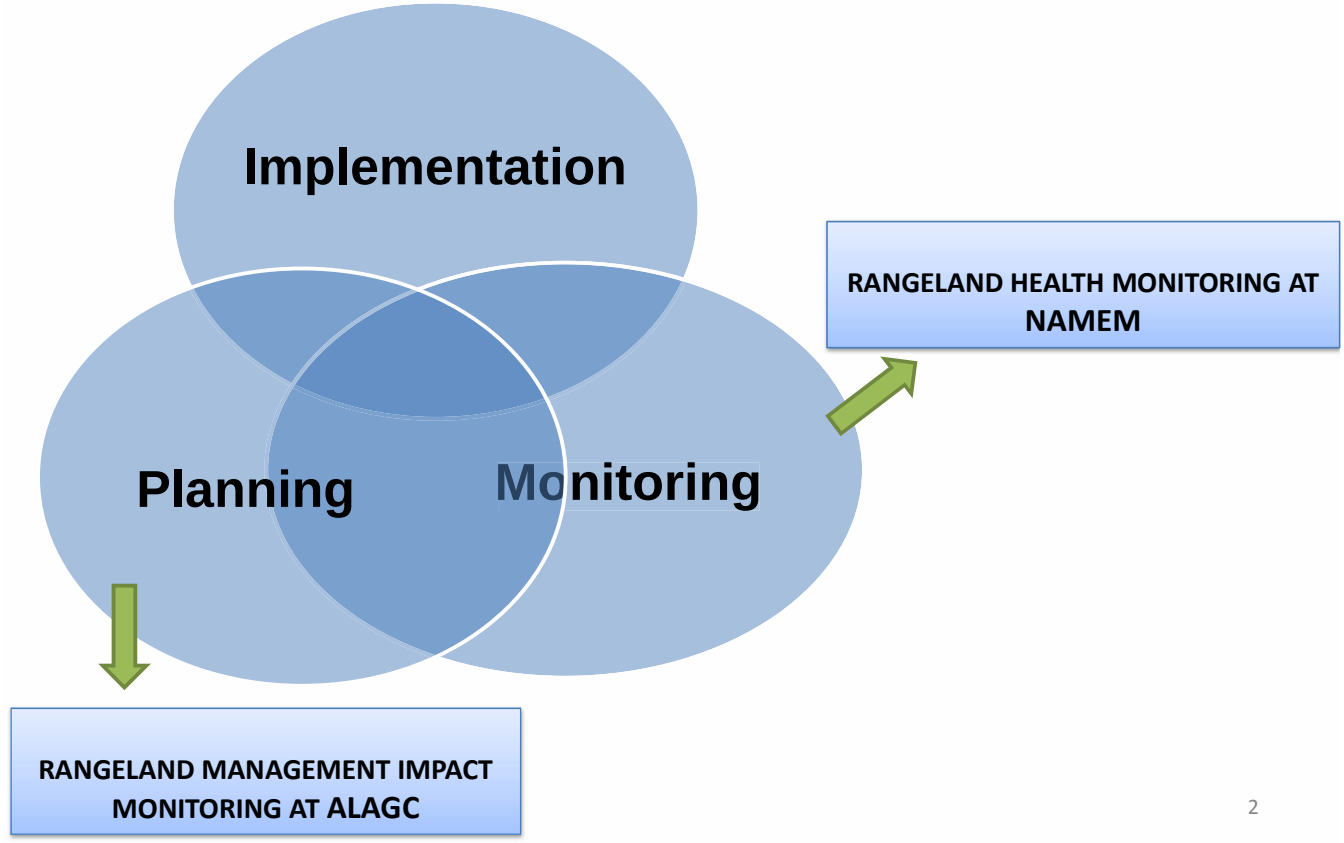
Resilience-based rangeland management plan is piloted through the rangeland use agreement with the herders to enforce sustainable grazing management. Basically, the soum’s land management plans are improved by providing information on rangeland conditions to specify where grazing can usefully be deferred or pastures rested, select appropriate timing of grazing, and recommend adjustments to stocking rates, and encouraging participation of all stakeholders, including herders and local government officials, in selecting preferred management options and updating plans. Monitoring systems created an opportunity to improve coherence among different stakeholders working for sustainable rangeland management in Mongolia. Also, it made possible to include rangeland management into sustainability code of practice of livestock products from Mongolia (for example natural rangeland based yak wool).

After concluding the discussions and Q&A round, the participants agreed to meet in November. MEGDT will inform on the date of a next meeting in due course.

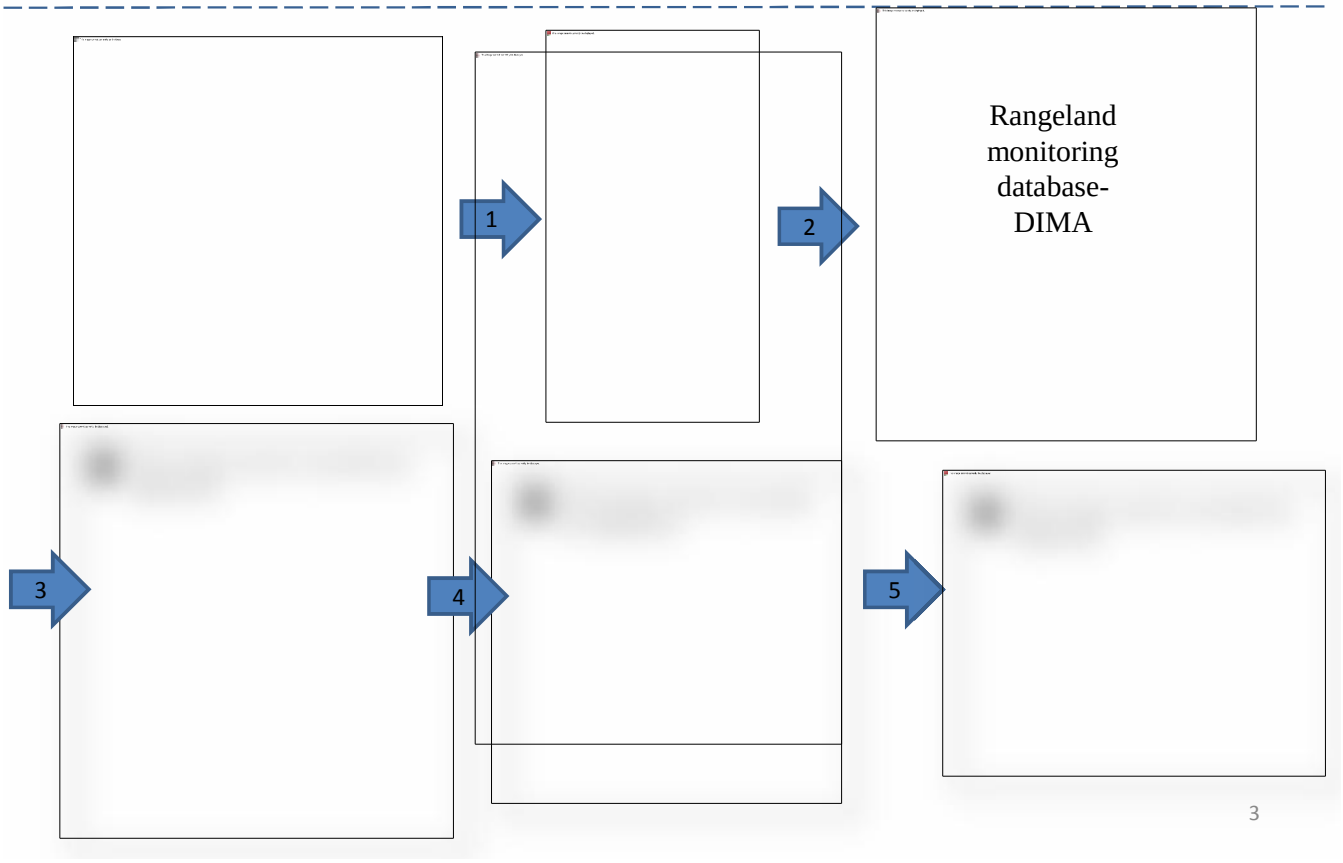
Rangeland health and grazing impact monitoring system in Mongolia

D.Bulgamaa, Ts.Enkh Amgalan, Green Gold project, SDC
B.Erdenetsetseg, NAMEM
R.Otgonchimeg, ALAGC

INSTITUTIONAL STRUCTURE



OPERATIONALIZING RANGELAND HEALTH MONITORING SYSTEM AT NAMEM



CURRENT STATE OF RANGELAND ECOSYSTEM HEALTH

The **65 %** of rangelands in Mongolia is altered with respect to the plant species composition of the reference communities

DIFFERENT NATURAL ZONES DIFFER IN POTENTIAL PRODUCTIVITY

Naturally productive

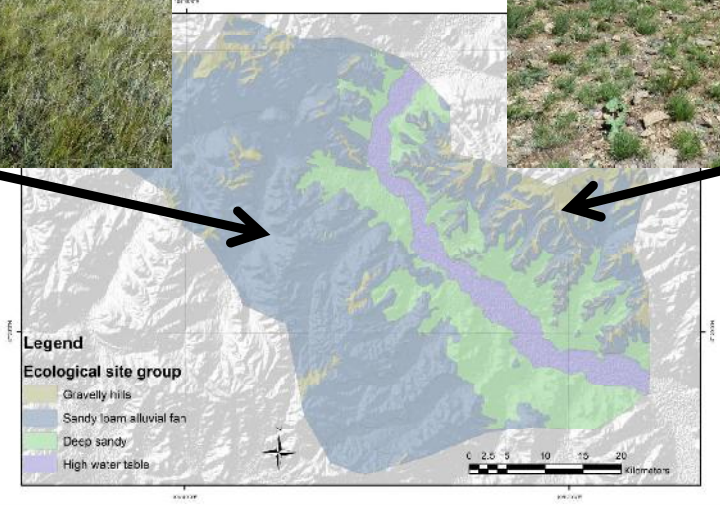
Naturally unproductive

DIFFERENT SOIL TYPES WITHIN NATURAL ZONES DIFFER IN PRODUCTIVITY

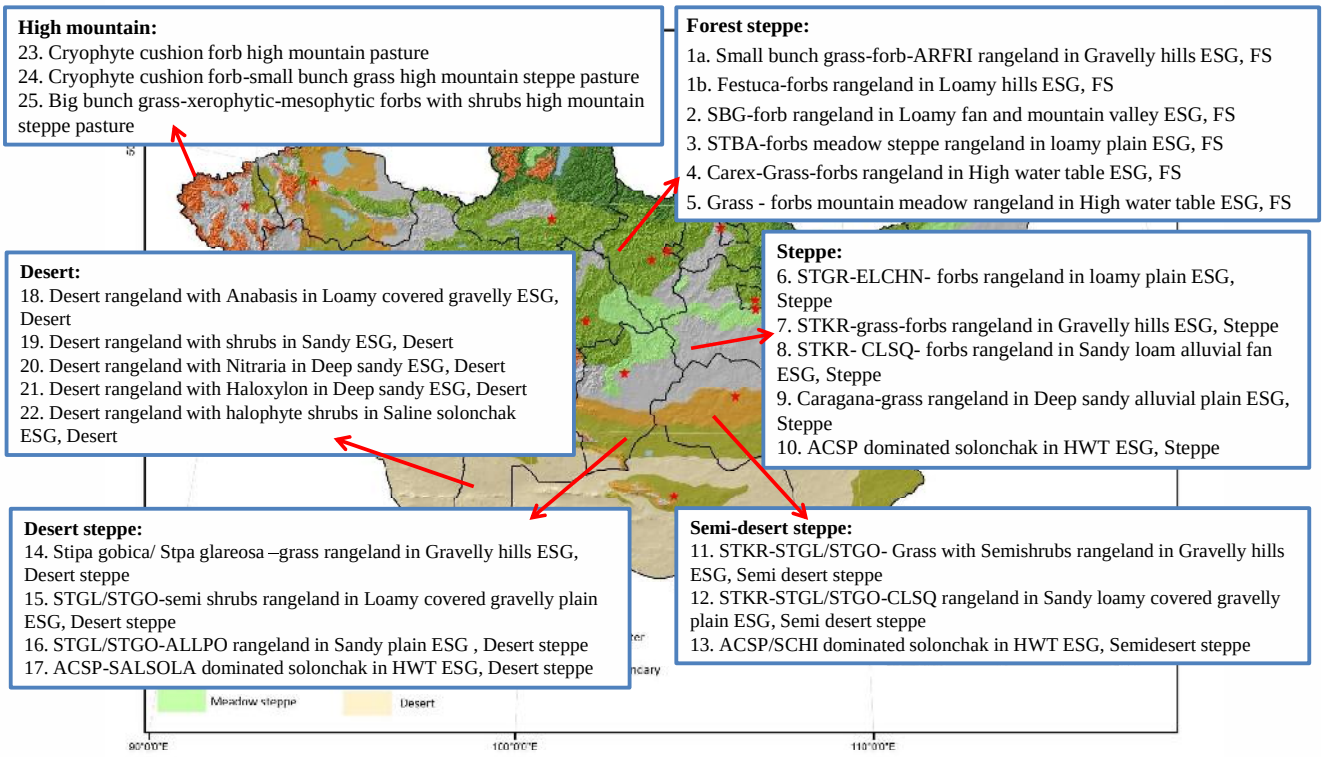
Naturally more productive

HEER (STEPPE)

Naturally less productive



MONGOLIAN RANGELANDS ARE CLASSIFIED AS PER THEIR ECOLOGICAL POTENTIAL, SPECIFIC TO DISTINCT SOIL-LANDFORM UNITS WITHIN NATURAL ZONES



RECOVERY CLASS CONCEPT

Class I: Reference conditions (non-degraded) or requires 1-3 growing seasons for recovery from minor changes.

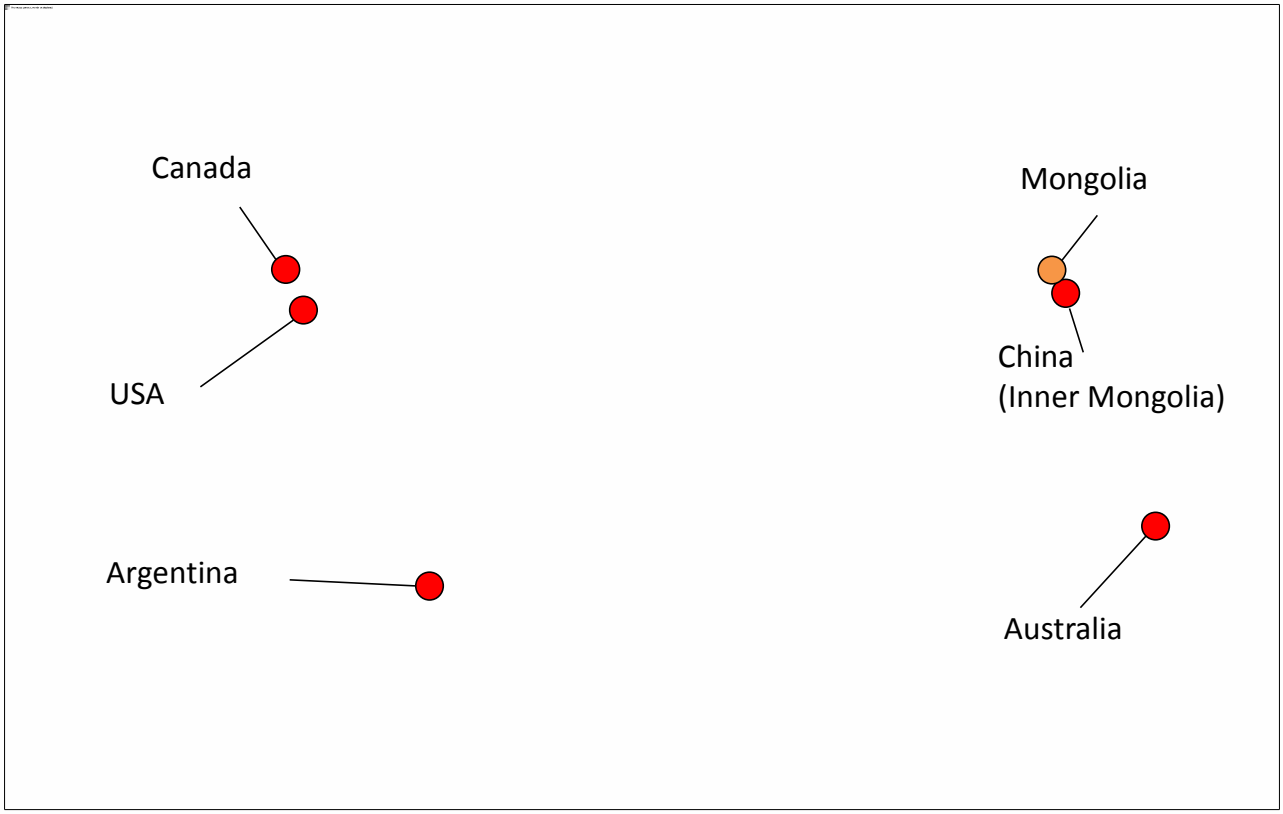
Class II: May be rapidly recovered (3-5 growing seasons)

Class III: May take 5-10 growing seasons to recover; many ecosystem services lost

Class IV: Local loss of key plant species, invasion of noxious plant species, or alteration of hydrology that is unlikely to be recovered for over a decade to many decades without intensive interventions

Class V: Extensive soil loss, accelerated erosion rates, or salinization. Usually impractical to recover former community (true desertification).

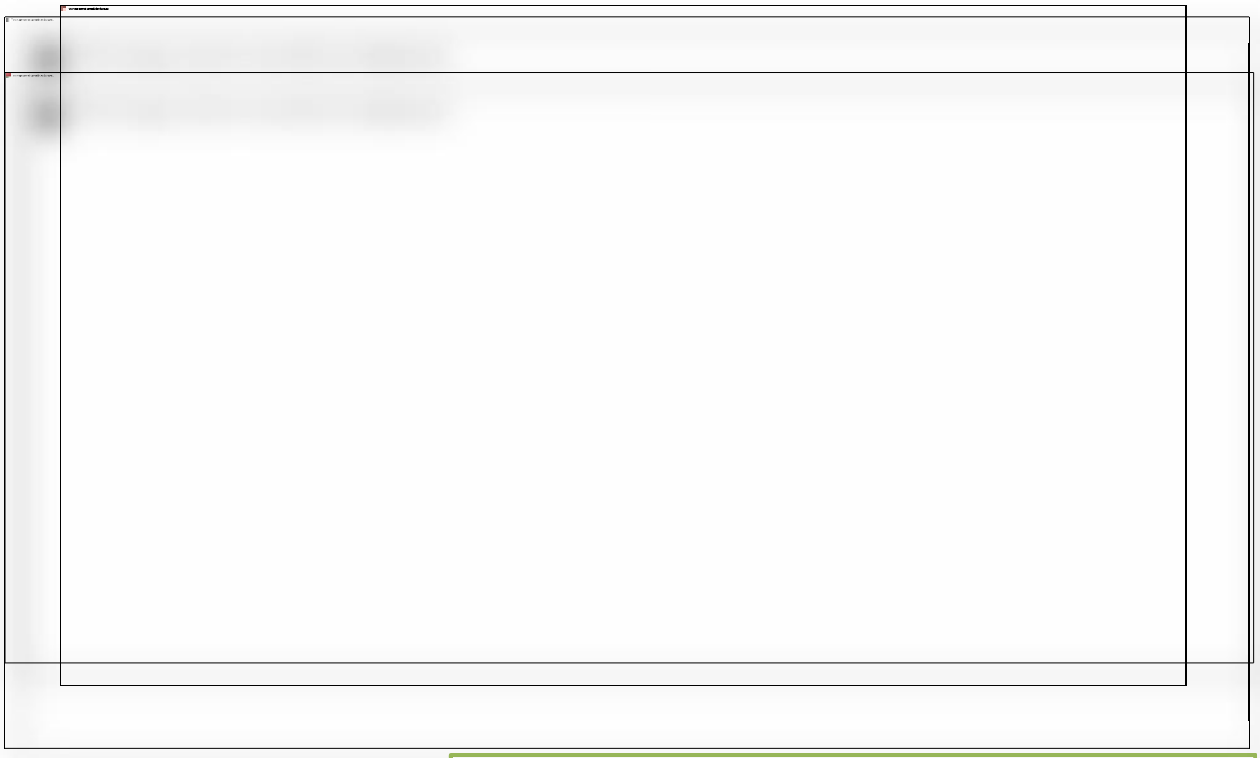
SIMILAR CONCEPTS USED WORLDWIDE



MORE THAN 90 % OF ENTIRE ALTERED RANGELANDS CAN BE RECOVERED IN 10 YEARS

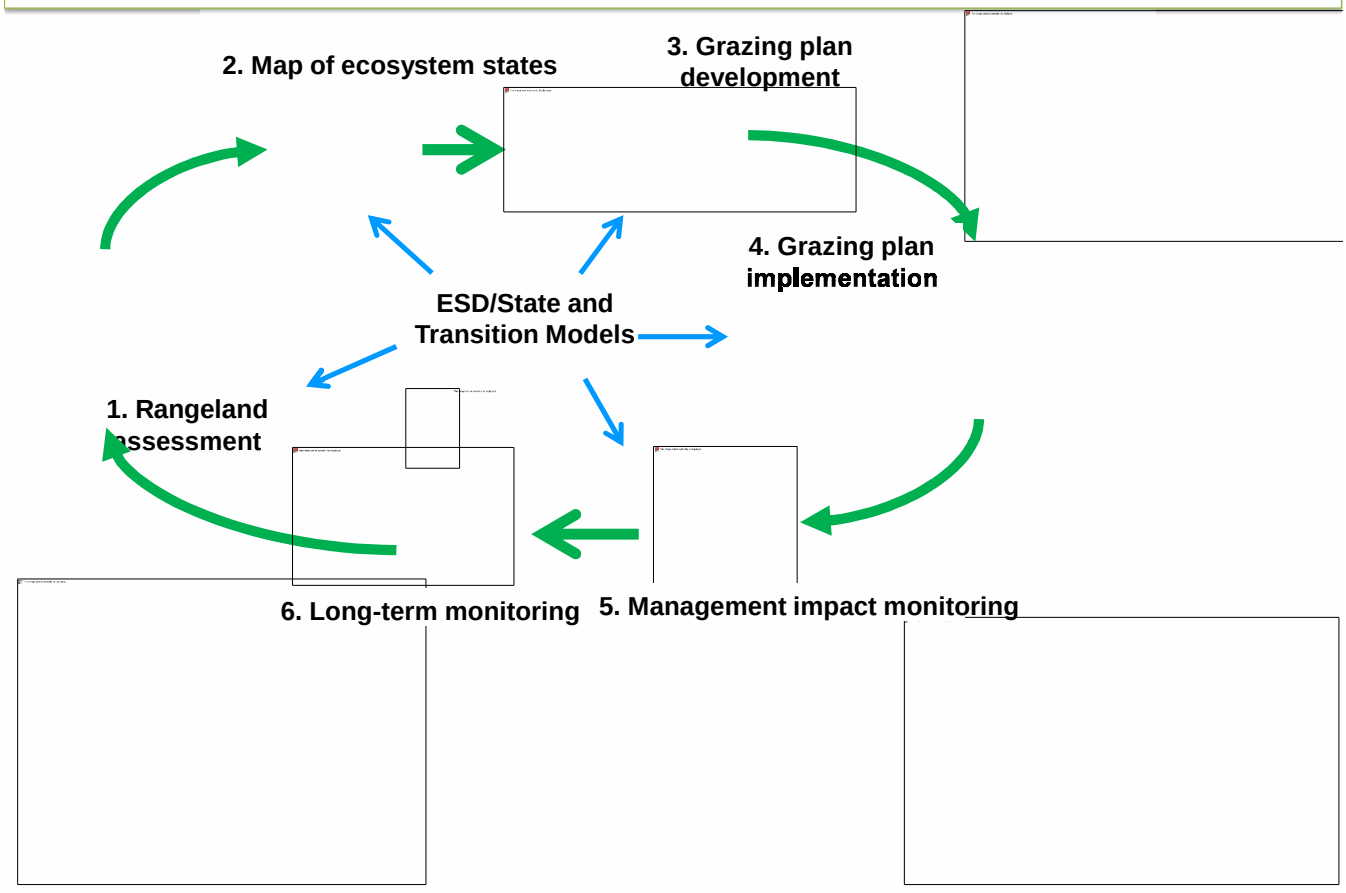
I – 52 %
II – 25 %
III – 15 %
IV – 7 %
V

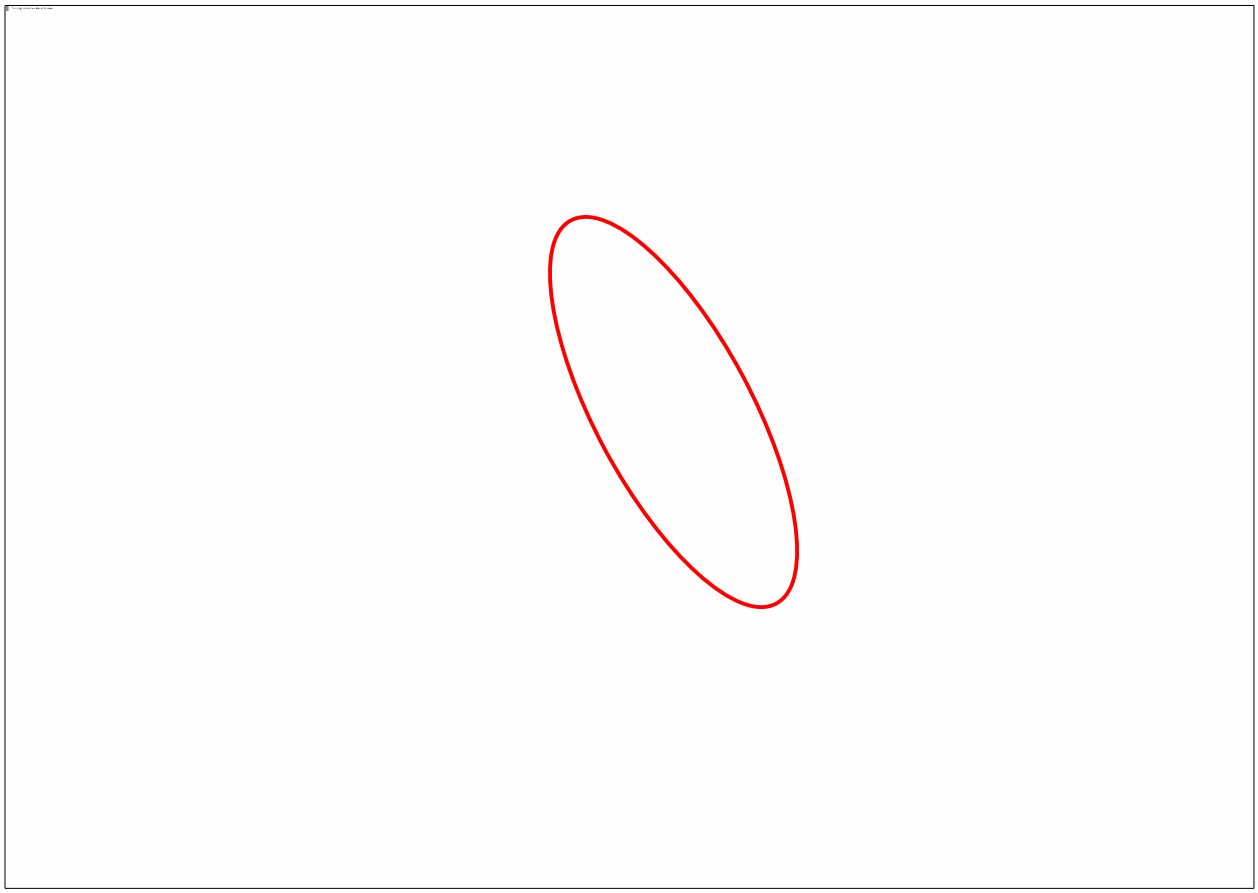
RANGELAND ECOSYSTEM HEALTH DOT MAP



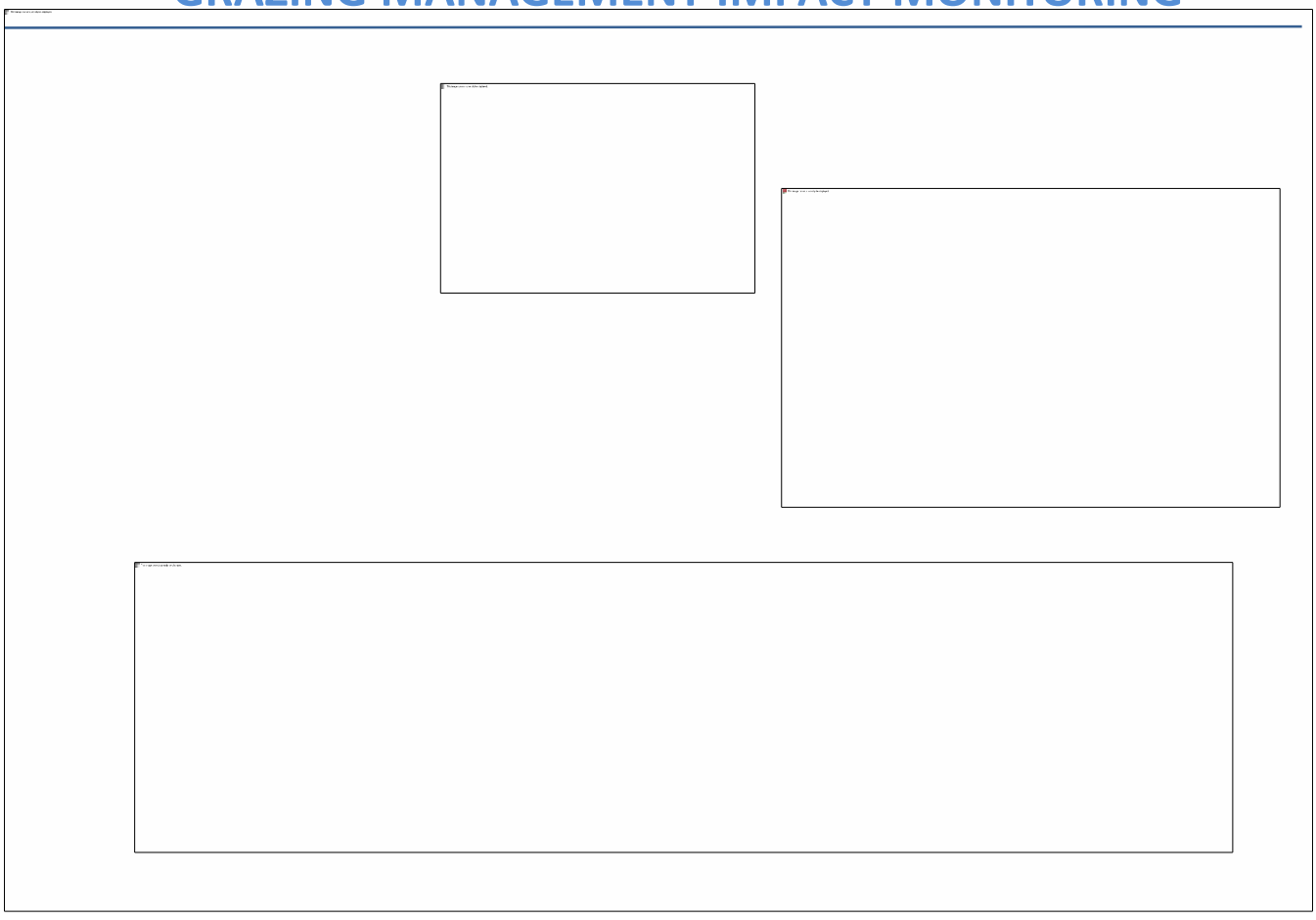
http://www.tsag-agaar.gov.mn/webmap/webmap.html
http://jornada.nmsu.edu/esd/international/mongolia

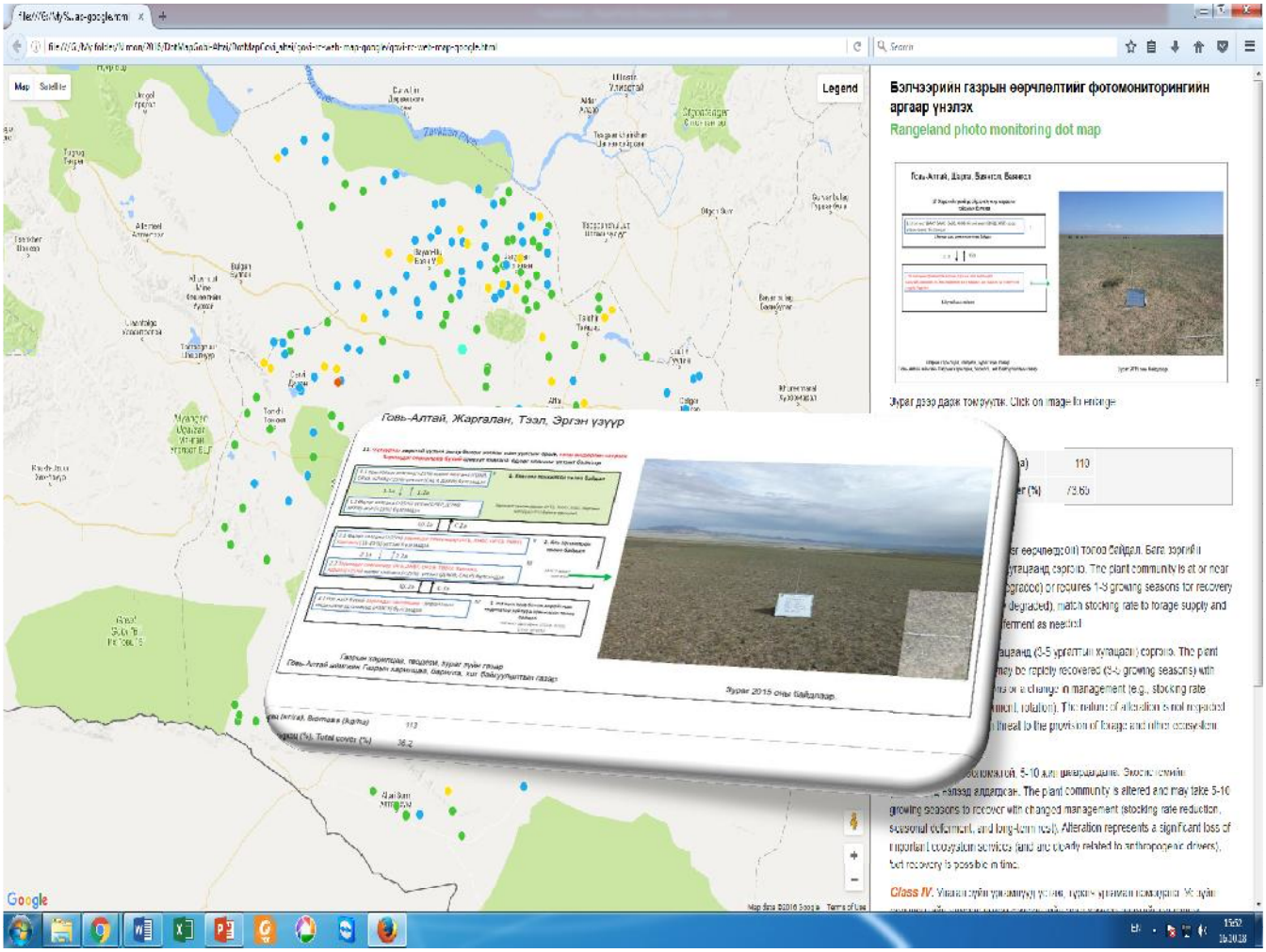
RESILIENCE BASED RANGELAND MANAGEMENT





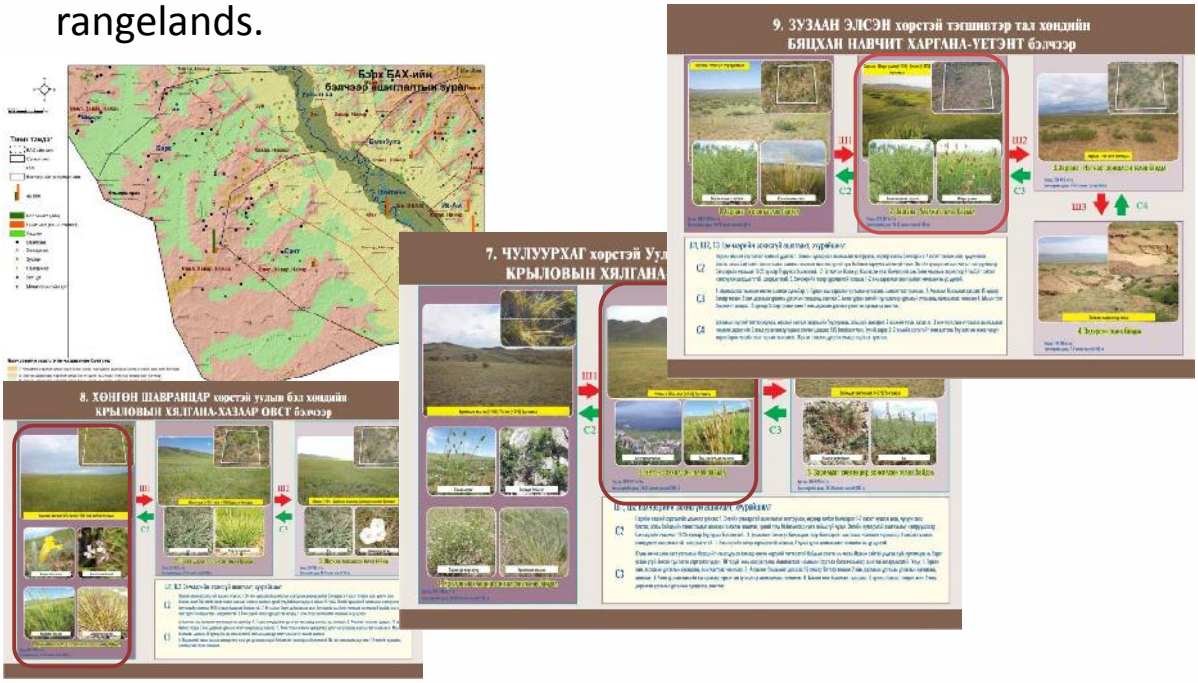
GRAZING MANAGEMENT IMPACT MONITORING





RANGELAND USE AGREEMENT TO ENFORCE SUSTAINABLE GRAZING MANAGEMENT

- Herders traditional user right is legitimized.
- Herders are more responsible to maintain and not to degrade a rangelands.



CONCLUDING REMARKS:

- Rangeland ecosystem health and management impact monitoring systems have created an opportunity to improve coherence among different stakeholders working for sustainable rangeland management in Mongolia.
- It made possible to include rangeland management into sustainability code of practice of livestock products from Mongolia (for example natural rangeland based yak wool)


Thank you for attention.