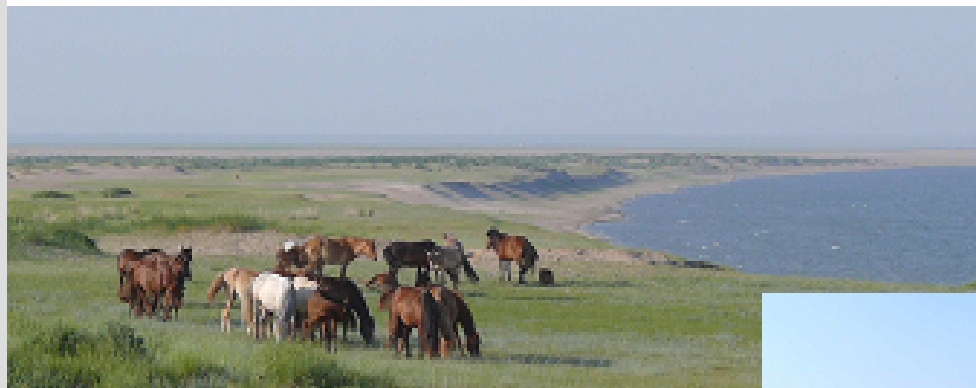


Hungarian-Mongolian Cooperation in the Kherlen River Basin



Kálmán Papp
EURO-INBO Bucharest 13-14 November 2014

Previous Bilateral Cooperation

By Hungarian government aids (loans and grants) the following activities were executed:

1957-1970 Water exploration, drilling of wells for pastures and animal husbandry

1967-1973 Geophysical water exploration

1969-1980 Exporting of smaller irrigation plants

1976-1981 Planning and constructing the Kherlen-Bayaan-Ulaan (1300ha) and Upper-Choibalsan (2000 ha) Irrigation

Systems

1971-1990 Water Management Master Planning (National and Regional Plans)

National Water Management Master Plan of Mongolia

1971. Agreement on the Expedition and Planning
Activities, Preparation of Atlas

1971-72. Preparation of topics and methodology

1972-73. Collection of data and expeditions

1974-75. Preparation of the National Water
Management Master Plan of
Mongolia

Cooperating partners:

Hungary: National Water Authority (OVH),
Water Resources Management Center (VIKÖZ)
Water Consulting Co. (VIZITERV)

Mongolia: Ministry of Water (Usny Aj Ahuyn Yaam)
Water Management Institute (Usny Khalguy Tösöl)

Content of Master Plan

- I. Natural Geographycal Conditions**
- II. Uses and Protection of Water Resources**
- II. Long Term Development of the Mongolian
Water Management**
- IV. Atlas of Master Plan**

Documents were prepared in Russian Language

Regional Water Management Master Plans

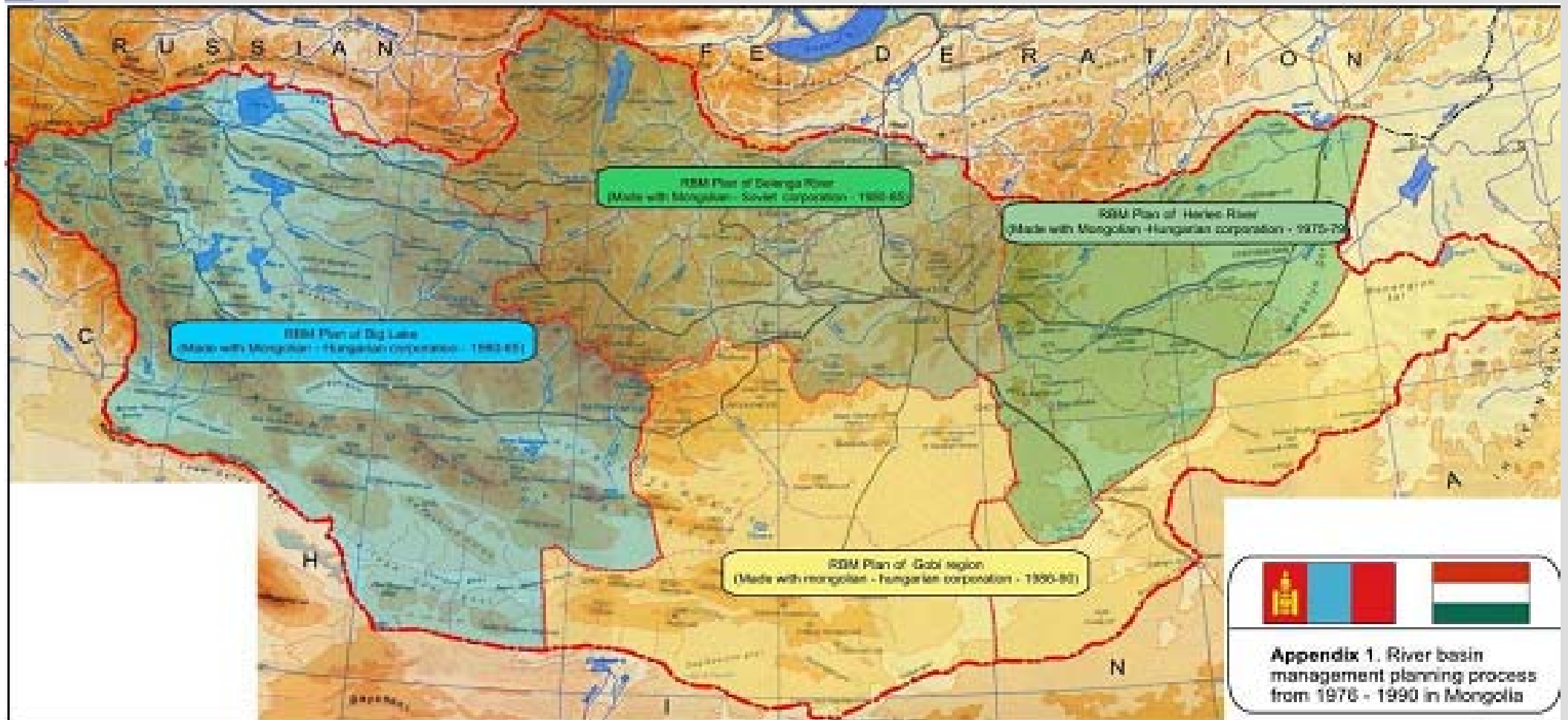
1975-1979. Kherlen River Basin

1980-1985. Basin of Great Lakes

1985-1987. Undrained Basins of Baydrag, Tuyn,
Taats and Ongiyn Rivers

For the Selenge River Basin the Master Plan was prepared by Lengiprovodhoz (SU) based on the National Master Plan

River basin management planning process in Mongolia



БНМАУ-ЫН УСНЫ АЖ АХУЙН ЯАМ
МИНИСТЕРСТВО ВОДНОГО ХОЗЯЙСТВА МНР

УСНЫ ХАЙГУУЛ ТӨСӨЛ, ЭРДЭМ ШИННИЛГЭЭНИЙ ИНСТИТУТ
ПРОЕКТНО-ИЗЫСНАТЕЛЬСКИЙ И НАУЧНО-ИССЛЕДОВАТЕЛЬСКИЙ ИНСТИТУТ

**ХЭРЛЭН ГОЛЫН САВ НУТГИЙН
УСНЫ НӨӨЦИЙГ НЭГДМЭЛЭЭР
АШИГЛАХ, ХАМГААЛАХ**

А Т Л А С

**КОМПЛЕКСНОГО ИСПОЛЬЗОВАНИЯ
И ОХРАНЫ ВОДНЫХ РЕСУРСОВ
РЕГИОНА Р. ХЭРЛЭН**

БНМАУ-ЫН БАРИЛГА-АРХИТЕКТУР, ТЕХНИН ХЯНАЛТЫН УЛСЫН ХОРООНЫ ХАРЪЯА
УЛСЫН ГЕОДЕЗИ, ЗУРАГ ЗҮЙН ГАЗАР

ГОСУДАРСТВЕННОЕ УПРАВЛЕНИЕ ГЕОДЕЗИИ И НАРТОГРАФИИ ПРИ ГОСУДАРСТВЕННОМ
НОМИТЕТЕ СТРОИТЕЛЬСТВА, АРХИТЕКТУРЫ И ТЕХНИЧЕСКОГО КОНТРОЛЯ МНР

УЛААНБААТАР 1981

High Level Decoration for the Hungarian Cartographer



The Cooperation Came to a Standstill between 1990 and 2007



- What could I do?
- Think as if I were in the Gandan Monastery
- Revolving a prayer mill for the renewing of contacts

Noril'sk

Novosibirsk

Irkutsk

Astana

Ulan Bator

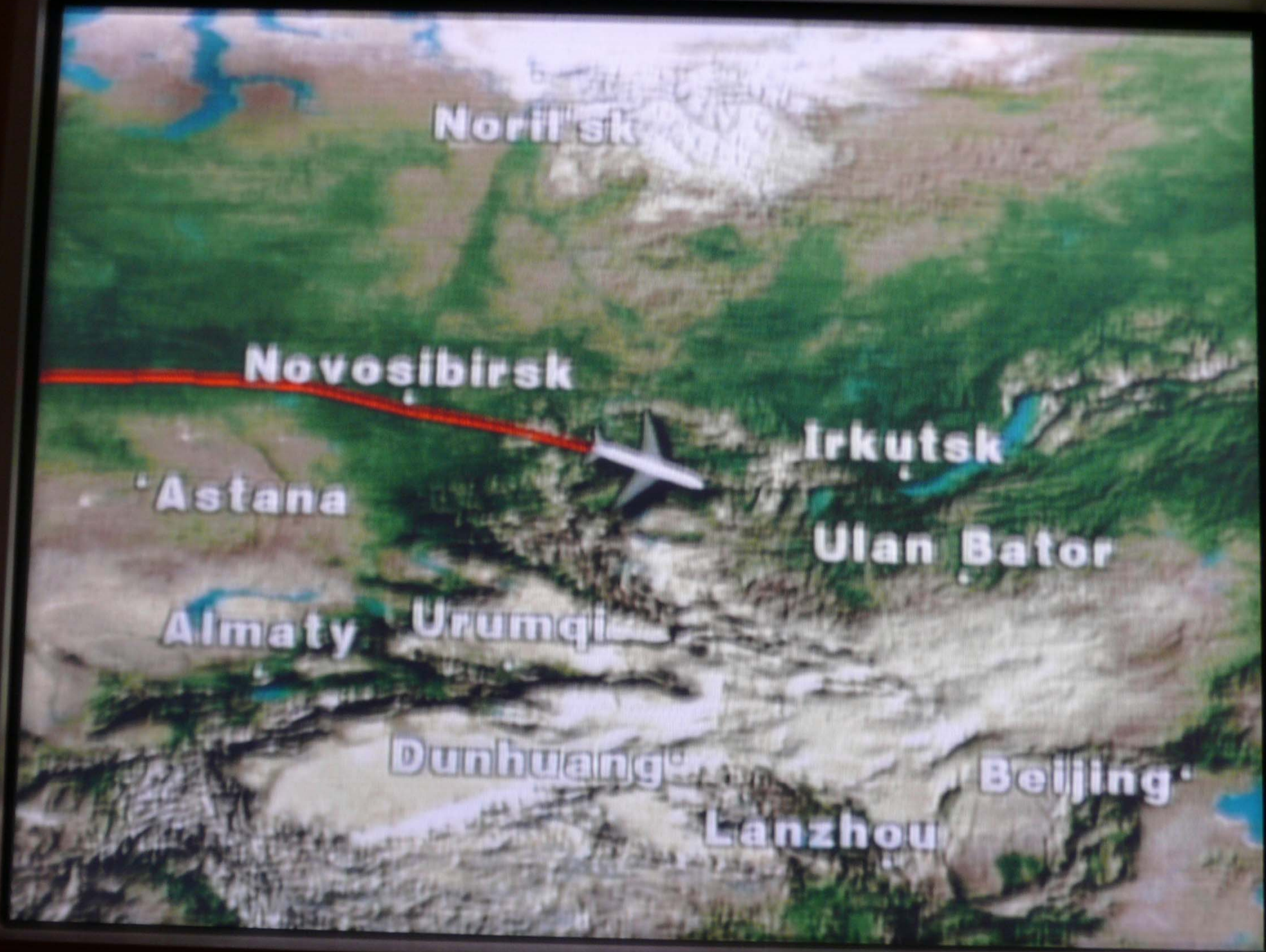
Almaty

Urumqi

Dunhuang

Beijing

Lanzhou







CHINGGIS KHAAN INTERNATIONAL AIRPORT

Welcome to
MONGOLIA

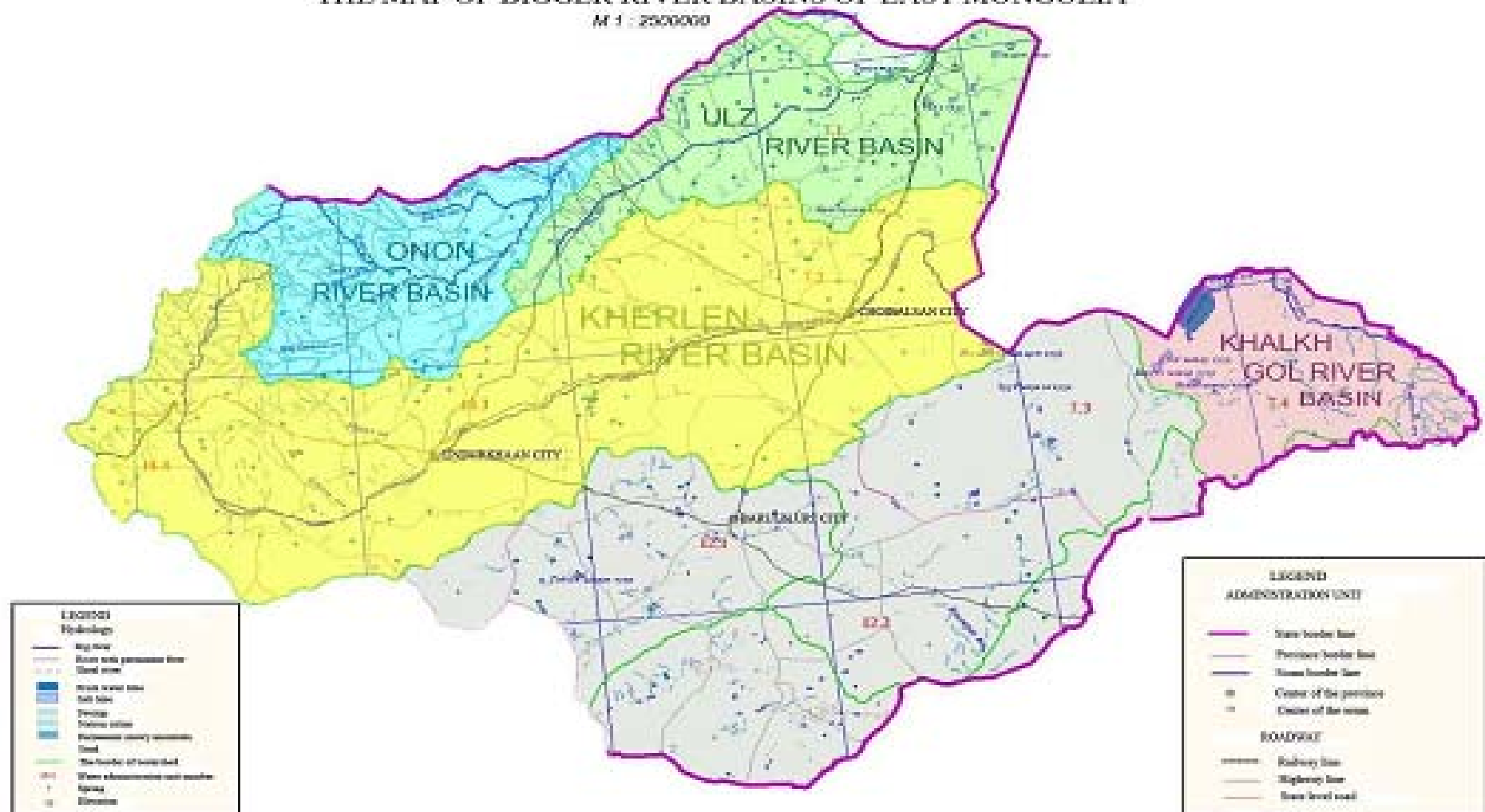
Renewing the Cooperation Agreement in 2008



First Proposal for Updating of River Basin Plans in East Mongolia

THE MAP OF BIGGER RIVER BASINS OF EAST MONGOLIA

M 1 : 2500000



Preparatory project for East Mongolia 2009-2011.

Grant Proposal for the East Mongolian Rivers which belong to the Pacific Basin (Kherlen, Khalkh gol, Onon gol and Uldz gol)

Partners:

Mongolian Side:

Water Authority

Institute of Geoecology

Hungarian Side:

National Directorate for Water and Environment

VIZITERV Environ Ltd.

Pictures from a Study Tour



Preparatory project for Kherlen RBM Plan 2013-2014.

Reorganisation of water management in Mongolia and in Hungary caused some delay in preparatory activities

Mongolian Side asked to focus on Kherlen Basin

2013. HU Foreign Ministry provided support for the project

2014. February Discussions in Budapest

2014. May High level HU delegation in UB

2014. June HU Expert delegation in Mongolia
With study tour to Kherlen River

Some facts about the Kherlen River



Second river in Mongolia

Length: 1254 km

Basin Area: 92000 km²

**Basin in Mongolia: 83890
km²**

Av. discharge: 21-22 m³/sec

Sources: Khentii Mountains

**Drains to the Dalay Nuur
(Lake Hulun) in China**

Tributaries:

Mörön gol

Tsenheryn gol

Project Partners

Hungarian Side:

National Water Directorate (OVF)

National Institute for Environment (NEKI)

VIZITERV ENVIRON Ltd.

Mongolian Side:

Institute of Geoecology

Kherlen River Basin Directorate

HU Expert Delegation Activities 12 June-1 July 2014.

Discussions and data collection in UB

- Ministry of Environment and Green Economy
- Institute of Geoecology
- Institute of Meteorology and Hydrology
- WWF Mongolia
- Environment Information Center
- Educational Center for Water Resources and Nature Conservancy
- Research Institute of Animal Husbandry

Opening discussion at Geocological Institute Ulaanbaatar – 13. June 2014.



Field Trip to Kherlen River Basin

Important places of field trip:

Möngönmorit: First Water Measuring Station

Baganuur: Kherlen Basin Directorate, Coal Mine
Water Measuring Station

Öndörkhan: Khentii Province Environment Dir.
Khentii Province Public Works Co.
Water Measuring Station

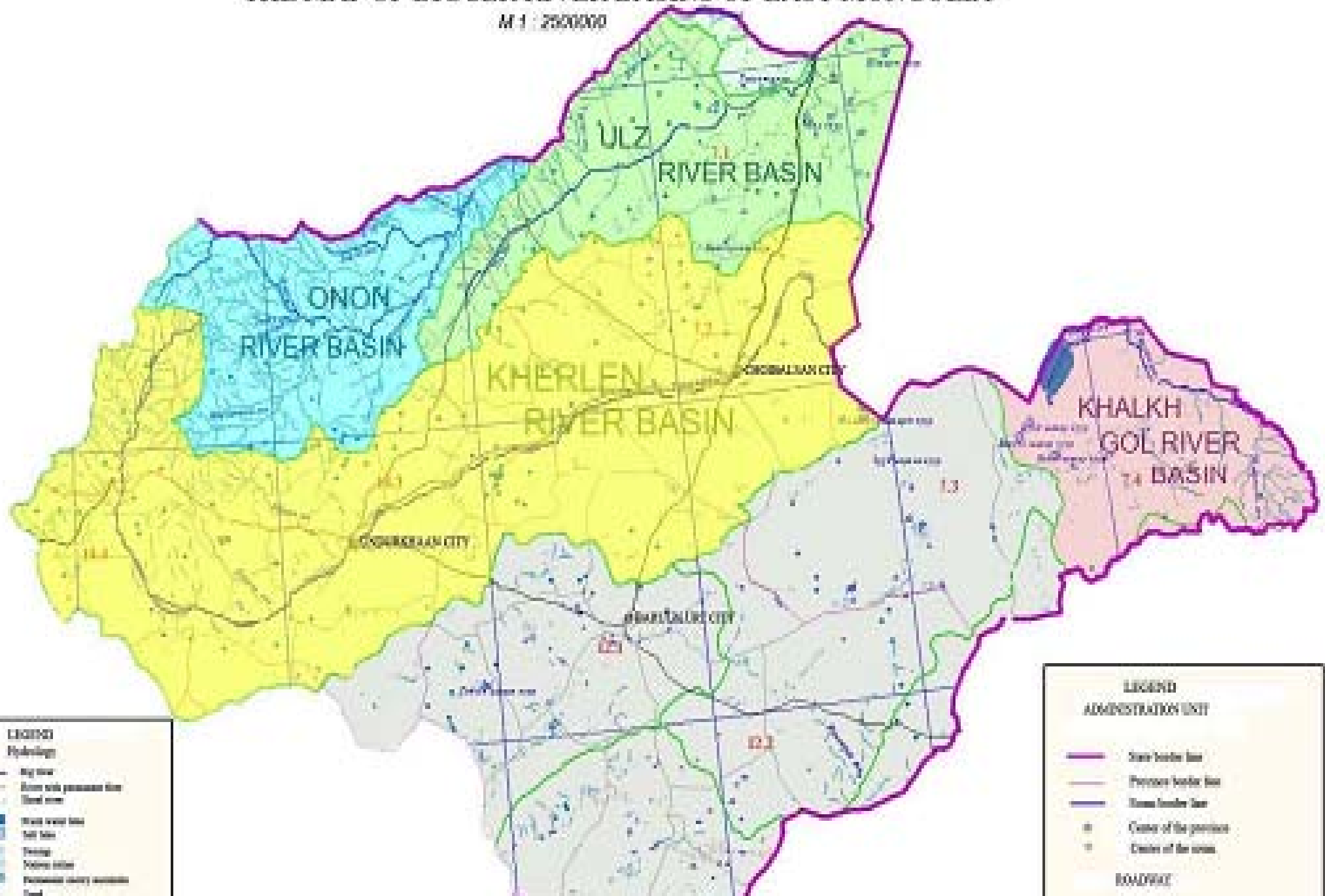
Delgerkhan: Avarga Toshon Salt Lake

Bayaan Ovoo: Khar Yamaat Nature Reserve

Mörön gol, Tsenheryn gol

THE MAP OF BIGGER RIVER BASINS OF EAST MONGOLIA

M 1 : 2000000



LEGEND
Hydrology

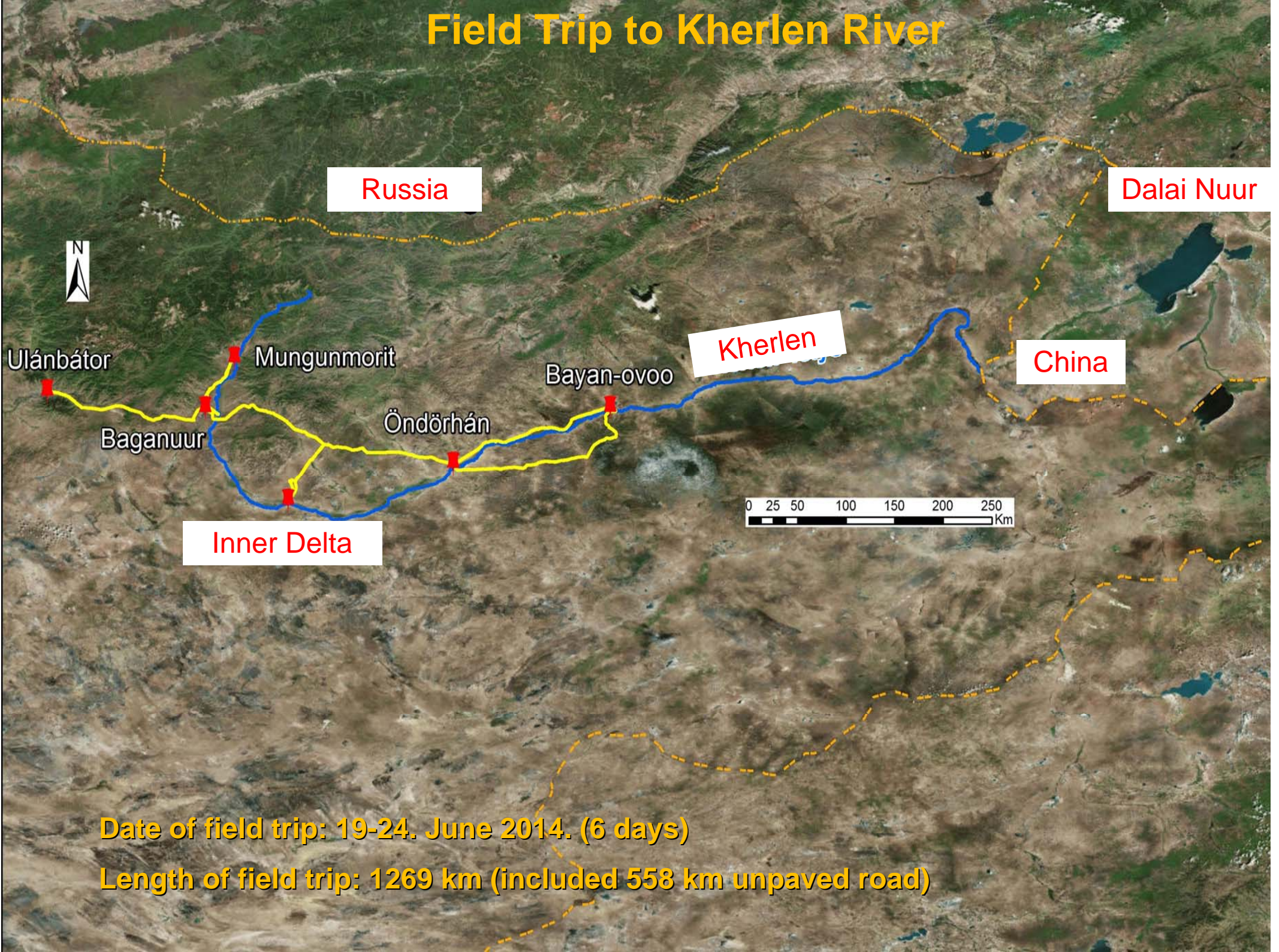
- Big river
- River with permanent flow
- Small river
- Water course line
- Salt lake
- Swamp
- Pasture water
- Permanent water reservoir
- Pond

LEGEND
ADMINISTRATION UNIT

- State border line
- Province border line
- County border line
- Center of the province
- Center of the county

ROADWAY

Field Trip to Kherlen River



Russia

Dalai Nuur

China

Kherlen

Ulánbátor

Mungunmorit

Bayan-ovoo

Baganuur

Öndörhán

Inner Delta

0 25 50 100 150 200 250 Km

Date of field trip: 19-24. June 2014. (6 days)

Length of field trip: 1269 km (included 558 km unpaved road)

At the Kherlen River Basin Directorate



Kherlen at M \ddot{u} ng \ddot{o} nmorit



Kherlen at Baganuur



At the Tsenheryn gol



Avarga Toshon Salt Lake



Kherlen Inner Delta Region



Water Quality Measurement at Öndörkhan



Kherlen near Bayan Ovoo



Thank You for Kind Attention! Muḡu Mesc!

