



# CACILM Multicountry Secretariat

*Sustainable Land Management Information System (SLM-IS):  
(ADB TA – 6357 REG)*

## Development of Baseline Data for the CACILM Sustainable Land Management Information System

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Bishkek, Kyrgyzstan, 2009

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## SLM Knowledge Mgmt : Website

The screenshot shows a Microsoft Internet Explorer browser window displaying the CACILM Knowledge Network website. The browser's address bar shows the URL: [http://wtop1.asiandevbank.org/QuickPlace/cacilm/Main.nsf/h\\_1C782EF29689BB4C4825729D001BF776c243201bdb4206b4825729d001c0372?OpenDocument](http://wtop1.asiandevbank.org/QuickPlace/cacilm/Main.nsf/h_1C782EF29689BB4C4825729D001BF776c243201bdb4206b4825729d001c0372?OpenDocument). The website header features the ADB logo and the text "CACILM Knowledge Network". Below the header, there is a navigation menu with links for "Home > Welcome", "Welcome to CACILM", "About Us", "Membership", "Contact Us", and "Links". The main content area is titled "Central Asian Countries Initiative for Land Management (CACILM)" and describes the initiative as a partnership between Central Asian countries and the international donor community. It lists "5 countries" (Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan) and "1 goal" (The restoration, maintenance, and enhancement of the productive functions of land in Central Asia). The website also includes a sidebar with "Advanced Search" and various navigation options like "In the News", "Calendar of Events", and "Resource Center".

Welcome to CACILM - cacilm - Microsoft Internet Explorer provided by Asian Development Bank

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Mail Print

Address [http://wtop1.asiandevbank.org/QuickPlace/cacilm/Main.nsf/h\\_1C782EF29689BB4C4825729D001BF776c243201bdb4206b4825729d001c0372?OpenDocument](http://wtop1.asiandevbank.org/QuickPlace/cacilm/Main.nsf/h_1C782EF29689BB4C4825729D001BF776c243201bdb4206b4825729d001c0372?OpenDocument) Go Links

Y! Search Web Mail My Yahoo! HotJobs Games Music

Welcome to CACILM - cacilm Add Tab

**ADB CACILM Knowledge Network**

Judy A. Vermudo Sign Out

Advanced Search

New... New Revision Edit Check Out... Copy Move Delete Cleanup Folder Options

Home > Welcome

Welcome to CACILM About Us Membership Contact Us Links

**Central Asian Countries Initiative for Land Management (CACILM)**

CACILM is a partnership between Central Asian countries and international donor community to work toward sustainable land management to combat land degradation and improve rural livelihoods

**5 countries**

**Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan** linked by their fragile dryland and mountain ecosystems, and life sustaining watersheds and rivers

**1 goal**

The restoration, maintenance, and enhancement of the productive functions of land in Central Asia, leading to improved economic and social well-being of those who depend

UPCOMING EVENTS

Applet STLinksApp started Local intranet

start Re: Fw: RITS# 2007... Welcome to CACILM -... KM proposal\_judy\_09... Yahoo! Messenger 6:49 PM

<https://cacilm.adb.org>

# **Central Asian Countries Initiative for Land Management (CACILM)**

## **Period of CACILM Implementation**

10-years Partnership between the  
International Donor Organizations and  
5 Central Asian Countries

## **CACILM Implementation Phases**

Inception Phase: 2007 - 2009

Implementation Phase: 2010 - 2012

Consolidation Phase: 2013 - 2016

# Central Asian Countries Initiative for Land Management (CACILM)

## CACILM Financing:

5 CACs

Global Environment Facility (GEF)

Asian Development Bank (ADB)

United Nations Development Program (UNDP)

German Agency for Technical Cooperation (GTZ)

Others: Global Mechanism, IFAD, ICARDA, FAO

# CACILM Program

Central Asian Countries Initiative for Land Management: **KAZ, KYR, TAJ, TUK, UZB**

CACILM is dedicated to combating land degradation and improving rural livelihoods.

SLM investment needed to address land degradation in CACs => \$1.6 billion

# CACILM Program

- capacity building
- integrated land-use planning
- sustainable agriculture in **rainfed** lands
- sustainable agriculture in **irrigated** lands
- sustainable **pastureland** management
- sustainable **forest** management
- **protected areas** management
- **biodiversity** conservation
- remediation in the region of Aral Sea

# **CACILM ACTIVITIES**

## **NATIONAL PROJECTS:**

- Medium Sized SLM Demonstration Projects (KAZ, KYR, TAJ, TUR, UZB) – 5
- Full Sized Investment Projects (TAJ, UZB) – 2

## **MULTICOUNTRY PROJECTS:**

- SLM Research – ICARDA
- SLM Information System – ADB
- SLM Knowledge Management – ADB
- SLM Capacity Building – UNDP/GTZ

# CACILM Progress – Multicountry

CACILM Steering Committee established and functioning:

CACs Members = **KAZ, KYR, TAJ, TUK, UZB**

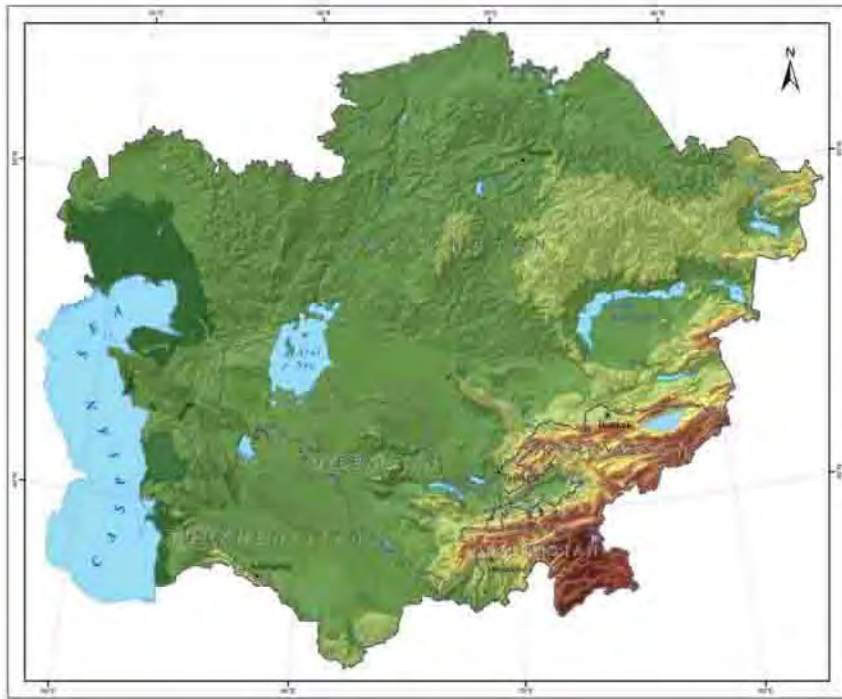
CACILM Donor Partners: **ADB, CIDA, FAO, GEF, GM, GTZ, ICARDA, IFAD, SDC, UNDP, UNEP, World Bank.**

CACILM Multicountry Secretariat (MSEC): Bishkek KYR

CACILM Steering Committee Meetings Bishkek (2007), Ashgabat (2008) and Dushanbe (2009)

Guide implementation of CACILM initiatives

Develop sustainable financing of SLM in CACs.



**Site Level Assessment**  
 (example for GEF site: Suusamyryn valley)

Multi-country



National



Project levels

# Specific Proposals: Data Output

## MAIN SUBJECT AREAS:

- Irrigated Agriculture
- Rainfed Agriculture
- Rangeland
- Watershed management (mountain areas, transboundary water issues...)

*(Precision of info & scales of presentation will differ between subject areas)*

# 10 Basic SLM-IS outputs : Priority Area

- i. Collect priority Map Layers at scale 1:500.000 – 1:1.500.000
- ii. Collect Baseline Data for Years 1990, 2000, 2006/7: Socio-Econ, Land Use, Crop Yields & Production
- iii. Collect Remote Sensing Images in correct format, to show all key functions
- iv. Standardise map legends, input & output formats, across CAC-5

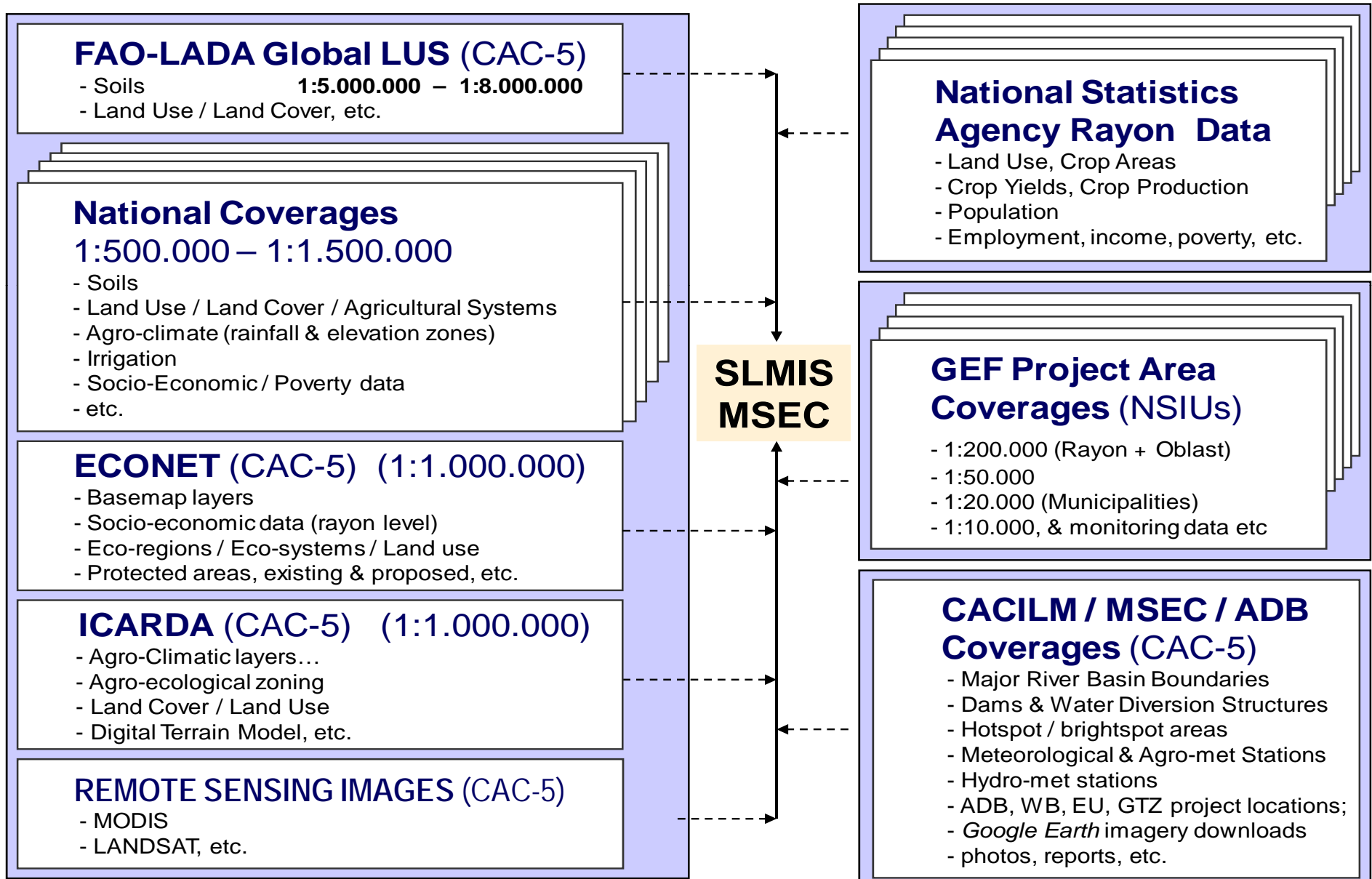
## 10 Basic SLM-IS outputs : Priority Area

- v. FAO-LADA LUS Maps: upgrade Global LUS Map for CAC-5 by use of National 1:500.000–1:1.500.000 map layers
- vi. GEF Project Areas: catalogue all map & other data available
- vii. Indicators of Land Degradation: set of indicators needed, to cover all levels: Global, Regional, National, Oblast & Project;

# 10 Basic SLM-IS outputs : Priority Area

- viii. Use of SLM-IS for Maps & Reports on Land & Water Degradation in baseline years
- ix. Use of SLM-IS & new institutional set-up to continue to monitor Land & Water degradation
- x. Demonstrate usefulness of SLMIS for a wide range of tasks

# Overall System: MSEC & CAC-5



# SLM Demonstration Projects: CACs, UNDP, GTZ

Kazakhstan: Sustainable Rangeland Management

Kyrgyz Rep: Demonstrating Sustainable Mountain Pasture Management in Susamyr Valley, Jergetal area

Tajikistan: Development of local Jamoats  
Demonstration of local experience for Combating Land Degradation”

Turkmenistan: Capacity Building and On-the-Ground Investments for SLM

Uzbekistan: Achieving of Ecosystem Stability on the Exposed the Aral Seabed and the Kyzylkum Desert

# SLM Investment Projects:

CACs ADB GEF

Kyrgyz Rep: Southern Agricultural Areas  
Development (Osh, Jalalabad,  
Batken) (\$20m)

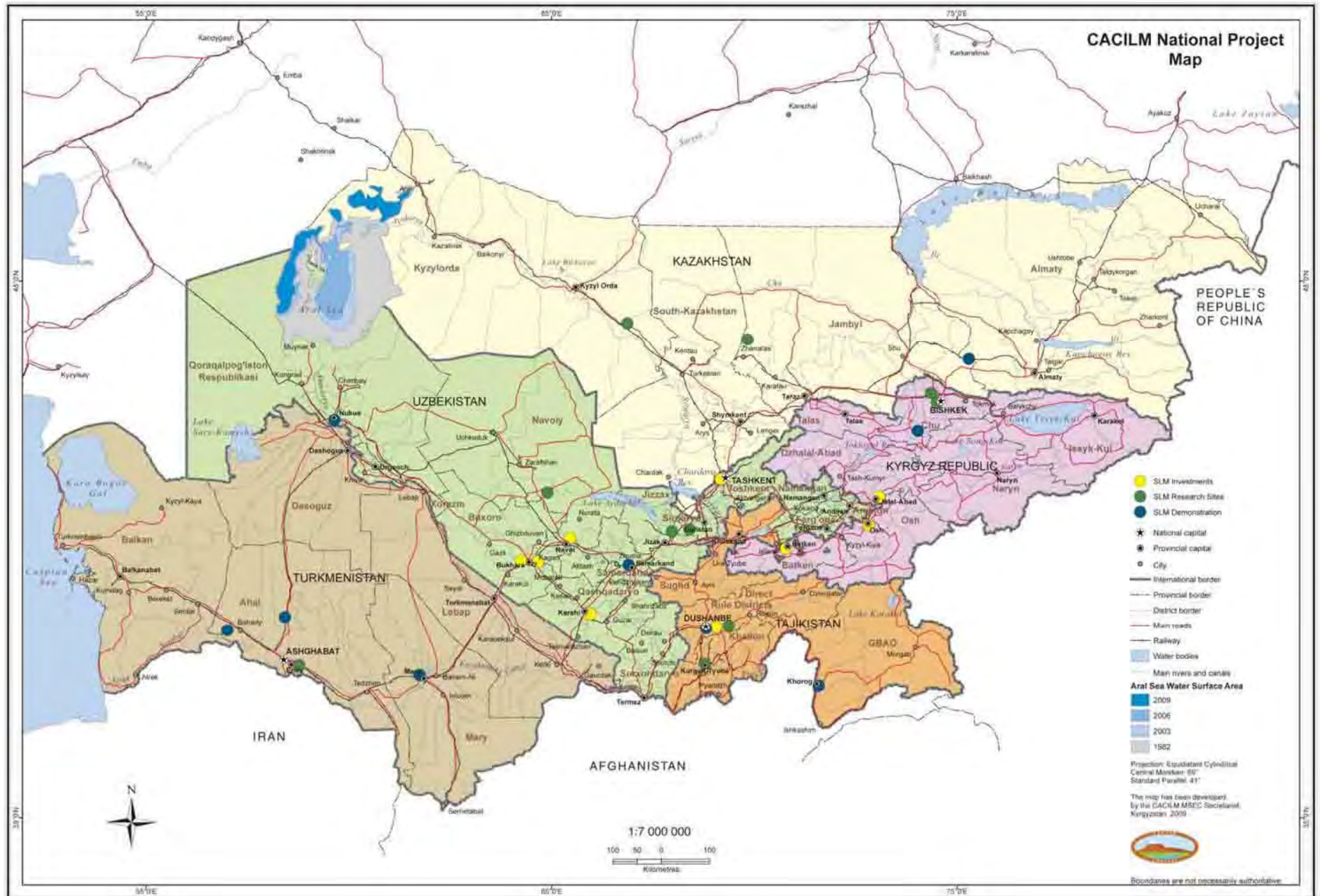
Tajikistan: Rural Development Project  
(Dushanbe region) (\$25m)

Uzbekistan: Land Improvement (Bukhara,  
Navoi and Kashkadarya) (\$70m)

# Example of Pasture Use in Suusamyry Valley



# Location of CACILM Pilot Projects



# Main Outputs of MSEC SLMIS

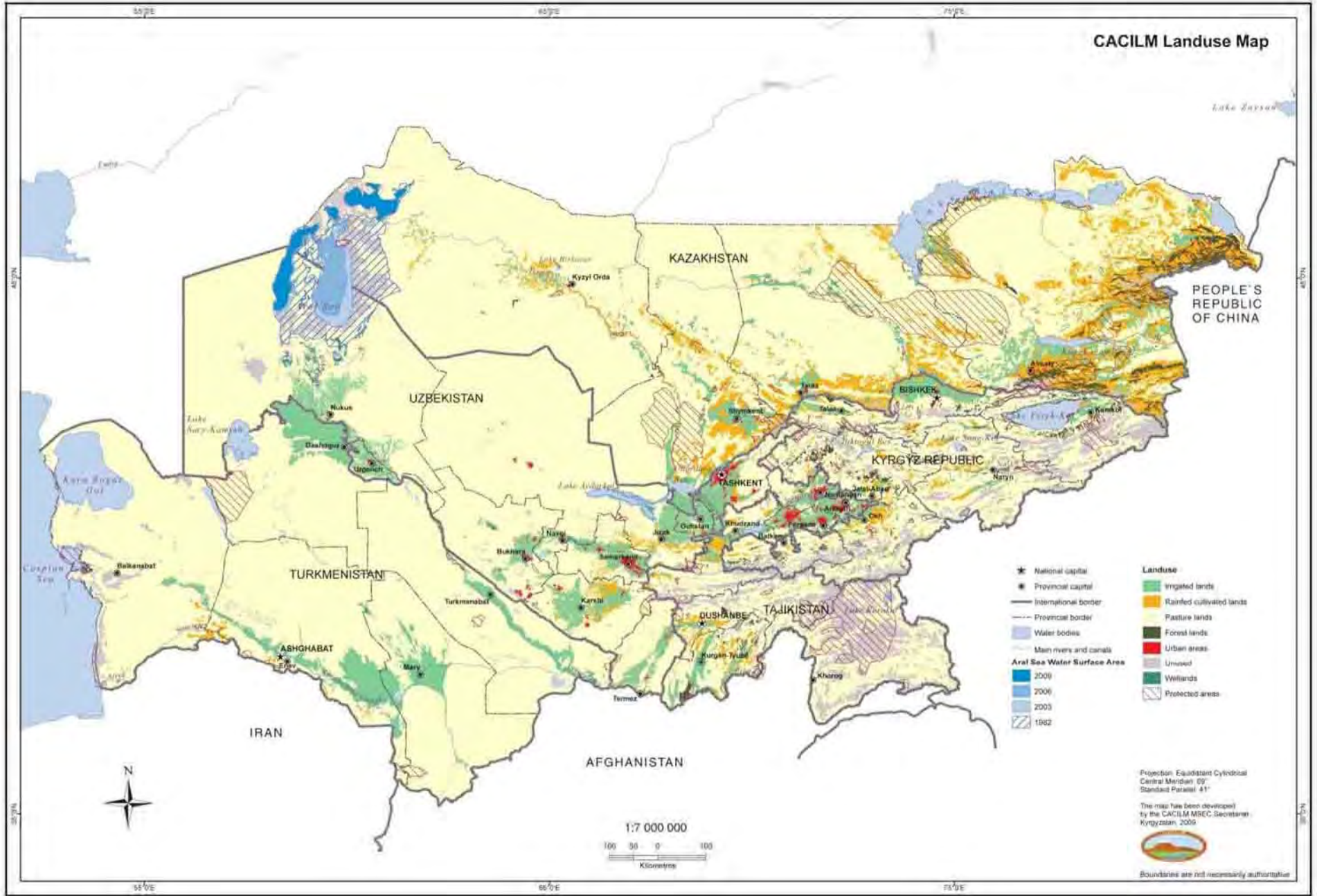
1. Land Use / Land Cover map
2. Rayon Land Use and Crop Statistics, 1990, 2000, 2006/7
3. Water Management map
4. Remote Sensing Imageries
5. Socio-economics / Livelihoods
6. Soil Map
7. Municipalities centres, & links to Soil Quality (Bonitet) ratings
8. Climate map
9. Dominant crops map
10. Hotspots and brightspots map

# Review of available data for CACILM

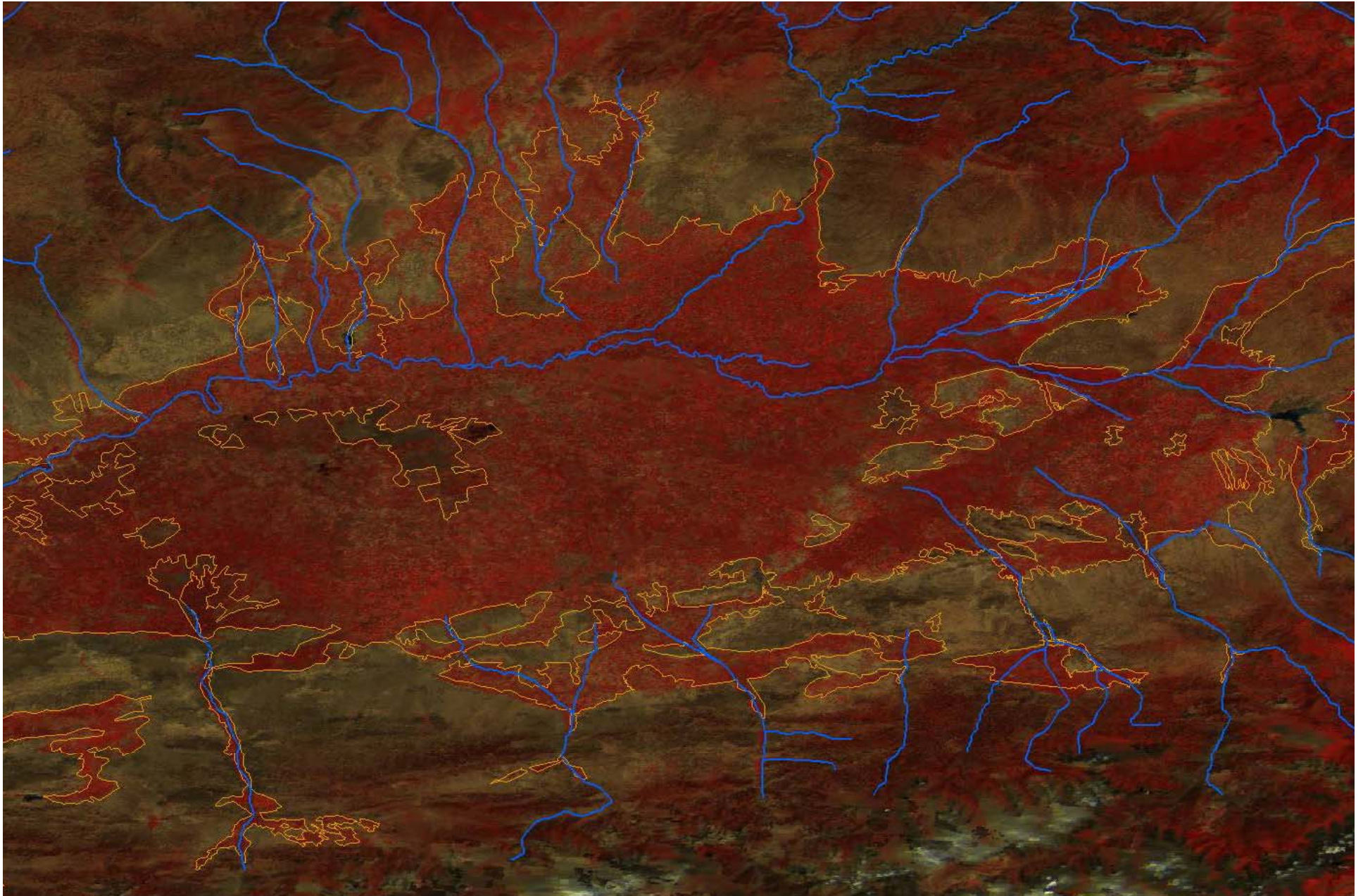
## Landuse/landcover map:

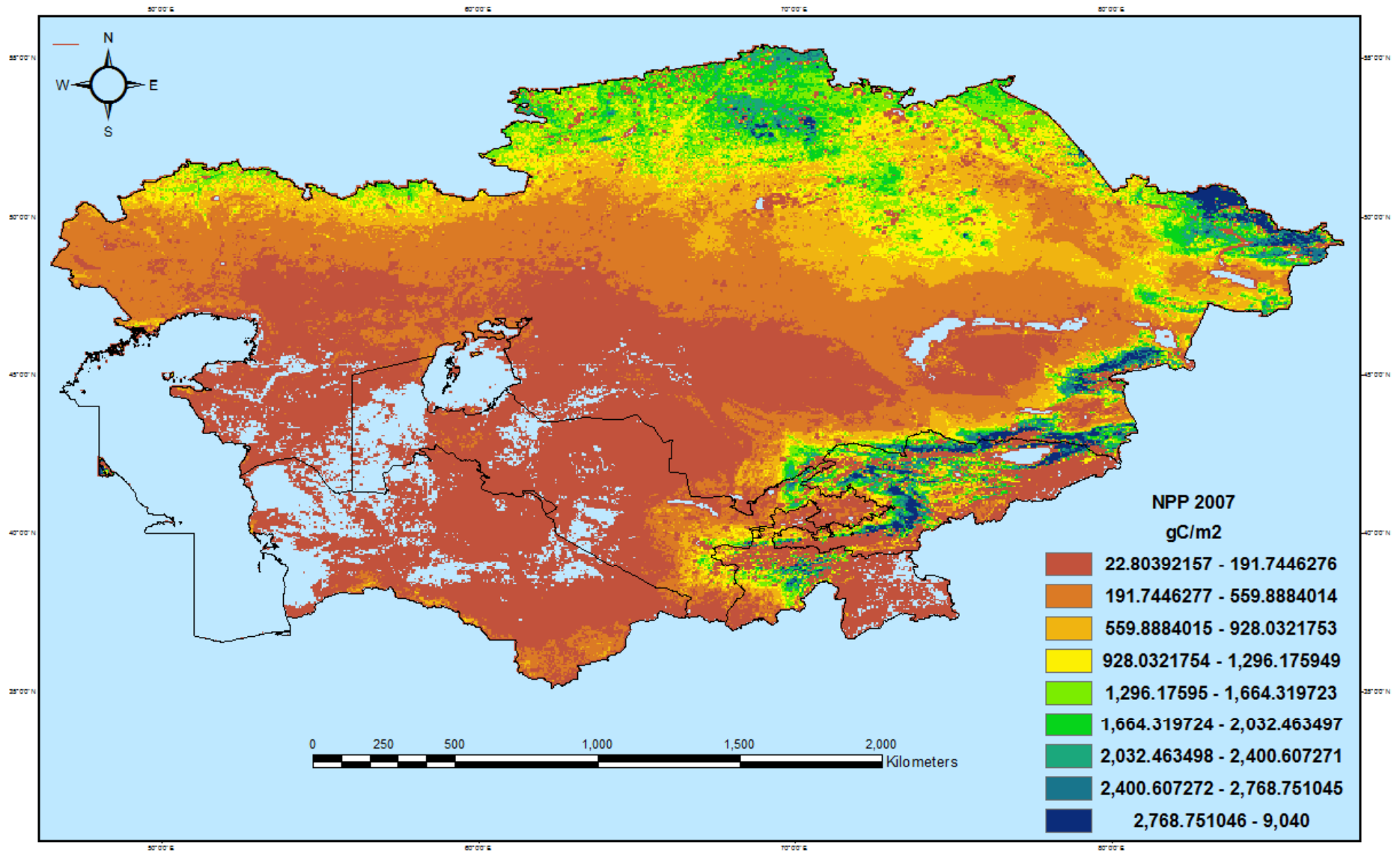
- FAO-LADA Global Land Use Systems map, 1:8m
- Globcover Land cover, 300 m resolution
- FAO/UNEP Land Cover Classification System
- Vegetation map, 1:2,5m of Kazakhstan and Central Asia
- ECONET 'Ecosys' coverage, 1:1 m of CAC-5
- MODIS NDVI Imagery: Day 193-213, 1:500.000
- Landsat TM, 30 m resolution
- Landcover/Landuse: KYRGYZSTAN 1:500.000
- Google Earth: 1:<100.000; 1:<10.000

# CACILM Landuse Map



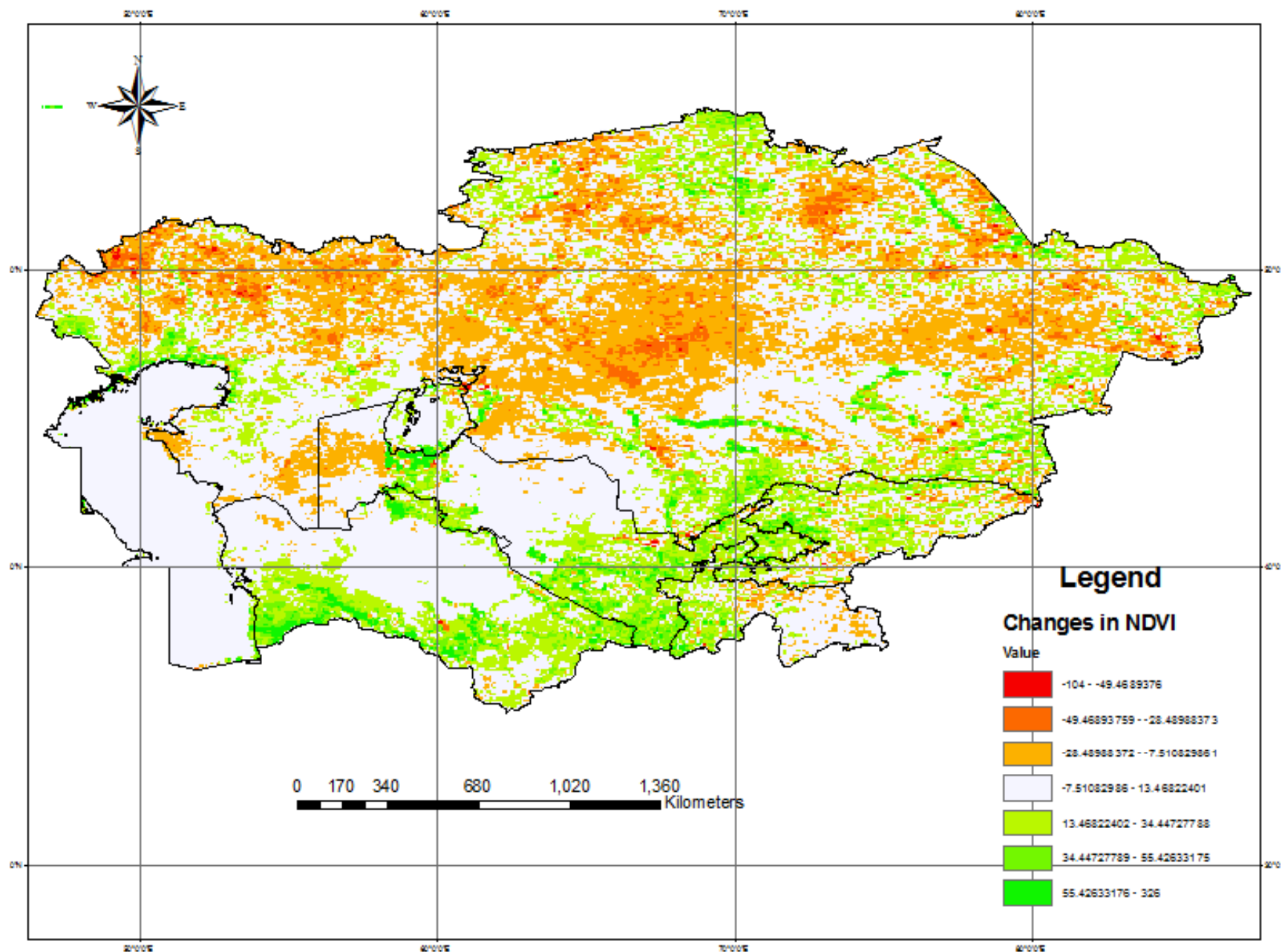
# MODIS Day193-213 UZB-Fergana



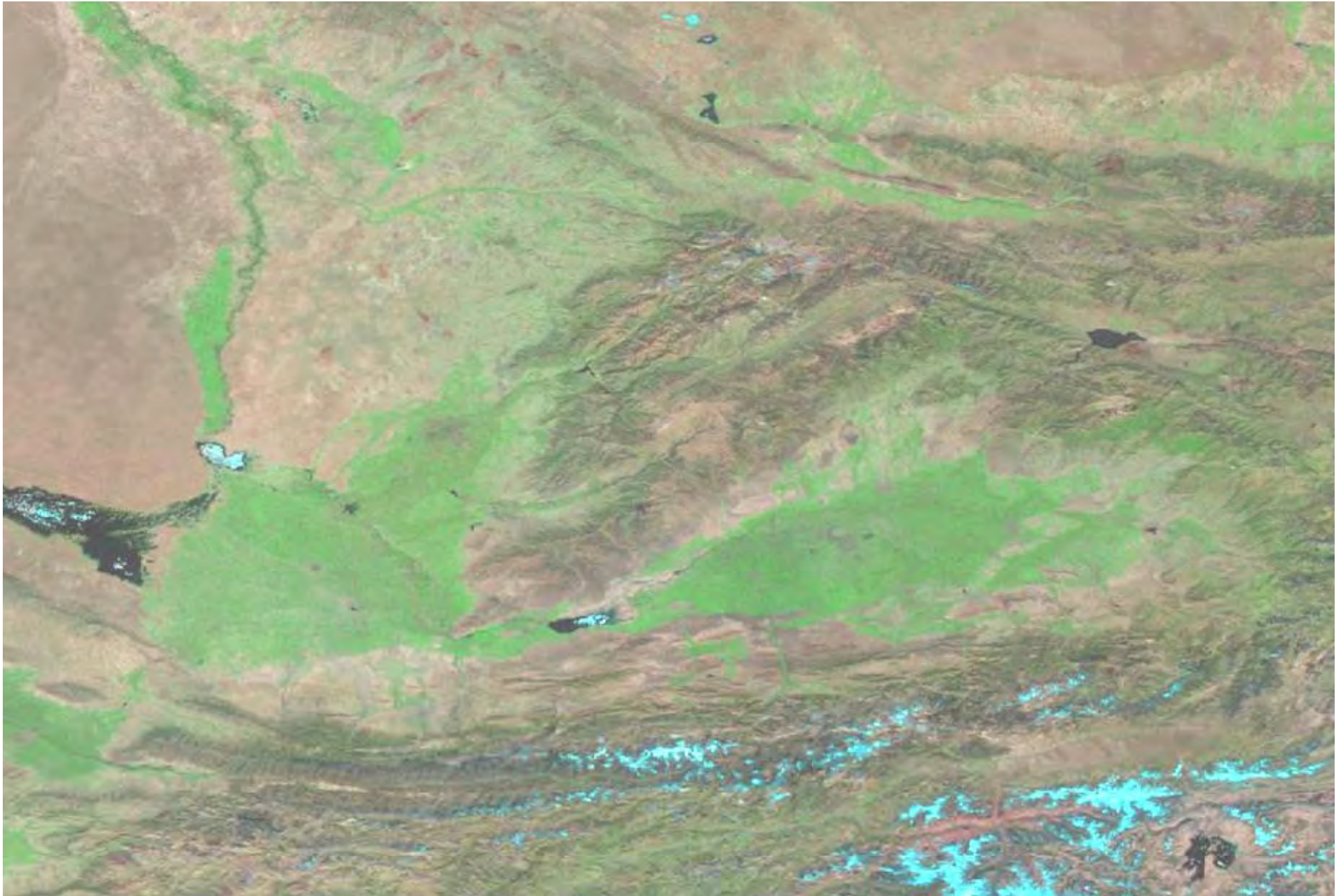


Net Primary Production, 2007.

Classification is based on half of the standard deviation ( $736.28/2$ ).

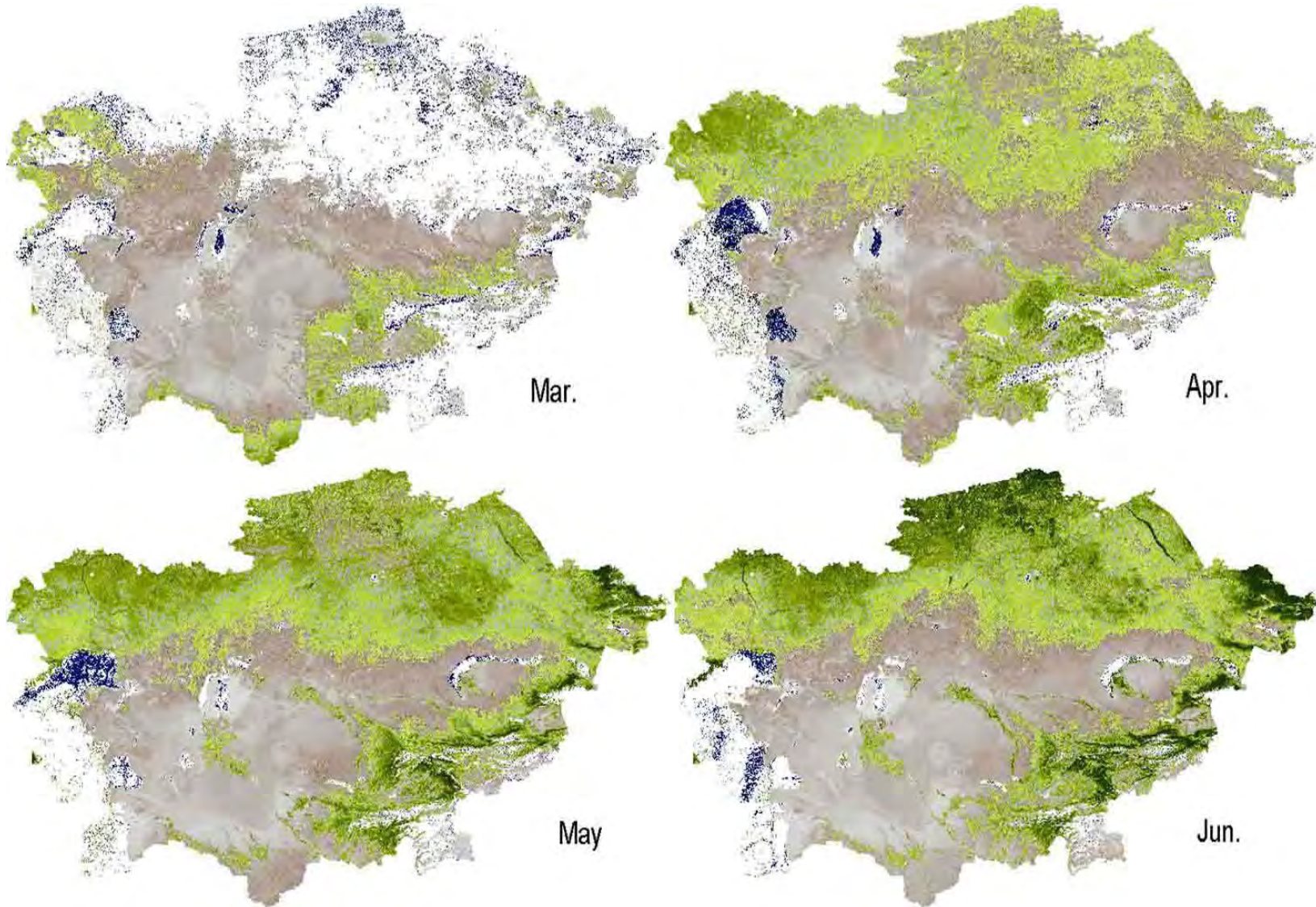


Changes in NDVI between 1983 and 2005. Data: GIMMS dataset.



Syr Darya Basin, Mid-Basin Areas: MODIS imagery (1:2.5m scale)

# Vegetation Green-Up, early Season, March – October, 2008



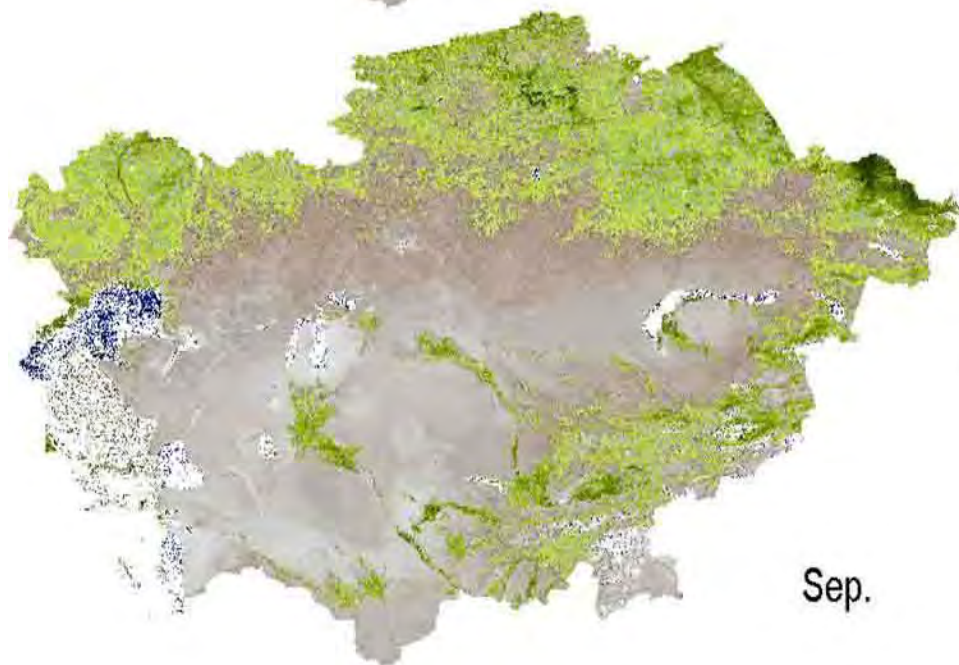
# Vegetation Growth, late Season, July – October



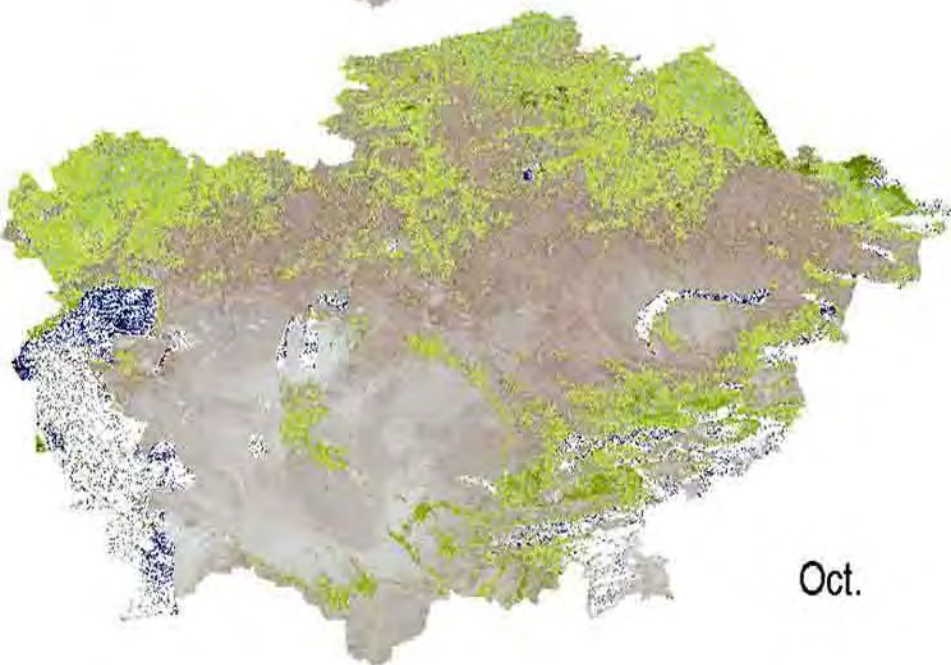
Jul.



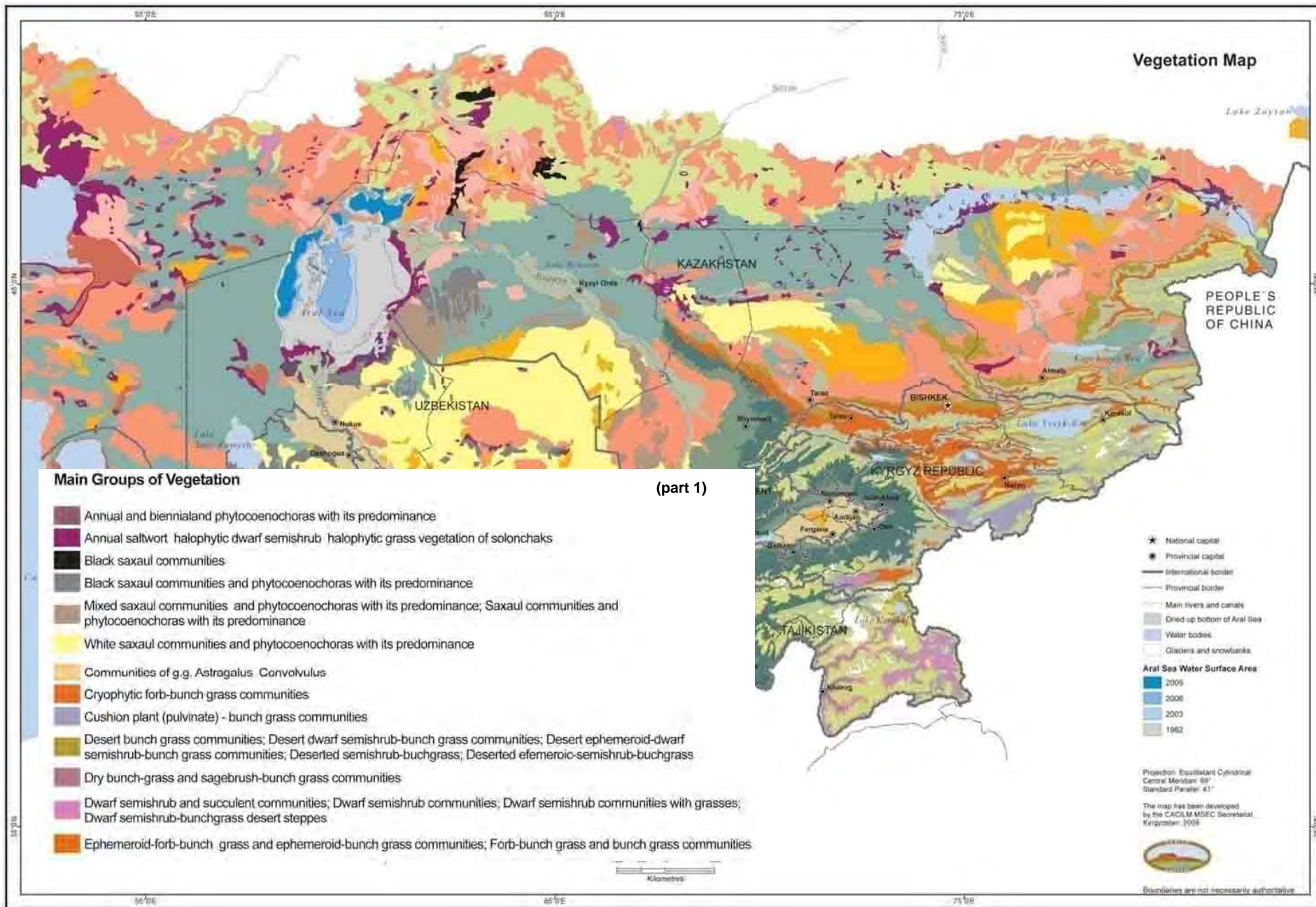
Aug.



Sep.



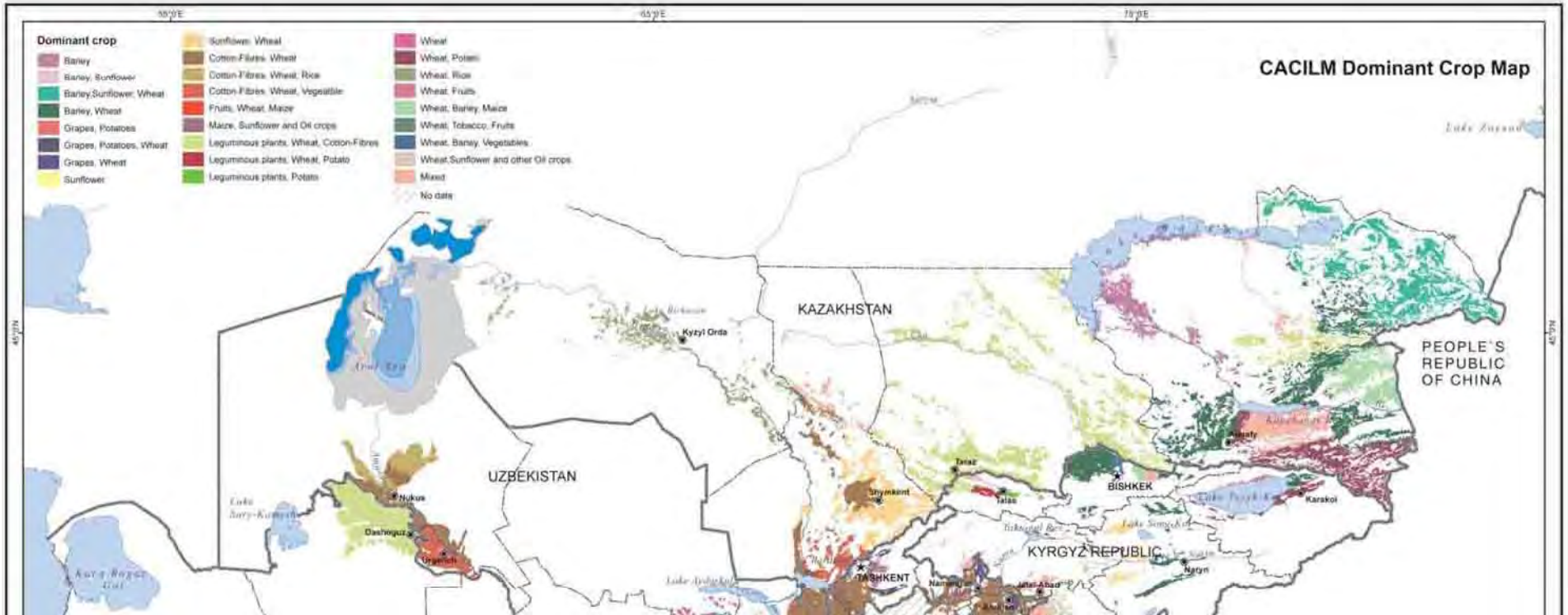
Oct.



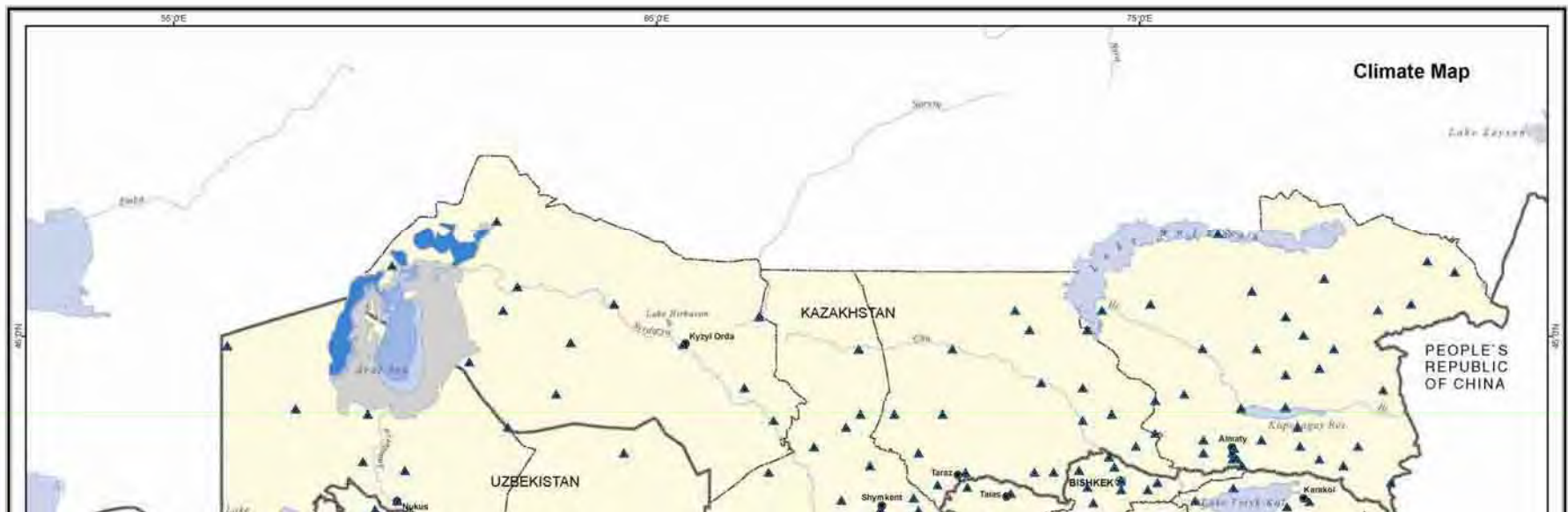
# Portion of CACILM Soil map



# Portion of Dominant Crops map



# Portion of CACILM Climate map



# Portion of CACILM Water Management map

