

AGRIWANET





GEFÖRDERT VOM







Introduction to IAMO & the AGRIWANET project

Martin Petrick

A snapshot of IAMO

- Founded in 1994 in Halle, Germany
- Member of Leibniz, an association of non-university research centers
- Core funding from Federal & State budgets, ~ 4,6 mln. € annually
- 3 academic departments
- 112 colleagues, approx. 20 nationalities
- 36 PhD students



Key tasks:

- <u>Economic research</u> on the agricultural & food sector in Central & Eastern Europe, Central Asia, China
- Training & promotion of young researchers
- Being a forum of academic exchange

Organisational structure



Foundation Board

Directorate

Scientific Advisory Board

Departments

Administration, Central Services and Technical Support

> Areas Research

> > Main

Public Relations, External Funds and Research Management

Staff Department

External **Environment for** Agriculture and **Policy Analysis**

Agricultural Markets, Marketing and World Agricultural Trade

Structural Development of Farms and Rural Areas

Policy Reforms and Institutional Change

Structural Change and Business Growth

Employment and Livelihoods

Competitive Strategies and Market Requirements

China International Research Group

Coordination Group Research

Internal Working Groups

Interest Groups

Graduate School AMO

Cooperation partners

Germany

University of Halle-Wittenberg University of Göttingen **Humboldt University of Berlin** Potsdam Institute (PIK) **BMEL**

International

World Bank **IFPRI** KU Leuven ISS The Hague **FAPRI UC** Davis

Leibniz Institute of Agricultural Development in Transition Economies

CIS

VIAPI Moscow HSE Moscow UCAB Kiev **ACEPAS** Astana **CAREC IWMI**



3 modes of water governance in Central Asia

Collapse:

- Frequent droughts
- Widespread food insecurity
- Degraded natural environment
- Political conflict

• ...

Status Quo:

- Irrigated agriculture a main source of employment, food security, export revenue
- Dominance of a few water demanding crops (cotton, rice)
- Dilapidated water infrastructure
- Salinization of soils & water
- Uncertainty over climate changeinduced variations in water availability, droughts
- Little real change in rules of water administration after independence
- Water a transboundary political issue

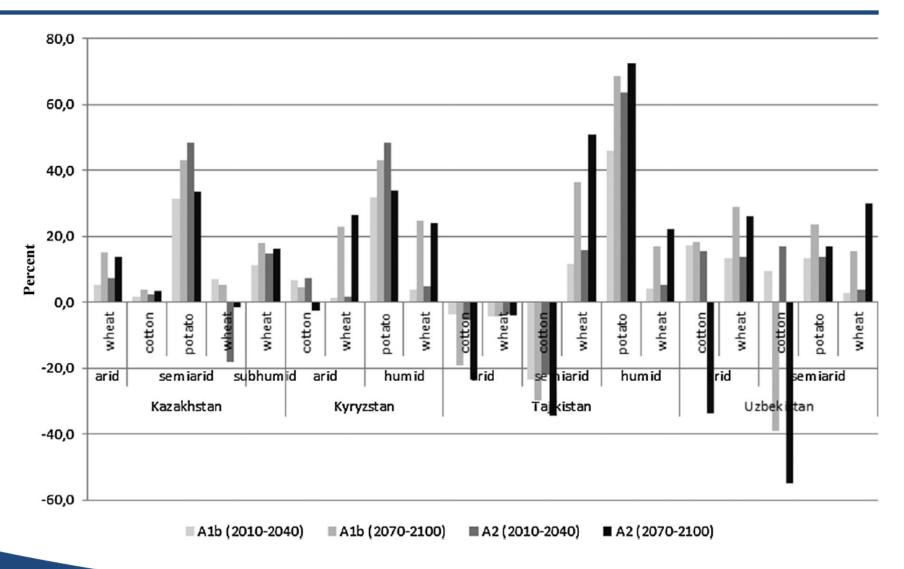
Sustainability scenario:

- Improved water-use efficiency (revised norms, water storage, irrigation technology, pricing, ...)
- Crop diversification
- Perennial crops
- Rehabilitated soils
- Reliable trade options

• ...

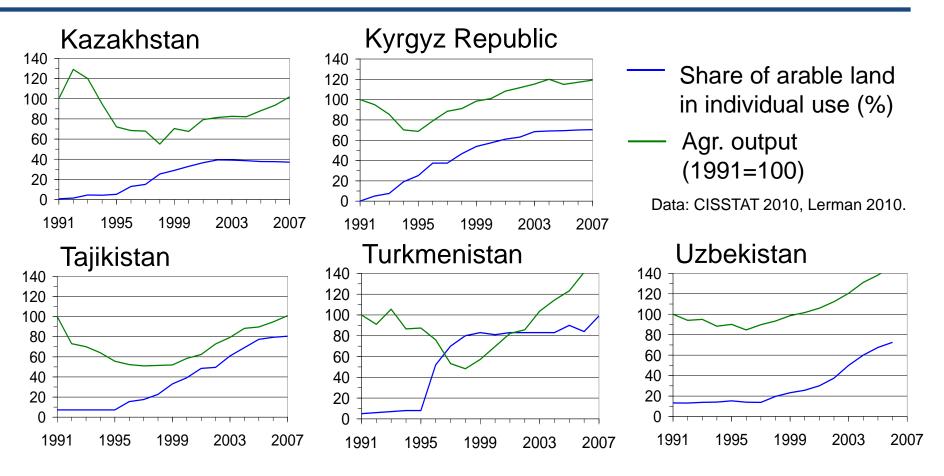
Based on Aleksandrova et al. 2014; Bucknall et al. 2003; Martius et al. 2012; Sehring 2009.

Crop yield response to climate change in CA

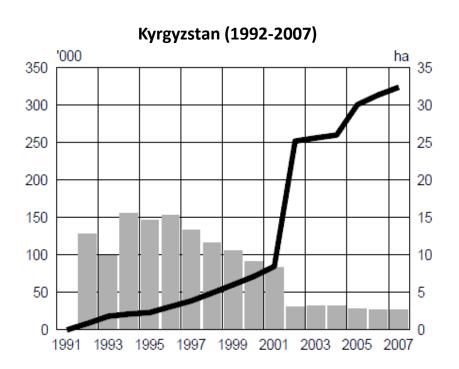


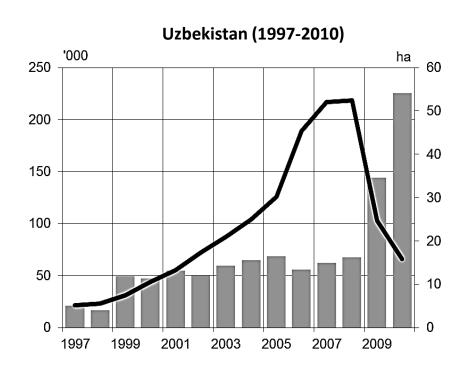
Source: Bobojonov & Aw Hassan 2014.

Farm restructuring & output



Diversity in farm restructuring across CA





■farms ■ave size

Source: Djanibekov 2012, based on official statistics.

Goals of IAMO's research on agric development in CA

Contribute to solid understanding of complex system structure

- Point out historical contingencies
- Engage in multidisciplinary identification & analysis of development traps
- Recognise that technological solutions to development challenges are not sufficient

Measure vulnerability & resilience of social groups

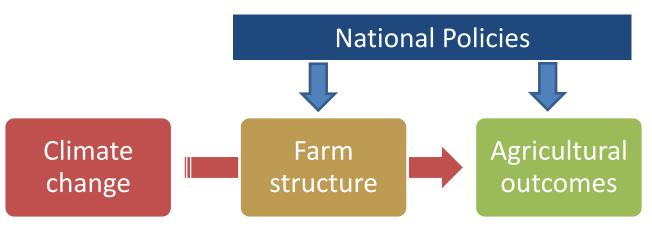
- Collection of meaningful data
- Quantitative analysis of development dynamics
- Illuminating case studies

Evaluate policies (quantitatively & qualitatively) to inform future decisions

- Enlighten the public about the "myths of the possible & the impossible" (W. Streeck)
- Avoid blueprint thinking
- Educate future generations of decision makers

Analysing the CA water-farm restructuring nexus

- Evolution of cropping and livestock patterns at subnational level?
- Water dependency of different farm types?
- Effect of farm restructuring on water scarcity?
- How does farm restructuring translate water availability into agricultural production & incomes?
- Role of national policies?



The AGRIWANET approach



- Establish a network of partners from each CA5 country, coordinated from Germany
- Provide a platform for harmonised data collection & analysis
- Train young researchers from CA5
- Engage in mutual learning & cooperation

Visit www.iamo.de/agriwanet

The AGRIWANET tasks



- Collate a consolidated, cross national database on agriculture & water, based on official statistics
- Assemble national chronicles of policy events
- Identify & analyse geographical hotspots of the climate-wateragriculture nexus
- Ex-post quantitative analysis of regional panel data
- Networking & learning across national borders
- Capacity building to promote follow-up cooperation

Originality of AGRIWANET



- First cross-country database of production and restructuring patterns for CA5 at provincial level
- First cross-country policy chronicle on water & agriculture for a significant post-Soviet period
- Utilising synergies from networking leading researchers across CA5
- Focus on socio-economic aspects rather than merely technological solutions
- Unique attempt to learn from comparative research

AGRIWANET – Network of partners



Germany:

- IAMO (Coordinator)
- Martin-Luther-University Halle-Wittenberg

Central Asia:

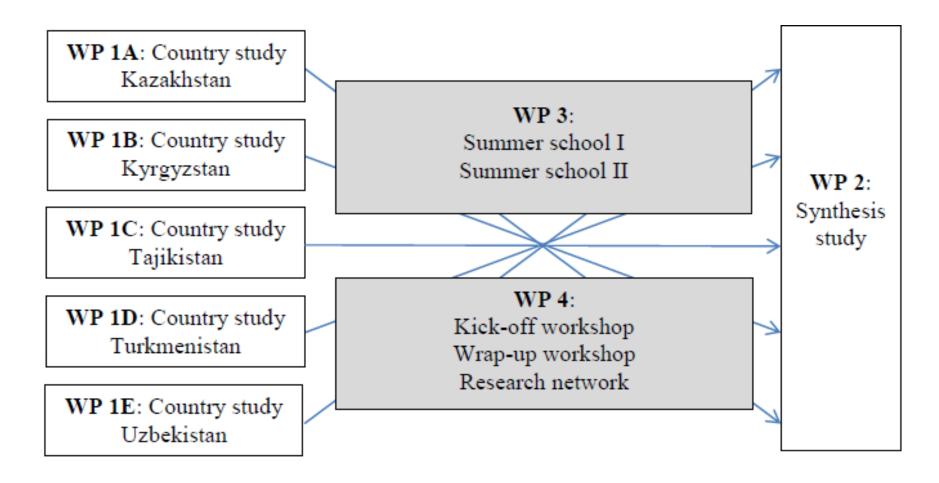
- Kazakhstan Association of Economists (KAE), Astana
- Institute of Public Policy and Administration (IPPA), University of Central Asia, Bishkek
- Centre of Economic Researches (CER), Dushanbe
- Tebigy Kuwwat Social Unit Enterprise, Ashgabat
- Center for Economic Development (CED), Tashkent

International:

- International Association of Agricultural Economists (IAAE)
- International Water Management Institute (IWMI)

AGRIWANET – project structure





The AGRIWANET milestones



April 2015	Kick-off workshop in Halle
April 2015	Summer school I in Halle
August 2015	Delivery of statistical databases (national teams)
September 2015	Summer school II in Almaty
October 2015	Delivery of policy chronicle (national teams)
May 2016	Delivery of country reports (national teams)
2Q 2016	Wrap-up workshop in Central Asia (cosponsored by IAAE)
July 2016	Synthesis report (coordinated by IAMO)