Tropentag, September 18-21, 2016, Vienna, Austria

"Solidarity in a competing world — fair use of resources"

Agricultural Restructuring, Water Scarcity and the Adaptation to Climate Change in Central Asia: A Five-Country Study (AGRIWANET)

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Abstract

The experience of the five post-Soviet Central Asian (CA5) countries in restructuring attempts and outcomes in agriculture, policy formation to address water-related problems, and strategies to tackle climate change provides a fertile ground for comparative analysis to address general issues in agricultural development. Two decades after national independence, research on water-climate-farm restructuring nexus in the CA5 region has progressed slowly due to little exchange of researchers in the region, a lack of a centralised database, and focus of existing studies on technical solutions. The project's objective is to provide an analytically sound and policy-relevant understanding of the CA5 climate-water-restructuring nexus by investigating the vulnerability of certain organisational forms of agricultural production to water availability, and causal relations between agricultural restructuring and climate resilience. To support this objective, the project consolidated a unified database of regional patters of production, restructuring, water use and climate change, and produced policy chronicles of each CA5 country. Within its capacity building and networking objectives, the project organised trainings and networking events for the CA5 researchers. The project's international socioeconomic research consortium unites IAMO, Martin Luther University Halle-Wittenberg, Kazak Applied Research Center Talap, University of Central Asia in Kyrgyzstan, Tajik National University, Turkmen NGO Natural Energy, and the Center for Economic Development in Uzbekistan. The consortium conducted several summer schools, workshops, conference sessions and an international conference jointly with the International Association of Agricultural Economists (IAAE). The consolidated database, policy chronicles and country reports will be made publicly available. The first results indicate various challenges for the regional sustainable development caused by the heterogeneity of national approaches in agricultural reorganisation. These approaches juxtapose the evolution of farm structures with the shifts in production portfolio and have particularly strong implications in irrigated areas. Based on the project results, the consortium will continue to update the cross-country expertise and expand its academic value addition such as via a new CA-focused AGRICHANGE project, and target

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additional EU research funds for CA5-related research topics. The study results will be consolidated into policy briefs and serve to institutionalise the Central Asia platform on agricultural development coordinated in Germany.

Keywords: Climate change, water scarcity