

**Duke University Center for International and Global Studies
Graduate Awards for Research and Training**

Travel Report

Dates: July 9-14, 2017

Location: Utrecht, The Netherlands

Project Title: Collective choice arrangements, sanctions, and monitoring in the maintenance of irrigation infrastructures in Tajikistan

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On July 9-14, 2017, I traveled to Utrecht, the Netherlands to present one chapter of my dissertation at the International Association for the Study of the Commons (IASC) XVIth Biennial Conference, entitled 'Practicing the commons: Self-governance, cooperation, and institutional change'. IASC is the leading international organization for the interdisciplinary study of the commons and common pool resources (i.e., water, air, fisheries, pastures, knowledge). The conference brings together leading academic scholars, as well as practitioners, to discuss and exchange research about the commons and experiences in managing the commons.

My main intention for attending the IASC Biennial Conference was to present a chapter of dissertation research about the maintenance of irrigation infrastructures in Tajikistan. Presenting my research at the conference was important for my development as a young scholar, especially with the opportunity to network and discuss my research interests with leading international scholars and practitioners in my field. I was excited to present my research on the social, technical, ecological, and institutional challenges that affect the maintenance of irrigation infrastructures in Tajikistan. Tajikistan happens to be located in post-Soviet Central Asia, which is a region of the world that receives little scholarly attention from the study of natural resources due the difficulty of obtaining funding, permissions and the necessary professional connections to conduct research there. Thus, it is important to continue promoting research and discussing the unique lessons about managing water resources from the Central Asian region, and I am glad I was able to do so at IASC.

The conference served as a huge motivation for me complete a significant writing portion of my dissertation over the summer, obtain feedback on my chapter from a number of conference participants, and incorporate that feedback as I move forward with my dissertation writing goals. As a result of interacting with so many conference participants, I also have a much better sense about where the field of common pool resources is heading. I can make an informed decision about my own future, should I continue to work in academia and engage with commons scholars and the commons literature.

In addition to presenting my own dissertation, I was also able to attend a pre-conference workshop about qualitative data analysis, called 'Coding the commons'. Coding qualitative data is an approach that scholars use to systematically analyze a lot of information that is stored in a text format, such as transcribed interviews, official documents, legal contracts, etc. I was initially

registered for a different workshop about modeling social-ecological systems and was disappointed when it was canceled at the last minute. However, I was so grateful to attend the 'Coding the commons' workshop, because I was able to learn about some recommended practices for coding qualitative data and what are the current expectations among scholars who study common pool resources. I do not believe I would have been able to obtain this sort of training at Duke University. Actually, as a result of this workshop, I have been able to apply what I have learned to significantly improve another chapter of my dissertation.

Another highlight of the conference included a field excursion to a very old irrigation system in an estate, called Het Lankheet, which is located in the highlands of the Eastern Netherlands. We were able to learn how communities in the Eastern Netherlands have irrigated agricultural lands since the 13th century. Scientists at Het Lankheet are currently studying these traditional irrigation practices and techniques in order to identify more sustainable solutions for land use and climate change adaptation in Europe. During the excursion, several talented individuals from various locations in the Netherlands also introduced us to their entrepreneurial business models that have put sustainability at the forefront of their management and operations.

For example, DSM chemicals, a globally recognized company for its leadership in sustainability, showed us how they use duckweed as a base for making wall paint. Duckweed grows from an eutrophication process that naturally occurs in ponds and is usually considered a nuisance, because it can deprive oxygen away from fish. However, DSM has been able to find a useful element of duckweed for making paint that does not require toxic chemicals. It was particularly fascinating and motivating to hear about how these Dutch companies have been able to sustainably work within the confines of nature, promote the use of renewable energy resources, and still be able to make a considerable profit at the end of the fiscal year.

Finally, I stayed for one extra day in Utrecht on July 15th. I was able to visit with another fellow scholar, Irna Hofman, who, like me, has also conducted her dissertation research in Tajikistan and is currently wrapping up her dissertation at Leiden University. We had only exchanged emails previously, and I was so grateful to have the opportunity to meet her in person and commiserate with her over the dissertation writing process. Since Irna is from the Netherlands, I was also able to learn more about the culture and history of the Netherlands from a local's perspective. We took a long walk along the canals to an estate, called Amelisweerd, outside of Utrecht and had a delicious lunch in the countryside.

I am incredibly grateful that the Duke University Center for International and Global Studies has been able to support my travel to the Netherlands to attend IASC this year. Thank you!