2023 Global Forum on Soil Health, Xi'an, China

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On September 19-20, 2023, the People's Republic of China hosted The Global Forum on Soil Health, held in Yangling, Shaanxi, China, and featured the participation of 160 delegates from 32 countries, international organizations, the private sector, and non-governmental organizations. Robert Hanson, the FAS Minister Counselor for Agricultural Affairs at the US Embassy of Beijing, and I, represented the USDA. Broadly speaking, China wanted to make a very public announcement of their acknowledgement that soil health is a global concern and that further international action, cooperation, and joint response is necessary at all levels to revert current soil degradation and recover healthy soils. There was a particular emphasis on five types of soils: black soils, red soils, salt-affected soils, paddy soils, and loess soils. As we all know, there can be quite a bit of overlap between these soils, but this is how the PRC wanted to address their concerns regarding soil health.



The morning of the first day included an opening ceremony with remarks from various Chinese state leaders including the Minister for the Ministry of Agriculture and Rural Affairs (who extended the invitation to the US), leaders of the Shaanxi Province, and others. Following the opening, there was a highlevel dialogue with keynote speeches from agriculture ministers or ambassadors from various countries around the world, predominantly from South America, European countries such as Kazakhstan and Uzbekistan, Australia, and Ireland. That afternoon consisted of parallel forums/panels themed on the five soils of emphasis. Each panel was addressed by about five domestic and five international speakers.

As a representative from the USDA, I spoke on the black soils panel, addressing the diversity of our own domestic black soils, soil security, and current USDA efforts on managing soil carbon for climate change mitigation. Most of the speakers for the black soils panel, domestic and international, were university researchers and professors.

Day two of the Forum consisted of visits to various centers to showcase government work being conducted in support of agriculture. In my opinion, the most interesting part of the field trip was a visit to their Farmland Protection and Quality Innovation Center, which is their country's version of our National Soil Survey Center (NSSC). They generally kept us together, but I was able to breakaway briefly to talk to two of their soil technicians.



Like our NSSC, they, too, had a soil repository of about 300,000 soils, and their version of a Kellogg Soil Survey Laboratory, which was not available for viewing (I tried). Their center differed a bit from ours in that not only did it hold their soil repository and lab, but it doubled as a very elaborate "soils of China" permanent exhibition that displayed how soils differed across the country by practice and region. That day, the guides also showcased their large-scale greenhouse innovation center.



The last day in Xi'an consisted of a visit to one of the country's best agricultural universities, the Chinese Academy of Agricultural Sciences (CAAS) and its Institute of Agricultural Resources and Regional Planning. There, I and Garrett McDonald, an Agriculture Attache to the US Embassy, received presentations from their soil scientists on research efforts in soil fertility and had a chance to tour their labs. Something interesting I learned from that meeting was that the USDA and CAAS will be conducting a knowledge and scientist exchange in the future where scientists from the US will visit CAAS, and vice versa.

My biggest takeaway was that, regardless of the political differences that exist between countries, there are scientists and public servants in China that, just like us, love what they do, and are genuinely interested in building relationships and sharing ideas and knowledge with US counterparts. Like the soils of the US, the soils of China are similarly diverse and vast and may assist us in the future with bridging research concepts on a more global scale.



I want to thank the FAS and the NRCS' International Programs Division for their hard work to ensure that we were able the represent the USDA and the NRCS at this important Forum. It was nothing short of a miracle coupled with their due diligence to process my government passport and visa approval within a two-week period. Both Marita McCree and Jason Chang of the IPD deserve special recognition for their efforts. Jason sat through the visa application process with me as I filled it out, step by step, and Marita went above and beyond—personally delivering my passport to me at Reagan National Airport on her day off. Thank you, both!