Special Issue

Climate Risk in Agriculture, Analysis, Modeling and Applications

Message from the Guest Editors

Climate risk in agriculture is one of the important issues determining the food security, livelihood of communities, and ecosystem sustenance throughout the world. Because temperature is rising, extreme events such as droughts, floods, and heat waves will further affect agriculture. Climate risk analysis and modeling involve understanding the interdependency between complex climate parameters and agricultural systems. Similarly, some advanced modeling techniques for crop and climate impact assessment can help simulate and project the most likely impacts of strategic adaptation actions. Applications of climate risk modeling in crop resilient practices and management, optimization of irrigation practices, and implementation of sustainable farming techniques will be worked out. Climate risk analysis can also serve as a very useful tool for effective and equitable agricultural insurance services. By incorporating climate risk analysis into agricultural planning, we can make farming communities more resilient and ensure food security in this era of climate change.

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