## **Cornell University's Kassam Research Group Collaborates with Indigenous People to Create Ecological Calendars**

The Kassam Research Group at Cornell University is leading two participatory action research projects focused on ecological calendars in North America and the Pamir Mountains of Central Asia. The overarching aim of these projects is to revitalize, recalibrate, and develop new ecological calendars by integrating indigenous, place-based knowledge with science. These projects aim to establish a proof-of-concept for ecological calendars in collaboration with diverse indigenous and rural communities across the globe.

With support from the Belmont Forum, the National Science Foundation (US), the National Science Foundation (China), Consiglio Nazionale delle Ricerche (Italy), and Deutsche Forschungsgemeinschaft (Germany), the Kassam Research Group will be partnering with communities in the Shugnan Valley of Badakhshan, Afghanistan; Alai Valley of Osh Province, Kyrgyztan; Tashkurgan Valley of Xinjiang, China; and Bartang Valley of Gorno-Badakhshan, Tajikistan. In addition to preliminary research, climate stations have been established in the high altitude mountainous communities.

The project's website states, "In 2017, the Kassam Research Group will be returning to these communities to continue participatory human ecological mapping. In addition, we will be establishing the project in the Bartang Valley in Gorno-Badakhshan, Tajikistan, and Shugnan Valley in Badakhshan, Afghanistan. We will integrate bioclimatic data with human ecological mapping to generate hybrid maps for these regions. Between 2017-2019 we will be working with international partners and communities to develop:

- (1) Workable ecological calendars integrating place-based ecological knowledge with scientific data
- (2) Proof-of-concept for application of ecological calendars internationally
- (3) Transfer of knowledge between communities in different bioclimatic zones
- (4) Curricula for inter-generational transfer and continued adaptation of calendars
- (5) High-profile international conferences on ecological calendars for food and livelihood security."

More information on the project is available on the Cornell University project website.