Support from the Scott Kloeck-Jensen fellowship allowed me to spend the summer doing a field-based internship with the Center for Environmental Monitoring (CSE) in Dakar, Senegal. CSE is a public association established in 1986 under the Ministry for the Protection of the Environment in Senegal. The agency is charged with a large scope of intervention, including land-use planning, capacity-building for decentralized management of natural resources, environmental monitoring of vegetative production and bush fires, early warning, and disaster response. They have also been among the public agencies charged with developing adaptation plans for climate change preparedness. As an intern, I worked with the pastoral resources team. CSE is currently collaborating with the national development program for the livestock sector (PDESOC). PDESOC aims to reduce poverty and increase food security among livestock producers while reinforcing sustainable management of grazing lands. This program is the second iteration of Senegal’s largest pastoral development program, implemented in the same regions in the mid 1980s.

The earlier program focused on building new infrastructure, elaborating collective management zones, and establishing recognized livestock corridors. Investment in infrastructure was primarily in the form of boreholes for access to water in the dry season. Management plans, including corridors, were regarded as successful locally during the 5 year lifespan of the project. However, insufficient capacity-building and training on shared management contributed to the gradual weakening of adherence to the land-use plans. At the same time, local agreements on resource use are rarely protected by local
level administrations. The current program is intended to address the lack of shared understanding of local land-use plans by building consensus.

I was charged with conducting follow-up analyses of CSE’s prior interventions in Kouthia Ba, Senegal in preparation for collaborative land-use planning activities in the zone. I designed a qualitative study using focus groups, individual interviews, and a household survey to examine the role of risk and uncertainty in current decisions on herd mobility and to collect data on customary management practices in order to deepen understandings of local frameworks for resource access. In addition, the study was also meant to contribute to growing dialogue at the national level about the nature of successful early warning systems for drought and excessive rainfall in order to serve livestock producers rather than exclusively targeting farmers. To this end, I spent extensive time speaking with local livestock owners about their access to information, sources of vulnerability to climatic shifts, and current strategies to respond to climatic variation. In particular, I focused on how they understood scientific information about vegetative production and rainfall forecasts and whether or not these sorts of information were used in decisions about herd management. After completing interviews and surveys in the field, I spent significant time transcribing audio recordings and beginning data analysis. In the coming months I will compile and submit a report to CSE that details observations about the intersection between climate vulnerability and divergent land use preferences in Kouthia Ba. Kouthia Ba is increasingly a receiving area for external livestock migrating seasonally; as the volume of livestock grows, land use pressures are also increasing on the agricultural front due to extensive cropping. Focusing on both
transhumant pastoralists and agropastoralists, the study can reveal tensions that arise due
to the divergent requirements of these disparate livelihoods.

As a master’s student in Geography who intends to do doctoral work on the
impacts of climate change and changing land-use patterns on pastoral systems in the
Sahel, the internship provided me an invaluable opportunity to gain field-based
experience working directly with small-scale resource users. My goals for the internship
were to gain a clear understanding of the current foci in pastoral development in the
region; to be exposed to the differing perspectives of technicians, ministry officials, local
officials, transhumant pastoralists, and agropastoralists; and to contribute insights from a
case-based study in a new receiving zone that included the perspective of resident
agropastoralists. The experience will certainly shape the questions I ask in the future and
how I choose to go about studying them. In addition, I have made great friends and
contacts in Senegal who are working on climate change planning and pastoral
development. This network will continue to help me orient my research toward problem-
based applications.