INTEGRATED LAND MANAGEMENT
Workshop and Internship Program for Graduate Students
Call for Applications

A. Intensive Week-long Workshop: Land Management in Theory and Practice (May 21-25, 2018, Cornell campus)

B. Optional: Paid Summer 2018 Research Internships with Partner Organizations

Do you work on a topic related to the land – such as agriculture, colonial plant science, biodiversity conservation, water resource management, agroecology, infrastructure, urban planning, property relations, energy or natural resource extraction? Land is fundamentally multi-faceted and multi-functional, and so management draws on a variety of disciplines, skills and knowledges – and yet, as researchers, we often approach our work through the narrow lens of a single chosen discipline, scale or socioecological problem. Cornell’s initiative in Integrated Land Management is offering a weeklong workshop and an internship program to help Cornell graduate students build these skills.

Weeklong Workshop:
In this integrative workshop, we dedicate one week to developing an integrated perspective and toolkit. We bring together a diverse group of faculty, development practitioners and community members to provide students working on any topic an overview of the latest methods, theories and approaches. This hands-on immersive workshop will feature demonstrations and discussions of Property Law, Geo-Hydrology, History, Plant Breeding, Rural Sociology, Horticulture, Climate Change and Land Use Modeling and Agricultural Economics applied to cutting-edge questions of sustainability, justice, science and economic development. In addition to contributions from a broad range of Cornell faculty, there will also be presentations and discussions with community members and researchers from Mozambique, Malawi, Tanzania and India. Participants in the week-long workshop will be organized into small groups to facilitate the application of lectures. This small group method will emphasize active learning as a principle of the workshop, and the small groups will be a key source of feedback on participants’ written work. Time will be budgeted in the schedule for writing and discussion, and each participant will produce a short essay during the week that advances integrative thinking as applied to their research.

Internship Program:
Our internship program includes the May weeklong workshop, a paid summer 2018 research experience, and a one-day workshop in the fall (date TBD). We plan to fund up to 11 interns to conduct research with our partner community organizations (abroad or domestically) under the guidance of a Cornell faculty member. Students will work in interdisciplinary teams with local community members and organizations on themes related to the May workshop. Project assignments will be assigned based on student interests and qualifications (see description of internship opportunities). We seek applicants with cross-cultural competencies and the capacity to work independently and in teams in unfamiliar contexts.

Workshop and Internship Program Goals:
The workshop will allow participants to deepen and broaden their engagement with an integrated approach to land management. The experience is designed to provide new insights on the specific questions that structure participants’ academic and professional work and to allow them to contextualize their work in an integrated appreciation of the larger dynamics that characterize land management.
Eligibility:
These opportunities are open to Cornell MS or MPS students and early Ph.D. students (1st-3rd year) from any related Cornell program (including but not limited to natural resources, development sociology, earth sciences, engineering, applied economics, law, history, atmospheric and earth sciences, hydrology, soil and crop sciences, ecology, etc.)

- **The May workshop** is open to Cornell students of any nationality, including students graduating in May 2018. (Non-Cornell students will be considered as well; please contact us.)
- **The internship program** is open to Cornell graduate students who are U.S. citizens/nationals or permanent residents who will not graduate before August 2018. Students graduating in May 2018 are not eligible for ILM internships.

Application Instructions:
To apply for the workshop or internship program, please complete these two steps:

1. Fill out this online application form:
   [https://cornell.qualtrics.com/jfe/form/SV_1zenAlI1t2NMYQd](https://cornell.qualtrics.com/jfe/form/SV_1zenAlI1t2NMYQd)
2. Submit the following documents in one email to program manager Nina Chaopricha at ntc24@cornell.edu:
   a. A 1-2 page application letter (M.S. Word or PDF document) with the following information: an explanation of your reasons for applying, relevant prior experience, and career goals
   b. A graduate transcript or list of graduate courses taken
   c. Your CV or resume
   d. For students applying for paid summer internships, please also include:
      i. 1-2 writing samples of any length
      ii. Description of international experience, discussion of cross-cultural competencies, and evidence of capacity to work independently and in teams in less-than-familiar contexts.
      iii. Contact information (phone number and email, and their relationship to you) for a Cornell professor who knows you and can speak to your ability to successfully complete this research internship program.

Applications are due on March 2, 2018. Decisions will be announced in mid-March.

Please address questions to Nina Chaopricha at ntc24@cornell.edu. Participants will be selected by a team of Cornell faculty and partners. Selection criteria emphasize correspondence with the call for applications, evidence that the workshop will add value to the students’ academic/professional program, and diversity considerations including student discipline, background and gender. We are committed to diversity and encourage applications from American students from ethnic backgrounds that are underrepresented in agricultural majors in the U.S. (African American, Alaskan Native, American Indian, Asian American, Hispanic American, Native Hawaiian, Pacific Islander, etc.)

Acknowledgements: The 2018 workshop and internship program are led by Cornell professors, Todd Walter (ENG), Steven Wolf (DNR) and Wendy Wolford (DSOC). This workshop and internship program were funded in part by a U.S. Department of Agriculture Higher Education Challenge (USDA HEC) Grant (PIs: Wendy Wolford, Rachel Bezner Kerr, Ray Craib, Steven Wolf, Tammo Steenhuis), with support from Cornell’s Atkinson Center for a Sustainable Future.
1) Land Management to Mitigate Harmful Algal Blooms

Internship location: Finger Lakes Region, New York State, USA

Supervisor: TBD (New York State Water Resources Institute) – The specific supervising individual will depend on the scale, scope, and watershed in which the intern is interested.

Cornell faculty mentor: Todd Walter (Biological and Environmental Engineering)

Internship description:
The New York State (NYS) Water Resources Institute (WRI) is engaged with investigating regional water resources issues and providing information to state stakeholders so they can make informed decisions to protect water resources. Recently the governor has committed millions of dollars to protect NYS’s rivers, lakes, and reservoirs from the seemingly more frequent problem of harmful algal blooms (HABs). HABs are a class of cyanobacteria or blue-green algae that produce toxins that pose serious risks to drinking water supplies and ecosystems. The HABs threat persists throughout all 50 states, including most, if not all, the Finger Lakes. The NYS WRI is cooperating with the NYS Department of Environmental Conservation, regional water labs (e.g., Upstate Freshwater Institute), Nongovernmental Organizations (e.g., The Nature Conservancy), and researchers to address this problem. The intern will coordinate with several of these groups to address some aspect of the regional HABs problem. Because the scope of this internship is so broad, interns will have some latitude in defining the latitude and focus of their efforts. The core objective is to improve our understanding of the key drivers of HAB outbreaks with an eye toward suggesting mitigating solutions.

Key responsibilities:
The intern(s) will be able to choose between field monitoring or geospatial analyses. “Field monitoring” is broadly defined to include both biophysical monitoring and social/behavioral data acquisition and assessment; the latter will require inclusion of additional mentorship, but is potentially possible. Regardless of the specific focus of the intern, she/he will be responsible for collecting, synthesizing, and analyzing the relevant data, which are anticipated to be geospatially correlated with identified HAB outbreaks. Investigations might include, but are not limited to HAB correlations with land use/management, economic or other census characteristics, population densities, physical or hydro-meteorological characteristics (e.g., watershed size). The intern will be expected to generate a final report and present findings to a public venue near the end of the internship.

Desired student qualifications:
- Flexibility and willingness to learn
- Ability to work in a team with a diverse range of perspectives
- Familiarity with geographic information systems (GIS)
- Familiarity with water quality issues
- Ability to communicate across diverse perspectives and levels of formal education
- Familiarity with Excel, Word or similar programs (higher level computational software would be ideal, e.g., MATLAB, R)
- Familiarity with field monitoring or geospatial analyses
- Strong writing skills
2) Land Governance in the Nilgiris Biosphere Reserve

Internship location: Kotagiri, Tamil Nadu, India

Supervisor: Anita Varghese, Keystone Foundation

Cornell faculty mentor: Steven Wolf (Natural Resources)

Internship description:
The Keystone Foundation, an NGO working in Kotagiri, India, has been working with tribal communities to advance sustainable livelihoods for 25 years. Interns will advance research and capacity building at the community-level on themes related to land governance as part of Keystone’s ongoing programming and as part of a collaboration between Cornell and Keystone. This collaboration is focused on understanding local people’s access to land in a landscape characterized by rapid socioeconomic change (urbanization, wildlife conflicts, changing agricultural markets) and changes in policy. Most specifically, we are studying implementation of the Forest Rights Act (FRA). FRA recognizes tribal people’s rights to derive traditional livelihoods from forested landscapes and acknowledges communities’ management authority over these lands. The work on land governance is part of a broader program focused on land governance within the Nilgiris Field Learning Center, a collaboration between Keystone and Cornell (https://blogs.cornell.edu/nflc/).

Key responsibilities:
Interns will conduct interviews with members of tribal communities to collect data about FRA implementation and social, economic, and ecological implications of changing land use and land access. Foci could include socioeconomic assessment of goods and services derived from forests; analysis of the diversity of interests within communities regarding community land claims; capacity needs assessment of communities in relation to making effective claims under FRA and successfully managing forestlands. This data collection will be informed by literature reviews on FRA, rights-based development, decentralization of forest governance, and struggles over land in the Nilgiris and India more broadly. Additionally, interns will document and critically assess a participatory effort to create a network of “barefoot ecologists.” Keystone is recruiting and training young people in villages to collect data on forest ecology and forest management (e.g., harvest of non-timber forest products). These data and the creation of community capacity to collect and manage data can be important elements of community management of forests, as envisioned under FRA.

Desired student qualifications:
- Flexibility and willingness to learn
- Ability to work in a team with a diverse range of perspectives
- Familiarity with forest governance debates
- International experience in rural settings in the Global South
- Knowledge of participatory research methodologies
- Familiarity with Excel, Word or similar programs
- Familiarity with some of the following research methods: field interviews, field observations
- Strong writing skills
3) Understanding the past and future of forest use, norms and rights in Jharkhand, India

Internship location: Jharkhand, India

Supervisor at organization: Ranjana Das, Oxfam India

Cornell faculty mentor: Wendy Wolford, Development Sociology; Steven Wolf, Natural Resources

Internship description:
Oxfam India brings a rights-based approach to fighting fundamental sources of poverty and inequality in India. The organization works with local civil society actors to build the capacity of the poor to negotiate the terms of their political and economic inclusion. In Jharkhand, Oxfam India is working with forest communities to improve their access to forest resources and to understand – in their own terms – what sort of future they aspire to. Interns will work with Oxfam India partners in local communities in the region to understand how different members (young, old, men, women) use natural resources – particularly the land and forest – and how they understand their rights in the context of political decentralization and the Forest Rights Act. Interns who take up this internship opportunity will likely work closely with interns who work with the Keystone Foundation in the Nilgiris Biosphere Reserve.

Key responsibilities:
Interns will work in teams to conduct interviews with a range of community members. Interns will be responsible for working with community and organizational partners, maintaining field notes that document their experiences and observations while in the communities, conducting individual and focus group interviews with community members. Interns will also be responsible for recording and transcribing interviews, analyzing interviews using accepted qualitative analysis software, and writing a final report that sets these interviews and observations within the broader ecological, legal, economic and political context. This report should be appropriate for academic, practitioner and community audiences.

 Desired student qualifications:
- Flexibility and willingness to learn
- Ability to work in a team with a diverse range of perspectives
- Familiarity with forest governance debates
- International experience in rural settings in the Global South
- Knowledge of participatory research methodologies
- Familiarity with Excel, Word or similar programs
- Familiarity with some of the following research methods: field interviews, field observations
- Strong writing skills
4) Soils, Food and Healthy Communities in Malawi

Internship location: Malawi and/or Ithaca

Supervisor: Esther Lupafya

Cornell faculty mentor: Rachel Bezner Kerr (Development Sociology)

Internship description:
These internships are linked to ongoing participatory research, based in Malawi, led by the Soils, Food and Healthy Communities organization. The overall farmer-led approach aims to identify viable ways that agroecology, nutrition education, participatory methods and local food enterprises can foster sustainable diets and livelihoods for rural communities in Malawi. The methodology is participatory and transdisciplinary, using a longitudinal mixed methods research design with 600 new households, and tracking 6000 households with ongoing involvement in the project. Interviews, surveys, agricultural data and participatory monitoring will be used to assess changes in production, diets, income and social dynamics over time.

A new component of this research is examining the impacts of agroecological practices on wild biodiversity (i.e. Birds, insects) and farmer researchers are playing a key role in measuring these impacts.

Key responsibilities:
The intern/s will spend time getting to understand the SFHC organization and the research project and will help to carry out research activities, organize and enter data, and analyse data in Malawi with a team that includes smallholder farmers, sociologists, NGO staff and ecologists. The research activities will utilize a range of methods, as determined by the broader research team, such as: interviews, participatory mapping of communities; photo-voice; yield and soil measurements. The student intern/s will code and begin preliminary analysis of the research, and write a report based on their findings. The students may also be involved in writing for the SFHC website.

Required student qualifications:
- Flexibility and willingness to learn
- Ability to work in a team with a diverse range of perspectives
- International experience in rural settings in the Global South
- Familiarity with Excel, Word or similar programs

Desired student qualifications:
- Knowledge of sustainable agriculture methods such as agroecology
- Knowledge of participatory research methodologies
- Statistical experience, preference with STATA
- Familiarity with some of the following research methods: interviews, focus groups, yield measurement, participatory mapping, use of GIS
- Website management, social media skills desirable but not required
5) **Tentative: Land Use, Distribution and Politics in Mozambique and Brazil**

Internship location: Northern Mozambique or Northeastern Brazil

Partner Organizations: The Rural Association for Mutual Aid (ORAM), Nampula, Mozambique; The Rural Observatory (OMR), Maputo Mozambique

Cornell faculty mentor: Wendy Wolford (Development Sociology)

**Internship description:** ORAM has been working in Mozambique for over a decade to help small farmers defend their rights to land. The organization works with local communities in northern Brazil to promote awareness of Mozambican Land Law and develop community maps of land use and desired access. This research is designed to help ORAM and local communities understand how this mapping process, along with the struggle for formal recognition of community use rights, has shaped local landscapes. Interns will work with community members, ORAM practitioners and Wendy to interview local residents and key stakeholders as well as catalogue activities and practices on the landscape so that the organizations and communities will develop an evidence base for their work. (Note: Wendy will be doing similar research in northeastern Brazil, so there is some possibility that interns could work with her there this summer on a similar project on former sugarcane plantations turned into land reform settlements.)

**Key responsibilities:** Interns will be working in a team to co-design research questions with ORAM and local community representatives. Research questions will require the integration of knowledge about the legal system, ecology, farming methods, and community dynamics. Interns will assist in interviewing residents and stakeholders and creating participatory land use maps through interviews, participatory mapping, transect walks and the use of qualitative photography methods such as PhotoVoice.

**Required student qualifications:**
- Advanced speaking ability in Portuguese (writing a bonus)
- Flexibility and willingness to learn
- Ability to work in a team with a diverse range of perspectives
- International experience in rural settings in the Global South
- Familiarity with Excel, Word or similar programs

**Desired student qualifications:**
- Knowledge of participatory and qualitative research methods
- Experience with participatory mapping