### Natalie Cooper Tinker Travel Grant October 2017 – March 2018 Report

Livelihoods Across Time and Space: An Analysis of Dynamic Traditional Societies in Sustainable-Use

Protected Areas in the Brazilian Amazon

### Justification for changes to proposed timeline of award expenditure:

The proposed research was slated to occur between June-October 2017. The award recipient had calculated her timeline under the assumption that her Brazilian research visa (VITEM-I) application process would resemble that of her prior experience obtaining the same category of Brazilian research visa in 2014. However, for yet unexplained reasons, this process took more than four months to complete, compared to the <30 days processing in 2014. As evident in the reporting below, some of these issues are still being resolved by the awardee from Brazil. Nevertheless, she has been able to initiate some activities to facilitate future data collection.

#### Abstract

The first sustainable-use protected area (SUPA) systems designed to protect traditional rubber tapper livelihoods were established in the Brazilian Amazon in 1989. However, rubber tapper societies living within these protected forests have proved dynamic. Livelihoods have shifted away from forest extractivist activities like tapping rubber toward cattle ranching and agriculture; and while timber extraction is an increasingly popular conservation and development strategy, informal logging and timber sales continue to threaten these systems as their rudimentary road systems infiltrate deeper into their forests. Organized within the Sustainable Livelihoods Framework, this study aims to deepen our understanding of the livelihood strategies adopted by reserve residents over the years since 1996, not long after the reserves were first created. The fellow will conduct semi-structured interviews with up to 56 households in the Chico Mendes Extractive Reserve that have been previously interviewed at least once and up to three times since 1996. This research, combined with previously collected data, will piece together a longitudinal perspective on the livelihood pathways of these residents and provide insight into why certain shifts in livelihood strategies have occurred along the way.

#### **Goal & Objectives**

#### Goal statement

Strengthen understanding of how livelihoods in SUPA forest communities in Acre have changed over time since 1996.

### **Objectives**

- Update the research instrument used to collect longitudinal data in Extractive Reserve Chico Mendes since 1996
- Measure current household levels of the 5 Sustainable Livelihood assets (human, natural, physical, financial, social)

• Compare current level of assets with data collected at the same households at multiple points in time between 1996 to 2018. Based on longitudinal data, describe livelihood portfolios, strategies, and pathways adopted by reserve residents

# **Stakeholder Analysis**

Stakeholder	Power	Interest	Attitudes/Expectations	Strategies to engage
Primary				
RESEX Individual – low; Collective – med.		Med./Low	Research fatigue: Resex residents are accustomed to 'extractive' research in which they volunteer time and see very few benefits.	Thoroughly & effectively communicate the goals and expected outcomes of the research at community meetings
			Yet, many understand the risks of pursuing livelihoods that	prior to data collection.
			degrade/deforest, yet feel their options are limited. May be interested in the research if it is made directly relevant to them.	Share research results through multiple formats: meetings, printed/visual materials for their records.
			Residents will be the primary source of information for this study, thus, their participation in interviews is critical.	
ICMBio	High	High	High interest in research with potential to strengthen knowledge for better management.	Frequent communication, regular updates and/or coordination about activities.
			Collaboration with Fellow during this and upcoming research for mutual benefit.	Present research to ICMBio team.
			Information exchange: materials about the Resex/communities that support the research. The Fellow will similarly share the outcomes of this research.	
Embrapa	Med.	Med.	Supportive of this research and related projects that link work in the Resex, the Fellow, and their collaboration with the University of Florida (i.e. the Fellow's advisor and lab), particularly as it	Regular communication with key collaborator at Embrapa, including updates about work.
			relates to timber and NTFP management.	Present research to Embrapa.
			This official collaboration has been/continues to be critical throughout various administrative	

			processes authorizing research.	
Tinker Foundation	Med.	High	Source of travel funds, with the expectation that the awardee can design, coordinate and implement effective research with outcomes that support biodiversity protection and sustainable development goals in the Brazilian Amazon.	Deliver timely final report.
Tinker Grant Recipient	High	High	This project will contribute to dissertation research and will inform future research.  Interested in delivering high quality research that reflects her best ability; and in creating and maintaining strong collaborations with in-country partners and communities.	
Awardee's academic advisor, UF (Kainer)	High	High	Academic advising throughout the project.  Will share regional expertise and long-term collaborations with Embrapa, Resex/SUPA communities, other organizations in Acre.  Interested in the Fellow conducting high quality research, positively supporting long-term collaborations, and fulfilling her duties as a graduate assistant at the University of Florida.	Frequent communication including updates and feedback about project.
Awardee's committee member and research collaborator, UC Stanislaus (Wallace)	High	High	The source of the original research instrument and data from prior years that will support a longitudinal study when combined with this project.  Share expertise of local context and research subject matter.  His collaboration and support/and participation in data analysis and manuscript preparation will be critical to the longitudinal study.	Regular communication with research-related updates and materials.
Secondary	l			
TCD Program, UF	Med.	High	Additional funding to support travel expenses and exploratory research.	Communicate research findings with TCD community upon return

			Community and network of interdisciplinary researchers with heavy presence in the Brazilian Amazon.	to UF.
			TCD is interested in the Fellow's responsible management and reporting of funds as well as her role as a supporting member of this network.	
SEMA	Low	Med.	Interested in research findings to inform public policy related to environmental management, especially within SUPAs of Acre.  Supporting information via publications	Share research plans and findings.
			and individuals that work in the Resex.	
WWF	Low	Med.	Presence in the Resex and ongoing work in conservation and development projects in the Resex and other SUPAs of Acre.	Share research plans and findings.

# Timeline

Activity	2017 2018			}				
	10	11	12	1	2	3	4	5
Introductions and meetings with key organizations and								
informants								
Obtain authorization: SISBIO								
Obtain authorization: Brazilian Research Ethics Committee (CEP)								
Livelihoods questionnaire development								
Introduce research to communities								
Pre-testing of questionnaire: Cognitive testing (various sites)								
Pre-testing of questionnaire: Pilot test (various sites)								
Questionnaire application: Extractive Reserve Chico Mendes								
Organize data								
Data Analysis								
Article for general public (English and Portuguese)								
Final Summary Report								
Manuscript preparation								
Return results to the Brazilian counterparts (local institutions								
and participating communities)								

# **Activities to date**

My focus during the first month in Acre, Brazil, has been to get situated here and (re-)integrating into my social-professional context. Getting situated has involved activities such as establishing a place to reside in Rio Branco, purchasing supplies, improving Portuguese, registering my passport with the federal police, and working to secure the necessary authorizations to conduct research in the protected area system. I have also been (re-)integrating into the network of various NGOs and governmental organizations engaged with conservation and development in the Chico Mendes Extractive Reserve as well as reconnecting with community members from there and other sustainable-use protected areas. In terms of actual events, this has included multiple meetings with key individuals from ICMBio, Embrapa, SEMA and IPAM. I also attended a two-day IPAM workshop about mapping and conservation issues with leaders from sustainable-use protected areas across the state, as well as a meeting with various organizations discussing the prospects of bamboo development projects within these areas. Finally, I have met informally with people I consider friends from these organizations and reserve communities that help to inform about the current local context and that will similarly play critical supporting roles in facilitating data collection.

In addition to these activities, I have continued to develop my questionnaire and submitted my IRB protocol for pre-testing. Members from key institutional counterparts (ICMBio and Embrapa) and support (SEMA) and I are also working to secure authorizations required to conduct research in federal protected areas.

#### **Challenges**

One set of challenges I am facing relates to acquiring the appropriate authorizations to conduct research in federal protected areas. When my visa was issued, authorization from SISBIO to work in the Chico Mendes Extractive Reserve looked promising – my project had been approved, yet the authorization was finalizing in Brasília. After 30 days, though, this process expired, and it is yet unclear why it was left to expire. Fortunately, my research visa was issued by the Brazilian consulate, and now in Brazil, I am able to address this issue more directly with my counterparts at ICMBio and Embrapa in Acre.

A second authorization needed is from the Brazilian Research Ethics Committee (*Comitê de Éticas de Pesquisa*, or CEP). Their protocol was renovated only recently, in mid-October. Two issues are presented here. First, their website (*Plataforma Brasil*) has been having technical difficulties, so thus far, even registering on the website to begin the processes has not been possible. I wrote an email to the CEP about these technical difficulties, as well as for more information about the process; I am still awaiting a response. On November 22nd, I went to the Federal University of Acre (UFAC) to find my local CEP members in hopes of making personal contact and clarifying some of these issues and getting some kind of orientation from them. Fortunately, I did meet with the UFAC CEP coordinators, and they walked me through the process. However, they made it clear that I must obtain SISBIO authorization prior to submitting my CEP materials to the committee. Also, once my research materials are submitted to the CEP, the full evaluation process will take a minimum of 40 days.

I have communicated this information about the CEP with my local institutional counterparts (ICMBio and Embrapa), and we will work together to strategize and hopefully resolve the outstanding issue of the SISBIO authorization. This might include some revision to my research proposal to align it more closely with current and/or upcoming projects at ICMBio, which I believe will only benefit my collaboration with them. Also, both counterparts will be visiting Brasília (the local of the authorization hold up) in early December, and we have discussed that they will both meet with appropriate contacts

there in effort to resolve this issue. Hopefully these actions will move this process along so I may then submit my research materials to the CEB in timely manner, and proceed with data collection.

Despite these challenges that may threaten my timeline, I am convinced that my presence in Acre is critical to their resolution.

## **Monitoring & Evaluation**

Reserve Chico Men Activities	Indicator	Target	Frequency of Collection	Progress to Date
Meet and organize with key institutional partners	-List of contacts and available resources for data collection	ICMBio-Acre director and team members; Embrapa collaborator	Weekly communication; meetings at least every 2 weeks	List of contacts obtained; maps of research site solicited; report summaries for research communities obtained
Update research instrument (questionnaire)	-Questionnaire ready for pre- testing -IRB approval -CEP approval	Informants with knowledge of Resex reality and public policy IRB-USA CEP-Acre/Brasil	Weekly revisions and adjustments	Questionnaire submitted to IRB/prepared for submission to CEP, for pre- testing; List of sample households obtained
Cognitive test questionnaire	-Questionnaire ready for pilot testing	Informants from Resex or other SUPA; Institutional representatives with knowledge of public policy	Between 5-10 cognitive tests	
Pilot test questionnaire Objective 2: Measu	-Questionnaire that demonstrates validity and discriminatory power; ready for application in research site -IRB approval -CEP approval	Residents of two SUPAs, including the Chico Mendes Extractive Reserve	Sample of 10-20 households in two SUPAs	

physical, financial, social)								
Activities Indicator		Target	Frequency of Collection	Progress to Date				
Introduce research to communities and schedule interviews	-Contacts of community leaders -Meetings with each community (3 total) -Rough schedule of household interviews	-Community leaders (3) -Members from 3 communities in the Chico Mendes Extractive Reserve	Three meetings will occur, depending on when each community hosts their monthly meeting	-Contact made with one community leader (Community: Rio Branco)				
Hire and train field assistant	-Contract with field assistant	-Student with experience in research communities and skilled motorcycle driver	Single hire; 2-3 month duration	Criteria shared with collaborators at ICMBio, Embrapa, contacts at UFAC				
Apply survey in RESEX Chico Mendes	-At least 46 completed questionnaires (one per landholding in RESEX)	Households surveyed at least once in years 1996, 2000, and/or 2006	An average of one interview daily; within 2 months time					

Objective 3: Compare current level of assets with data collected at the same households at multiple points in time between 1996 to 2018. Based on longitudinal data, describe livelihood portfolios, strategies, and pathways adopted by reserve residents

Activities	Indicator	Target	Frequency of Collection	Progress to Date
Compile, organize, summarize data from questionnaires	Database representing 2018 questionnaire data			
Obtain data from prior years & standardize with 2018 data	Complete & standardized database for longitudinal study			
Analyze data				

### **Next steps**

- Meet with director at ICMBio to adjust/align research project more closely with current projects at ICMBio
- Prepare materials for re-submission of project to SISBIO
- Prepare all materials for submission to CEB

- As soon as SISBIO authorizes research, meet with CEB members at UFAC to review materials and submit to the committee through online portal *Plataforma Brasil*
- Prepare for pre-testing:
  - o Meet with communities (3) in RESEX Chico Mendes to introduce myself and my research
  - As best as possible, plan for field assistant. This will be difficult until all authorizations are in place, as the timeline is yet uncertain.