**Terms of Reference and Data Agreement**

# **Purpose of document**

The purpose of this document is to provide a Terms of Reference and Data Agreement for the XXXX project (the Project) funded under the National Socio-Environmental Synthesis Center’s (SESYNC’s) Graduate Student Pursuit program in 2014. The document is intended to impart the spirit of collaboration between team members and present mutually agreed upon plans for: i) completing tasks; ii) accessing project-related data and outputs; iii) authoring publications; and iv) modifying the plan as needed. In this regard, this document can be considered a living document subject to review and renewal in light of emerging issues, concerns or opportunities.

# **Spirit of collaboration**

The intent of the Project is to promote an open and fair environment for collaboration between team members from diverse disciplines, with differing perspectives, and who bring different expertise. This environment will be created by pursuing deep integration between disciplines, facilitating learning across disciplines, and co-developing legitimate and transparent rules for distributing benefits.

# **Goals of the Project**

The goals of the Project are: (1) to systematically uncover the role of governance in contributing to surprise in each of the three case studies; (2) to develop contingent theoretical generalizations through structured and focused comparison across the case studies; and (3) to connect insights and findings with the needs of practitioners and policy-makers operating in applied contexts.

# **Completion of project-related tasks**

The success of the Project is contingent upon the completion of a number of tasks. These tasks are related to within-case analysis, cross-case synthesis and communication with external stakeholders. Table 1 provides a breakdown of the tasks and the team members who have self-identified or agreed to work on each task.

Please note, at a minimum we will need more than one person working on each task, but everyone can be involved on each if they want.

# **Access to data and outputs**

All team members who contribute to the aggregation, analysis and synthesis of data related to the Project will have sustained access to the databases and products that are developed. However, we agree that each team member will discuss and vet opportunities related to publication, presentation, dissemination or other activities garnering academic or professional benefit with the entire team before pursuing them. Additionally, team members will be given the option to work collaboratively on all opportunities that arise, as appropriate. Also, we agree to pursue the goal of having the aggregated data become publically available upon completion of the project via the Social-Ecological Systems Meta-Analysis (SESMAD) Database (<http://sesmad.dartmouth.edu/ses_cases>).

# **Authorship of publications**

Publications increase the value of participating in the Project to team members. One of the key outputs from the Project – as outlined in our proposal – will be a high impact peer-reviewed publication. However, we envision the opportunity for other papers to emerge. Such opportunities will not only be supported, but also encouraged so long as they do not detract from the main objective (i.e., the publication) with regards to time, energy and resources.

While team members are not required or expected to lead a publication, they are encouraged to be creative and to aim high with their aspirations. As these other papers emerge it is important to have an open and transparent process for noting who will be involved and in what capacity. Accordingly, Table 2 below will provide such a venue.

It is hoped that each paper be the result of team science. The process for developing papers will inevitably vary, and the team should agree upon how different contributions translate into authorship. For example, we might consider a policy where unless someone has not engaged at all, everyone is included on each paper, ensuring that those leading the paper get the recognition. There is a good chance that various team members will play a role in providing context to a case or contribute to editing or framing the papers. The benefit is that we all come out with more publications. At the same time, there may very well be instances where people aren’t interested or do not have time to contribute to a particular publication. In these cases it may make sense not to include everyone as authors. We are not advocating any particular policy at this stage but rather providing some possible approaches as a key to initiate a conversation. However, as noted in the section above, team members will be given the option to work collaboratively on all opportunities that arise.

Additionally, we agree to follow the rules of team members' host institutions in cases where Project-related papers also contribute to doctoral work. In particular, any issues regarding intellectual property or authorship deriving from the research leading up to a thesis or in the completed thesis itself should conform to the policies of team members' home institution, consistent with the requirements of thesis examination and availability in the public domain. Permission will also be obtained from co-authors of manuscripts submitted or in preparation for inclusion in the thesis; an email to that effect should suffice. The individual contributions of the student and other authors will be stated explicitly in the “Preface” to the thesis. Copies of this agreement will be retained by the supervisor and student.

# **Authorship beyond core team members**

*What constitutes authorship?* Following guidelines from PNAS (pnas.org/site/authors/journal.xhtml) authorship will be limited to those who contribute significantly to the work. Intellectual contribution is required for authorship and “Just providing the laboratory space for a project or furnishing a sample used in the research is not sufficient to be included as an author.” Specific contributions that constitute authorships are research design, performing analysis, contributing new analytical tools, writing and providing substantive feedback on drafts of the manuscript. Examples of activities that alone do not qualify for authorship are acquisition of funding; general supervision of a research group; and writing assistance, technical editing, language editing, and proofreading. Authorship for supplying data will be decided by all authors for each case.

*Adding authors:* When a new contact is made (e.g., external experts, someone with data) all group members will be consulted before offering authorship. Group members will jointly decide what is required from this contact to receive authorship. An explicit agreement of these requirements will be obtained from the new contact via email. Please see apa.org/science/leadership/students/contract-worksheet.pdf for examples.

*Tracking authorship and acknowledgements:* The requirements for authorship will be added to the authorship document on the collaboration site. In addition, all people or organizations that may be acknowledged and their specific contribution will be added to the authorship document.

# **Strategy for revising the document**

This document will be reviewed and revised in light of emerging issues, concerns or opportunities. Team members will maintain bi-weekly project meetings, which will provide a forum for discussing these issue, concerns or opportunities. Decisions regarding the revision of the document will be made during these meetings through attempts at reaching consensus.

**Table 1. Breakdown of tasks and work plan**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Case or project component*** | ***Data Aggregation*** | ***Narrative development*** | ***Historical analysis*** | ***Social-ecological network modelling*** | ***External communication*** |

**Table 2. Publication plan**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Publication topic*** | ***Brief description*** | ***Lead author(s)*** | ***Contributing author(s)*** |

# **Review by team members**

This document has been reviewed and approved by the following team members on the specified dates (Table 3).

Table 3. Confirmation of review by team members.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Team member*** | ***Version 1.0***  ***Date: 2/17/2015*** | ***Version 2.0***  ***Date: 3/31/2015*** | ***Version 3.0***  ***Date:*** | ***Version 4.0***  ***Date:*** |