GEF-Land Degradation and Monitoring Project
Steering Committee Conference Call
June 27, 2016

Present:
Dr. Sandy Andelman, Vital Signs
Dr. Annette Cowie, STAP
Dr. Lennart Olsson, Lund University
Dr. Stefan Sommer, JRC

Mr. Tristan Schnader, Vital Signs

Absent:
Mr. Stephen Muwaya, Ministry of Agriculture, Animal Industry, and Fisheries, Uganda
Dr. Compton Tucker, NASA

Introduction and Agenda Amendments

Dr. Andelman welcomed everyone and called the meeting to order at 3:04 p.m. EDT. She asked if anyone had amendments to the agenda. No additional items were offered.

Dr. Andelman reported that the African stakeholders elected Mr. Stephen Muwaya to represent the project's four pilot countries on the Steering Committee. He is the UNCCD Focal Point for Uganda. Dr. Andelman mentioned that there was notable competition in the stakeholder representative election and emphasized the importance of Mr. Muwaya's future participation on the Steering Committee.

Mr. Muwaya was invited, but was unable to join for the call.

Nominations and Selection of ESA Representative to the Steering Committee

Dr. Cowie put forth Dr. Marc Paganini as a candidate to represent the European Space Agency (ESA) on the Steering Committee. Dr. Cowie mentioned that she sent Dr. Paganini incorrect information and that she would follow up with him.

Before being able to commit to the Steering Committee, Dr. Paganini needs internal permission before being able to join. He expects approval, but he cannot commit until then. The ESA will ultimately decide who will be their representative.

Dr. Andelman mentioned that the Steering Committee is looking for a representative of ESA, who is a scientist that uses satellite observation in his or her work and is not just someone that creates data products. Dr. Cowie agreed that this representative needs to add technical value to the project.

Dr. Sommer agreed that Dr. Paganini was the most appropriate candidate to represent the ESA on the Steering Committee. Dr. Paganini is active in the field of land degradation and in general global environmental issues.

No other candidates were offered. The Steering Committee agreed to wait to hear back from Dr. Paganini as to whether or not he has permission to participate on the Committee.

Dr. Sommer mentioned that the Steering Committee could also consider inviting Dr. Paganini onto the Science Advisory Committee in case he cannot get internal approval to participate on the Steering Committee.

Science Advisory Committee – Operation and Role

Dr. Andelman noted that the Steering Committee needs to identify clear terms of reference for the Science Advisory Committee (SAC) with one of the key tasks being to provide peer review of the project's products and reports.

There was a discussion about other possible roles and responsibilities of the SAC, including whether or not it would be useful if the SAC members should review and comment on the project's progress reports. Dr. Sommer expressed concern about the SAC overlapping its role with the Steering Committee's. Dr. Cowie explained that she believes that the Science Advisory Committee should support the Steering Committee on technical aspects of the on-going work program. Dr. Andelman mentioned that she is open to input, but that there may be challenges with having the SAC review the project's progress reports, which are in a format that doesn't lend itself well to external review. Dr. Olsson mentioned that he was not against the SAC providing input or asking questions pertaining to the progress reports. He noted that many of the problems pertaining to progress are organizational issues, rather than technical or scientific issues.

Dr. Olsson asked about remuneration for members of the SAC. Dr. Andelman mentioned that there is nothing in the budget for remuneration. She indicated it may be possible that we can pay a small honorarium for review of the key products, which may help us get more substantive reviews. However, to pay an honorarium may require going through a complicated procurement process through the GEF. Dr. Andelman agreed to talk to Ulrich Apel from the GEF Secretariat about the details of this process. We might have to have an open RFP for participation on the Science Advisory Committee if we intend to pay honoraria.

Dr. Cowie noted that she has spoken to Dr. Graciela Metternicht and Dr. Stuart Marsh about their interest in being involved in the SAC and let them know that it was most likely that they would not receive financial remuneration. Despite this, both agreed to be nominated.

There was a discussion about how often, or at what intervals, should the SAC have calls. Dr. Andelman suggested having an initial call that would allow the members of the SAC to orient themselves to the project. Prior to this initial call, we can distribute the project proposal,

workplan, as well as a schedule for producing key products and reports to the members. During the call, we can ask the members how they would like to schedule their calls.

Nominations to the Science Advisory Committee

Dr. Cowie put forth Dr. Graciela Metternicht and Dr. Stuart Marsh as candidates to be nominated to the Science Advisory Committee.

Dr. Sommer then suggested that the Steering Committee invites Dr. Joachim Hill from the University of Trier.

Dr. Olsson suggested nominating Dr. Rasmus Fensholt from the University of Copenhagen onto the SAC for his experience in time series analysis.

The group agreed to invite all of the aforementioned candidates onto the Science Advisory Committee.

Dr. Andelman suggested that Vital Signs propose a minimum set of products that we would like to have peer reviewed. This list, along with the SAC's terms of reference, can be circulated via email and can ensure that every particular area of expertise that we need is covered during the review process. Based on that list, the Steering Committee can add additional members to the Science Advisory Committee.

Updates on Progress for FY16Q4

Dr. Andelman reported that the project is mostly on track for FY16Q4, although slightly behind on a few activities. The bulk of responsibility for this quarter falls to NASA. She noted NASA has processed and verified the 1981-2015 AVHRR 8-km NDVI3g & coincident soil moisture data for Senegal, Uganda, Kenya, and Tanzania.

Dr. Olsson reported that he spoke to Dr. Tucker a week prior to the Steering Committee Call. Dr. Tucker reported that the analysis of the 2002-2015 MODIS Aqua & 2000-2015 MODIS 250 Terra NDVI & coincident soil moisture data for Senegal, Uganda, Kenya, and Tanzania would be available this week.

Dr. Andelman reported that Dr. Gonzalez-Roglich from Vital Signs has put together the 2015, 2010, 2005, and 2000 Landsat mosaics of each country.

The group discussed stratification of all four pilot countries. Dr. Andelman suggested that we focus on first stratifying by vegetation type, as opposed to agro-ecological zones. Then, within each vegetation type, we can identify and discuss the areas of known improvement, of continuing degradation, and the areas of no change in order to establish validation. With additional levels of stratification, it may be challenging to obtain sufficient sample size of NC2.

Dr. Olsson put forth the idea of conducting an explorative analysis of the MODIS time series to see where there are hotspots of degradation and improvement and how those areas are distributed spatially in various land use types, vegetation types, elevation types, etc. Dr. Olsson suggested conducted such an analysis before deciding exactly how to stratify.

Dr. Sommer recognized the difficulty of the situation, where there is a mixture in field sites and data sites with local and national stakeholders and institutions with different sets of priorities and objectives. He suggested that we do not fix a rigid scheme of stratification, but to establish course levels that remain the same everywhere, but that allow flexibility without losing consistency. At higher resolution levels, it might work well to fix agro-ecological zones and land coverage, but then adapt according to established common criteria as you go into more detail. At a certain level of detail, it may not be necessary to determine what sequence and type of stratification to apply.

In agreement with Dr. Sommer, Dr. Olsson provided a two-part approach. The first part entails taking the existing plots from Vital Signs and from CSE, going from known conditions in reality, and use them to see how they are characterized by the four levels of remote sensing data. The second part entails analyzing the MODIS time series and selecting positive and negative anomalies, going from the remote sensing data to the ground level with high resolution data. This would give us a fairly good idea as to why these anomalies exist. This would provide us with a basis for selecting the best possible stratification for an operational assessment of land degradation. The Committee agreed to the suggestion, and Dr. Olsson offered to send a document that details the procedure.

Dr. Olsson reported on other progress from Lund University's perspective. Dr. Olsson mentioned complications of communication between Lund and CSE and other referred-to-organizations in Senegal. Dr. Olsson and Dr. Yengoh have started looking at global data sets that will be available for every country and that have consistency in quality between countries. In comparison to national data sets, global data sets are more reliable and accessible. At the moment, Dr. Yengoh is looking at the 30m resolution land cover data set to see if that will be useful or not. Dr. Yengoh will write up a suggestion on how to move forward by the end of the week.

Dr. Andelman reported that, while the project is slightly behind by approximately two weeks, we expect to be fully on track by August.

Collaboration with Graduate Student

Dr. Andelman reported that a PhD student from the University of Evora would like to collaborate with the project. This student has a background in policy, but her PhD focuses on remote sensing. She already has funding and is not expecting compensation.

The Steering Committee agreed that she could make valuable contributions to the project if she will be collecting field data in Kenya within the next year, but that, if not, direct collaboration

opportunities would be limited. Dr. Andelman agreed to find out and to report back to the Committee.

Adjournment

There being no further business, the call adjourned at 4:06 p.m. EDT.