



C-AGG/Brazil Collaboration on Agricultural GHG Mitigation Opportunities Field Visits and Proposal Presentation

July 2015

Executive Summary

C-AGG's Brazil Team made their fourth trip to Brazil July 17-21, 2015 to visit potential project sites for implementing the team's proposed pilot project and to discuss a recently developed proposal for a measurement, reporting, and verification (MRV) system invited by the Bank of Brazil (BB). C-AGG's primary goals and objectives for this trip included:

- Understanding conditions on the ground within a proposed pilot project watershed in the Cerrado biome;
- Receiving feedback and discussing next steps on the invited proposal C-AGG submitted to the Bank of Brazil in June 2015 to develop an MRV system to monitor the ABC Low Carbon Agriculture Plan with a goal of generating carbon credits for ABC Plan activities; and
- Continuing to build relationships with key stakeholders in country.

Laerte Ferreira, a professor at the Federal University of Goiás and Director of the Laboratory de Processamento de Imagens e Geoprocessamento (LAPIG), invited C-AGG's Brazil delegation to Goiás for a three day tour of potential pilot project farms in the state. Bill Salas, Steven Hagen, and Monica McBride accompanied Laerte, Pedro Alves Vieira, a former municipal environment secretary, and two of Laerte's graduate students, Janete Rego Silva and Fernando Moreira de Araujo on the visits. The three days were broken down as follows:

- **Day 1:** visit to better understand an integrated crop-livestock-forestry system arranged by Pedro Arraes, Present of EMATER in Goiás. The C-AGG delegation was accompanied by Maria Peloso and Antelmo Alves, both Directors at EMATER-Goiás.
- **Day 2:** Laerte and Pedro Vieira arranged for visits with two farm managers at medium sized farms in the Rio Vermelho watershed (RVW)
- **Day 3:** Laerte and Pedro V arranged for visits with two familial farmers in the Villa Boa settlement also located within the RVW

All of the farms visited on days 2 and 3 are currently research sites for Janete Silva's graduate research investigating pasture productivity in the watershed. The farm visited on day 1 was south of Goiás and not located within the RVW. This site visit served as an opportunity to build more partnerships in country with key stakeholders working on innovative models of pasture restoration.

The visits to the proposed pilot project sites in the RVW provided valuable insights into the variability in farm sizes, land owners and producers in the region. The vast differences in land owner backgrounds and topography, soil, and water tables in the watershed were evident during our visit and highlighted a project design challenge that the team needs to consider when selecting field sites for a pilot project. The physical differences will make the use of a biogeochemical model to track changes in GHG emissions challenging particularly when trying to scale across a region, state or country. Discussions with farmers in the watershed reinforced the lack of technical assistance provided to small and medium sized

farmers, something that even the newly funded World Bank project¹ is unlikely to solve in the near term. Effectively engaging farmers in a pilot project will require a significant increase in local capacity in the near term to transfer knowledge of ABC Plan technologies and opportunities to the local farmers.

Meetings and discussions with the BB and Ministry of Agriculture (MAPA) highlighted additional collaborations required to move C-AGG's MRV proposal forward. The BB provided valuable insights into the various Brazilian ministries' and stakeholders' mandates, helping inform the current debate regarding the most appropriate Brazilian institution to host an MRV system for the ABC Low Carbon Agriculture Program. The BB felt the Ministry of Finance could play a key role in the project and recommended C-AGG meet with the ministry on a future trip. C-AGG's meeting with MAPA established new contacts within the Ministry working on the development of methane digester projects for swine farms, which is another technology promoted under the ABC Plan that will be need to be incorporated into an MRV system. The trip moved the dialogue on a C-AGG pilot project from the theoretical to the tangible, and from information gathering and sharing to a more operational and tactical approach.

C-AGG Brazil Team Delegates who participated in the trip:

- Debbie Reed, Executive Director, C-AGG, USA
- Monica McBride, Project Manager, C-AGG, USA
- Bill Salas, President, Applied Geosolutions (AGS), USA
- Steven Hagen, AGS, USA

Trip Outcomes

The Bank of Brazil indicated full support to pursue the proposal submitted by C-AGG, and offered to convene a group of government entities and stakeholders to discuss C-AGG's MRV proposal in September, to socialize and promote the project concept, to discuss logical collaborators, and to identify a Brazilian host for the system. Prior to this larger meeting, the BB will also socialize the proposal with the Ministry of Finance, a stakeholder C-AGG has not met with previously. The BB also agreed to meet and discuss the proposal with C-AGG's contacts at the Ministry of Agriculture.

C-AGG's Brazil Delegation plans to return to Brazil in September or October to continue discussing the proposal with other government ministries. In preparation for these discussions, C-AGG is continuing to share the proposal with funders in the US in addition to identifying additional stakeholders within Brazil who should be involved in the first phase of the project.

¹ International Bank for Reconstruction and Development's grant to the Servico Nacional de Aprendizagem Rural for a Sustainable Production in Areas Previously Converted to Agriculture Use Project. 2014.