Climate Working Group
Minutes

Monday, April 17, 2023
2:00 p.m. – 3:00 p.m. Central U.S./Canada Time

Members Present:
Brenna Grant – CRSB
Dominik Wisser – FAO
Giacomo Sisinni – FAMI-QS
Nick Jolly – Beef & Lamb NZ
Anne Krema – CME Group
Camilla Nobile – GTPS
Alex Bjork – WWF US
Samantha Werth - USRSB
Juan Batista – Agrifood Quality
Eric Harris – Sure Harvest
Giuseppe Tempio – FAO
Jack Philpott – FAO
Genet Mengistu -

Megan Meiklejohn – Savory Institute
David Smith, Melita Smith – Ceres Tag
Kim Davis – Ceres Tag
Salome Rozier – ERSB
Terry Ward – Zinpro
Matthew Cleveland – ABS Global
Sara Kroopf – McDonalds
Sabreena Larson - Acceligen
Merina Born – MACS
Jan Heinrich – Ecosecurities
Alice Rocha – UC Davis

Staff Present: Julie James, Katie Ambrose

_____

I. Welcome and Overview   *Brenna Grant & Sam Werth*

Samantha Werth welcomed guest speakers and the existing interested in GLEAM and how it can be leveraged for beef climate goals. Also have Sure Harvest to update climate goals.

II. FAO GLEAM, Presentation and Discussion   *Dominik Wisser (FAO GLEAM),*
                                                       Brenna Grant, Sam Werth

GLEAM (Global Livestock Environmental Assessment Model) was developed following the publication of Livestock's Long Shadow (2006). There have been many versions, updated following release of new IPCC GWP values. GLEAMi is more project based, to allow for immediate impact outcomes. Latest version is GLEAM 3, using 2015 as a base year with updated IPCC guidelines.

GLEAM compliments IPCC reports, as the reports does not directly report agricultural sector emissions. GLEAM is a global life cycle assessment, with all steps of production represented, including upstream emissions, herd parameters, dry matter intake, manure management types, and environmental data, also allows for assessing mitigation potential of interventions.

Considered a tier 2 approach (tier 1 approach does not have as much detail, focusing on total herd numbers and multiplying by emissions per head). Feed is a very important component, looking at intake and quality. Additional sources of data include climate and environmental data such as temperature.

An illustrative example of GLEAM showed that increased productivity has the greatest potential to offset emissions, compared to nutritional/dietary changes. Other interventions include genetic selection, feed additives, improved feed processing. This highlights the model's ability to project mitigation outcomes. There is more benefit to looking at projected emissions, especially from developing regions where emissions are still increasing.

GLEAM contains a large database of livestock data, with over 100 million records from over 200 countries, from reports, ministry reports, censuses, etc. Represent also different production systems and spatial data for different types of animal products. Last year, the FAO developed an online interactive tool (https://www.fao.org/gleam/dashboard/en/), which allows you to look at different input data and domains for GLEAM 3. Can also refine to emission intensities per production systems, commodities, etc. Input data are available to see, to determining what type of information is needed to use the model

Questions/Discussion:

GRSB members offered brief context for interest in GLEAM. GRSB has goal to reduce net emission intensities by 30% by 2030. There's a lot of methodical differences, including reporting, scopes, data sources, etc. between regional roundtables when performing LCAs. Current plan is to use 2015 as the baseline year, as that was the majority of data available from regional roundtables.

The hope is to use GLEAM to provides a single platform and a single methodology for all roundtables to use and could show projection emissions for all different roundtables based on their individual priorities. Current approach looks at engagement levels for other roundtables, what goals they've set, and how those goals align with the GRSB 30% reduction goal. Framework developed with Sure Harvest works as a tool to encourage collaboration to work toward those goals, a lot of complementarity potential to work toward aggregate numbers of GHGs

All interventions that are easily quantified effect specific inputs/database that translate into changed emissions, any changes to input parameters will be noted through the modeling chain

Questions focused on data accessibility, data sources, time comparisons between assessments using the GLEAM model, reporting levels, and when the newest version of GLEAM is available.

All data is available by region, but there is a huge variability in data quality and availability but is downloadable (but only for one region at a time).

To perform a time series comparison, one needs to update animal numbers and to do it correctly, you need to update all parameters, which becomes extremely complicated, because you have to use the same methodology every time; GLEAM follows IPCC and those methods have changes and those are not comparable either, in order to create a consistent time series, but it is something that they are working on; planning on updating more frequently than every 5 years, based on major differences to input parameters. Working on getting that information released, as the sources are often very different, next release will include references to data sources

GLEAM has an online application to be shared that provides a template that outlines the data needed, units, variables and interests. GLEAM team interested in collecting data from some participating roundtables, which have data "holes" in the GLEAM model as soon as possible

Not currently, there are some issues related to releasing country data that are being worked on, but the plan is to address that in the future

Version 4 is expected soon (end of 2023) and updated to 2020 animal populations. New updates would have to be run with "old data" in order to have true baseline comparisons. Conceptually, having updates is easy, but practically, it's hard due to data limitations

III.	Climate Goal Discussion	*Eric Harris (Sure Harvest), Brenna Grant, Sam Werth*

Need additional details on alignment, need to define of what it means to be aligned for when evaluations come, need follow up. Further discussion to come as to how GLEAM will be integrated to reach those goals

IV.   Working Group Next Steps

Looking through the data, looking at the template from GLEAM, follow up steps on what is needed for goals work

GRSB planning on attending COP this year, still working through contract details, with more information to be released in the next 2 weeks

At next meeting, discussing principles and criteria for accounting, ensuring that everyone is being consistent in allocation, and accurate tracking carbon through systems; feedback on GHG Protocol addressing commodity specific examples for better clarity; next meeting will further discussion on scoping and setting the stage for above changes/updates

Further contact will come through email for future group action items.