SECTOR: Source-selective and Emission-adjusted Greenhouse Gas Calculator for Cropland

**Project Title:** P1602 - GHG mitigation in rice: From evidence-based concepts to adoption at scale

**Description of the innovation:** In response to increasing interest in mitigation studies in cropland, particularly rice production, IRRI developed SECTOR - a Greenhouse Gas (GHG) Calculator for cropland. The tool provides a streamlined framework for accelerated data input that will facilitate rapid assessments of multiple scenarios for domains with many spatial units.

**New Innovation:** No

**Stage of innovation:** Stage 3: available/ ready for uptake (AV)

**Innovation type:** Research and Communication Methodologies and Tools

**Geographic Scope:** Global

**Number of individual improved lines/varieties:** <Not Applicable>

**Description of Stage reached:** The SECTOR tool has been officially launched and tested with data from Vietnam and used the tool to conduct the GHG calculations for the Thai Rice NAMA tool. A scientific article as well as a tutorial and the tool itself are openly accessible.

**Name of lead organization/entity to take innovation to this stage:** IRRI - International Rice Research Institute

**Names of top five contributing organizations/entities to this stage:**
- IAE - Institute for Agricultural Environment
- CLRRI - Cuu Long Delta Rice Research Institute

**Milestones:**
- National governments, agri-food companies and agricultural development actors use improved emissions data and tools to support farmers' use of LED practices (e.g. for efficient fertilizer use)

**Sub-IDOs:**
- 30 - Reduced net greenhouse gas emissions from agriculture, forests and other forms of land-use (More sustainably managed agro-ecosystems)
- 46 - Increased capacity for innovation in partner development organizations and in poor and vulnerable communities

**Contributing Centers/PPA partners:**

**Evidence link:** https://cgispace.cgiar.org/handle/10568/99819
**Deliverables associated:**
- D19012 - Introducing a new tool for GHG calculation for cropland: SECTOR (https://tinyurl.com/yxjt8ykb)
- D19034 - SECTOR: Source-selective and Emission-adjusted GHG Calculator for Cropland (https://tinyurl.com/y6o7kk56)
- D19013 - Functional link to an information platform consisting of guidelines how to use the tool for project planning and scenario development. (https://tinyurl.com/yxbaay3l)

**Contributing CRPs/Platforms:**
- CCAFS - Climate Change, Agriculture and Food Security