

IFDC Signs Agreement with Bangladesh Rice Research Institute (BRRI) for Continuing the Green House Gas Emission Research

IFDC has signed an agreement with BRRI with funding support from Krishi Gobeshana Foundation, a semi autonomous foundation of the Bangladesh Government under the Ministry of Agriculture for continuing the greenhouse gas emission (GHG) research for another three years with regular technical assistance from IFDC for the first year of the project. The Agreement was signed on October 12, 2015, by Mr. Josh DeWald, IFDC Director of EurAsia Division and Dr. Jiban Krishna Biswas, Director General, BRRI

Between October 2012 and September 2015, IFDC implemented the USAID funded **AAPI Pilot Project Integrating Greenhouse Gas (GHG) Emission Mitigation into the Feed the Future (FTF) Bangladesh Fertilizer Deep Placement Rice Intensification (GHG)**, in collaboration with Bangladesh Rice Research Institute (BRRI) and Bangladesh Agricultural University (BAU). In each location, IFDC established an advanced laboratory equipped with automated continuous GHG emissions measurement facilities with a total investment of US\$ 1 million. Project activities quantified the environmental impacts of rice production, particularly nitrous oxide (N₂O) and nitric oxide (NO) emissions, under two different fertilizer management regimes (fertilizer deep placement [FDP] and broadcast application of urea fertilizer) and two different water management protocols (alternate wetting and drying [AWD] and continuous standing water [CSW]). In addition, the project enhanced the capacity of local institutions and scientists, enabling them to achieve excellence in research that addresses climate change issues and improves understanding of the dynamics impacting climate change. In particular, the project trained three local scientists at IFDC headquarters on GHG emissions measurements; two scientists, one from each site, are in the process of utilizing project results for their PhD theses; and, one student from BAU has utilized methane emissions measurements for an MSc thesis. Finally, the project contributed to Bangladesh's understanding of potential future opportunities related to the claiming of carbon credit payments due to mitigating GHG emissions through improved water and fertilizer management.

Due to the GOB's keen interest in continuing the research, a proposal was submitted by BRRI and IFDC to KGF to provide support for continued GHG emission mitigation and adaptation research. This constituted a proposed addendum to a Bangladesh Government project called Climate Change Mitigation and Adaptation Project of Agriculture Research Institutes. KGF approved this addendum and therefore BRRI will continue GHG research using facilities established by IFDC with USAID funding for another three years, with IFDC providing regular technical support for the first year. Methane emissions measurement has been incorporated into this project to make a total quantification of gas emission from rice fields under the fertilizer and water management treatments described above.