THIS SIDE EVENT offers an opportunity to share good practices for reducing emissions of short-lived climate pollutants to improve food security and livelihoods, and mitigate climate change.

WHY DOES IT MATTER? The agriculture and forestry sectors are responsible for about 50% of methane emissions and over 35% of black carbon emissions. A growing global population and changing diets will drive up these figures if no action is taken. At the same time, it is projected that agriculture production will be heavily impacted by climate change; and we are already facing agricultural productivity losses as black carbon alters regional rainfall patterns, and black carbon and tropospheric ozone reduce plant productivity.

THE AGRICULTURE INITIATIVE of the CCAC is taking action through four work streams which address the major sources of methane and black carbon in the agricultural sector: (1) Livestock and manure management; (2) open agricultural burning; (3) paddy rice cultivation; and (4) enteric fermentation. It works with networks of actors who have the capacity to disseminate best management practices and ensure their implementation on the ground over time, including national and sub-national organizations, farmer organizations and extension services; and is starting to engage with the private sector.

THE CLIMATE AND CLEAN AIR COALITION brings together 96 partners - nations, institutions and organisations - and actors on the city level and companies to take fast action to reduce short-lived climate pollutants, with the aim of fighting air pollution and near-term climate change, and improving public health, food security, and energy access and efficiency.

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 13h00 - 13h15 | Welcome and Opening  
 Mi Nguyen, Deputy Permanent Representative, Permanent Mission of Canada to the Food and Agriculture Agencies of the UN |
| 13h15 - 13h30 | The CCAC and the Importance of Addressing SLCPs in Agriculture  
 Helena Molin Valdes, Head CCAC Secretariat |
| 13h30 - 13h40 | Livestock and Manure Management  
 Pierre Gerber, Animal Production and Health Division, FAO  
 Theun Vellinga, Wageningen University (TBC) |
| 13h40 - 13h50 | Open Agricultural Burning  
 Lars Nordberg, International Crysophere Climate Initiative |
| 13h50 - 14h00 | Paddy Rice Cultivation  
 Juan Manuel Cammarano, Alternate Permanent Representative, U.S. Mission to United Nations Agencies in Rome |
| 14h00 - 14h10 | Enteric Fermentation  
 Matthew Hooper, Counsellor – Primary Industries, New Zealand Embassy, Rome/Italy |
| 14h10 - 14h30 | Q&A and Discussion  
 Moderated by Helena Molin Valdes, Head CCAC Secretariat |
Addressing Short-Lived Climate Pollutants from Agriculture and Enhancing Food Security and Livelihoods

An Initiative of the Climate and Clean Air Coalition

**Objective.** Share and implement best practices for minimising emissions of short-lived climate pollutants from agriculture in a manner that is consistent with broader climate change objectives and that also enhances food security and livelihoods.

**What.** In the 2011 UNEP Synthesis Report, control of methane emissions from livestock and intermittent aeration of continuously flooded rice paddies were identified as key methane abatement measures; and a ban on open burning of agricultural waste as a key black carbon abatement measure. For black carbon emissions, the science on the climate impacts from biomass burning is most robust and unequivocal in regions covered by snow and ice, such as the Arctic, the Himalayas, and the Andes.

The reduction of SLCPs in agriculture is an important element of climate-smart agricultural practices that promote livelihoods through enhanced productivity and resilience, build environmentally sustainable agricultural production systems, and complement other actions to promote greenhouse gas emissions reductions.

**Livestock and Manure Management Workstream:** (i) establishing a Global Manure Knowledge Kiosk with the support of three regional centers in Costa Rica, Ethiopia and Thailand; (ii) global assessment of existing manure management practices; and (iii) identification and design of high-impact projects in Asia, Africa and Latin America to reduce methane emissions.

**Geographical coverage:** Latin America, Africa, and Asia regional activities (country-specific activities to be determined); global knowledge platform

**Budget:** $2,785,000

**Paddy Rice Production Workstream:** (i) establishing a Global Information Platform for data and lessons learned on alternate wetting and drying best management practices; (ii) developing programs in Vietnam, Bangladesh and Colombia for up-scaling mitigation at the national level.

**Geographical coverage:** Eastern Himalayas (Nepal, Myanmar, China, and the Tibetan Plateau, Bangladesh, Bhutan and India) and Andes regions (Colombia, Venezuela, Ecuador, Peru, Bolivia, Argentina and Chile)

**Budget:** $777,460

**Open Agricultural Burning Workstream:** (i) assessment of the nature of open burning in the Eastern Himalayas and the Andes, identifying alternative methods and mitigation options for at least two staple crops in each region; (ii) the creation of regional open burning information sharing networks.

**Geographical coverage:** Vietnam, Bangladesh and Colombia (Phase 1) with expansion into additional regions in Phase 2.

**Budget:** $315,000

**Enteric Fermentation Workstream:**

under development

**Partners:** The CCAC Agriculture Initiative is a led by Bangladesh, Canada, the European Commission, Ghana, Japan, Nigeria, the United States, the UN Food and Agriculture Organisation and the World Bank. Institutional Partners include: CATIE, the International Center for Tropical Agriculture through its Climate Change, Agriculture and Food Security Research Program (CCAFS) and other groups under the Consultative Group on International Agricultural Research (CGIAR), International Center for Tropical Agriculture (CIAT), Environmental Defense Fund (EDF), Global Research Alliance on Agricultural Greenhouse Gases (GRA), Global Methane Initiative, International Climate Cryosphere Initiative (ICCI), International Livestock Research Institute (ILRI), ICIMOD, International Rice Research Institute (IRRI), Livestock & Poultry Environmental Learning Center (LPELC), Michigan Technological University, University of Vermont, Molina Center, Stockholm Environment Institute (SEI), UNEP (through the Sustainable Rice Platform), and Wageningen University.