**The response of agricultural systems to climate and integrated assessment across spatial scales**

A CCAFS science meeting parallel session chaired by Santiago Lopez Ridaura and Andy Challinor

The session aims to and improve our understanding of why and how the results of agricultural assessments vary with the spatial scale of the analysis. The key question is at what spatial scales can we make robust impacts and adaptation statements?

***Outline***

Indicators of agricultural sustainability at a range of spatial scales must be integrated in order to have a coherent evaluation of current and future, or alternative, agricultural systems. Analyses at different spatial scales are carried out for different purposes, and results can differ.

This session will discuss: Tools and approaches for developing indicators and multi-criteria analysis; the aggregation of data and the articulation of scales of analysis, the quantification of trade-offs and synergies, the exploration of future scenarios and other methodological challenges for systems analysis can be included in the presentations and discussions.

The strategic value of this session is in its analysis of methodology, with a view to developing specific CCAFS relevant tools (e.g. Life Cycle Assessment and Scenario Analysis ).

The session will include 3 presentations (30 minutes) and time for discussion on the topics mentioned above. The ideal would be that each presentation tackles the articulation of scales of analysis (e.g. field/farm, farm/landscape, field/landscape) and their respective temporal scales of analysis.

***PRESENTATIONS:***

Lopez Ridaura S. and Jat M.L. An operational framework for the multi-scale analysis of scenarios for agricultural systems.

David Lobell: Assessing agricultural productivity at a range of spatial scales (draft title)

De Pinto A. Investigating Competing Objectives in Small-holder Farming. An Example from the Gaza Province in Mozambique.