

24. Climate smart services: case studies in Senegal, Burkina, and Colombia

Andrieu Nadine^{1,2}, Howland Fanny², Ndiaye Ousmane³, Munoz Armando², Molina Carlos⁴, Faure Guy¹

¹CIRAD, UMR Innovation, 34090 Montpellier, France

²CIAT, DAPA, km17 Cali, Colombia

³ANACIM, Dakar, Senegal

⁴FENALCE, Colombia

The transition to climate smart farming systems requires the definition of new climate information, modeling tools for a systemic assessment of performances of farming systems under pillars of CSA, and new advice services. Our communication is based on different case studies conducted in Senegal, Burkina Faso, and Colombia. In the case study in Senegal, local climate forecasts were produced for small farmers linking local (bio-indicators) and scientific (local climate forecast) knowledge. This project showed that the use of the two kinds of knowledge and of an innovative and participative strategy to work with a diversity of partners and next users were key to produce and spread relevant information to support decision making of smallholders farmers in a context of climate uncertainty. The case study in Burkina Faso was based on the use of a whole farm model with three main types of farmers found in the Sudanian area. We show how the use of the model permitted a systemic assessment of the effect of introducing a CSA practice on productivity, variation of income or use of mineral fertilizers taking into account the specific management strategies of the different types of farmers. The case study conducted in contrasted area of Colombia was based on investigations made with farmers and advisers from a national organization of cereal farmers in order to assess their perception and needs in terms of information and services in face of climate change. We share the contrasted visions of farmers on climate change and show how it is linked to their specific demand in terms of information and services. For advisers we show the need of renewing their current top-down modality of interaction with farmers. We draw lessons in terms of how to link the approaches developed in each case study for integrated and innovative CSA services.