**A systematic approach to assess climate information products applied to agriculture and food security in Guatemala and Colombia**

**Supplementary Text S1**

**Interview format for decision-makers and considerations for its application in Colombia**

[Tailored agro-climate services and food security information for better decision making in Latin America project – AGROCLIMAS](https://ccafs.cgiar.org/tailored-agro-climate-services-and-food-security-information-better-decision-making-latin-america#.W9CFfFVKjIU)

Written by Claudia Bouroncle (2015), and adapted for Colombia by Diana Giraldo and David Ríos (2018)

AGROCLIMAS project aims to identify the information gaps and aspects to improve in the climate information products that are available for supporting the decision making of different groups of actors in Colombia. These decisions are related to the management of climatic events that affect yields and incomes of grains producer families in Colombia, focusing in the departments of Santander and Córdoba. When talking about climate events, we are covering decisions both to prevent crop losses (preventive actions) and to palliate losses effects (reactive actions).

The goal of this interview is to contribute to that identification, considering the decision makers at technical level departments of Santander and Córdoba. Also, from different governmental and non-governmental organizations, universities involved in cooperation projects and international technical cooperation organizations.

For the elaboration of this interview there have been considered the available agroclimatic information products inventory for Colombia (Perez Marulanda et al. 2016), and the study about supply and demand of information to the drought management at Guatemalan Dry Corridor (Bouroncle et al. 2017), which is the guide document for this analysis in Colombia. Furthermore, the interview format for Guatemala uses as main source the Handbook for workshop facilitation to actor mapping for AGROCLIMAS project in Colombia (Blundo Canto 2015), and some other literature related to previous experiences (Stone and Meinke 2005; Fountas et al. 2006).

The interview will be applied to technical decision makers from Colombian governmental organizations related to the agricultural sector, as well as to decision makers from non-governmental organizations and international technical cooperation. The target of the study focuses on people related to decisions aiming to strengthen the adaptive capacity of farmers in adverse climate events risk. Also, seeking to reduce the impact in basic grain production caused by adverse events as droughts and floods, and other processes related to climatic variability through knowledge, technical assistance, climate information or provision of seeds. It is about decisions promoting the planned adaptation more than subsequent reactive actions (as food distribution). David Andrés Ríos, an economist from the International Center for Tropical Agriculture (CIAT), will establish the previous contact with potential decision makers, for the subsequent interviews application during the period April-June 2018.

**References**

Blundo Canto G (2015) Manual Talleres Agroclimas. 11.

Bouroncle C, Girón E, Imbach P, et al (2017) Oferta y demanda de información para la gestión de las sequías en el Corredor Seco de Guatemala: ¿cuál es la percepción de los tomadores de decisiones?

Fountas S, Wulfsohn D, Blackmore BS, et al (2006) A model of decision-making and information flows for information-intensive agriculture. Agric Syst 87:192–210. doi: http://dx.doi.org/10.1016/j.agsy.2004.12.003

Perez Marulanda L, Blundo Canto G, Gärtner Vargas C, Giraldo Mendez D (2016) Estado del arte de los productos de información climática en Colombia.

Stone RC, Meinke H (2005) Operational seasonal forecasting of crop performance. Philos Trans R Soc London Ser B Biol Sci 360:2109–2124. doi: 10.1098/rstb.2005.1753

**INTERVIEW FORMAT**

|  |
| --- |
| Introduction |

Good morning/afternoon. Thank you for your time. My name is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I work for the International Center for Tropical Agriculture (CIAT) under AGROCLIMAS project to develop innovative approaches and tools based on scientific and local information to improve the climate risk management through (i) the joint of crop information and climate forecast, (ii) improve the agroclimatic information formats and delivery to decision makers and (iii) strengthen and promote policymaking.

The Institute of Hydrology, Meteorology and Environmental Studies, Ministry of Agriculture and Rural Development – MADR, and different organizations produce and disseminate information about weather and climate, crop development and prices in Colombia. We would like to know which of these products are the ones you use the more and how to improve them.

The interview will last around one hour; your voice will be recorded with the purpose of further analysis if you agree. The joint analysis of this and other interviews will be used to elaborate technical reports and scientific publications. We will not publish nor divulge the content of the interview, which will be maintained in confidentiality; therefore, your answer will be maintained anonymous and used only for this research. Do you agree to participate and to be recorded?

|  |
| --- |
| Name of interviewed person |
| Position |
| Organization |
| E-mail and phone |
| Agree to participate (Yes/No) |
| Agree to be recorded (Yes/No) |

|  |
| --- |
| Decision - Making |

In the first part of this interview, we will focus on your daily work.

|  |
| --- |
| What does your organization do? Moreover, how is your organization related to climate and agriculture issues? |

|  |
| --- |
| Specifically, how does your work is related to the agroclimatic issue? |

|  |
| --- |
| Does your organization generate data related to key family farming issues? How often? What parts of the country does it cover? Is this data shared with other institutions? Could you share one copy with us? |

|  |
| --- |
| Information Products Classification |

There are bulletins and platforms made by IDEAM and MADR, among others, which could be useful for decision making and recommendations related to agriculture management in Colombia; some of them are produced several years ago. I have brought a printed copy of this bulletins, corresponding to the latest edition. Some are emitted daily, weekly or monthly and include issues like climate, crops, and prices.

## Do you know these products (or previous editions)? According to your answer, products will be grouped into five categories (there are not right or wrong answers)

**Category 1**: I have never heard about this product before

**Category 2**: I have heard about it before

**Category 3**: I have seen it once

**Category 4**: I have consulted it before, but I do not use it frequently

**Category 5**: I use it and consult it frequently

| **Code** | **Name** | **Organization** | **Frequency** | **Category** |
| --- | --- | --- | --- | --- |
| COL\_N\_AMF | App My Forecast | IDEAM | Daily |  |
| COL\_L\_AFP | Agroclimatic Forecasting Platform | Co-production | Monthly |  |
| COL\_L\_ACB | Coffee Agroclimatic Bulletin | Coffee producers association | Monthly |  |
| COL\_N\_NAB | National Agroclimatic Bulletin | Co-production | Monthly |  |
| COL\_L\_EWS | Early Warning System | Bogotá mayor's office | Biweekly |  |
| COL\_L\_ABS | Santander Agroclimatic Bulletin | Co-production | Monthly |  |
| COL\_L\_ABC | Córdoba Agroclimatic Bulletin | Co-production | Monthly |  |
| COL\_R\_CABC | Climatic Analysis Bulletin CIIFEN | CIIFEN | Monthly |  |
| COL\_N\_DHB | Hydrometeorological Bulletin | IDEAM | Daily |  |
| COL\_N\_MBCP | Bulletin on Climate Prediction | IDEAM | Monthly |  |
| COL\_N\_MBI | Agricultural Inputs Bulletin | DANE | Monthly |  |
| COL\_N\_AF | Agrometeorological Forecast | IDEAM | Weekly |  |
| COL\_N\_C | Celuagronet | Agronet MADR | Daily |  |

|  |
| --- |
| Products grouped in category 3: Why don’t you consulted? |

|  |
| --- |
| Besides these bulletins, do you use another bulletin, map or information product in your work frequently? (Yes / No) |

|  |
| --- |
| If the answer is affirmative, ask for: |
| Product name |
| Producer organization |
| Topic, format, and periodicity |
| Where it can be found |

|  |
| --- |
| Evaluation of Prioritized Information Products |

From products grouped in Category 5, which are the most used, select four of these products to be evaluated. In case there are not at least four products in Category 5, you should include category 4.

Now we are going to check the four selected products.

|  |
| --- |
| Product 1 |

|  |
| --- |
| How do you use this product? What is the objective? |

To answer the next questions a 1 to 5 scale will be used, corresponding to the following categories

**Category 1 –** Completely disagree

**Category 2 –** Disagree

**Category 3 –** Neutral

**Category 4 –** Agree

**Category 5 –** Completely agree

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| QUESTION | COMMENT | 1 | 2 | 3 | 4 | 5 |
| I think I would like to use this bulleting frequently |  |  |  |  |  |  |
| I find this bulletin unnecessarily complex[[1]](#footnote-1). |  |  |  |  |  |  |
| I think the bulletin is very easy to use |  |  |  |  |  |  |
| I think that I would need the support of a technical person to be able to use this bulletin |  |  |  |  |  |  |
| I find the various sections in this bulletin were well integrated[[2]](#footnote-2). |  |  |  |  |  |  |
| I think there is too much inconsistency in this bulletin[[3]](#footnote-3) |  |  |  |  |  |  |
| I would imagine that most people in my work team would learn to use this bulletin very easy. |  |  |  |  |  |  |
| I find the bulletin very cumbersome to use[[4]](#footnote-4) |  |  |  |  |  |  |
| I feel very confident using the bulletin |  |  |  |  |  |  |
| I needed to learn a lot of things before I could get going with this bulletin |  |  |  |  |  |  |

|  |
| --- |
| Regarding the bulletin **CONTENT**, you think this product would be more useful for your work if it had: |
| Different scale (national, regional, municipal). Why? |
| Other sections. Which and why? |
| Information about the elaboration process and uncertainty level |
| Other comments related to the bulletin content |
| Regarding the bulletin **FORMAT**, you think this product would be more useful for your work if it had: |
| Access to raw data (Excel files, Shapefiles, etc.) |
| Another distribution frequency. Which and why? |
| Another distribution mode. Which and why? |
| Other comments related to bulletin format |
| What would be the main obstacle among your work team to use this product? (Explore limitations in staff, equipment, knowledge, and special requirements). |

(Repeat questions 4.1 – 4.13 for the remaining selected information products)

|  |
| --- |
| Characteristics of an Ideal Information Product |

|  |
| --- |
| Now in 2018, imagine that you have a particular request information to the National Meteorological Service or the Agriculture Ministry, and you have not budget limitations. How would the ideal product supplying the required information be? |

Thank you for attending this interview. The information you have provided is very valuable. We will share with you the study results and the report. Before finishing, do you have any question?

1. The bulletin could have the same information in a simpler way [↑](#footnote-ref-1)
2. Different sections have a logical sequence, and each part contain the necessary information. There are not missing or redundant information. Regarding a map can be considered legend, title, notes for interpretation. [↑](#footnote-ref-2)
3. Contradictions between different sections. Analysis scale very detailed and very general conclusions. Information that is not considered in the recommendations [↑](#footnote-ref-3)
4. Very technical language, color scales that do not distinguish, lack of explanation or justification, maps with very small scale. [↑](#footnote-ref-4)