

Clear, Concise, Compelling: Communication Hacks for Agri-Economists

Mariana Fernández: Head of Operations

Date: 22/05/2025

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AGENDA

Topic

Why Communication Matters in Agri-Economics

Know your audience

Making data talk: From numbers to narrative

The Power of Structure & Brevity

Digital & Visual communication tips

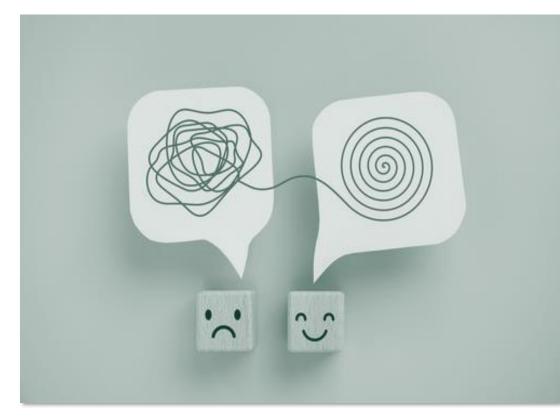


Why Communication Matters in Agri-Economics

- 1. Agricultural challenges (e.g. food security, sustainability, CAP reform) are urgent and complex—communication determines whether research informs action.
- 2. EU-funded projects require strong dissemination, exploitation, and stakeholder engagement plans.
- 3. Poor communication can lead to misunderstandings, underutilized data, and reduced policy impact.

Example:

A policy brief on farm subsidies that's too technical won't influence decision-makers. But a clearly presented one, with real-world implications, can shape policy dialogue.



Know your audience



- 1. Academics & Economists: Use precise terminology, highlight models/methods, publish rigorously.
- 2. Policymakers: Focus on implications, relevance, cost-benefit, and solutions.
- 3. Farmers & Industry Stakeholders: Use plain language, concrete examples, and visual aids.
- 4. Public/Media: Create narratives, humanize your data, link to everyday life.

Making Data Talk: From Numbers to Narrative

- 1. Use the "So What?" Test After each key point, ask: why does this matter?
- **2.** Build a story arc: Problem \rightarrow Evidence \rightarrow Solution \rightarrow Impact
- 3. Translate figures into meaning: "A 3.2% yield loss" \rightarrow "Enough food to feed 400,000 people lost each year in this region.

Visual Aids:

- 1. Graphs with clear titles, meaningful legends.
- 2. Use colors and comparisons that guide interpretation (not just data dumping).



The Power of Structure & Brevity



- 1. BLUF (Bottom Line Up Front): **Lead with your key message.**"We found that crop diversification improves yield resilience by 18%—here's how."
- **2. Rule of Three:** Humans remember 3s."Three drivers of agriemissions: fertilizers, livestock, and land use."
- **3.** Inverted Pyramid (for reports/articles): Most important → supporting evidence → background.

Avoid:

- 1. Dense blocks of text in presentations.
- 2. Academic jargon like "heteroskedasticity correction" without explanation.

Digital & Visual Communication Tips



Cross-Cutting Research Activity 6: **Economic and Impact Analysis**

Abigail Nguema, George Norton, and Mike Bertelsen



Objectives

CCRA-6 has four main objectives:

Objective 1: Identify the costs and benefits of CAPS in cropping systems/practices and related animal and forestry sub-systems.

Objective 2: Identify optimal CAPS and the sequencing of CAPS elements for each cropping system being researched.

Objective 3: Identify broader economic and social impacts of wide-scale CAPS

Objective 4: Identify any policy changes required to enhance CAPS adoption in each

Current Focus: We are presently concentrating on Objectives 1 and 2.

We are developing an economic model that will serve as a template for economic impact analyses of SANREM CRSP Phase IV regional projects as well as future SANREM CRSP regional programs

The Andes Regional project (LTRA-7) has been selected as the initial focus for the economic impact analysis template. We are evaluating the impact of conservation agriculture by conducting a farm-level assessment of SANREM CRSP project activities in two sub-watersheds of the Chimbo watershed in Ecuador. A model is being developed to assess the economic impact of LTRA-7 in Ecuador through an evaluation of the effects of selected CAPS on farm income and soil loss

Demonstration Plot: Researchers work with project farmers to establish and maintair experimental farm plots which serve to evaluate selected conservation agriculture production

elements



Phase IV Goals

CCRA-6 will collaborate with and assist the LTRAs in developing a common baseline and methodology for addressing the economic questions related to CAPS development and implementation, including the short-term, long-term, individual and society-wide costs and benefits of CAPS.

This 5 year project will conclude with an ex-post analysis of the economic impact of SANREM CRSP projects throughout the world.

It is expected that the resulting comparative analysis across LTRAs will provide significant insights into general strategies to promote wide-scale adoption of CAPS.





Methods

In order to develop a model template applicable (given project-specific adjustments) to the array of Phase IV LTRAs, we are conducting an ex-ante economic impact analysis of LTRA-7, "Pathways to CAPS in the Andes."

We are developing a farm-level linear programming model to analyze the costs and benefits of the experimental CAPS elements, including impacts on farm income (consumption + savings) and soil erosion, in the Alumbre and Illangama sub-watersheds of central Ecuador.

The analysis entails the following steps:

1) Definition of Model Activities

Determine the production-related activities on a typical farm in the study area, as well as activities necessitated by the CAPS elements that are the focus of LTRA-7 [for example, cover cropping, varying types of tillage].

2) Definition of Model Constraints

> Production constraints

Determine the applicable constraints on land, labor, capital, and other farm resources.

➤ Soil loss constraints

Define appropriate soil loss constraints based on current erosion levels as well as on optimal soil conditions under conservation agriculture systems.

3) Determine Model Coefficients and Right Hand Side Values

Analyze available and collected data in order to populate the linear programming model.

> Secondary data available: 2007 Baseline Survey conducted by INIAP in the study area

> Primary data to be collected from:

Expert interviews (project economists, agronomists, soil scientists) Farmer interviews (heads of households implementing experimental CAPS

4) Run the Model and Conduct Sensitivity Analysis



Project scientist Luis Escudero on a farm in the Alumbre subwatershed

Accomplishments to Date

In collaboration with project scientists, and based on the conservation agriculture experiments currently being implemented in Ecuador, we have defined the key activities and production/soil loss constraints which comprise the linear programming model.

Using data from the 2007 baseline survey of farm households in the study area and budgets and other information provided by scientists, we have begun to determine the coefficients and right hand side values of the model. These data will be verified and completed using information obtained through farmer interviews in June 2011.

An aggregated tableau of the model is presented below:

Aggregated Tableau							
	Production Activities	Selling Activities	Borrowing Activities	Labor Activities	Cash Transfer Activities	Revenue Activities	RHS
Objective Function	1					31	Max
Land Constraint	1						≤ 34999,409 m²
Labor Constraints	I.			+1			≤ 737.18 hrs
Rotational Constraints	+1						- 0
Cash Constraints	A	$-\mathbf{B}$	(-)1, 1.1	±W	a.I	1	≤ C
Credit Constraints			1				≤ D
Soil Loss Constraint	8						≤ C ≤ D ≤ E
End of Year Cash Constraint	1	$-\mathbf{B}$	1.1		(-)1	1	- 0

Impediments Encountered

Data for many of the CA practices are not available over several seasons. Therefore certain coefficients are rough estimates.



Cooperating farmer in Illangama subwatershed describing conservation agriculture practices being tested on his farm during a field day with other farmers

Anticipated Products and Their Impacts

- 1. Analysis of most profitable conservation agriculture program for Chimbo watershed that meets environmental objectives of the CA program in Ecuador
- 2. A model that will be adapted and applied in other countries for analyzing profitability and environmental benefits of CAPS in other watersheds. Expected impacts are higher adoption of CAPS and improved farm incomes and soils.
- 3. In future years on the project, adoption analyses and analyses of aggregate benefits will be conducted and a summary impact report prepared for the whole project

A Case for Agricultural Development:

ff Applications provides food, income and jobs, and hence can be an as effective tool to reduce poverty in transforming countries 1 55



There are three main reasons why agriculture is an effective way to reduce poverty, build vibrant rural economies and provide a foundation for country-wide economic growth:







We need more investments in agriculture, including aid, to reduce poverty, improve food security, and stimulate economic growth.



Final Takeaways

- 1. Know your audience and adapt.
- 2. Make your message clear, visual, and relevant.
- 3. Structure your story—don't just deliver data, deliver impact.



