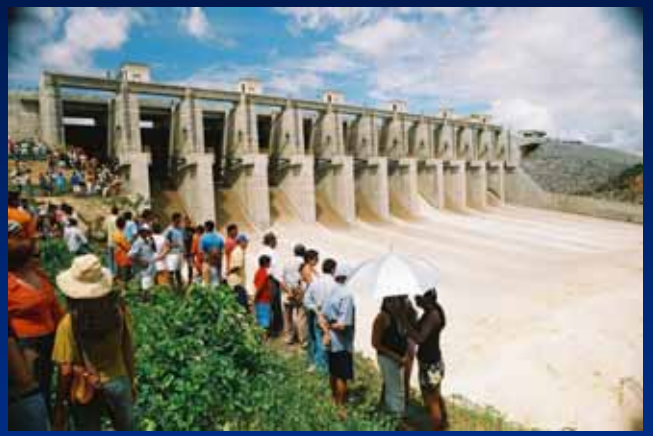
Understanding how meanings get transformed in the dissemination of climate information: the case of Northeast Brazil





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CIFAS Comitas Institute for Anthropological Study

IRI The International Research Institute for Climate and Society

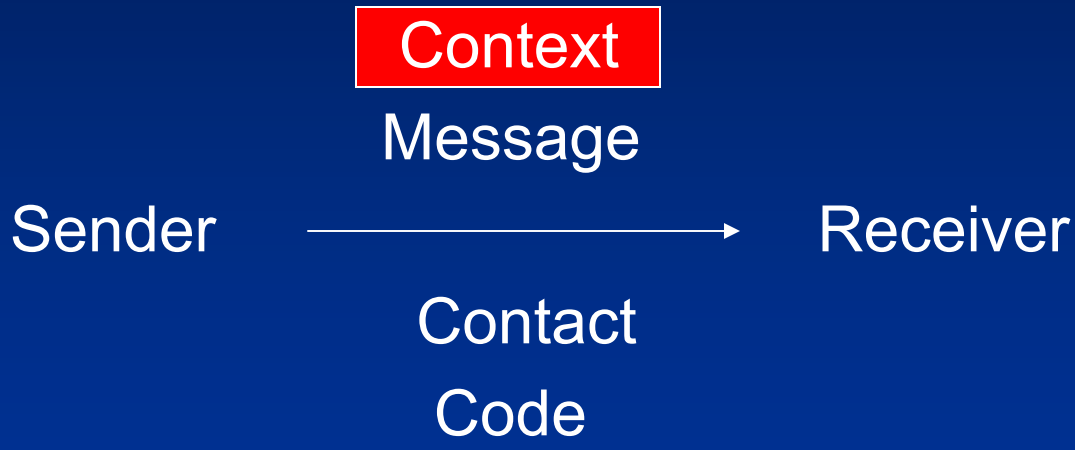
CRED Center for Research on Environmental Decisions

Understanding the *social life* of climate information: different possible approaches

- Semiotic and communicational aspects
- Analysis of mental maps (cognitive aspects) and local narratives (“cultural” aspects)
- Analysis of economic constraints on information use
- Analysis of how institutional configurations and policy systems affect information flow and use

Communicational aspects - 1

Elements of the communicational process, according to Jakobson:



Communicational aspects - 2

Relationship between message and context in the communicational process:

- Indexicality: message carries with it marks of the circumstances in which it was generated, indicating to receiver how it should be interpreted.
- Decontextualization → Recontextualization
- Genres of discourse: the internal organization of messages. References to rain can be found in:

  Religious discourse

  Political discourse

  Technical-scientific discourse

Case study: dry land farmers in Ceará

- Poorest segment of the local population (75% with less than 1 dollar a day);
- Most vulnerable to climate variation (main crop: corn);
- Illiterate (60% of the rural adult population);
- Preferential target-population for governmental efforts to cope with the effects of droughts (ex.: the selected seed distribution program).

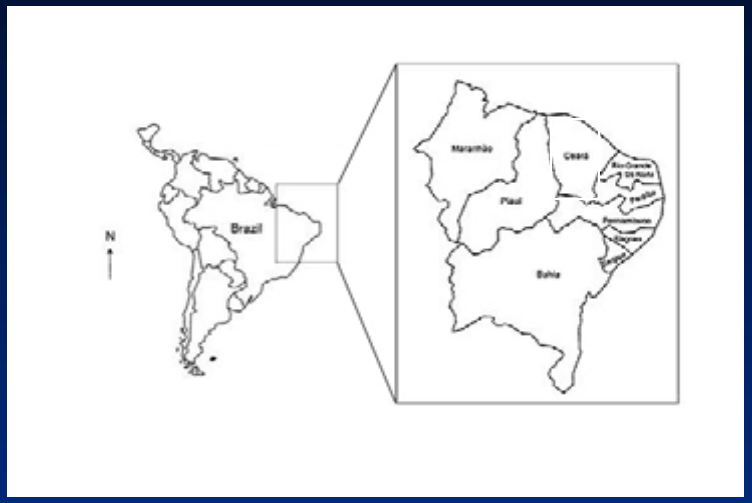


Photo: Fernando Briones

The problem

Failure in the attempts to use climate information

Methodology:

- Analysis of spontaneous cultural manifestations that make reference to climate;
- Interviews with producers, extension officers, rain prophets and meteorologists.

Important elements of the rural narratives on climate

Photo: Diario do Nordeste

Photo: O Povo

- In local narratives, climate is preferentially part of the religious realm;
- Ideas of “nation” and “state” are very weak;
- Government seen as dispute among powerful groups (rather than as a politically neutral bureaucratic apparatus);
- “Urban” is represented as contrary to the rural in the rural imaginary: urban citizens are incapable of understanding the rural life, therefore have no authority to talk about it. That affects directly the perceived authority of technicians.

These are factors that compose the context in which climate information will be recontextualized as it reaches the rural areas.

The scientific forecasts carry with them strong “birthmarks” (indexicality):

- Product of the government
- Product of a urban way of thinking
- Unrelated to religion
- Use concepts of difficult contextualization

As a result, the farmer understands the scientific forecast as something that belongs to a world that is not his.

Photo: Diario do Nordeste

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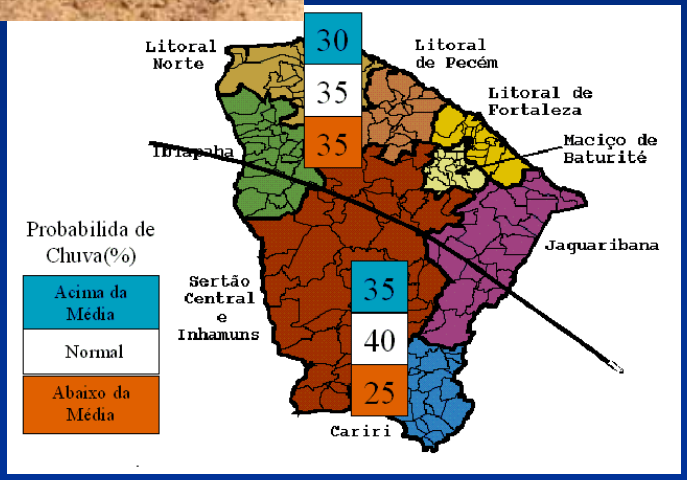

Findings

For the case of Ceará:

1 – Identified polarities:
- science vs. religion,
- urban vs. rural,
- local population vs. government.

2 - Identified established association of concepts in the discourse of policy makers (dominant genre): rain-vulnerability-poverty

3 – Unresolved conceptual confusions:
- definition of what is the rainy season
- short and long term scales

Findings - 2

4 – Little management of expectations: important to talk about the scope of work, not only about climate info (negotiation of the criteria through which meteorology is to be evaluated)

5 – What people do not understand is therefore irrelevant. Best results observed when *communication brokers* where in place.

6 – Strategies for insulation against political manipulation of climate forecasts (e.g. International Climate Outlook Fora, integration of forecasts before release) help safeguard the public image of meteorology.

Preliminary results

Suggested methodological strategy for designing communication campaigns:

1 – Understand preferential meanings and interpretative tendencies (polarities, established associations) of the target population when it comes to climate, environment and natural resources;

2 – Study how those affect meanings associated to climate information when scientific forecasts are received by the population;

3 – Detect main “negative” association of meanings, and design communication strategies to act upon (and neutralize, if possible) them.

Preliminary results - 2

This approach suggests:

1- That the *management of the social image of meteorology* is a fundamental element of the work of improving the value of climate information;

2 – That climate communication efforts should be designed with the help of communication professionals, and local communication brokers should be used.