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Analysis of the communicational networks between farmers and organizations over the latest ten years in southern Santa Fe province. Six cases.



#### : mgonnel@unr.edu.ar

<sup>\*</sup>Los datos del presente trabajo fueron recopilados a través de seis trabajos realizados por alumnos de segundo año de la Carrera de Ingeniería Agronómica de la Universidad Nacional de Rosario, cuyos nombres se transcriben al final de este artículo.

the same areas where the students live.

### **INTRODUCCIÓN:**

Since 2005 the cathedras "Rural Extension" and "Integration Workshop I : Investigations of Natural and Social Sciences" of the Universidad Nacional de Rosario faculty of Agronomy Sciences began to work together due to analyze and develop communication networks among farmers and agrarian agencies from southern Santa Fe's region along the time. Here we itemize the data collected from the research.

In this endeavor is important to remark the involvement of teachers, tutors and groups of students starting from the proposal of an actual problematic, mostly of times, inherit to

Encompass social issues is not an easy task within an institution which pre-eminence is the technical training, even less thinking about the farmers. "*en su condición de ser histórico-social, experimentando continuamente la tensión de estar siendo para poder ser y de estar siendo, no en forma mecánica, no sólo lo que hereda sino también lo que adquiere.*" <sup>Freire, P.</sup> (1996).

We had worked with farmers and agencies from the localities of Maciel, Bernardo de Irigoyen, Pujato (2 cases), Casilda, Carcarañá and Fuentes (2 cases), all of them Santa Fe province.

When topics referred to the flows between information and communications into rural environment are retaken and problematized is necessary see as their activities today is crossed and influenced by the new technologies, framed into the socioeconomic crisis cycles that spanned our country the last decade.

In crisis times new conditions are set which stress internally the agencies and therefore, their relationship with the socio-rural environment. Due to our work, we only needed to focus in **how** these critical instances affected the regular flow of messages established in the community.

The historical place where the participating actors and agencies voices are represents interest and each one's type of participation. This space contextualizes the always changing relationship between productions-needs-consumptions-flows of information.

The local production characteristics, the imaginaries about public and private relationships and the farmer's sense of belonging are needed topics due to describe and analyze each locality scoped kind of contact.

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The possibility to describe communicational practices whether participatory or dominant arises from the previous context analysis described before.

"La verdadera comunicación no está dada por un emisor que habla y un receptor que escucha, sino por dos o más seres o comunidades humanas que intercambian y comparten experiencias, conocimientos, sentimientos (aunque sea a distancia a través de los medios audiovisuales). Es a través de este proceso de intercambio cómo los seres humanos establecen relaciones entre sí y pasan de la existencia individual aislada a la existencia social comunitaria." <sup>Kaplún, M. (1987)</sup>.

To our students was necessary introducing the mass media problematic in the constructions of new communicational models from the setup of new technologies of information which modify the messages coming and going.

"... los denominados medios comunitarios (radios, televisión, telecentros) son, sin duda, impulsores privilegiados de la comunicación participativa para el desarrollo. Desde sus orígenes, a finales de la década de los años cuarenta, hasta los trabajos teóricos de sistematización más recientes, de investigadores como Nicolás Jankowski <sup>(2002)</sup>, y de Peter Lewis <sup>(2008)</sup>, los medios comunitarios se caracterizan por la centralidad que ocupa la participación de la ciudadanía no sólo en la construcción de los mensajes que se difunden, sino en su gestión y en los procesos de cambio social que se impulsan desde estos medios." <sup>Sáez, V.</sup>;(<sup>2010</sup>).

The environment of the farmer's quotidian point of meeting, immersed into a mediated and consumerist society, permeates the generation of new social spaces which are needed to define, design and promote practices that help to increase everyone's democratic participation.

Because of these points of meeting, a community can breathe and speak out its voice.

From the university environment describe actual problematics, meeting the voices that tells these realities and bring their word due to subsequent analysis and discussion, is the first step to change the traditional point of view of the traditional institutional extension regarding the concept about unidirectional messages.

"La sociedad del conocimiento, confundida y suplantada por la sociedad de la información, no asume, en muchas oportunidades, la complejidad y diferencia cultural como clave de transformación y cambio social. En este contexto, a la educación se le presentan diversos desafíos frente a la crisis de la post modernidad y los accesos neotecnológicos de las técnicas pos mediáticas de información." <sup>Echeto (2010)</sup>.

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## METHODOLOGY:

The data collected by groups of students along five years mostly described communications channels established between the agencies and local farmers analyzed whether or not they're associated. Data showed how the farmers receive the news, which topics they consider the most important due to their activities and the media by which they are informed.

The data collection was performed by random sampling, determining each area's universe of farmers. Farmers and qualified sources were interviewed, questionnaires were developed and reviewed and selected secondary data, supplied by government agencies and NGOs.

## **EXPERIENCES AND CASELOAD:**

## CASE 1: MACIEL Y BERNARDO DE IRIGOYEN (villages)

The aim of this first conjoined work was determinate the active actor's behaviour.

From both cities agronomist engineer's perceptions about farmer's knowledge at the time to acquire or not new technologies were consulted.

A first instance of the investigation, took contact with the agronomist engineers due to research about what knowledge they consider the farmers have over soybean crops, predominant seeding.

Later was performed a census of professional agronomists who worked in those locations, related to be aware of the number of technicians working in the area.

This time, it was possible to interview all the agronomists working in both localities and working either in public or private agencies related to agricultural production.

It was explored from the agencies that confer a professional respect to outreach and technical support in the construction of channels of information with farmers.

It was inquired about conditions that allow growing of new channels of communication that make more participative the relationship among agencies and farmers.

The obtained results showed that 50% of engineers frequently make visits to farms and 25% visits with a moderate frequency (every 15 days) the rest (25%) infrequently (only once a month).

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Regarding to consultations made by the farmers to the agronomist engineers, the 49% of the agronomist engineers was visited by farmers at least once a week, 38% were visited every 15 days and the rest (13%) only once a month.

As it is shown if we compare these results are very similar frequencies of consultation, from both, professionals and farmers.

The approaching implemented by the agencies were fundamentally information meetings (up 75%). Importantly, the large number of farmers who attended them and the degree of involvement they had. In these changes, there is the perception of engineers regarding knowledge farmers: 75% believe that local farmers are aware of the technological aspects applied to soybeans, however not always adopt new technology, the last one due purely to economic reasons.

Regarding to how farmers perform their activities with the addition of this new technology, 63% of engineers find some differences between tenants and owners of lands, considering the owners more likely (economically) to perform the expensive practice.

The professionals exhibit that times and priorities established by soybean cropping makes restricted convoke for larger participation. That is why massive regional talks are a front page.

Being the soybean in the region the major importance crop, the diffusion of new knowledge about it and its practices is what predominate in the mass media dedicated to agricultural issues.

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# CASE 2: PUJATO (rural city)

In this case it was decided research the incidence of new channels over the information and communications taken starting from the addition of new technologies in the process of outreach.

In this case 36 polls were queried to local farmers. The data obtained from it was complemented with other ones obtained from close interviews to farmers selected randomly.

Local farmers embraced a new practice, direct seeding as a replacement of the traditional seeding system. We worked over the most extended crop: soybean.

The soybean arrived to the region in the end of the seventies; it was researched how the acquisition of this new technological package modified a traditional practice carried along for years, rupturing several generations' ancient conceptions.

Regarding how information about this topic is received from a public agency the conferences still are the most convocatory mean.

Respect the influence over the farmers from the either public or private media, results showed: private agencies: 72.5%; public agencies: 25%; neither private nor public agency: no information at all.

Private agencies interest play in this issue mostly about the supplies selling for direct seeding, at the year that this work begun (2005) the farmers noticed these companies by conference offers for them.

Therefore, we conclude that the participation of the agencies was focused in the summittalks for farmers at the moment to offer supplies according the seeding schedule.

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# CASE 3: CASILDA (city)

In this case the work was about information and communication networks applied by local outreach agencies.

A survey about the universe of local farmers under the influence of the INTA's rural outreach department was done. Once the farmers were surveyed, obtained data showed that mostly of them received information from the agency.

About this information frequency, half of farmers 49% received it semi-annually, showing a lack of reading habit. Due to the preferences order, next comes farmers who choose receive monthly information about technical and political issues that affect their work and daily living.

Related to by which mass media the farmers got informed, from a total of 40 farmers, 35 said they assist to conference talks organized along the area; 22 of them get information from mass media (radios and local TVs.); 20 receive and read brochures from INTA (agency outreach) and 24 farmers ingather in their own lands. Respect to the application of new knowledge in their regular practice 48 farms answered using it applied to their current crops; 28 in machinery and 12 in marketing.

Regarding new technologies incorporation; 40 farmers (all questionnaires) added supplies; 39 consider they add techniques plus supplies; and 32 added only machinery.

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# CASE 4: CARCARAÑÁ (city)

Closely linked with the information flows and mass media used by different agencies to reach the farmers analysis, it is about the changes operated into the Carcarañá INTA's outreach department.

50 polls to farmers from a previous sampling were done. The information obtained was supplemented with qualified informants.

Results showed: the 84% the farmers decided get the information from the INTA because its value. Mostly of them (33 farmers) receive information from the mass media (Internet, radio, Tv.) and conferences, due its importance ingathering comes next. The using of TV radio and Internet (mass media) favours the contact between professionals and farmers. The attendance events are highlighted whether through conferences (30 farms) or ingathering in their own lands (26 farmers).

Mostly of farmers (90%), see the received information very useful due their daily practice. The rest of them decide rely and apply more in their traditional knowledge transmitted through generations or consider some elements despite others according to the moment interest and criteria.

Almost in the same proportion farmers who receive information weekly and monthly are distributed they expressed it arrives just in time regarding to the scheduled activities.

It can be said that technological changes over the last decade expedite the access to the information but not always bring with them communication conditions that make more participative the relationship between farmers and agencies.

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# CASE 5: PUJATO (rural city)

In this case analyzed information was provided by a local Cooperative. The work was conjoined with farmers associated to that cooperative through poll making. The data research was complemented with deep interviews to qualified informants.

In this case the received information frequencies by the farmers varied respect the previous cases, remarking the reception of daily information (42%) and weekly (38%). The rest stated they receive information monthly.

The information provided by the cooperative is applied due to several purposes, mostly highlighting those aimed to supplies use, choose and use of management techniques, meteorology systems knowledgement, crop's pathologies and treatment.

Mostly of farmers (59%) receive information through lectures from agronomist engineers in charge of the cooperative, this mean is the most preferred because in this meeting each farmer can speak up their inquietude and comments about the performance in their practice, being this very useful as much for the agronomist as for the farmers attending the meeting. This is a remarkable point especially in time when technologies mediate between subjects conditioning them. Highlight the meeting face to face was the most representative for this group of students.

Next due its importance follows brochures (47%) and Internet (33%) as a contact mean between the cooperative and farmers.

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## CASE 6: FUENTES (rural city)

This case is a comparative work between two cooperatives existent since different periods: the Magnani cooperative operational until 2001 and Agricultores Federados (AFA) cooperative currently operational. Due to this activity was necessary contact the actors who had been involved in both cooperatives. So, from the age point of view the range of farmers were heterogeneous.

Results revealed that currently the most used mean are the cellular phone (95.23%), showing up this the new technology for the first time. Next due its importance are the assemblies (42, 85%), then the mass media, radio (38.09%), magazine (28.57%) and Tv. (23.80%) respectively. The using of Internet participation is the lesser (14.28%). This latest data was the most surprising to the students involved into this experience.

It was necessary due to this work characterize the cooperative submitted farmers regarding to the crop extension they were working in. These typologies are:

- **Small farmers:** They are owners and tenants of less than 41 acres; and they represent 52.38%.
- **Medium farmers:** extensions between 41 and 151 acres and they represent the 38.09%.
- **Bigger farmers:** extensions of more than 151 acres and represents 9.52%.

Respect the first cooperative it can be said that the most used mean was the radio, being the most popular and traditional. Currently, the cellular phone incursion had been the greater impact and it can be considered as a mean used by everyone regardless the age, setting the first differences between the analyzed agencies.

Also can be observed a significant difference between the ways to reach the associated farmers to both cooperatives at the both periods of time studied.

From the colleted data it can be said that the current cooperative have new ways and technological tools that allows it to reach the most number of farmers in the lesser time.

This availability, however, does not imply a greater institutional belonging and neither effectives a bigger participation.

### CONCLUSION:

At the moment we can say about the studied and analyzed cases:

- 1. The information flows between farmers and agencies of southern province Santa Fe were influenced over the last decade by communicational technologies incursion and acquisitions.
- 2. The summit-talks between farmers and professional agronomists still are a traditional and irreplaceable contact tool among rural actors.
- 3. The information from the private agencies is closely linked to economic interests.
- 4. The soybean as the most extended crop in the region is what concentrates the more amounts of news at the time to spread the word.
- 5. About the new technologies the most popular regardless the user's economic incomes is the cellular telephone. Not so internet's using, more associate to material goods and knowledge due to use it.
- 6. The differences founded between public and privates agencies are in the marketing but it is not in the most democratic participation in their activities.
- 7. The messages frequency was distributed between weekly, monthly and annually.
- 8. The new information and communication technologies set a punctual point of contact so is more difficult keep the contact with the process along the time.
- 9. Working from extension process as its required by the Sustainable Development proposals is working the information to achieve communication processes in which reflection-action can be mirrored so it ca be added to the environmental care agenda and the farmers heterogeneity who constitutes the day-to-day rural-urban space in which these production actors accomplish their work.
- 10. The information, the mass media, the news's circuit and their preferences analysis as the convergence when its possible articulate the word as a mean to speak up from their own experiences, at the day still is a significant aspect to work for within the intervention processes that enables to improve the environment conditions, not only focused in the productions increases.

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### NOTES:

Work performed by the students, starting of which this work was elaborated:

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